



Bumper Development Corporation Ltd.

Review of Well Licence No. 0287658

Davey Field

July 13, 2004

ALBERTA ENERGY AND UTILITIES BOARD

Decision 2004-056: Bumper Development Corporation Ltd.—Review of
Well Licence No. 0287658

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ALBERTA ENERGY AND UTILITIES BOARD

Calgary Alberta

BUMPER DEVELOPMENT CORPORATION LTD.

REVIEW OF WELL LICENCE NO. 0287658

DAVEY FIELD

Decision 2004-056

Application No. 1334386

DECISION

The Alberta Energy and Utilities Board (EUB/Board) has considered the findings and recommendations set out in the following Board Member report and adopts the recommendations contained therein.

DATED at Calgary, Alberta, on July 13, 2004.

ALBERTA ENERGY AND UTILITIES BOARD

[Original signed by]

Neil McCrank, Q.C.
Chairman

ALBERTA ENERGY AND UTILITIES BOARD

Calgary Alberta

BOARD MEMBER REPORT RESPECTING BUMPER DEVELOPMENT CORPORATION LTD. REVIEW OF WELL LICENCE NO. 0287658 DAVEY FIELD

Decision 2004-056
Application No. 1334386

1 RECOMMENDATION

Having fully and carefully considered all of the evidence, the Board Member recommends that Well Licence No. 0287658 remain in good standing, with no change to the access road location, subject to the conditions listed in Appendix 2.

2 INTRODUCTION

2.1 Application

On May 27, 2003, Bumper Development Corporation Ltd. (Bumper) applied to the Alberta Energy and Utilities Board (EUB/Board) pursuant to Section 2.020 of the *Oil and Gas Conservation Regulations* for a licence to drill a well and construct an access road at Legal Subdivision 7, Section 35, Township 33, Range 28 West of the 4th Meridian (the 7-35 well). On May 28, 2003, the Board issued Well Licence No. 0287658 to Bumper for the 7-35 well on the understanding that there were no outstanding issues.

2.2 Intervention

On June 4, 2003, Bumper completed construction of the 7-35 well site and access road. On August 1, 2003, Mr. Gary Norman and Mr. Glenn Norman, of H.G. Norman & Sons, (collectively the Normans) filed a request (Application No. 1334386) under Section 40 of the *Energy Resources Conservation Act* for the Board to review Well Licence No. 0287658. The Normans are adjacent landowners whose lands are immediately north of the constructed access road. The Normans expressed concern that the location of the access road would increase the water level on their land and impact the drainage of their land. The Board determined that the Normans might be parties who would be adversely affected and granted the review, directing that a hearing be scheduled to reconsider the well licence in light of the Normans' concerns with the access road.

2.3 Hearing

The Board held a public hearing at the Nesbitt Community Hall, located at the intersection of Township Road 342 and Range Road 282, Alberta, on June 7, 2004, before Board Member Tom McGee. The Board Member and EUB staff conducted a site visit at the 7-35 well on June 7, 2004, prior to opening the hearing. A list of those who appeared at the hearing is set out in [Appendix 1](#).

3 BACKGROUND

Mr. Pat James is the principal of EV Ranches Ltd., which is the registered owner of the southeast quarter of Section 35, Township 33, Range 28 West of the 4th Meridian (the SE 35 lands, or Mr. James's lands). The well site and access road proposed by Bumper were agreed to by Mr. James, the landowner. The Normans' lands are located at the northeast quarter of Section 35, Township 33, Range 28, West of the 4th Meridian (the NE 35 lands, or the Normans' lands). The 7-35 well is located on Mr. James's lands just south of the fence line separating Mr. James's lands from the Normans' lands. The access road is located about 2 metres (m) south of the fence line and runs west to the 7-35 well site, parallel to the fence line. The access road runs through a low area that straddles the NE 35 lands and the SE 35 lands (the slough). For further detail, see Figure 1.

4 ISSUES

The issues respecting this application are

- consultation,
- heavy metal contaminants, and
- location of the access road.

5 CONSULTATION

The Normans submitted that they were not notified of Bumper's intention to drill the 7-35 well and to construct an access road on Mr. James's lands. They submitted that had Bumper consulted them, they would have explained why the chosen location was not suitable for road construction. The Normans argued that had the EUB been made aware of their concerns in advance, the Board would not have issued the well licence to Bumper. They noted that under the most recent edition of EUB *Guide 56: Energy Development Application Guide* (October 2003 edition) Bumper would have been required to notify them. The Normans believed that even when advised of their concerns that Bumper did not respond or share information in a timely manner.

Bumper submitted that it complied with the October 2000 edition of *Guide 56* requirements in force when the application was filed, which did not require Bumper to notify the Normans. Bumper submitted that it tried to address the Normans' concerns once it was made aware of them.

The Board Member recognizes that Bumper met the minimum requirements set out in *Guide 56* at the time of filing its application with the EUB. However, the Board Member believes that Bumper should have gone beyond the minimum expectations by consulting with the Normans with respect to the access road, given its proximity to the Normans' lands. Consulting the Normans before filing an application with the EUB would have been consistent with the spirit and intent of *Guide 56*.

6 HEAVY METAL CONTAMINANTS

The Normans and Bumper agreed that with the exception of the gravel used to cap the access road, all materials used to construct the road were excavated from a borrow pit that Bumper dug immediately south of the access road on Mr. James's lands.

The Normans stated that some of the clay used to construct the access road migrated onto their lands. They further stated that elevated levels of arsenic, selenium, nickel, and zinc (heavy metals) were found on their land following the construction of the access road. The Normans submitted that the clay excavated from the borrow pit and used to construct the access road is the source of the heavy metals found on their lands. The Normans were particularly concerned with the increased concentration of selenium, which they argued could cause increased selenium levels in forage crops grown in that area. They were concerned that additional selenium in forage could impact the health of their cattle herd. They requested that Bumper carry out soil, water, and forage monitoring programs for heavy metals concentration for a period of at least five years.

Bumper agreed that the testing of the clay material that had migrated from the access road onto the Normans' lands had revealed slightly elevated levels of selenium and other heavy metals in concentrations above Canadian Council of Ministers of the Environment (CCME) guidelines for agricultural soils. For this reason, Bumper committed to conduct further vegetation, water, and soil monitoring until 2005, at which point the results would be considered and the need for further testing determined.

The Board Member accepts that the evidence indicates the subsoil material excavated from the borrow pit has higher levels of some heavy metals than the area topsoil. The Board Member also accepts that some of this material has migrated from the access road onto the Normans' lands. The Board Member is not persuaded that these higher levels of heavy metals in general, and selenium in particular, would affect the safety of the forage or water consumed by the Normans' herd. Pursuant to Section 19(1) of the *Oil and Gas Conservation Act*, the EUB has the authority to prescribe the location of an access road and the conditions relating to its construction. In light of the Normans' outstanding concerns respecting the health of their herd, the Board Member believes that Bumper should conduct additional soil, water, and forage testing and that Bumper needs to protect the surrounding lands from further migration of clay off the access road by covering the crown and shoulders of the road in accordance with the conditions set out in Appendix 2.

7 ACCESS ROAD

The parties acknowledge that the access road has been constructed through a slough that straddles Mr. James's and the Normans' lands. The Normans stated that the previous owner of the NE 35 lands drained the slough in 1980. They said that since the access road was constructed in 2003, for the first time in many years, they have been unable to farm the slough in NE 35. Bumper acknowledged that Alberta Environment required it to install three culverts under the access road in September 2003, which re-established the movement of surface water between the SE 35 lands and the NE 35 lands.

As part of their future plans for their lands, the Normans said that they planned to farm the slough area for the next five years and then return the slough to a permanent wetland, which they

said could result in flooding and washing out the access road. The Normans did not comment on the impact of this plan on Mr. James's lands.

The Normans argued that the location of the access road has reduced the total water storage capacity of the slough by up to 5 per cent, which would result in an additional volume of water on their land. They calculated an estimate of the volume of runoff from this area from a topography map. They estimated that this additional volume meant that an extra five to eight days would be required for the land to dry, which the Normans submitted was an unacceptable loss of valuable farming time. The Normans also contended that the slough would have a depth of over 1 m at its deepest point, which could wash out the access road onto their lands. The Normans acknowledged that the borrow pit provided additional water storage, but they did not believe that it would compensate for the area lost by the construction of the access road. They said that their issues were not resolved by the drainage of water through culverts from one side of the road to the other, as stated by Bumper, but maintained they were concerned about the change in the water storage capacity of the slough.

Bumper acknowledged that a representative of Alberta Environment met with them in September 2003 to discuss several issues pertaining to the location of the access road. As a result of the meeting, Bumper installed three culverts under the access road, which it said has adequately resolved the concerns with regard to the flow of water and the access road's potential impact on the Normans' lands. Bumper submitted a letter from Alberta Environment that confirmed this. Bumper also stated that it would consider relocating the access road but only if all parties could agree on a suitable location that would have a minimal impact. Bumper also indicated its willingness to make future modifications to the road if necessary.

Mr. James stated that, in his opinion, the road was in an appropriate location. He said he was not prepared to enter into discussions to move the access road unless it could be proven that there was a significant environmental reason to do so. Mr. James did not agree with the amount of runoff that the Normans believed was directed towards the slough. He stated that the natural drainage of the section was to the east, not to the north, as described by the Normans. He further stated that he had lived on or near these lands for his entire life, and that he had never seen the water level of the slough exceed a maximum depth of two feet along the fence on the north side of the access road.

The Board Member accepts Mr. James's description of the drainage patterns of the area. This evidence suggests that the effective drainage area, and thus the required storage volumes, calculated are overestimated. The Board Member does not believe that the location of the access road has or will significantly increase the volume of water accumulating on the Normans' lands.

Dated in Calgary, Alberta, on July 13, 2004.

ALBERTA ENERGY AND UTILITIES BOARD

[Original signed by]

T. M. McGee
Board Member

APPENDIX 1 HEARING PARTICIPANTS

**Principals and Representatives
(Abbreviations used in report)****Witnesses**

H.G. Norman & Sons
G. Fitch

Gary Norman, of
H.G. Norman & Sons

Glenn Norman, of
H.G. Norman & Sons

F. de Mille, P.Ag., of
AFC Agra Services Ltd.

D. Cooper, P.Eng., of
Hydroconsult EN3 Services Ltd.

Bumper Development Corporation Ltd.

J. Glazer, P.Eng., of
Bumper Development Corporation Ltd.

T. Schlenker, RPFT, of
WasteCo Environmental Services Ltd.

J. Stephenson, of
WasteCo Environmental Services Ltd.

EV Ranches Ltd.

P. James, of
EV Ranches Ltd.

Alberta Energy and Utilities Board staff

L. Lacasse, Board Counsel

B. Austin, P.Geol.

T. Goodman, Ph.D.

D. McCluskey

E. Knox, C.E.T.

APPENDIX 2 SUMMARY OF CONDITIONS

The Board has set the following conditions over and above its normal requirements.

- The Board requires Bumper to cap the crown of the access road with 7 centimetres of gravel. Bumper must cover the shoulders of the access road with topsoil and plant vegetation similar to that surrounding the road. Bumper must notify the EUB upon completion, which must be no later than October 1, 2004.
- Bumper must retain an expert on soil, water, and forage testing and submit a plan to the EUB for review and approval by September 15, 2004. The plan must include a program for soil, water, and forage testing for a one-year period. A copy of the plan must be provided to the Normans and Mr. James. Upon approval by the EUB, Bumper must implement the one-year plan immediately and provide the expert's report and recommendations for future testing, if necessary, by December 31, 2005.

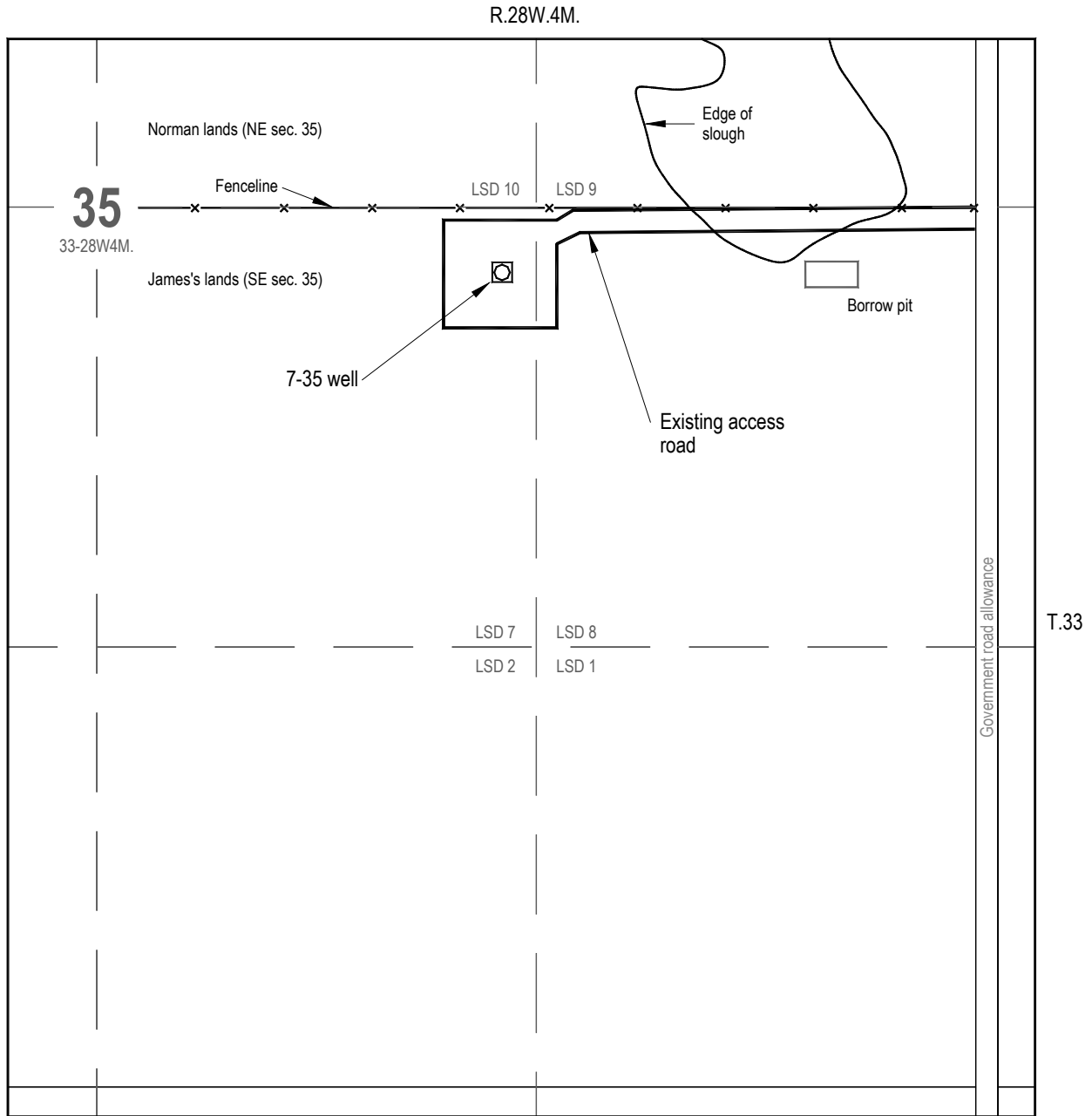


Figure 1. 7-35 well and surrounding area