



Penn West Petroleum Ltd.

Application for a Licence for a Natural Gas Pipeline

Albers Field

March 29, 2005

ALBERTA ENERGY AND UTILITIES BOARD

Decision 2005-020: Penn West Petroleum Ltd., Application for a Licence for a Natural Gas Pipeline, Albers Field

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ALBERTA ENERGY AND UTILITIES BOARD

Calgary Alberta

**PENN WEST PETROLEUM LTD.
APPLICATION FOR A LICENCE FOR A
NATURAL GAS PIPELINE
ALBERS FIELD**

**Decision 2005-020
Application No. 1348061**

DECISION

The Alberta Energy and Utilities Board has considered the findings and recommendation set out in the following examiner report, adopts the recommendation, and directs that Application No. 1348061 be approved.

DATED at Calgary, Alberta, on March 28, 2005.

ALBERTA ENERGY AND UTILITIES BOARD

(Original signed by)

M. N. McCrank, Q.C., P.Eng.
Chairman

**EXAMINER REPORT RESPECTING
PENN WEST PETROLEUM LTD.
APPLICATION FOR A LICENCE FOR A
NATURAL GAS PIPELINE
ALBERS FIELD**

**Decision 2005-020
Application No. 1348061**

1 RECOMMENDATION

The examiner panel recommends that the Alberta Energy and Utilities Board (EUB/Board) approve Application No. 1348061.

2 INTRODUCTION

2.1 Application No. 1348061

Penn West Petroleum Ltd. (Penn West) submitted an application to the EUB on June 2, 2004, which was subsequently amended on October 14, 2004, in accordance with Part 4 of the *Pipeline Act* for approval to construct and operate a pipeline for the purpose of transporting natural gas from an existing well located at Legal Subdivision (LSD) 11, Section 7, Township 42, Range 7, West of the 4th Meridian (11-7 well) to an existing tie-in point at LSD 8-13-42-8 W4M (8-13 well). The applied-for pipeline would be about 2.1 kilometres (km) in length, with a maximum outside diameter of 88.9 millimetres (mm), and would transport natural gas with a maximum hydrogen sulphide (H₂S) concentration of 0 moles per kilomole (0 per cent). The proposed pipeline would be located about 12 km northwest of Hughenden.

2.2 Intervention

Peter and Elizabeth Froland own the northwest quarter of Section 7-42-7 W4M, the land on which a portion of the pipeline would be located. The Frolands raised concerns regarding safety, routing, soil handling—including, in particular, preservation of the quality of the topsoil—reclamation, and livestock management along the pipeline route.

2.3 Hearing

The application was considered at a public hearing in Wainwright, Alberta, on January 17, 2005, by Board-appointed examiners T. J. Pesta, P.Eng. (Presiding Member), G. A. Habib, M.A., and M. P. Vandenbeld, C.E.T. A site visit was conducted on January 16, 2005. Those who appeared at the hearing are listed in Appendix 1.

3 BACKGROUND

On June 2, 2004, Penn West originally applied for a pipeline to run diagonally across the northwest quarter of Section 7-42-7 W4M (hereinafter the “diagonal route”), almost directly

from the existing 11-7 well to the existing 8-13 well. This diagonal route was 1.47 km in length. Following the objection raised by the Frolands and in the face of the failure of appropriate dispute resolution (ADR) negotiations, Penn West submitted an amended application on October 14, 2004, which, as amended, discarded the previously proposed diagonal route. The route proposed in the amended application is referred to as the “applied-for route” and is further described in Section 6 of this report.

Forming part of the amended application, the attached figure shows the location of the applied-for pipeline, the discarded diagonal route previously proposed by Penn West, and the Frolands’ land.

4 ISSUES

The examiners consider the issues respecting the application to be

- need for the pipeline,
- location and impact of the pipeline, and
- appropriate dispute resolution matters.

5 NEED FOR THE PIPELINE

Penn West stated that the applied-for pipeline would be an extension of an existing pipeline system to recover gas reserves from the Albers field that Penn West operates. The applied-for pipeline would be constructed from the existing 11-7 well to an existing riser at the 8-13 well. The production would be transported from the 8-13 well via an existing pipeline system to an existing gas plant located at LSD 15-11-43-9 W4M. Penn West explained that the 11-7 well would be producing gas from the Viking zone and described the gas as sweet and relatively dry.

Penn West stated that once the applied-for pipeline was tied in, it would improve and maximize the potential for gas recovery in the area. It estimated that the pipeline would transport about 2000 cubic metres of gas per day. Based on the production profile, Penn West indicated that the 11-7 well would be expected to produce for about 5 to 7 years.

The Frolands understood Penn West’s need to produce the reserves from the existing 11-7 well and did not challenge the need for a pipeline.

The examiners are satisfied that Penn West has a need for a pipeline to transport the gas production from the 11-7 well.

6 LOCATION AND IMPACT OF THE PIPELINE

6.1 Views of the Applicant

Penn West submitted that the applied-for route would run south from the existing 11-7 well and west within the access road right-of-way located along the southern edge of the northwest quarter of Section 7-42-7 W4M. The applied-for route would then continue across the government road allowance that separates Ranges 7 and 8 and head due north, along the eastern edge of sections

12 and 13-42-8 W4M, to the tie-in point at the 8-13 well. Penn West added that the applied-for route would be a shorter distance on the Frolands' land than the diagonal route. Penn West explained the difficulty it had in obtaining consent from the Frolands for the diagonal route and stated that it subsequently decided to discard this option. This resulted in Penn West deciding to place the applied-for pipeline in the well access road it had acquired with the consent to drill the 11-7 well.

Penn West submitted that it would not only meet but exceed Alberta Environment requirements for soil conservation and reclamation. In order to achieve this standard, Penn West would acquire the services of a soil specialist before commencement of construction. The specialist would also be on site during construction to provide guidance to the pipeline contractor.

To ensure minimal or no impact on the soils, Penn West committed to direct the soil specialist to determine the depths of the topsoil and subsoil prior to construction so that proper steps could be taken to avoid admixing. Penn West would separate any horizons encountered within the topsoil and subsoil and pile each type of soil within the 15 m right-of-way. Penn West added that whether it would guarantee a 1 m separation between the soil piles, as requested by the Frolands, would depend on the excavated topsoil quantities expected, as derived from the soil specialist's analysis.

Penn West stated that if it were not possible to pile all of the soils within the right-of-way, as alleged by the Frolands, Penn West would then either approach the Frolands to obtain consent for a temporary workspace or haul the soil and store it on the 11-7 well site. Penn West emphasized that it would do whatever was necessary to make sure that all activities remained within the right-of-way or the additional temporary workspace. Penn West confirmed that it would handle the soils appropriately and in accordance with all rules as outlined by Alberta Environment.

Penn West requested that a soils report introduced at the hearing by the Frolands not be admitted into evidence. Penn West objected to the submission because the author of the report was not available for cross-examination.

Penn West stated that it would lay the pipe in the ditch as the ditch was being excavated. Penn West added that it would backfill as much of the ditch as possible each day to minimize the amount of ditch left open. Penn West explained that it would bury the pipeline to a depth of 2.1 m on the section of pipeline travelling west from the 11-7 well, as vehicular traffic had a tendency to drive frost deeper in the ground. It stated that the section on the west side of the government road allowance would be buried to a depth of 1.5 m. Penn West noted that with the precautions it had taken, freezing of the pipeline would not be a concern.

Penn West stated that its 11-7 well access road was currently undeveloped and was in agricultural use by the Frolands. Although given the right in the surface well agreement for a permanent access road, Penn West said that it would continue to allow agricultural activity unless unforeseen circumstances required a permanent access road.

Penn West proposed that the applied-for pipeline would be built with a depth of cover, quality, and specification that would ensure the safety of its personnel and that of the landowners if they chose to continue to farm on the access road right-of-way over the pipeline. Penn West stated that the applied-for pipeline was designed to match the current pipeline system so that there

would be no variation within the existing gathering system. It stated that the operating pressure for the pipeline would be low and that the produced gas would not contain any H₂S. Penn West confirmed that if the Board so directed, it would install an emergency shutdown (ESD) valve at the wellhead to prevent flow of gas into the pipeline in the unlikely event of a pipeline failure.

Penn West stated that the Frolands had raised other concerns that were common to both the diagonal and the applied-for pipeline routes, including right-of-way fencing during construction, introduction of rocks to the soil, littering during and after construction, installation of a Texas gate, weed control, and application of manure for soil rehabilitation. Penn West submitted that it had responded to these concerns and had made commitments to address them, stating that it would set up a portable fence each night in any areas where the ditch had been left open. It added that the portable fencing would be similar to a corral-type system with portable panels. Penn West committed to removing any visible rocks by hand or with a shovel while backfilling the ditch and to remove survey stakes and all garbage on a daily basis. Penn West indicated that it would install a Texas gate in the northwest quarter of Section 7-42-7 W4M to meet the minimum specifications as outlined by the Municipal District of Provost (MD of Provost). Penn West acknowledged that it was responsible to control weeds within the right-of-way and stated that the access road right-of-way would be reclaimed after construction to meet Alberta Environment requirements. Penn West concluded that it therefore would not be necessary to spread manure along the right-of-way to help with soil reclamation.

Penn West stressed that the applied-for route used the existing 11-7 well access road right-of-way, which confined soil disturbance to a pre-existing area for which a surface lease agreement was in place. In Penn West's view, there was no reason why the applied-for route would not be acceptable.

6.2 Views of the Interveners

The Frolands stated they had a preference for the diagonal route, which was not before the examiners for consideration due to the amended application. The Frolands noted that for the applied-for route, the majority of the land on the access road right-of-way was new land, which they defined as having been broken for only 4 or 5 years. The Frolands explained that newly broken land tended to have more topsoil than old farmland and that soil samples taken along the right-of-way exhibited about 10 to 22 centimetres of topsoil. They explained that as a result, the soil along the access road right-of-way would be more fertile than the rest of their field on the northwest quarter of Section 7-42-7 W4M. In contrast, the Frolands noted that the remainder of their field consisted of old land, which had been broken since the turn of the century. They concluded that they would prefer that Penn West use the diagonal route, which would be located on very little new land with less topsoil. The Frolands further explained that there would be less disturbance and less soil to handle with the diagonal route as compared to the applied-for route, since the pipeline would be buried to a depth of only 1.5 m along the diagonal route. Along the applied-for route, the pipeline would be buried to a depth of up to 2.1 m, resulting in the handling of larger volumes of soil during excavation.

The Frolands expressed concern with respect to soil handling during construction, after construction, and subsequently during reclamation of topsoil along the applied-for route. They submitted that from their experience, the reclamation process would be enhanced if soil piles were separated and then replaced in the same order in which they were excavated. The Frolands also stressed that using loam and manure would help with reclamation of the soils.

The Frolands explained that they had similar concerns about the diagonal route to those about the applied-for route in relation to most of the issues, but stated the main issue with the applied-for route pertained to the soils. The Frolands stated that they would classify the soil as three distinct types – the topsoil, otherwise known as horizon A, and the subsoil, consisting of horizons B and C. They stated that during excavation of the ditch, the different types of soil would need to be placed into three separate piles. The Frolands also expressed their view that it would be physically impossible for Penn West to place all of the excavated soil within the 15 m right-of-way. They said that they would prefer not to grant Penn West any temporary work space. They particularly disagreed with Penn West's suggestion of piling soil on the 11-7 well site, as they were concerned that using this method would result in greater risk of admixing due to increased soil handling. The Frolands produced a soil report that they requested be admitted into evidence and noted that the author of the report was not present.

In the event of a pipeline break within the access road right-of-way, the Frolands submitted that access to the 11-7 well would be restricted and that the diagonal route would alleviate such a concern. If the applied-for route were approved, the Frolands confirmed that an ESD valve should be installed on the wellhead.

The Frolands stated that they had some unresolved issues that were not covered by Penn West's commitments in its letter dated January 7, 2005. In addition to the soils handling question, they explained that the other main outstanding issues related to fencing of the right-of-way and the application of manure. The Frolands stated that they were concerned about the safety of their cattle and would like a fence in place along the right-of-way for the duration of the construction period. The Frolands stated that the temporary fencing proposed by Penn West would not be adequate to prevent the cattle from wandering near the open ditch and the soil piles. The Frolands were concerned about the damage to the topsoil and the loss of organic matter caused by the pipeline construction and requested the application of manure to help reclaim the topsoil. In discussions with Penn West, the Frolands requested that a soil sterilant not be used on the right-of-way to control weeds.

The Frolands stated that their main interest was to maintain the long-term productive capability of the land. In their view, they would be more impacted by the applied-for route than the diagonal route.

6.3 Views of the Examiners

The examiners note that the interveners have identified soil handling and the preservation of top soil as a central issue. The examiners recognize that Penn West committed to maintain a depth of cover of 2.1 m along the access road right-of-way. The examiners note that even for a highway the minimum requirement for depth of cover would be 1.4 m and for a public road it would be 1.1 m. Penn West committed to a depth of cover of 2.1 m, which affects the space required for soil storage. In the event that the 15 m right-of-way is not a sufficient workspace for the amount of soil that would be excavated, the examiners would discourage Penn West from moving the soil to the existing 11-7 well site, as Penn West suggested. While the examiners note that preventing unacceptable admixing of topsoil is Penn West's sole responsibility, the examiners see merit in the Frolands' providing Penn West with temporary additional workspace if it becomes necessary and encourage them to do so. Such cooperation would help accomplish the goal of soil preservation, which is ultimately in the interest of both parties.

The examiners note that the Frolands produced a soils report at the hearing without prior notice. Additionally, the author was not present to speak to the material. In the result, the examiners accepted the report as an exhibit but are unable to weigh its contents. In this circumstance, there is a particular necessity for Penn West to do careful and scrupulous soils investigation work prior to the commencement of construction and to carefully consider the meaning of that information in planning any resulting soils handling program.

The examiners are encouraged by Penn West's intent to continue to allow the Frolands to farm the right-of-way. In the examiners' view, this is of benefit to both parties.

The examiners are satisfied that the pipeline design is more than adequate for the applied-for pipeline operating conditions. There are no requirements for installation of an ESD valve for a pipeline with 0 per cent H₂S. Therefore, the examiners do not see any merit in recommending that an ESD valve be installed in this situation.

The examiners are satisfied that Penn West's suggested construction procedure and method of fencing would be sufficient to protect the cattle. The examiners would encourage the Frolands to help reduce the potential risk to the cattle during the pipeline construction by pursuing options with Penn West for timing of moving the cattle from and onto the northwest quarter of Section 7. Similarly, the soil specialist should discuss the best approach for soil reclamation with the Frolands and consider their suggestions to ensure short- and long-term success for the reclamation of the soils.

The examiners note that the diagonal route would have been shorter than the applied-for route and may have involved less excavation. However, the examiners believe both routes have merit and consequently there is no compelling reason to deny the applied-for route. The examiners are satisfied that any potential impacts of the applied-for pipeline have been satisfactorily addressed.

7 APPROPRIATE DISPUTE RESOLUTION MATTERS

On July 23, 2004, EUB staff arranged a facilitation meeting attended by the Frolands and Penn West. However, the parties were unable to reach an agreement at that meeting. In parallel, the EUB continued to process the application, which led to setting a hearing date in accordance with EUB procedures. Meanwhile, EUB staff continued to encourage the parties to engage in the ADR process. An ADR session was held on December 21, 2004, but the parties were again unable to reach an agreement.

Both parties were frustrated with the ADR process. Penn West submitted that there had been insufficient EUB explanation of the ADR process and stated that Penn West would have benefited from greater clarification. The Frolands said that they entered into ADR in good faith, expecting that all options would be considered. They expressed frustration at the lack of feedback from Penn West, particularly in terms of the unexplained failure to continue with the diagonal route.

The examiners believe that the ADR process is well defined and has been successfully applied in many situations. EUB *Informational Letter 2001-1: Appropriate Dispute Resolution (ADR) Program and Guidelines for Energy Industry Disputes* describes the ADR process.

The examiners believe that it is unfortunate that the parties did not build on the initial facilitation meeting. As a minimum, the underlying reasons for the outstanding issues should have been explored, but Penn West chose to discard other options and opt for pipeline routing that it described as an option that would have reduced the public consultation requirement with the landowner. In the examiners' view, this is contrary to the intent and spirit of the ADR process. The examiners stress that in the ADR process, according to the precepts of that program, all options should remain open for consideration. The objective of the ADR process is to encourage consultation and face-to-face discussion and to explore all potential options in order to resolve the issues between affected landowners and company decision-makers. The examiners believe that further attempts may have led to a mutually acceptable location for the pipeline and could have resulted in a more agreeable coexistence between these two parties during the production life of the reserves. The examiners encourage both parties to engage in the ADR process again, should the need arise, and attempt to resolve any outstanding issues in a manner that would be in the best interest of both the applicant and the landowner.

8 CONCLUSION

The examiners find that Penn West has a need for the proposed pipeline and that it can be constructed and operated in a safe and environmentally acceptable manner. The examiners also find that the associated impacts can be properly addressed and mitigated. As a result, the examiners are of the view that the subject application is in the public interest and, therefore, recommend that the Board approve the application.

Dated in Calgary, Alberta, on March 28, 2005.

ALBERTA ENERGY AND UTILITIES BOARD

<original signed by>

T. J. Pesta, P.Eng.
Presiding Member

<original signed by>

G. A. Habib, M.A.
Examiner

<original signed by>

M. P. Vandenberg, C.E.T.
Examiner

APPENDIX 1 HEARING PARTICIPANTS

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

Penn West Petroleum Ltd. (Penn West)
R. C. Swist, LL.B.
V. P. Ferenc-Berry, LL.B.

D. Yedon
A. Bruinsma
T. Cookson
R. Simmons, P.Eng.
D. Murray, of
Cavalier Land Ltd.

P. Froland and E. Froland
T. Roberts, Q.C.

P. Froland
E. Froland
A. Froland

Alberta Energy and Utilities Board staff
J. Webb, Board Counsel
E. Simpson
C. Giesbrecht
E. Knox, C.E.T.

APPENDIX 2 COMMITMENTS BY PENN WEST

The examiners note throughout the decision report that Penn West has undertaken to conduct certain activities in connection with its operations, some of which are not strictly required by the EUB's regulations or guidelines. These undertakings, described as commitments, were submitted at the hearing as Exhibit 7, dated January 7, 2005, and appear on the following pages. It is the examiners' 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 examiners take these commitments into account when arriving at their decision. The examiners expect the applicant, having made the commitments, to fully carry out the undertaking or advise the EUB if, for whatever reasons, it cannot fulfill a commitment. The EUB would then assess whether the circumstances regarding the failed commitment warrant a review of the original approval. The examiners also note that the affected parties have the right to request a review of the original approval if commitments made by the applicant remain unfulfilled.

TO: Peter and Elizabeth Froland

FROM: Penn West Petroleum Ltd. / Dave Yedon

RE: Albers 11-07-042-07 W4M Pipeline Construction
NW ¼ Section 7 – 42 – 7 W4M
New Pipeline located within the Access Road for the Referenced Well site.
EUB Application No. 1348061

OPERATOR COMMITMENTS:

Project Timing

1. The Operator Penn West undertakes to install the pipeline as soon as practicable after the spring thaw, subject to ground conditions being dry enough to execute the work.
2. Penn West will provide the landowner(s) with at least 72 hours notice of construction kick-off.

Supplemental Information

3. The Operator Penn West will install one emergency shut down (ESD) valve at the 11-07 wellhead if required by the AEUB for safety reasons. A check valve will be installed at the 08-13 end of the pipeline to prevent backflow into the 11-07 pipeline if the ESD valve is required.

Construction of Pipeline

4. The pipeline will be buried to a depth of approximately six to seven feet, (1.8 to 2.1m).
5. The pipeline will be constructed of pipe that meets CSA standard.
6. The pipeline specification is: 88.9mm OD x 3.20mm WT, CSA Z 245.1, Grade 230, Category 1, steel linepipe as indicated in the public notification letter.

Land Conservation and Reclamation

7. All topsoil to be stripped from the right-of-way will be conserved on top of other topsoil. Subsoil will be placed on top of subsoil. Subsoil will not intentionally be placed on topsoil.
8. Topsoil stripping on the access road right-of-way will take place prior to moving any heavy equipment onto the worksite.
9. The actual ditch will be dug with a backhoe with the narrowest bucket available for the size of hoe available. The trench would be approximately six to seven feet deep on the road right-of-way in order put the pipeline down below the frost level in the access road. During the

backfilling of the trench, a laborer would be positioned with the hoe to pick out any visible rocks by hand or with a shovel.

10. At the conclusion of the project, the topsoil will be replaced over the right-of-way. All disturbed ground will be roto-spiked.

Fencing

11. The Operator undertakes to repair each fence that the pipeline crosses and the Operator further agrees to brace each fence cut after the fence is reconstructed.
12. The Operator undertakes to construct and maintain adequate fences, latching gates, and other works to ensure the safety and prevent the straying of livestock, if there is livestock on the land, during the surveying, construction and initial 'clean up'.

Litter During or After Construction Including Survey Stakes

13. Prior to construction, the right-of-way will be re-staked to ensure that all construction is contained within surveyed right-of-way.
14. During the construction phase, Penn West's inspector and the designated contractor will be instructed to pick up and remove all garbage on a daily basis.
15. After construction is complete, the survey stakes will be removed and Penn West's inspector and the contractor's superintendent will walk the right-of-way to ensure that no survey stakes and no garbage are left on the Right of Way and/or adjacent land.
16. The Operator undertakes to pick any rocks within the Right of Way after the pipeline construction is complete.

Texas Gate Built and Installed in the NW Corner of Section 07-042-07 W4M.

17. In accordance with the land document (surface lease) signed prior to the time the 11-07 well was drilled, Penn West will install a Texas gate at the above captioned location, subject to the following conditions:
18.
 - a. The landowner(s) will be responsible for securing approval to install the Texas gate in the MD road allowance from the MD of Provost, and shall provide a written copy of the approval from the MD to Penn West. No Texas gate will be installed without county approval.
 - b. The Texas gate will be standard and will not be custom build.
 - c. The Texas gate will meet the minimum specifications outlined by the MD of Provost. In the event of any discrepancies vis-à-vis specifications, the County's requirements will prevail.

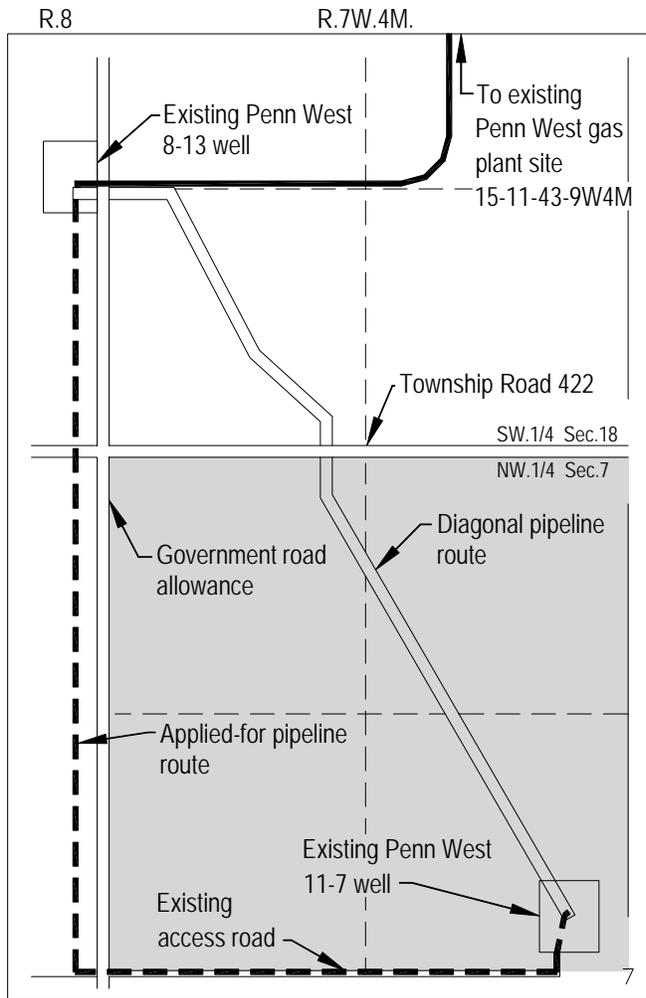
- d. The Texas gate will be installed after the completion of the pipeline construction project.
- e. The landowner(s) will be responsible and liable for the Texas gate.
- f. Penn West will in due course sell the Texas gate to the landowner(s) for one dollar.

Weed Control

- 19. The Operator acknowledges that it shall be responsible for all weed control on the access road right of way within which the pipeline is located as specified in the surface lease for the Penn West well located at LSD 11-07.

Miscellaneous

- 20. The Operator undertakes to pay all rates and taxes that may be assessed or levied from time to time against the pipeline.
- 21. The Operator undertakes to immediately notify the Landowner in case of any leak or malfunction of the pipeline after the pipeline is put in use.
- 22. The Operator shall ensure that neither of its agents, contractors or other personnel engages in the wanton discharge of firearms on or adjoining the access road right of way.
- 23. Any notices to be given to the Landowner will be given at Box 289, Hughenden, Alberta T0B 2E0. Phone (780) 856-3649.
- 24. The Operator hereby covenants and agrees to indemnify and save harmless the Landowner from any and all liabilities, damage, costs, claims, suits or actions caused by or resulting from the pipeline being located on the Landowner's land except damages caused by the Landowner's gross negligence or willful misconduct.



Legend

 Frolands' land

Applied-for and diagonal pipeline routes