

**EXXONMOBIL CANADA LTD. AND  
EXXONMOBIL RESOURCES LTD.  
APPLICATIONS FOR SOUR GAS WELLS  
CROSSFIELD FIELD**

**Decision 2003-001  
Applications No. 1254039 and 1254040**

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## **1 APPLICATION AND BACKGROUND**

On January 15, 2002, ExxonMobil Canada Ltd. and ExxonMobil Resources Ltd. (ExxonMobil) submitted applications to the Alberta Energy and Utilities Board (EUB/Board) pursuant to Section 2.020 of the Oil and Gas Conservation Regulations for well licences to drill two horizontal wells from a surface location in Legal Subdivision 2 of Section 36, Township 26, Range 28, West of the 4th Meridian (LSD 2-36-26-28W4M) to bottomhole locations in LSD 8-25-26-28W4M and LSD 10-36-26-28W4M (the 2-36 wells). The purpose of the 2-36 wells is to produce sour natural gas from the Crossfield member with maximum hydrogen sulphide (H<sub>2</sub>S) concentrations of 120.0 moles per kilomole (12 per cent). ExxonMobil calculated the H<sub>2</sub>S release rate for each of the 2-36 wells to be 0.994 cubic metres per second. The wells are classified as level-2 facilities with a corresponding emergency planning zone (EPZ) radius of 2.54 kilometres.

On December 16, 2001, the EUB received an objection from Mr. B. Hanson, Ms. J. Hanson, Mr. E. Munro, and Ms. T. Hanson (Hanson Group), landowners of the east half of Section 35-26-28W4M, the northwest quarter of Section 23-26-28W4M, and Section 25-26-28W4M. The concerns of the Hanson Group related to development setback restrictions caused by the location of the well, the routing of the access road to the 2-36 wells, and the potential duplication of a Municipal District of Rockyview (the MD) road allowance by ExxonMobil's access road.

On June 4, 2002, the EUB received an objection from another group of area residents, Mr. G. Borchert, Ms. B. Borchert, Ms. B. Baillie, and Mr. D. Gibson (the BBG Group), whose primary concerns related to public health and safety. At that time, ExxonMobil indicated that it was negotiating extensively with the BBG Group. It made several commitments, resulting in an agreement with the BBG Group and withdrawal of the BBG Group's objections.

The location of the 2-36 wells, the proposed access route, alternative access routes, and lands owned by the Hanson Group and Mr. Scott Nixdorff, the owner of the land on which the wells would be drilled, are shown on the attached figure.

## **2 HEARING**

A public hearing to consider the applications and interventions was held October 22, 2002, in Airdrie, Alberta. The Board panel consisted of J. D. Dilay, P.Eng. (Presiding Member), K. G. Sharp, P.Eng., and C. A. Langlo, P.Geol. Those who appeared at the hearing are listed in the following table.

## THOSE WHO APPEARED AT THE HEARING

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### Principals and Representatives (Abbreviations Used in Report)

### Witnesses

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ExxonMobil Canada Ltd. and  
ExxonMobil Resources Ltd. (ExxonMobil)  
P. Miller

E. Mather  
G. Roggeveen  
D. Ratcliff

Bonar Hanson, Joan Hanson, Tracy Hanson,  
and Earl Munro (the Hanson Group)  
K. Luft

B. Hanson  
E. Munro

S. Nixdorff

S. Nixdorff

Alberta Energy and Utilities Board staff  
R. McKee, Board Counsel  
E. Knox, C.E.T.  
S. Smith  
J. Smith

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The Board and EUB staff viewed the 2-36 well site location and the surrounding area on August 19, 2002.

Subsequent to the close of the hearing, at the request of ExxonMobil, the Board granted both parties leave to submit argument with regard to new evidence that ExxonMobil believed should have been entered at the hearing. A written process was engaged that saw the applicant and intervener make submissions with respect to the new evidence and its relevance. Final evidence was received and the hearing was closed on December 4, 2002.

### 3 ISSUES

The Board considers the issues respecting the applications to be

- need for and surface location of the wells,
- access road routing, and
- public consultation.

### 4 NEED FOR AND SURFACE LOCATION OF THE WELLS

ExxonMobil indicated that it selected the proposed surface location based on five criteria:

- location of the reservoir,
- the preference of the landowner on which the wells would be drilled,
- stakeholder concerns,
- environmental impact, and
- use of existing infrastructure.

ExxonMobil stated that it used seismic data to determine the preferred bottomhole locations for

the 2-36 wells. It mapped the reservoir, outlining the areas that were believed to have good porosity development, and said that the wells were positioned to encounter this porosity in order to increase the potential recovery rates from the Crossfield member. The applicant noted that the reservoir had poor vertical permeability and poor effective porosity, requiring it to evaluate the type of drilling it would use for both wells. Having considered vertical, horizontal, and deviated drilling, ExxonMobil explained that it had selected a horizontal drill for both wells, as this would join the poorly connected “pods” within the reservoir, resulting in optimum production rates and maximum recoveries.

ExxonMobil said that both wells were to be drilled from the same surface location to limit the environmental impact on Mr. Nixdorff’s property, limit traffic impact, and complement existing infrastructures. ExxonMobil also stated that it adjusted the location of the 2-36 wells some 60 metres (m) farther north than the originally proposed surface location and amended its applications accordingly to remove any setback restrictions that would have been imposed on the Hanson Group lands.

The Board notes that the interveners did not take issue with the surface or bottomhole locations of the 2-36 wells and agreed that the proposed surface locations for the 2-36 wells were suitable.

## **5 ACCESS ROAD ROUTING**

### **5.1 Views of the Applicant**

ExxonMobil stated that it discussed four access road options, Routes A, B, C, and D (shown on the attached figure), with the landowner, Mr. Nixdorff. ExxonMobil indicated that Routes A and D travel south along the boundary between Section 31-26-27W4M and Section 36-26-28W4M and continue west to the 2-36 well site. It noted that Route B enters the 2-36 well site from the west and Route C enters from the northwest.

ExxonMobil said that although Route B, a route directly from the west from Highway 791, was acceptable to Mr. Nixdorff, this was not its preferred option because it would not minimize the impact on the environment and local residents. ExxonMobil noted that the road would need to cross a large coulee, which would necessitate the installation of a culvert and require the approval of Alberta Environment (AENV). This route would also increase the amount of traffic, dust, and noise on Highway 791 and affect more residents in the area than would alternative routes. ExxonMobil also noted that although it raised the Route B option with the Hanson Group, it received no response.

ExxonMobil also discussed with Mr. Nixdorff a second access road route (Route C) that originated from a Nexen Canada Ltd. (Nexen) well site at LSD 6-36-26-28W4 and proceeded southeast to the proposed location of the 2-36 wells. ExxonMobil stated that Mr. Nixdorff rejected this route as it would cut through his farming operation and all traffic would pass directly by his son, Nels Nixdorff, whose residence was located in the northwest quarter of Section 36-26-28W4M. ExxonMobil stated that it did not pursue this option further as a result of Mr. Nixdorff’s concerns.

ExxonMobil explained that Routes A and D follow the eastern boundary of Section 36 and

similar routes along the southern boundary of Section 36 to the 2-36 wells. It identified the north-south portion of these routes as the route in contention between Mr. Nixdorff and the Hanson Group. It said that Route A was entirely on Mr. Nixdorff's land, running north to south on the west side of the MD road allowance, while Route D, the option preferred by the Hanson Group, ran north to south on the MD road allowance. ExxonMobil noted that Mr. Nixdorff owned the property on both sides of the MD road allowance.

ExxonMobil stated that Mr. Nixdorff strongly opposed the Route D option and was concerned that he would decline to sign a surface lease agreement for the 2-36 wells if it proposed that route. ExxonMobil maintained that the Route A option would allow Mr. Nixdorff to gate and lock the access road and thereby control unwanted or unauthorized access to the south portion of his property. ExxonMobil confirmed that it would have no objection to granting the Hanson Group unrestricted use of the road to access the northeast quarter of Section 25.

ExxonMobil submitted that it had obtained confirmation from the MD that it would require a road built within the MD road allowance to be upgraded to MD standards if the 2-36 wells were placed on production. ExxonMobil stated that compared to its standard all-weather access road, an MD standard road was required to be built with wider and deeper ditches, a higher profile, higher soil compaction, more gravel, and a minimum width of 30 m. It stated that the cost of a half-mile of this type of road was approximately \$150,000, excluding reclamation costs, as the road would be on public lands and considered permanent. ExxonMobil understood that the MD did not have any plans to develop the road allowance.

ExxonMobil submitted that the Route A option, which it considered temporary, would take less land out of agricultural use, since its all-weather roads were only 20 m wide, versus the 30 m required for MD standard roads. Additionally, this option would affect land for less time, because ExxonMobil committed to reclaiming the road to AENV standards once the 2-36 wells were abandoned or if the MD ever developed the adjacent road allowance. ExxonMobil maintained that the Route A option would cost about \$100,000 to \$120,000 to construct, including the cost to reclaim the road back to agricultural use.

ExxonMobil stated that it was also concerned about the potential liability that it would be exposed to as a result of having to maintain the Route D option while allowing public access.

Lastly, ExxonMobil argued that a decision about road use was outside the jurisdiction of the Board. It stated that the jurisdiction over road use was given via statute to the MD.

## **5.2 Views of Mr. Nixdorff**

Mr. Nixdorff submitted that he supported ExxonMobil's position in this matter and the selection of the Route A option. Mr. Nixdorff said that the Route C option was unacceptable because it would run through the middle of his farming operations and, while Route B was also acceptable, he preferred Route A.

Mr. Nixdorff stated that restricting public access was a key issue to him. He believed that having a public access road that extended south to the bottom of Section 36 would make it more difficult to monitor and control public access to his land.

Mr. Nixdorff stated that Route A would be beneficial to him, as it would allow him to gate the road to restrict public access and exercise more control over his land. Additionally, Mr. Nixdorff said that the Route A option would be built with a lower profile to allow easier traversing of the road by his cattle and machinery. Mr. Nixdorff stated that the Route D option would require a higher profile road, which would make it difficult to move his machinery across. The construction of Route D would also require him to move his branding pens currently located within the road allowance. As such, Mr. Nixdorff concluded that the construction of the Route D access would remove more land from agricultural use than would Route A.

Mr. Nixdorff stated that while he allowed ExxonMobil to develop the northern half of the road allowance, he believed that it had been a mistake, since he was having trouble controlling access to his land. Mr. Nixdorff confirmed, however, that he had no objection to the Hanson Group using the proposed road to the northeast quarter of Section 25.

### **5.3 Views of the Hanson Group**

The Hanson Group stated that the MD had surveyed and set aside land for the purpose of road construction and where possible it should be used for that purpose. It said that it simply wanted to see ExxonMobil conduct responsible development by taking into consideration current and future development in the area. The Hanson Group stated that it preferred Route D over Route A, because it believed that Route A was not responsible development, as that land was designated for agricultural purposes, while the MD road allowance had been set aside specifically for the purpose of road construction.

The Hanson Group stated that the first time it had seen a map with the alternative road options was as evidence provided at the hearing. The Hanson Group explained that Route B appeared to be feasible but was not an option that had been presented to it before the hearing. It expressed no opinion on Route C.

The Hanson Group indicated that although it was aware that ExxonMobil had committed to reclaiming Route A, it was not an acceptable option because it increased the risk of more roads than would otherwise be necessary. Additionally, the Hanson Group contended that it was difficult to guarantee that the land would be reclaimed to its original condition. The Hanson Group noted that it had been approached by another company, Nexen, with regard to a reduced well spacing proposal for lands south of the 2-36 wells, which indicated to it that the road allowance might be developed in the near future. The Hanson Group also stated that neither the Route A nor Route D option would directly or adversely affect it.

The Hanson Group stated at the hearing that it believed that the MD would allow ExxonMobil to build the Route D option without building it to MD standards, maintain it as a private road, and possibly gate and lock the access. The Hanson Group did not provide evidence at the hearing to support these statements. However, as part of written submission, it produced a letter dated October 17, 2002, that was in response to an inquiry from the Hanson Group as to the MD's

position regarding this application. The letter clearly indicated that the position of the MD was as suggested by the applicant.

#### **5.4 Views of the Board**

The Board believes that it has jurisdiction respecting the location and method of construction of an access road to a well or facility, pursuant to Section 19(1) of the Oil and Gas Conservation Act, which states:

19(1) The Board may, where a licensee requires a road to give the licensee access to the licensee's well site, prescribe in a licence the location of the road and conditions relating to its construction.

Where such access includes the use of an existing road allowance, however, the standards of construction would be those of the approving authority, in this instance the MD. The Board agrees that the Route B option would result in increased traffic and affect more residences. The crossing of the coulee would likely involve additional costs and may result in more environmental impacts than the other options. Similarly, the Route C option would result in increased traffic and impacts on Mr. Nixdorff's farming operation.

The Board notes that while the Hanson Group contended that the MD would modify its construction and access requirements for an access road on the road allowance, no evidence was provided to support that contention. Based on both letters from the MD to the applicant and the intervener, the Board must conclude that these letters represent the position of the MD.

The Board accepts that the MD road allowance is not likely to be developed in the near future. The Board further notes that the Hanson Group said that it would not experience any direct or adverse impact as a result of either Route A or D.

The Board therefore concludes that the Route A access for the 2-36 wells is the preferable option.

## **6 PUBLIC CONSULTATION**

### **6.1 Views of the Applicant**

ExxonMobil indicated that it initially contacted the affected parties regarding this project in late September 2001 and at that time became aware of the concerns of the Hanson and BBG Groups. It stated that it engaged in an extensive and complete consultation process with all affected parties and expended a significant effort to address the landowners' concerns. ExxonMobil stated that this effort and the efforts of EUB staff in a facilitation role resulted in an agreement between ExxonMobil and the BBG Group. Subsequently, the BBG Group withdrew its objection. ExxonMobil also stated that Ms. Hanson attended an initial meeting with all the parties but did not raise any of the Hanson Group's concerns at that time.

ExxonMobil stated that once it became aware of the Hanson Group's concerns regarding land-use development setbacks, it resurveyed and revised the surface location of the 2-36 wells to

remove the impacts of a 100 m setback that would have been imposed on the Hanson Group's land and then met with the Hanson Group to communicate that the well locations had been moved. ExxonMobil indicated that while the Hanson Group was satisfied with the resolution of the setback issue, it continued to raise concerns about the location of the access road. ExxonMobil concluded that the Hanson Group's concerns regarding the access route appeared to be a compensation issue, since it saw the Hanson Group as the only people benefiting from Route D.

ExxonMobil stated that accommodating the preference of the landowner, Mr. Nixdorff, with regard to the routing of the access road was one of its primary concerns. ExxonMobil suggested that Route B was acceptable to Mr. Nixdorff and would also avoid ExxonMobil's concerns with respect to such things as liability and cost. However, both the applicant and Mr. Nixdorff preferred the Route A access.

ExxonMobil characterized the impasse regarding access route options as a dispute between adjacent landowners and did not believe that the matter could be resolved through mediation. ExxonMobil noted that throughout the consultation process, the Hanson Group was difficult to contact. Only when the Hanson Group retained legal counsel did contact become more regular, albeit through correspondence rather than personal meetings. ExxonMobil did not believe that a meeting between the MD, the Hanson Group, and Mr. Nixdorff would resolve the Hanson Group's concerns, given that both parties had been in touch with the MD and had received similar responses regarding possible upgrading of the road allowance to MD standards.

## **6.2 Views of the Hanson Group**

The Hanson Group stated that it believed that ExxonMobil's public consultation process was completely inadequate and unsatisfactory. It indicated that until the day of the hearing, it was never presented with options for the access road and, therefore, it believed that ExxonMobil had not fully investigated options. In particular, the Hanson Group testified that it had never seen the Route B option prior to it being discussed at the hearing. The Hanson Group indicated that Route B might be acceptable to it despite the concerns raised by the applicant. The Hanson Group also took exception to ExxonMobil's apparent conclusion that its concerns were based on compensation, because at no time had it made a request for direct compensation. While admitting that a municipal standard road providing access to its land would enhance the value of the land, the Hanson Group argued that it was motivated solely by its concern for responsible development and appropriate use of land in an agricultural setting.

The Hanson Group stated that it expressed an interest on numerous occasions in the appropriate dispute resolution (ADR) process. However, ExxonMobil never provided it with this option. It argued that a complete public consultation process would have included an ADR component involving the applicant, the MD, themselves, and Mr. Nixdorff.

The Hanson Group stated that although it was aware of the general policies of the MD regarding opening of this road allowance, it believed that the MD might have been willing to discuss options to its policies and standards.

The Hanson Group also stated that it had not attempted to contact Mr. Nixdorff directly to

discuss its concerns or access road routing options.

### **6.3 Views of the Board**

The Board notes that the concerns of the BBG Group were resolved through processes of consultation and ADR, resulting in the withdrawal of its objection. The Board also notes that this was predicated, in part, on commitments made to the BBG Group by ExxonMobil. Accordingly, the Board expects that ExxonMobil and its successors will fully honour those commitments.

The Board is concerned, however, that the early conclusion by ExxonMobil that the Hanson Group's concerns were compensatory in nature undermined its ability to engage in effective consultation with the Hanson Group. The Board believes that issues created as a direct result of applications remain the responsibility of the applicant to address. The Board believes that both ExxonMobil and the Hanson Group could have done a better job of engaging consultation. However, given the evidence, it is not clear to the Board that additional or better consultation would have resulted in resolution of the issues.

Counsel for the interveners argued repeatedly that a hearing held on this matter indicated a failure on the applicant's part to communicate effectively with the intervener and that the resort to a hearing was indeed an admission of failure. The Board disagrees. The inability of reasonable parties to come to consensus on difficult and contentious issues is not in itself indicative of a failure of process, reason, or common sense, but simply an illustration of the fact that many issues within the jurisdiction of this Board are complex and often emotionally charged. There are obvious efficiencies to a negotiated resolution and, indeed, the Board continues to encourage and promote efforts to find common ground. Should resolution not be possible, the Board's enabling legislation is specifically designed to allow either party the legal right to a hearing process to obtain a resolution.

## **7 DECISION**

Having carefully considered all of the evidence, the Board approves Applications No. 1254039 and 1254040 and the routing of the associated access road as applied for, which is described as Route A in this report. The well licences will be issued in due course.

DATED at Calgary, Alberta, on January 13, 2002.

### **ALBERTA ENERGY AND UTILITIES BOARD**

*[Original signed by]*

J. D. Dilay, P.Eng.

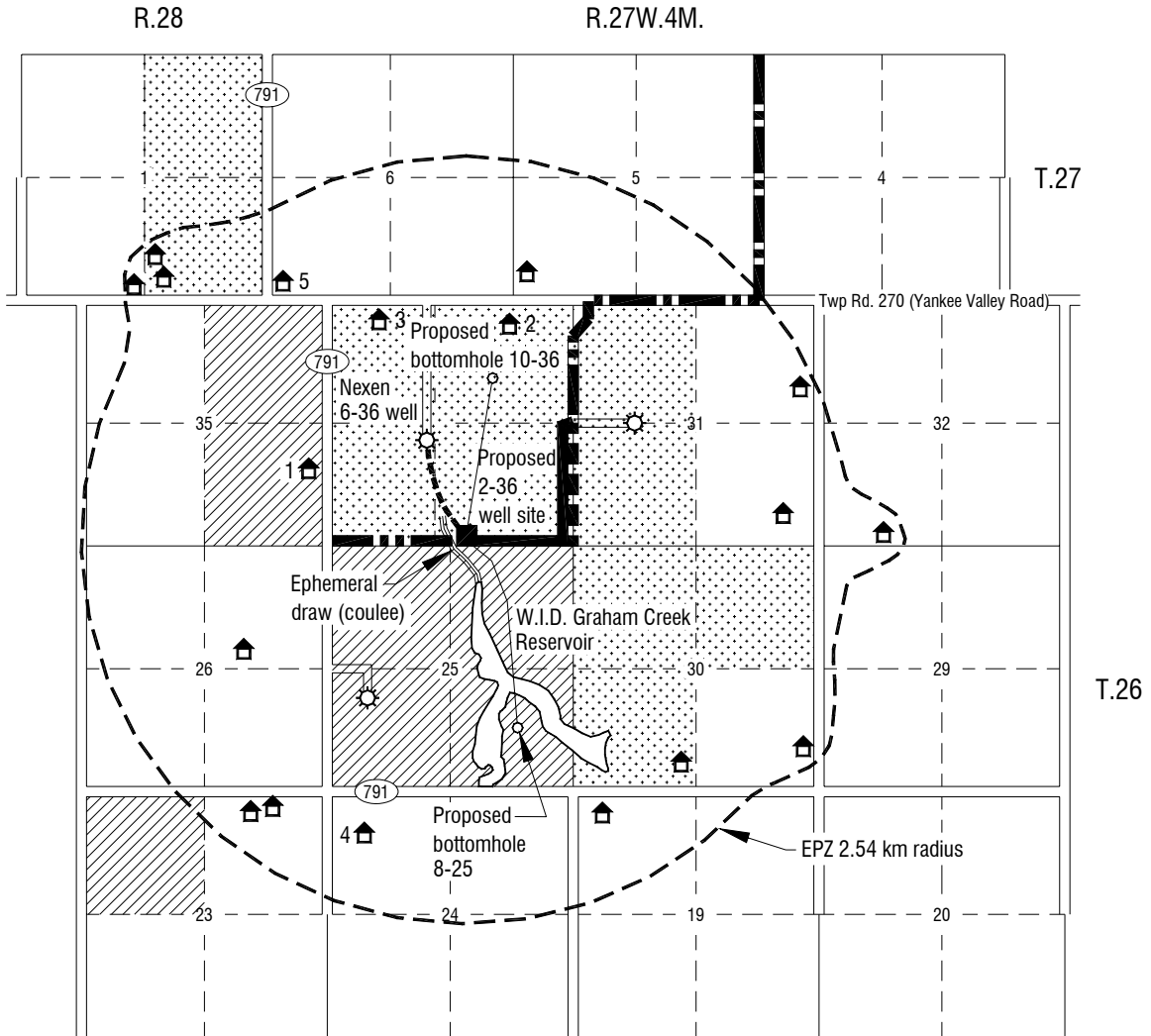
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K. G. Sharp, P.Eng.

*[Original signed by]*

C. A. Langlo, P.Geol.





**Legend**

**Access road options:**

- Route A
- Route B
- Route C
- Route D
- Rig traffic (existing road)



Lands owned by the Hanson Group



Lands owned by Nixdorff

- 1 Tracy Hanson and Earl Munro
- 2 Scott Nixdorff
- 3 Nels Nixdorff
- 4 Dale Gibson and Brooke Baillie
- 5 Guenter and Barb Borchert
- House icon Residence

**Crossfield Field**

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