



EOG Resources Canada Inc.

Application for a Pipeline Licence
Provost Field

July 15, 2008

ENERGY RESOURCES CONSERVATION BOARD

Decision 2008-061: EOG Resources Canada Inc., Application for a Pipeline Licence, Provost Field

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ENERGY RESOURCES CONSERVATION BOARD

Calgary Alberta

**EOG RESOURCES CANADA INC.
APPLICATION FOR A PIPELINE LICENCE
PROVOST FIELD**

**Decision 2008-061
Application No. 1512009**

1 DECISION

The Energy Resources Conservation Board (ERCB/Board), having carefully considered all the evidence, hereby approves Application No. 1512009.

2 INTRODUCTION

2.1 Application

EOG Resources Canada Inc. (EOG) applied to the ERCB, pursuant to Part 4 of the *Pipeline Act*, for approval to construct and operate a high-density polyethylene pipeline for the purpose of transporting natural gas from an existing well site located in Legal Subdivision (LSD) 16, Section 27, Township 35, Range 15, West of the 4th Meridian (the 16-27 well), to a tie-in point at LSD 4-34-35-15W4M. The proposed pipeline would be about 1.2 kilometres (km) in length, and the hydrogen sulphide content of the gas in the pipeline would be zero.

2.2 Intervention

Robert Somerville, the holder of Metallic and Industrial Minerals Permit (MIMP) No. 9306040782, the area of which includes a portion of the proposed pipeline right-of-way, objected to the proposed pipeline (see attached map). Mr. Somerville was concerned that the proposed pipeline would restrict his ability to explore for minerals, in particular for diamond-bearing rocks, in that area.

2.3 Hearing

The Board held a public hearing in Stettler, Alberta, on June 3, 2008, before Board Member J. D. Dilay, P.Eng. (Presiding Member) and Board Members M. J. Bruni, Q.C., and G. Eynon, P.Geol. The panel and Board staff conducted a site visit on June 2, 2008. Those who appeared before the panel at the hearing are listed in [Appendix 1](#).

The Board considers the hearing to have closed on June 6, 2008, the date on which EOG and Mr. Somerville filed their responses to undertakings given during the hearing.

3 ISSUES

The Board considers the issues respecting the application to be

- need for and location of the pipeline, and
- impacts of construction and operation of the pipeline on the permit area.

In reaching the determinations contained within this decision, the Board has considered all relevant materials constituting the record of this proceeding, including the evidence and argument provided by each party. Accordingly, references in this decision to specific parts of the record are intended to assist the reader in understanding the Board's reasoning relating to a particular matter and should not be taken as an indication that the Board did not consider all relevant portions of the record with respect to that matter.

4 NEED FOR AND LOCATION OF THE PIPELINE

4.1 Views of the Applicant

EOG stated that the pipeline was needed to bring the 16-27 well on production. It further stated that testing proved the well to be economic for EOG and that the expected life of the well would be about 14 years. EOG said that the route it chose for the pipeline was the shortest, most direct, and therefore the most economic. EOG also pointed out that it had obtained the consent of the surface landowner for the proposed pipeline location.

4.2 Views of the Intervener

Mr. Somerville did not contest the need for the pipeline and further stated that he did not believe the route should be changed.

4.3 Findings of the Board

The Board agrees that there is a need for the pipeline. It considers the proposed route to be appropriate because it is direct.

5 IMPACTS OF CONSTRUCTION AND OPERATION OF THE PIPELINE ON THE PERMIT AREA

5.1 Views of the Applicant

EOG acknowledged that Mr. Somerville had the right to explore for minerals under the lands covered by the MIMP. It also acknowledged that the proposed pipeline would be located on a portion of the lands covered by the MIMP.

EOG argued that there were various steps involved in exploring for diamonds, which could include conducting airborne or ground-level magnetic or electromagnetic surveys over the prospective lands and sampling the surface soils and rocks to look for indicator minerals. EOG explained that indicator minerals could help determine whether conditions deep in the earth's crust were suitable for diamonds to form. Under suitable conditions, diamonds could be transported to the surface in kimberlite bodies or pipes.¹ EOG stated that in order to confirm that the proper indicator minerals were present, rock and/or soil samples would have to be systematically collected and carefully processed, the heavy minerals identified using a

¹ Kimberlite pipes are the main type of geological feature in which diamond deposits capable of sustained profitable mining have been found to date in Canada.

microprobe, and those minerals subsequently analyzed for their chemical composition using an electron microscope.

EOG acknowledged that indicator minerals might be found in glacial till in the area, but that the source of the indicator minerals could be far from their current location. It explained that as ice sheets moved over the land, they eroded material from the surface (including kimberlites and their indicator minerals), and the eroded material was transported with the ice as it advanced. It further stated that if indicator minerals were found, one would then need to sample systematically to trace back along the path of the ice movement to identify the vicinity of the kimberlites. The next step would be to look for an associated geophysical signature to find the kimberlite pipe itself. It further explained that additional exploration would be needed after a possible location of the kimberlite pipe was identified and that usually would include a drilling program.

EOG argued that during the two years that he had held the MIMP, Mr. Somerville had only done preliminary prospecting, which it described as rock picking and some trenching. EOG stated that if the pipeline were approved and constructed, Mr. Somerville's ability to prospect in this fashion would not be impacted, as he could still walk over the pipeline right-of-way. EOG further committed to enter into a crossing agreement that would allow Mr. Somerville the ability to traverse the right-of-way to explore for minerals. (See Appendix 2 for commitments.)

EOG argued that Mr. Somerville's permit area encompassed about 20 000 acres and that a 1.2 km right-of-way would have an extremely minor impact overall on his permitted lands; a very small portion of land (about 4.45 acres) would be affected by the pipeline compared with the large area he had to explore. EOG stated that Mr. Somerville could explore up to the pipeline right-of-way and could also drill under the pipeline, as long as a reasonable amount of separation was kept between the borehole and the pipeline.

EOG stated that it intended to plough in the pipeline, rather than trench it, and offered Mr. Somerville access to the exposed soil along the length of the pipeline in order to collect samples. EOG committed to reduce the pipeline right-of-way to 10 metres (m) from the standard 15 m if the pipeline were ploughed in, which would further reduce the impact the pipeline would have on this portion of Mr. Somerville's permit area.

5.2 Views of the Intervener

Mr. Somerville stated that he was the holder of MIMP No. 9306040782 and agreed that the permit covered a large area of land in Township 35, Range 15W4M, some 20 000 acres.

Mr. Somerville stated that he had met the conditions of the permit to date. He explained that he prospected the land looking for rocks to find indicator minerals by various means, including digging and screening materials up to a depth of 2 m during his farming operations and examining cut banks in the area. Mr. Somerville stated that none of the rocks he had collected were analyzed in a laboratory, because doing so would make the results public after one year. Mr. Somerville confirmed that to date he had only prospected in this fashion, and he stated that he had no intention of conducting any airborne surveys or drilling in the next couple of years, as he did not have the financial resources to do so. He stated that the area EOG proposed for the pipeline route was a priority for him because he believed that there was good potential for

finding indicator minerals there, given its proximity to Sullivan Lake, which he believed was an indicator of a kimberlite pipe.

Mr. Somerville stated that he had already explored a portion of the proposed pipeline right-of-way. He further stated that he would like to collect samples from the pipeline construction area and have time to evaluate the findings to determine if indicator minerals were present. He initially requested that if the pipeline were approved, it be trenched in and the ditch be left open for many months so that he could have the rocks he collected from the spoil pile analyzed before the trench was reclaimed. He then clarified that what he meant was that it would make more sense to determine if there were diamonds present prior to the pipeline being installed rather than after. He indicated that it would be an inconvenience to him to have to go around the pipeline, but acknowledged that EOG had offered to enter into a crossing agreement with him. Mr. Somerville further argued that he would be impacted if the pipeline were built because he would not be able to collect samples from below the pipeline, and he stated that he did not understand how samples could be taken from below the pipeline after it was installed.

5.3 Findings of the Board

The Board acknowledges that two different sets of subsurface minerals rights—one for petroleum and natural gas and the other for metallic and industrial minerals—were granted by the Province of Alberta with respect to the same land. The Board notes that oil and gas exploration and production operations are much further advanced in the area than are minerals exploration activities, which are at their earliest prospecting stages. The Board further notes that given the 20 000 acres that Mr. Somerville has within his MIMP, the area of the pipeline right-of-way—about 4.45 acres, or about 0.02 per cent of the MIMP area—would not meaningfully affect his ability to prospect his permit area.

The Board notes that EOG made several commitments to Mr. Somerville to minimize the impact on his permit area. This includes allowing Mr. Somerville to pick rocks from the spoil pile if the pipeline is trenched in or from the disturbed area if it is ploughed in. The Board notes, however, that EOG prefers to install the pipeline by ploughing it in. The Board believes that ploughing would be a superior method in the circumstances because it would be more economical and have less impact on the surface, allowing for quicker reclamation of the right-of-way. If the pipeline were installed using the trenching method, the Board believes that for reasons of safety and proper construction it would not be appropriate to leave the ditch open for an extended period.

With respect to Mr. Somerville's concern that he did not know how he would be able to collect samples under the pipeline, the Board notes that boreholes could be directionally drilled under the pipeline if the boreholes were at a safe depth below the line.

In addition, the Board notes that Mr. Somerville provided only general information and did not provide any supporting technical evidence to demonstrate that the potential for the existence of diamonds was such that the Board should deny the application or impose special conditions. The Board further notes that if such information becomes available in the future, Mr. Somerville could apply to the Board pursuant to the *Pipeline Act* for relocation of the line.

6 CONCLUSION

Having carefully considered all of the evidence, the ERCB hereby approves Application No. 1512009.

Dated in Calgary, Alberta, on July 15, 2008.

ENERGY RESOURCES CONSERVATION BOARD

<original signed by>

J. D. Dilay, P.Eng.
Presiding Member

<original signed by>

M. J. Bruni, Q.C.
Board Member

<original signed by>

G. Eynon, P.Geol.
Board Member

APPENDIX 1 HEARING PARTICIPANTS

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

EOG Resources Canada Inc. (EOG)
G. Fitch

B. Balmer
A. Orr
J. Davis
K. Schatz

R. Somerville
D. Bishop

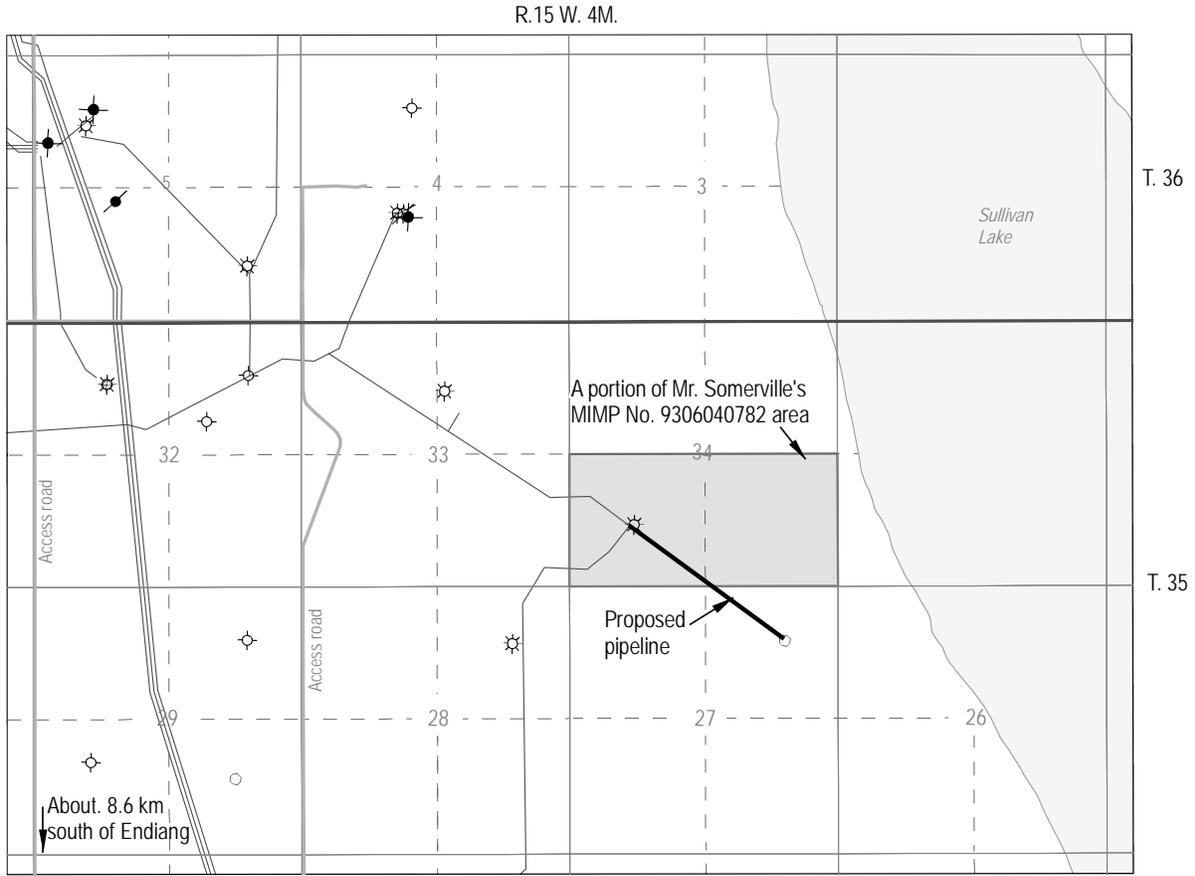
R. Somerville

Energy Resources Conservation Board staff
T. Grimoldby, Board Counsel
D. Burns, Board Counsel
C. Giesbrecht
D. Russell
A. Beaton

APPENDIX 2 COMMITMENTS BY EOG

Throughout the decision report, the Board notes that EOG has undertaken to conduct certain activities in connection with its operations that are not strictly required by ERCB regulations or guidelines. These undertakings are described as commitments and are summarized below. It is the Board's view that when a company makes commitments of this nature, it has satisfied itself that these activities will benefit both the project and the public, and the Board takes these commitments into account when arriving at its decision. The Board expects the applicant, having made the commitments, to fully carry out the undertaking or advise the ERCB if, for whatever reasons, it cannot fulfill a commitment. The ERCB would then assess whether the circumstances regarding the failed commitment warrant a review of the original approval. The Board also notes that the affected parties also have the right to request a review of the original approval if commitments made by the applicant remain unfulfilled. Those commitments by EOG are to

- enter into an appropriate crossing agreement with Mr. Somerville, which would include heavy equipment;
- ensure that the crossing agreement contains measures to protect the pipeline;
- plough in the pipeline and reduce the pipeline right-of-way from 15 m to 10 m; and
- allow Mr. Somerville to take samples along the length of the pipeline from the disturbed soil and rock resulting from the pipeline being ploughed in.



Map of area