



# **Teck Resources Limited**

**Application for Oil Sands Evaluation Well Licences  
Undefined Field**

**October 21, 2013**

**ALBERTA ENERGY REGULATOR**

Decision 2013 ABAER 017: Teck Resources Limited, Application for Oil Sands Evaluation Well Licences, Undefined Field

October 21, 2013

Published by

Alberta Energy Regulator  
Suite 1000, 250 – 5 Street SW  
Calgary, Alberta  
T2P 0R4

Telephone: 403-297-8311  
Toll free: 1-855-297-8311  
E-mail: [inquiries@aer.ca](mailto:inquiries@aer.ca)  
Website: [www.aer.ca](http://www.aer.ca)

## CONTENTS

Decision .....	1
Introduction.....	2
Applications .....	2
Background.....	2
Interventions .....	3
Hearing.....	4
Issues.....	4
Analysis.....	4
The Need For The Wells.....	4
Adequacy of Notification and Consultation .....	6
ACFN and MCFN.....	7
FCM .....	8
Effects on Water .....	9
Project Footprint and Cumulative Disturbance.....	10
Cumulative Effects.....	10
Land Disturbance .....	11
Effects on the Ronald Lake Bison Herd .....	13
Effects on Traditional Land Use Activities .....	16
Conclusion .....	20

## Appendices

1 Summary of Conditions and Commitments.....	22
2 Hearing Participants.....	23

## Figures

1 Regional map from Fort Chipewyan to Fort McKay.....	24
2 Corehole Program map .....	25



## ALBERTA ENERGY REGULATOR

Calgary Alberta

---

**TECK RESOURCES LIMITED  
APPLICATION FOR OIL SANDS  
EVALUATION WELL LICENCES  
UNDEFINED FIELD**

**2013 ABAER 017  
Applications No. 1749543, 1749567, 1749568,  
1749569, 1749570, 1749572, 1749605,  
1749607, 1749620, 1751999, 1752756,  
1763318, 1763325, 1763326, 1763327**

---

### DECISION

[1] Having carefully considered all of the evidence, the Alberta Energy Regulator (AER) approves Applications No. 1749543, 1749567, 1749568, 1749569, 1749570, 1749572, 1749605, 1749607, 1749620, 1751999, 1752756, 1763318, 1763325, 1763326, and 1763327.

[2] In reaching its decision, the AER considered all 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 help the reader understand the AER's reasoning on a particular matter and does not mean that the AER did not consider all relevant parts of the record with respect to that matter.

[3] During the proceeding, the *Responsible Energy Development Act (REDA)* came into force in Alberta. The *Energy Resources Conservation Act (ERCA)*, which established the Energy Resources Conservation Board (ERCB/Board), was repealed and the AER was created. In accordance with *REDA*, the AER assumed all of the ERCB's powers, duties, and functions under Alberta's energy resource enactments, including those under the *Oil and Gas Conservation Act (OGCA)*. Throughout the transition from the ERCB to the AER, the authority of the panel assigned to hear this matter continued in accordance with the *Responsible Energy Development Act Transition Regulation*. Where appropriate, this decision refers to the AER anywhere the ERCB was mentioned in the hearing record.

[4] Findings concerning the public interest have been included in this decision because section 3 of the *Oil Sands Conservation Act (OSCA)* and section 4 of the *OGCA* both state that one of the purposes of the statute is to provide for the economic, orderly and efficient development in the public interest of the oil sands and oil and gas resources of Alberta. The panel is aware of its responsibilities under section 15 of *REDA* and section 3 of the *Responsible Energy Development Act General Regulation*, which requires the AER to consider the economic, social, and environmental effects of energy resource activities when considering an application. The panel is satisfied that throughout the proceeding and in its decision it has considered the purposes and factors identified in those sections.

## INTRODUCTION

### Applications

[5] Teck Resources Limited (Teck) applied under section 2.030 of the *Oil and Gas Conservation Regulations* for licences to drill 177 vertical crude bitumen oil sands evaluation wells within Townships 99 and 100 of Ranges 10 and 11, West of the 4th Meridian. The purpose of the wells would be to evaluate oil sands in the McMurray Formation, including defining the extent of the bitumen resource and determining the economic viability of oil sands development in the area. Oil sands evaluation wells are used to obtain core samples and are not intended to produce hydrocarbons. For ease of reference, these applications will be referred to as the originally proposed 2012/2013 winter corehole drilling program (Corehole Program).

[6] The Corehole Program would be located about 49 kilometres (km) north of Fort McKay and about 124 km south of Fort Chipewyan, on the west side of the Athabasca River (figure 1).

### Background

[7] Most of the applications for the Corehole Program were submitted to the AER on December 23, 2012; December 25, 2012; December 26, 2012; December 27, 2012; January 20, 2013; and January 27, 2013. Teck advised all involved parties in April 2013 that it intended to submit further applications for consideration at the hearing, and accordingly, four additional applications were submitted on May 27, 2013.

[8] Teck applied for the Corehole Program in order to better define the bitumen resource that Teck has applied to develop as part of its application for the Frontier Oil Sands Mine Project (Frontier Project). The application for the Frontier Project was submitted to the AER on November 21, 2011, and is currently under review; however, that application does not form part of nor was it considered in this proceeding. Teck is the sole owner of the Frontier Project, which is a proposed truck and shovel oil sands mine to be located about 110 km north of Fort McMurray. Teck has conducted oil sands evaluation and geotechnical drilling in support of its Frontier Project application since the winter of 2005/2006, resulting in information from about 680 coreholes and 600 geotechnical holes in the project area. Geotechnical drilling is intended to gather information about the subsurface material and geology, not to evaluate the hydrocarbon resource. Geotechnical programs are approved by Alberta Environment and Sustainable Resource Development (AESRD) under the *Public Lands Act* and do not require AER licences or approvals.

[9] Teck submitted oil sands exploration (OSE) applications 120047, 120049, and 120099 to AESRD and received letters of authority dated December 6, 2012, and May 16, 2013, allowing it to enter and occupy Crown lands for the purpose of conducting an oil sands exploration program for the 2012/2013 winter drilling season. Teck obtained the necessary authorizations from AESRD, including temporary field authorizations for the geotechnical program and authorizations for various miscellaneous leases, mineral surface leases, and licences of occupation to complete the winter drilling program. AESRD has also authorized two ten-year diversion licences dated December 9, 2009, and July 25, 2012, and various temporary diversion licences approving and controlling the withdrawal of water required for Teck's winter drilling programs. Teck began its geotechnical drilling program related to the above-mentioned applications in the winter of 2012/2013.

[10] Teck stated that it has also received confirmation of consultation adequacy from AESRD dated November 28, 2012, and clearance under the *Historical Resources Act* from Alberta Culture for the OSE applications. Teck also said that it has received a development permit for the workers' campsite from the Regional Municipality of Wood Buffalo and obtained all necessary third-party agreements, including road use agreements and a forest management agreement for land withdrawals. Teck submitted that, with the exception of the proposed AER well licence applications, it has all government authorizations needed to proceed with the Corehole Program.

### Interventions

[11] The ERCB received submissions from the Athabasca Chipewyan First Nation (ACFN), both before and after the Corehole Program applications were submitted, outlining ACFN's concerns about

- direct and adverse impacts on ACFN members' ability to exercise their traditional rights,
- reduction of the land base available to support ACFN's treaty rights and traditional resources required to sustain these rights,
- cumulative impacts of development in the project area and in the region,
- deterioration of water quality and quantity in the Athabasca River drainage system, and
- interference with and impacts on area wildlife.

[12] The ERCB also received submissions from the Mikisew Cree First Nation (MCFN), both before and after the Corehole Program applications were submitted, outlining MCFN's concerns about direct, indirect, and cumulative impacts on MCFN's traditional lands and traditional resources. MCFN was concerned that such impacts could adversely affect the rights and cultural activities of the MCFN, and critical wildlife habitat in the area.

[13] On February 14, 2013, the ERCB sent letters to ACFN and MCFN advising that because it appeared that they had rights that may be directly and adversely affected by the ERCB's decision on the applications, they had met the test under section 26 of the *ERCA* to initiate a hearing of the applications.

[14] On April 16, 2013, Fort Chipewyan Métis Local 125 (FCM) sent a letter to the ERCB requesting full participation in the hearing. In this letter FCM outlined its concerns about the direct and adverse effects of the applications on customs, practices, and traditions important to the Métis; on the historic and current use of a Métis trapline (registered fur management area, [RFMA] # 1275); and on various trails that connect several occupancy and harvesting areas within the traditional territory used by FCM members for winter hunting of bison and moose. FCM also submitted that Teck failed to comply with *Directive 056: Energy Development Applications and Schedules (Directive 056)* consultation requirements by failing to notify and consult with FCM about the Corehole Program.

[15] On June 17, 2013, the ERCB was succeeded by the AER. A notice of hearing was issued by the AER on July 9, 2013, for a hearing to start on August 19, 2013. The notice and a cover letter was sent to the parties advising that FCM could also participate in the hearing.

[16] Before the hearing began, FCM filed a notice of question of constitutional law (NQCL) under the *Administrative Procedures and Jurisdiction Act*. The AER requested submissions on matters related to the NQCL that might affect the panel's jurisdiction over the questions presented in the NQCL. Written submissions were received from Teck, the Province of Alberta, and MCFN. FCM withdrew its NQCL before the AER had issued any decisions in relation to the NQCL.

## Hearing

[17] The AER held a public hearing in Fort McMurray, Alberta, that began on August 19, 2013, and ended on August 22, 2013, before hearing commissioners R. C. McManus (presiding), A. H. Bolton, and B. McNeil. The panel and AER staff conducted a helicopter site tour of the project area on August 21, 2013. Those who appeared at the hearing are listed in appendix 2.

## ISSUES

[18] The panel considers the issues respecting the applications to be

- the need for the wells,
- adequacy of notification and consultation,
- effects on water,
- project footprint and cumulative disturbance,
- effects on wildlife and the Ronald Lake bison herd, and
- effects on aboriginal traditional land use activities.

## ANALYSIS

### THE NEED FOR THE WELLS

[19] Teck submitted that the Corehole Program is required in order to gather information needed to advance progress on the Frontier Project, to effectively manage the resource, and to develop more detailed engineering designs and project cost estimates.

[20] Teck submitted that its oil sands lease rights include the right to explore and assess the geology of the bitumen resource in its lease areas and that these wells are needed for Teck to exercise those rights. *Directive 082: Operating Criteria: Resource Recovery Requirements for Oil Sands Mine and Processing Plant Operations (Directive 082)* requires that a lessee properly delineate the resource it plans to develop. Teck confirmed that it has not yet fulfilled this requirement and that more drilling information is needed. Teck advised that it needs this information not only to satisfy the requirements of *Directive 082* but also to enable the development of detailed engineering designs and project cost estimates that would be used to assess the feasibility of the Frontier Project.



[21] Teck stated that its application was consistent with the Lower Athabasca Regional Plan (LARP), which was prepared under the *Alberta Land Stewardship Act* and approved by the Government of Alberta in 2012. Teck submitted that LARP indicates the economic potential of oil sands resources is to be optimized as part of the province's strategic plan for the Lower Athabasca region. Teck said that section 20 of *REDA* requires the AER to act in accordance with LARP when the AER considers applications. Teck interprets LARP as confirming that the province wants further energy development in the area where the Frontier Project is proposed because the area has been selected by the government for oil sands exploration and development, subject to certain objective environmental thresholds. Teck submitted that failure to acquire timely drilling information would impede its development of the Frontier Project.

[22] ACFN submitted that it had initiated a legal challenge of LARP and cautioned the panel against relying on LARP.

[23] ACFN challenged Teck's position on the need for more data to advance engineering for the Frontier Project. ACFN submitted that Teck's reliance on the Frontier Project to support the need for the wells was inconsistent with Teck's position that the Frontier Project was not within the scope of this hearing. ACFN also found that Teck's submission that it needs timely drilling information on these applications in order to meet the requirements of *Directive 082* is inconsistent with Teck's position that the disclosure of the number of oil sand evaluation wells needed to meet *Directive 082* density requirements is irrelevant. In addition to challenging the overall need for the wells, ACFN also challenged the need for the wells right now. It argued that Teck would not suffer any irreparable harm if the applications were delayed to permit further information on impacts to be collected.

[24] It was Teck's position that disclosure of the number of evaluation wells needed to meet *Directive 082* density requirements was irrelevant as Teck was drilling the wells not only to satisfy *Directive 082* but also to help in its business decisions. Teck disagreed with ACFN's position that the applications could be delayed. Teck said that failure to get approval for these applications before the 2012/2013 winter season had already resulted in a one-year schedule delay for the Frontier Project and in Teck incurring about \$12 million in contractor penalties. Teck submitted that it continues to pay rent on the oil sands leases and that failure to acquire the licences for these applications in time to begin the Corehole Program during the upcoming 2013/2014 winter season will result in further schedule delays, additional development costs, and lost opportunity costs.

[25] The panel acknowledges that evaluation wells allow for more than just the effective management of resources. They also help oil sands lessees make business decisions since the acquired information supports conceptual and detailed mine planning that is needed to apply for other approvals.

[26] The panel does not accept ACFN's argument that it is somehow inappropriate for Teck to connect the need for the wells to its ongoing efforts to advance the Frontier Project. *Directive 023: Guidelines Respecting an Application for a Commercial Crude Bitumen Recovery and Upgrading Project (Directive 023)* states that a proponent must acquire enough drilling information to delineate the resource and determine the economic viability of the project. *Directive 023* sets out the information required in an application for approval of a scheme to recover oil sands or crude bitumen or for approval of an oil sands processing plant. These

requirements include information about the geology and the resource evaluation in the project area.

[27] Further to the above, *Directive 082* outlines the drilling density the AER requires when it evaluates an application for a new mine such as Teck's Frontier Project. *Directive 082* identifies the maximum spacing that is permitted between drillholes used to delineate the bitumen resource beneath mine and processing plant sites. The panel understands that Teck's Frontier Project is currently being reviewed by the AER (Application No. 1709793) and that the delineation drilling that Teck has completed for the project does not meet the drilling density requirements of *Directive 082*. The panel therefore believes that Teck's efforts to get regulatory approval for the Frontier Project is directly connected to the need for the current applications. While the panel notes that *Directive 082* allows an applicant to request a variance to the AER's drilling density requirements before filing an application, Teck has not applied for a variance. The panel notes that no evidence was provided in this proceeding to seek or support a decision that a lower drilling density is appropriate in these circumstances.

[28] Based on the AER's existing requirements and in recognition of the fact that Teck is seeking these wells not only to meet the AER's requirements but also to assess the economic feasibility of the Frontier Project and to refine its design, the panel finds that the Corehole Program is needed. The applications are consistent with the AER's resource conservation mandate under *OSCA* section 3 "to effect conservation and prevent waste of the oil sands resources of Alberta; to ensure orderly, efficient and economical development in the public interest of the oil sands resources of Alberta; and to provide for the appraisal of Alberta's oil sands resources." With regard to the request that the approval be delayed, the panel sees no need for such a delay. The panel accepts Teck's submission that the Corehole Program is located in an area designated for oil sands exploration and development under LARP. While the panel understands that ACFN may have initiated a legal challenge of LARP, the AER must act in accordance with LARP as it currently exists.

## **ADEQUACY OF NOTIFICATION AND CONSULTATION**

[29] Teck argued that while ACFN, MCFN, and FCM have expressed a multitude of concerns that the applications, if approved, would affect their rights and traditional uses, they have failed to work with Teck to identify whether there were site specific concerns that could be mitigated. Teck also said that if community members had issues, they should be expected to bring those issues to Teck's attention during the consultation process.

[30] Teck stated that the concerns expressed by the interveners had previously been raised and considered by AESRD through its approval process and that AESRD had found that the consultation was complete and adequate. Teck also argued that AESRD's issuance of the authorizations necessary to conduct the Corehole Program demonstrated that AESRD had found Teck's proposed mitigation measures to be appropriate to address the issues raised and to meet AESRD's regulatory requirements. Teck argued that because AESRD has legislative responsibility for assessing and managing impacts on public lands, wildlife, and water resources, the AER should have regard for AESRD's determinations with respect to the adequacy of consultation and mitigation with respect to the interveners' issues.

[31] MCFN and ACFN submitted that the panel could not rely on the AESRD's adequacy determination and assessment of concerns. To be able to do so, the AER would need to assess the adequacy of crown consultation, which is prohibited by section 21 of *REDA*. It was further submitted that Teck should not be permitted to rely on AESRD's determinations about the adequacy of consultation to demonstrate compliance with *Directive 056* or to provide that the project was in the public interest.

[32] The panel notes that the AER's notification and consultation requirements under *Directive 056* are separate from and independent of AESRD's consultation process. The panel also acknowledges that under section 21 of *REDA*, the AER does not have the jurisdiction to assess the adequacy of Crown consultation. The AER's role in assessing consultation is therefore limited to determining compliance with the AER's notification and consultation requirements. In this regard the AER must independently determine the adequacy of Teck's notification and consultation efforts measured against AER requirements and expectations.

[33] Under *Directive 056*, applicants are required to develop effective participant involvement programs that include parties that express an interest in the proposed development. While the tables set out in *Directive 056* provide some guidance about who to include in a participant involvement program, the tables are not intended to be viewed as a maximum. Regardless of whether a person is within the areas set out in a table, *Directive 056* states, "the applicant must also include those people that it is aware of who have concerns regardless of whether they are inside or outside the radius of personal consultation and notification indicated in Tables 5.1, 6.1, 6.2, and 7.1."

#### **ACFN and MCFN**

[34] Teck submitted that it met or exceeded the AER's notification and consultation requirements and that its approach included early consultations, sufficient timelines for review, sufficient information to undertake a review of proposed activities, and responsiveness. ACFN and MCFN disagreed. They said that Teck's timelines for providing site-specific concerns were too short and that the consultation that occurred was not responsive to their concerns. In terms of the timelines being too short, MCFN submitted that the time provided to respond was insufficient given the significance of their concerns and the number of applications they received.

[35] In terms of responsiveness, ACFN said that because Teck had not attempted to address and respond to the issues raised, it had not complied with *Directive 056*. Rather than respond, ACFN said that Teck kept writing back asking what ACFN's site-specific concerns were. ACFN further advised that they tried to have substantive discussions with Teck, but Teck resisted.

[36] MCFN described a similar experience wherein Teck repeatedly told them that they were not providing site-specific concerns. MCFN disagreed as they believed that the information provided was specific. In terms of its interpretation of what "site specific" means, Teck advised that it considered that a site-specific impact needs to relate to the actual physical location of the leases and access roads supporting a core hole and that a site-specific impact would be "something that would require us to drop or relocate a core hole such as cabins, trails, water bodies, etc." MCFN advised that each of its mapped site-specific values implies a much wider geographic area for the meaningful practice of its rights. Both ACFN and MCFN believed that

Teck's interpretation failed to provide best practices for mitigating impacts on traditional land use and treaty rights.

[37] In terms of consultation timelines, the panel finds that ACFN and MCFN had sufficient time to engage with Teck for *Directive 056* purposes. The panel notes that the *Directive 056* participant involvement package was provided to both MCFN and ACFN in the autumn of 2012, and that there were numerous communications between the parties between then and the start of the hearing. The panel finds that Teck met and in fact exceeded the minimum notification period set out in *Directive 056*. *Directive 056* says that "the applicant must allow participants a minimum of 14 calendar days to receive, consider, and respond to notification of the proposed development." The panel is of the opinion that adequate time was provided for these parties to engage; however, the panel is concerned about the quality of the engagement.

[38] The panel notes that the differing interpretations of site specific appear to have hindered the abilities of the parties to engage in meaningful discussions. The panel notes that *Directive 056* does not require a person to identify a site-specific impact in order to be treated as a person with concerns who should be included in the *Directive 056* consultation and notification program. That being said, identification of site-specific concerns might help the AER in its consideration of an application.

[39] The panel agrees that impacts on aboriginal traditional land uses and rights cannot be understood simply by looking at whether proposed drilling sites, access roads, and other infrastructure overlap previously identified or mapped traditional use values. While it is important to identify and mitigate potential site-specific impacts, the panel agrees with ACFN that simply avoiding specific mapped traditional-use values will not necessarily be sufficient to avoid impacts on traditional land use activities or rights. The panel understands that traditional-use values mapped through traditional land use (TLU) studies may be incomplete representations of TLU activities and may not reflect all traditional land use and cultural activities in an area.

[40] Despite the difference of opinion over site-specific versus broader impacts, the panel finds that Teck's notification to these parties was adequate and that ACFN and MCFN had several opportunities to learn about the project and raise their concerns. The panel is disappointed that the parties appeared to be talking past one another on the question of site specific versus broader impacts and that the resulting discussions about these aspects of the project may not have been as fruitful as they might otherwise have been. The panel believes that all parties are responsible for ensuring that consultation is meaningful. The panel acknowledges, however, that because of the differing perspectives of ACFN, MCFN, and Teck on oil sands development near the Corehole Program, the parties might have difficulty agreeing on how to resolve the issues identified.

## **FCM**

[41] FCM submitted that Teck did not comply with the AER's *Directive 056* requirements because, despite having previous knowledge of FCM's concerns, Teck did not initially notify FCM about the Corehole Program applications. FCM said that it was not notified until April 2013, after a decision had been made about whether the applications should proceed to hearing. This was despite FCM having filed a statement of concern (SOC) with AESRD in May 2012 about the Frontier Project application.

[42] Teck confirmed that before April 2013, it had not notified or consulted with FCM specifically about the applications for the Corehole Program. Teck said it was unaware that FCM had concerns about its winter drilling program because FCM had not previously raised concerns about a similar program that had been proposed for the winter of 2011/2012 but that was never conducted. Teck also stated that AESRD had not required it to consult with FCM. Teck did, however, commit to providing FCM with *Directive 056* notification in the future at the same time that it notifies Fort Chipewyan-based First Nations.

[43] The panel finds that Teck's efforts to notify and consult with FCM did not meet *Directive 056* requirements. Teck was aware that FCM had filed an SOC related to the Frontier Project and that this SOC had been accepted by AESRD. As a result, Teck should have been aware that FCM had concerns about development activities in the overall project area and should have included FCM in its participant involvement program for the Corehole Program. That said, the panel finds that any deficiencies in Teck's failure to notify and consult with FCM were remedied through the hearing process. The panel accepts Teck's commitment to ensuring that it provide FCM with *Directive 056* notification at the same time that it notifies Fort Chipewyan-based First Nations.

[44] The panel recommends that Teck enhance its efforts to fully meet the requirements and "spirit" of *Directive 056* in all future applications to which *Directive 056* participant involvement requirements apply. The panel also encourages the parties to continue to engage and improve communications in an attempt to resolve concerns and make the consultation process more effective.

## EFFECTS ON WATER

[45] ACFN and FCM expressed concerns over both the quantity of water being used for the winter drilling program and the potential for contamination of surface water bodies, including the Athabasca River, because of the community's location downstream of the project area and its use of the Athabasca River as a source of drinking water. ACFN and FCM said that many of their members already avoid eating fish or drinking water from the Athabasca River and other rivers and lakes in the area. They also said that concerns about the quality of water are growing and that the Corehole Program would contribute to both real and perceived contamination of the water.

[46] Teck said that it will use water primarily for the construction of ice bridges, ice roads, and drilling pads. Smaller volumes of water will be used to drill the core holes and to operate Teck's camp. Teck used about 38 000 m<sup>3</sup> of water for its 2012/2013 geotechnical program, and it expects to use the same amount for the Corehole Program, assuming similar weather conditions. Teck submitted that the volumes of water to be diverted are small and will not have an adverse environmental effect on the water bodies.

[47] Teck said that AESRD is responsible for water withdrawal authorizations. Teck also stated that AESRD has reviewed its proposed water diversion activities and has issued all of the water licences necessary to enable Teck to complete the proposed Corehole Program. Teck noted that AESRD administers the Athabasca River Water Management Framework, which protects against unacceptable low flows in winter. Teck said that its withdrawal of small amounts of water in the winter will not negatively affect the use the Athabasca River as a transportation route.

[48] Teck submitted that there are no significant contamination sources associated with its Corehole Program that would impair on-site or off-site water quality. Teck said that mitigation for its camp water use would be a commercial wastewater/sewage treatment system, and for its drilling materials would be compliance with *AER Directive 050: Drilling Waste Management*.

[49] The panel acknowledges that AESRD is responsible for assessing and approving Teck's proposed water diversion program, and that it has issued the necessary authorizations for the proposed water withdrawals.

[50] The panel agrees that the volume of the water withdrawals is small and not likely to adversely or irreversibly affect any water bodies. The panel also notes that as a result of the planned uses of water by Teck, most of the water used for the program would be returned to the hydrologic cycle during spring breakup.

[51] The panel finds that insufficient information was provided to support concerns about water quality and the potential contamination of water as a result of the Corehole Program. The panel finds that the risk of water contamination from the Corehole Program is minimal due to the localized nature of activities and Teck's proposed mitigation.

## **PROJECT FOOTPRINT AND CUMULATIVE DISTURBANCE**

### **Cumulative Effects**

[52] All three interveners expressed concern about the cumulative effects of oil sands development, including multiple winter exploration programs and the large number of geotechnical and corehole wells required for the Frontier Project.

[53] ACFN expressed concern about the cumulative effects of Teck's proposed Corehole Program in combination with other past and current resource delineation and geotechnical programs. ACFN also expressed the concerns that Teck has not completed an assessment of the cumulative effects of its resource delineation activities to date and that Teck's reasoning for not doing so is that other companies have not been required to complete such assessments.

[54] Teck confirmed that it has not completed a formal environmental impact assessment (EIA), or an assessment of the cumulative effects of the winter drilling programs that it had completed to date, or the Corehole Program, and that there are no regulatory requirements for such assessments for oil sands exploration programs. Teck said that its proposed mitigation measures were designed to minimize site-specific effects and that this would also help limit environmental and cumulative effects of the program. Teck also said that LARP was the appropriate mechanism for managing cumulative effects.

[55] The panel acknowledges that there is no requirement under the *Environmental Protection and Enhancement Act* (EPEA) or the AER's rules to conduct an EIA or cumulative effects assessment for exploration programs such as those proposed in the Corehole Program applications. The panel also believes that a formal EIA or cumulative effects assessment for each exploration program would not be practical and that LARP is a more appropriate mechanism for establishing disturbance limits and managing regional cumulative effects. While the panel recognizes that some of the tools and frameworks contemplated under LARP for managing

cumulative effects, such as disturbance limits and the biodiversity management framework, have not yet been developed or implemented, the panel does not believe that it is necessary or would be appropriate to wait until these tools have been developed and implemented before issuing the authorizations for the Corehole Program wells. Section 7(3) of the Regulatory Details Plan in LARP states that

a decision-maker or local government body must not adjourn, defer, deny, refuse, or reject any application, proceeding or decision-making process before it by reason only of

- a) the Crown's non-compliance with a provision of either the LARP Strategic Plan or LARP Implementation Plan, or
- b) the incompleteness by the Crown or any body of any direction or commitment made in a provision of either the LARP Strategic Plan or LARP Implementation Plan.

### **Land Disturbance**

[56] Teck submitted that it designed the Corehole Program to limit the amount of new disturbance by using geotechnical well pads and existing access as much as possible. Teck has acquired the necessary surface access authorizations from AESRD. Teck estimated that the total disturbed area of existing dispositions was about 140 hectares but indicated that individual disturbance areas cannot be simply summed up because the amounts include disturbance related to the geotechnical program, and some of the Corehole Program will take place on those already disturbed sites. Teck estimated that approval of the Corehole Program would result in about 23 hectares (ha) of new disturbance.

[57] Teck submitted that AESRD was responsible for assessing the environmental effects of the proposed geotechnical and corehole programs on Crown lands and for issuing the required surface authorizations. Teck said that AESRD had assessed the potential impacts of both programs, including the issues raised by the intervening parties, had authorized the clearing and construction of access routes and well sites for the Corehole Program, and had issued the water diversion licences and authorizations necessary for pad and access preparation. Teck submitted that the AER should take in to consideration AESRD's authorizations.

[58] Teck provided a series of technical memoranda outlining its wildlife and watercourse mitigation measures. These memoranda identify key mitigations proposed by Teck for the Corehole Program, including

- sharing common access corridors with other operators;
- using existing linear corridors for access where possible;
- using existing clearings;
- locating facilities, roads, remote sumps, and well sites outside of the Key Wildlife Biodiversity Zone where possible;
- placing breaks in snow berms to allow wildlife movement and access to trapping trails;
- avoiding water bodies and creek crossings where possible;
- removing log spans, rig mats, and snow fills before spring break-up; and
- closing access after drilling and use of active and passive access control.

[59] Teck said that access will be controlled through use of signage, rollback of snow and woody debris, and vehicular traffic speed limits. Teck also said that the proposed Corehole Program will adhere to AESRD's Code of Practice for Exploration Operations.

[60] Teck said that it is committed to an "early-in/early-out" policy whereby work would begin immediately after freeze-up in order to complete the Corehole Program as soon as possible. Teck submitted that the Corehole Program would take about 90 days to complete.

[61] Teck also submitted a technical memo to address reclamation and stated that vegetation cover would recover relatively quickly because of the minimal-impact disturbance techniques being used for the Corehole Program. Teck said that it would employ low-impact winter construction methods that have limited impact on soils and ground disturbance and that would include freezing over access and drilling pads. Teck submitted that these methods promote rapid reclamation through the use of rollback on leases and access roads and the use of stripping techniques that leave the rooting zone intact. Teck said that recent site assessments of previous corehole programs in the Frontier Project area noted healthy regrowth of vegetation on all sites.

[62] The panel recognizes that AESRD has jurisdiction to establish regulatory requirements to manage environmental impacts for surface access to Crown lands and to assess effects on wildlife resources. The panel also notes that AESRD has issued the requisite authorizations for surface disturbance as requested by Teck and, in so doing, has exercised its authority to impose regulatory conditions, including mitigation requirements for the surface access associated with the Corehole Program.

[63] The AER accepts that LARP reflects government policy on land development as set out in the plan and that bitumen resource development is a priority use for the Lower Athabasca region, which includes the area of the applications. The panel notes that the applications are not for projects that would be located in an area identified for protection under LARP, and it therefore believes that completion of the proposed Corehole Program is consistent with the requirements of LARP.

[64] The panel believes that Teck has made considerable effort to minimize the amount of new surface disturbance associated with the Corehole Program and to limit the duration of the effects of any disturbance that does occur. During its flyover of the project area, the panel observed that while there has been some disturbance of the project area as a result of previous exploration activities, the amount of disturbance visible from the air was significantly less than what the panel had expected given that Teck has drilled about 680 coreholes and 600 geotechnical holes in the project area over the past six years. While the panel acknowledges that its observations occurred at a single point in time and under specific conditions, and are therefore subject to some limitations, it believes its observations support Teck's evidence that the use of low-impact techniques to date has helped to minimize the nature and extent of disturbance associated with these activities.

[65] The panel finds that the amount of new surface disturbance associated with the Corehole Program is small and that the mitigation measures proposed by Teck are appropriate to ensure that the disturbance related to them will be of relatively short duration and that vegetation will recover relatively quickly. The panel therefore concludes that the preparation of well sites and access roads for the Corehole Program will not result in any significant or long-term adverse environmental or cumulative effects.



## EFFECTS ON THE RONALD LAKE BISON HERD

[66] ACFN and MCFN presented concerns about the sustainability of the Ronald Lake bison herd (RLBH). Both expressed concerns that the Corehole Program could negatively impact the population and habitat of the RLBH. All of the parties agreed that the Corehole Program area falls within the winter range for the RLBH (see figure 2).

[67] The Government of Alberta conducted a study on the RLBH that was supported by Teck, and has produced a draft report entitled “Ronald Lake Bison (Bison bison), Winter 2012-2013 Activities, Progress Report (Draft), July 2012”<sup>1</sup> (the 2013 study). The RLBH’s home range boundaries for this study were determined from two sources—the observations locations from three scouting flights, and data from Lotek Iridium satellite collars. Teck said that the estimate provided in the 2013 study suggests that the minimum herd size is about 186 individuals and that the 2013 study showed an 84 per cent increase in estimated population size since 2009, the increase occurring while Teck has been conducting winter drilling programs.

[68] MCFN questioned the reliability of the RLBH population estimate and submitted that there was a possibility that the population estimate in the report is the result of an over count. Mr. Martin Jalkotzy, Teck’s wildlife expert, agreed a viable subpopulation of bison requires at least 400 animals, based on the current National Recovery Plan for Wood Bison.

[69] The panel finds that no definitive information on the size of the RLBH was provided. The panel notes, however, that all available evidence suggests that the RLBH is small in number, and it is uncertain whether the herd is sustainable.

[70] ACFN and MCFN expressed concern that direct and indirect habitat disturbance associated with the Corehole Program might cause the RLBH to leave the area, either moving north into Wood Buffalo National Park (WBNP) or west into the Birch Mountains.

[71] Teck said there is no evidence to support the conclusion that the proposed applications would have significant or long-term effects on the RLBH. Teck submitted that the RLBH will likely avoid the immediate surroundings of an active drill rig but is not likely to avoid the general area of the Corehole Program. To support this, Teck noted that it has observed that bison have continued to use the project area after six years of winter drilling.

[72] Teck presented evidence that the Corehole Program would result in about 23 ha of new surface disturbance and that only a portion of this may be suitable bison habitat. Although Teck did not provide an estimate of the amount of disturbance to bison habitat, Teck maintained that reclaimed sites would support sedges and grasses and would potentially enhance the quality of habitat available to bison. Dr. Petr Komers, ACFN and MCFN’s wildlife expert witness, said that these areas might not be used by bison if the areas represent a high predation risk.

[73] ACFN and MCFN also said that Teck’s estimated 23 ha of new disturbance does not account for the cumulative effects of existing access and well site disturbance or other activities in the area. The intervening parties also said that the 23 ha does not account for indirect disturbance that is caused by wildlife avoiding zones around the various access routes and well site surface disturbances, and that the parties believe will impact the RLBH.

---

<sup>1</sup> Note that this report should read “July 2013,” not “July 2012.” The document title is incorrect.

[74] Dr. Komers said that bison are very skittish and sensitive to noise and are easily disturbed by human activity, and run away from human disturbance. Dr. Komers estimated, based on 2008 satellite imagery, that roughly 40 percent of bison habitat in Teck's proposed Corehole Program area has been disturbed. Dr. Komers said that the proposed Corehole Program will add another 4.3 per cent to the area of existing bison habitat disturbance. Dr. Komers submitted that his reference to disturbance included not just the direct footprint clearing but also the zone of influence around each footprint, with the zone of influence including the effects of vehicle movements, construction noise, and human access. MCFN expressed concern that the need for the RLBH to move away from the exploration activities might reduce the herd's access to high quality habitat and increase stress levels, potentially reducing reproductive success (i.e., calving numbers).

[75] Teck challenged the methodology and some of the assumptions used by Dr. Komers in his disturbance analysis and submitted that it significantly overestimated the amount of disturbance in the project area and the sensitivity of bison to sensory disturbance. Teck submitted that assessed wildlife species affected by noise will habituate to the disturbance effects of the project and that impacts of traffic and site reclamation would be insignificant. Teck submitted that sound levels would attenuate logarithmically away from the source and would not be additive unless the sound sources overlap. Teck did not provide any measured or predicted sound levels or analysis to support its statements. Teck said that the proposed program would meet the requirements of *Directive 038: Noise Control*.

[76] While the panel heard conflicting views on the sensitivity of the RLBH to direct habitat loss and sensory disturbance, the panel finds that the recent 2013 study's radio collar data and observations of wood bison during previous winter drilling programs, and the ongoing use of the area for bison hunting by MCFN and AFCN harvesters all indicate that the RLBH continues to use the project area despite previous winter drilling programs in the area. The panel therefore concludes that while members of the RLBH may move away from the immediate vicinity of areas of human activity or noise associated with the Corehole Program, the evidence does not support the view that the RLBH will travel large distances or permanently abandon the area as a result of the Corehole Program. Given the nature of Teck's proposed activities, the panel finds that the amount of direct habitat loss will be small and that any indirect habitat loss due to sensory disturbance will be localized and of short duration. The panel is encouraged by Teck's intention to continue to conduct wildlife surveys and complete sighting cards because such surveys and sighting records would help Teck determine and understand the effects of the Corehole Program on wildlife distribution.

[77] The interveners expressed concern about increased access and the potential for increased hunting of the RLBH. ACFN expressed concern that increased access could increase hunting by non-aboriginal hunters, which could in turn affect the sustainability of the herd and reduce the abundance of bison available for the exercise of traditional hunting rights. Dr. Komers advised that if the RLBH population is about 186, the annual sustainable level of harvest by hunting would likely be in the low tens or teens.

[78] Teck proposed several mitigation measures intended to reduce potential impacts on the RLBH, including

- implementing access control by closing off access points;

- using vehicle pools to shuttle workers in and out in order to reduce traffic;
- limiting traffic speeds to 30 km/hr or less;
- applying rollback to roads as quickly as possible to make access impassable to all-terrain vehicles and snowmobiles;
- accelerating the Corehole Program to finish as soon as possible, with construction being complete by about January 15, 2014;
- sequencing drilling rigs and activities to complete work in the key Wildlife and Biodiversity Zone first; and
- stopping work at any sites where wildlife are observed.

[79] MCFN and ACFN said that they lacked confidence in Teck's proposed mitigation measures to protect the RLBH because of a lack of data confirming that these measures would be effective and because the groups had not been involved in the development of the mitigation measures. MCFN and ACFN proposed a number of measures to mitigate effects on the RLBH and to address information gaps, including additional studies to monitor population trends, a five-year moratorium on development in the area, the use of First Nations monitors, and sensory disturbance reduction measures such as using hospital-grade mufflers on drilling equipment.

[80] Teck said that it could not accept the mitigation measures proposed by the interveners. Teck submitted that most of the recommendations provided by the interveners were related to policy issues and were unrealistic and inappropriate conditions for the Corehole Program. Teck also submitted that some of the recommendations, such as the need for additional studies or a moratorium on activity, would impede its ability to achieve the requirements of *Directive 082* or to continue to advance the Frontier Project in a timely manner.

[81] The panel finds that the mitigation measures proposed by Teck for managing access and protecting the RLBH are appropriate. The panel finds that the proposed access mitigation measures adequately address concerns about enabling increased access for both non-aboriginal and aboriginal hunters that could adversely affect the RLBH. The panel also believes that Teck's proposed mitigation plans will help to minimize sensory disturbance and the risk of disturbance to the herd during operations.

[82] MCFN and ACFN stated that, while brucellosis and tuberculosis are characteristic of bison in WBNP, the RLBH is not diseased. MCFN and ACFN submitted that the management strategy of Alberta and Canada for the RLBH has been based on the premise that the RLBH was diseased. ACFN and MCFN submitted that the 2013 study found that the RLBH, unlike the bison in WBNP, does not have tuberculosis or brucellosis disease prevalence. MCFN and ACFN submitted that this supports the view that the RLBH is distinct from the WBNP bison and therefore should be managed as an endangered species.

[83] Teck confirmed that AESRD's current approach is to manage the RLBH to prevent the spread of disease to domestic livestock and that this approach was based on the assumption that the RLBH originated in WBNP and would have the same disease prevalence. Teck submitted that evidence from the 2013 study did not prove that the RLBH was disease free but did confirm

that disease prevalence is lower in the RLBH than anticipated, and is lower in the RLBH than in WBNP.

[84] Teck said that it was not sure how distinct the RLBH is because the radio-telemetry data from the 2013 study shows that bison from the RLBH wander into the southern part of WBNP.

[85] Mr. Jalkotzy explained that wood bison have been identified as a threatened species under the federal *Species at Risk Act*, so if the RLBH bison are designated as pure wood bison rather than as a hybrid with plains bison, a federal recovery strategy would apply to the RLBH. Mr. Jalkotzy further explained that it is Teck's understanding that AESRD is currently doing genetic testing to determine whether the RLBH is genetically distinct from the WBNP bison.

[86] All parties agreed that there are gaps in the RLBH data and that there is need to establish better population and trend estimates, population demographics, definition of range use, harvest tracking, response to disturbance, disease prevalence, and genetic distinctiveness in order to ensure the sustainability of the RLBH. The 2013 study identified these same gaps and concluded that the missing information is necessary for the Alberta government to determine how the RLBH should be managed.

[87] While the panel acknowledges that there are information gaps related to the size, distribution, and disease status of the RLBH, given that the effects of the Corehole Program will be short-term and localized in nature, the panel does not believe it is necessary to delay approval of the Corehole Program until the necessary research is completed and data gaps filled. The panel does, however, believe that the timely completion of more research into these issues might inform future management and regulatory decisions related to the RLBH.

## **EFFECTS ON TRADITIONAL LAND USE ACTIVITIES**

[88] All of the aboriginal groups emphasized the importance of the Corehole Program area to their members. They also stressed that access to undisturbed lands is very important for their members' ability to continue to practise and teach their youth about TLU and cultural activities.

[89] According to FCM, the area to the north of the Teck leases is one of the last pristine areas in the oil sands region. ACFN said that most of the area south of the Firebag River is being developed by oil sands companies and that the project area is one of the last areas in which its members can practise their TLU activities. The project area is identified as part of ACFN's Homeland zone in the document entitled "ACFN Advice to Alberta Regarding LARP." ACFN confirmed that it considers its Homeland zone to be an area of critical importance to the continued practice of its treaty and aboriginal rights.

[90] MCFN stressed the importance of access to undisturbed lands for the practice of TLU activities such as hunting. It also stressed the importance of TLU activities for maintaining social relationships and for reinforcing cultural practices such as community sharing and the passing on of traditional knowledge to younger generations through oral history and experience on the land.

[91] All three interveners provided evidence of recent and ongoing traditional land use in the area. The interveners emphasized that the evidence presented at the hearing relating to current TLU activities was an incomplete, or partial, representation of the current TLU activities of its

members due to the difficulties and costs associated with collecting this type of information. ACFN said that while it has over 1000 members, it was not feasible to have all of them appear at the hearing, so only two active resource harvesters were presented as witnesses to speak about their recent resource harvesting activities in the project area. MCFN said that its TLU studies are not comprehensive and that no study has focused on the Corehole Program area. FCM said that it has not had the ability or capacity to capture or understand the full extent of its members' use and occupancy of traditional lands, making it difficult for them to fully or meaningfully engage with developers about the potential impacts of programs on the communities' TLU activities.

[92] The panel acknowledges that the project area is important to ACFN, MCFN, and FCM for the pursuit of TLU activities and the exercise of aboriginal and treaty rights due to the area's proximity to Fort Chipewyan and the fact that it has been subject to less oil sands and other development activity than areas further south in the Athabasca region. The panel understands that the TLU information collected and provided by the aboriginal groups is not a complete representation of the use of the project area by group members, but the panel believes that the evidence presented is sufficient to demonstrate that there is ongoing use of the area by some ACFN, MCFN, and FCM members. The full extent of such use is not, however, apparent.

[93] The panel notes that most TLU activity identified by ACFN, MCFN, and FCM has historically occurred along or within a few kilometres of either side of the Athabasca River and outside of the immediate area of the Corehole Program. These areas will not be subject to direct physical disturbance by the Corehole Program, and any sensory disturbance is likely to be highly localized and of short duration. That is not to say that the project will not adversely affect ACFN, MCFN, or FCM harvesters, just that most of their harvesting activity does not appear to be within the project area.

[94] ACFN said that Teck's proposed winter drilling program will directly and adversely affect ACFN members' ability to practise their TLU activities and exercise their treaty rights in the vicinity of the Corehole Program, and it will affect their ability to harvest moose and bison in the area. ACFN submitted that the Corehole Program will contribute to significant adverse cumulative effects, which ACFN has already experienced on its traditional uses and rights. ACFN expressed concern that the cumulative effects of exploration programs are not evaluated or considered.

[95] ACFN and MCFN emphasized the cultural and spiritual importance of wood bison to their communities and traditional lifestyle. MCFN submitted that the bison have spiritual significance since the bison skull is put inside the sweat lodge and the meat is used in a feast to honor those who have participated in the sweat and those who have passed on. Both ACFN and MCFN said that the RLBH was particularly important because it is the last remaining herd they can legally hunt. They also said that the RLBH is important to them as a food source. MCFN and ACFN submitted that they protect the RLBH through sustainable hunting practices.

[96] ACFN and MCFN expressed concern that the activities associated with the Corehole Program would affect the movement of the RLBH by forcing them further north into WBNP where they might contract diseases, or further west into the Birch Mountains. ACFN and MCFN argued that this could increase stress levels on the RLBH such that calving numbers would decrease. Forcing the herd to move would also make it more difficult to hunt the bison as harvesters would have to travel farther and into unfamiliar territory to locate the bison,

increasing the effort, risk, and cost of the hunt. ACFN and MCFN confirmed that winter was the preferred hunting season for the RLBH because the area was too wet to access at other times of year. They noted that the proposed timing of the Corehole Program overlaps the preferred hunting period.

[97] In response, Teck said that the disturbance caused by the Corehole Program could actually result in an increase in habitat suitable for bison because it creates new foraging opportunities. Teck also said that the Corehole Program is proposed in an area where winter drilling has occurred almost every year for the past six years and that the evidence seems to suggest that the RLBH is doing quite well.

[98] As discussed in the “Effects on the Ronald Lake Bison Herd” section, the panel acknowledges that there is some uncertainty around the response of bison to sensory disturbance and that more research may be required in this area. However, while the panel believes that the Corehole Program has the potential to result in some level of disturbance to bison, and therefore to bison hunting activities, the panel finds that the Corehole Program will not likely result in the bison moving large distances or not returning to the area after the disturbance has stopped. The panel believes that the Corehole Program disturbance will be similar to the disturbance associated with previous programs, which do not appear to have caused bison to permanently abandon the project area, as evidenced by ongoing bison sightings during recent exploration drilling programs, by recent radio collar data, and by evidence of recent successful hunting activities in the program area by aboriginal groups.

[99] In terms of accessing the Corehole Program area to carry out TLU activities, the interveners cited concerns about hanging ice, snow berms, and snowmobiler safety. The interveners said that Teck’s proposed development would force traditional land users to travel greater distances to harvest resources, resulting in economic strains and exposure to unsafe conditions that go with travelling in unfamiliar territory.

[100] The interveners also said that reopening existing access routes and making new access routes and well sites can create barriers to travel if companies place berms across or destroy parts of existing trails. Removing snow from existing trails can also damage and cause wear and tear on equipment. The roll back placed by companies on access routes can also hinder travel along these routes. Unexpected hazards such as vehicle traffic on exploration roads, glare ice on steep hills, and damaged or removed ice bridges on trails can also increase the potential for accidents, injuries, and damage to equipment. Withdrawing water from water bodies can result in hanging ice that collapses when someone travels across it.

[101] ACFN and MCFN also submitted that access roads built by Teck could facilitate increased access to and hunting of the RLBH by non-aboriginal hunters. Competition from non-aboriginal hunters exacerbates existing competition problems and further decreases the resources available for the exercise of aboriginal and treaty rights.

[102] Teck said that it would not restrict aboriginal community members’ access for the purposes of exercising traditional rights. Teck advised that its program design was informed by identifying and trying to avoid potential cut-and-fill situations, muskeg areas, trails, and other features that support traditional uses, and by ensuring that watercourses and water bodies are appropriately buffered. Teck confirmed that it completes rollback of materials on access roads once the roads are no longer required for operation, and this restricts future vehicle access. Teck said that it

prohibits its workers from hunting or carrying firearms or from participating in off-road motorized recreational activities during nonworking hours. Teck said that it cannot restrict or prevent other individuals, such as nonemployees or nonaboriginal hunters, from accessing the area because access restrictions are determined by AESRD. Teck also said that the other access restrictions it has proposed, such as early reclamation of access and rollbacks, are consistent with AESRD requirements.

[103] ACFN and MCFN expressed concern about Teck's proposed mitigation measures. They believed that Teck focused only on site-specific information and did not take all their concerns into consideration. ACFN and MCFN also said that TLU maps do not illustrate the larger pattern and importance of traditional land use or indicate the larger tracts of land that are necessary for traditional use practices. ACFN argued for the need for a rigorous and credible study of the impacts of the Corehole Program on its ability to exercise treaty rights and traditional land use activities, and on its ability to access its traditional lands. ACFN requested a five-year moratorium on all activity north of the Firebag River.

[104] The panel acknowledges that creating new access to the RLBH has the potential to result in increased hunting of the herd. The panel also recognizes that disturbance caused by temporary exploration programs near the Corehole Program area can contribute to an increase in the effort, risk, and cost experienced by resource harvesters. The panel notes, however, that very little new access will be created as a direct result of the Corehole Program; most access disturbance already exists and was approved as part of previous exploration programs. The panel finds that any disturbance effects will be localized and temporary and that the mitigation measures proposed by Teck are appropriate. The panel does not believe that the resulting effects will prevent or significantly affect the ability of resource harvesters to conduct TLU activities in the vicinity of the Corehole Program. The panel also believes that ongoing consultations and communications between the parties could resolve potential conflicts between resource harvesters and Teck during Corehole Program operations, and the panel encourages the parties to establish a mechanism for facilitating such communications.

[105] Furthermore, while the panel understands that aboriginal groups are concerned about the cumulative effects of past and currently proposed exploration programs, the panel must acknowledge and respect that the assessment and management of such cumulative effects on the landscape is the responsibility of AESRD, and in this case AESRD has approved the requested disturbance.

[106] FCM submitted that the Fort Chipewyan Métis are active land users and harvesters and that large numbers of Métis still use the Athabasca River for travelling. FCM expressed concern that disturbance to their pristine watershed will impact bison, woodland caribou, moose, furbearers, and important medicinal plants harvested by its members. FCM was also concerned that Teck had not conducted an assessment with the Fort Chipewyan Métis community to determine the nature and extent of effects on Métis occupancy, use, and rights.

[107] FCM said that RFMA #1275 had been held by Métis trappers and their families for several generations, and the current holders (Arne and Barb Hermansen) had intended to pass the trapline down to their children and grandchildren. Barb Hermansen estimated that roughly one quarter to one third of RFMA #1275 would be affected by the winter drilling program. This affected area contains about 90 per cent of the winter drilling program area. Ms. Hermansen also

indicated that the family had a cabin at Big (Oakley) Lake that was used for fall hunting and trapping and medicinal plant gathering (see figure 2).

[108] Teck confirmed that it had funded an oral history project involving Barb Hermansen that resulted in the book, *Barb Hermansen: Her Story. The Last Woman to Raise Children on the Athabasca River*, and that it considered this information when it assessed the potential impacts of the Corehole Program. Teck noted that the registered holder of RFMA #1275, Arne Hermansen, had not objected to the Corehole Program.

[109] When asked by the panel whether she knew of any other community members using the trapline area, Ms. Hermansen responded that she did not. FCM said that it does not consider information gathered from a single trapline holder to be representative of the community's use of the area; it submitted, however, that it lacks traditional land use and occupancy information for its community and therefore finds it difficult to assess impacts on traditional use.

[110] The panel agrees with FCM that information from the trapline holder or a single resource user may not reflect broader community use of the project area. However, from the information provided it is not clear to what extent FCM members use RFMA #1275 for TLU activities.

[111] The panel concludes that while the Corehole Program may result in some adverse effects on the TLU activities of some individual ACFN, MCFN, and FCM members, these effects will be localized, of short duration, and temporary. The activities do not involve the permanent taking up of lands and are not likely to have significant or long-lasting effects on the interveners' ability to conduct TLU activities or practise their aboriginal and treaty rights.

## CONCLUSION

[112] The panel finds that the evidence in this proceeding indicates that the effects associated with the Corehole Program will be localized, temporary, and of short duration. The panel concludes that the nature of the activities and the mitigation proposed by Teck are such that the activities will not result in significant adverse effects on the environment, the RLBH, or Aboriginal traditional land use and rights.

[113] The panel understands that some concerns raised by ACFN, MCFN, and FCM are related to the regional cumulative environmental effects of oil sands development, including exploration programs, and to the potential development of the Frontier Project and the associated effects on TLU practices and treaty and aboriginal rights. While recognizing that these are important issues, the panel reiterates its view that LARP and the associated management tools contemplated therein are the appropriate forum for addressing the regional cumulative effects of oilsands development. Similarly, the effects resulting from development of the Frontier Project are the subject of a separate regulatory proceeding. The scope of these cumulative effects issues and the requested remedies extend beyond the scope of the Corehole Program and this proceeding. In assessing the effects of the Corehole Program on the environment, the RLBH and Aboriginal and treaty rights the panel has had regard for the Corehole program's contribution to regional cumulative effects and is satisfied that with the proposed mitigation measures, this contribution will be negligible.



[114] Having considered the economic, social, and environmental effects of the applied-for winter drilling program, the AER hereby approves the Corehole Program applications.

Dated in Calgary, Alberta, on October 21, 2013.

**ALBERTA ENERGY REGULATOR**

*<original signed by>*

R. C. McManus  
Presiding Hearing Commissioner

*<original signed by>*

A. H. Bolton  
Hearing Commissioner

*<original signed by>*

B. M. McNeil  
Hearing Commissioner

## **APPENDIX 1 SUMMARY OF CONDITIONS AND COMMITMENTS**

Conditions generally are requirements in addition to or otherwise expanding upon existing regulations and guidelines. An applicant must comply with conditions or it is in breach of its approval and subject to enforcement action by the AER. Enforcement of an approval includes enforcement of the conditions attached to that licence. Sanctions imposed for the breach of such conditions may include the suspension of the approval, resulting in the shut-in of a facility. The conditions imposed on the licence are summarized below.

Undertakings, promises, and commitments (collectively referred to as commitments) to parties involving activities or operations that are not strictly required under AER requirements. These commitments are separate arrangements between the parties and do not constitute conditions of the AER's approval of the applications. The commitments that have been given some weight by the AER are summarized below.

The AER expects the applicant to comply with commitments made to all parties. However, while the AER has considered these commitments in arriving at its decision, the AER cannot enforce them. If the applicant does not comply with commitments made, affected parties may request a review of the original approval. At that time, the AER will assess whether the circumstances regarding any failed commitment warrant a review of the original approval.

### **COMMITMENTS BY TECK**

- Teck committed to providing FCM with *Directive 056* notification at the same time it provides notification to other Fort Chipewyan-based First Nations in the future.

---

**APPENDIX 2 HEARING PARTICIPANTS**


---

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

**Witnesses**


---

**Teck Resources Limited**

 Counsel:  
 M. Ignasiak  
 S. Duncanson

 I. MacKenzie  
 V. Yehl, P.Geo.  
 J. Turuk  
 L. Chiasson, P.Eng.  
 L. Halsey, P.Geol.  
 M. Jalkotzy, P.Biol.  
 M. Hubscher

**Athabasca Chipewyan First Nation**

 Counsel:  
 J. Biem

 P. Marcel  
 D. Somers  
 A. Adam  
 J. Ladouceur  
 R. Cardinal  
 P. Komers, Ph.D., P.Biol.

**Fort Chipewyan Metis**

 Counsel:  
 C. Bertolin  
 K. Lambert

 F. Fraser  
 O. Campbell  
 B. Hermansen  
 S. Labour

**Mikisew Cree First Nation**

 Counsel:  
 K. Brooks  
 M. Gustafson

 R. Martin  
 A. Martin  
 T. Marten  
 W. Courtoreille  
 M. Lepine

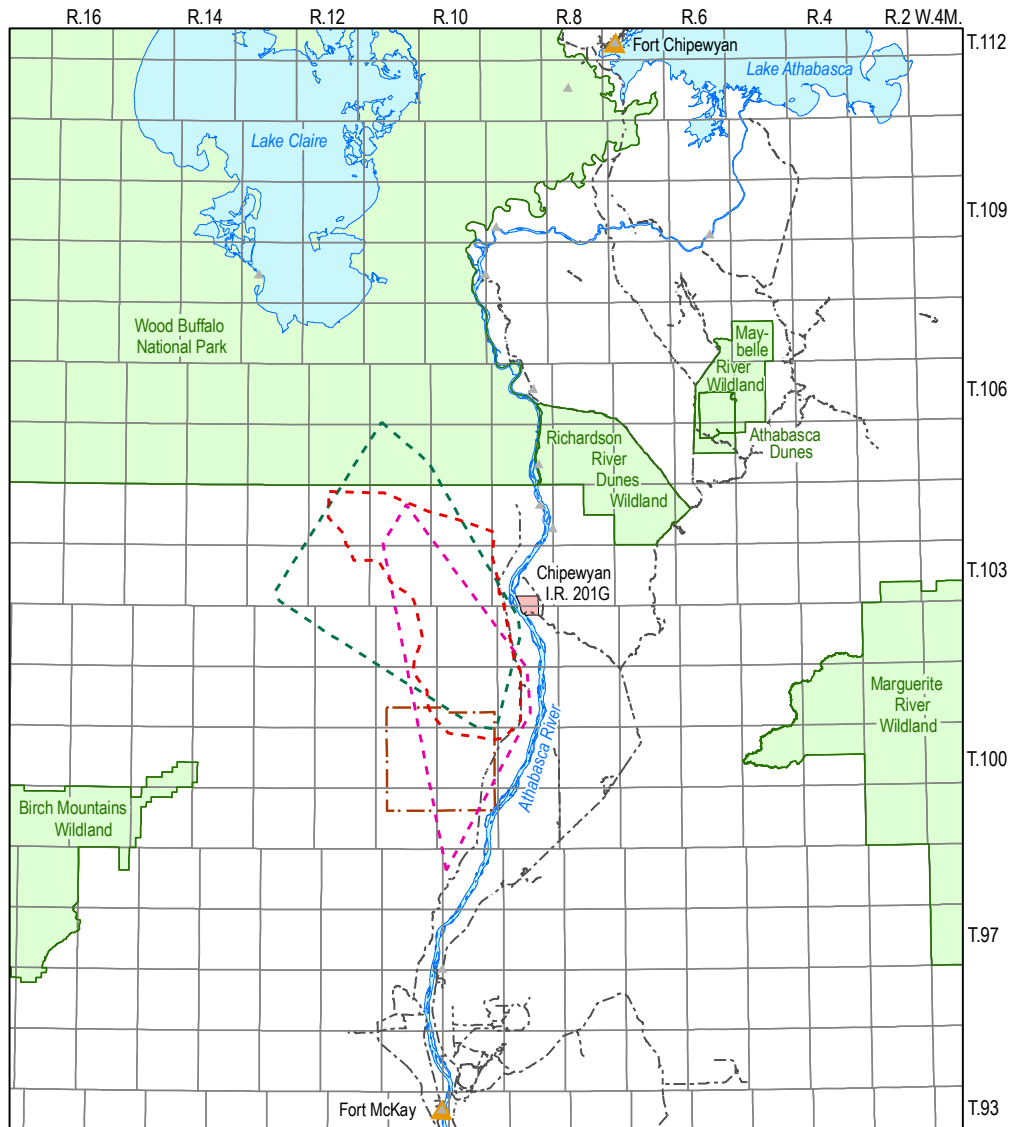
G. Clark

G. Clark

---

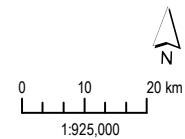
**Alberta Energy Regulator staff**

 K. Cameron, AER Counsel  
 G. Perkins, AER Counsel  
 M. Alboiu  
 J. Stewardson  
 D. Miles  
 B. Greenfield  
 S. Youens  
 C. Tobin  
 E. Johnston  
 S. Cook

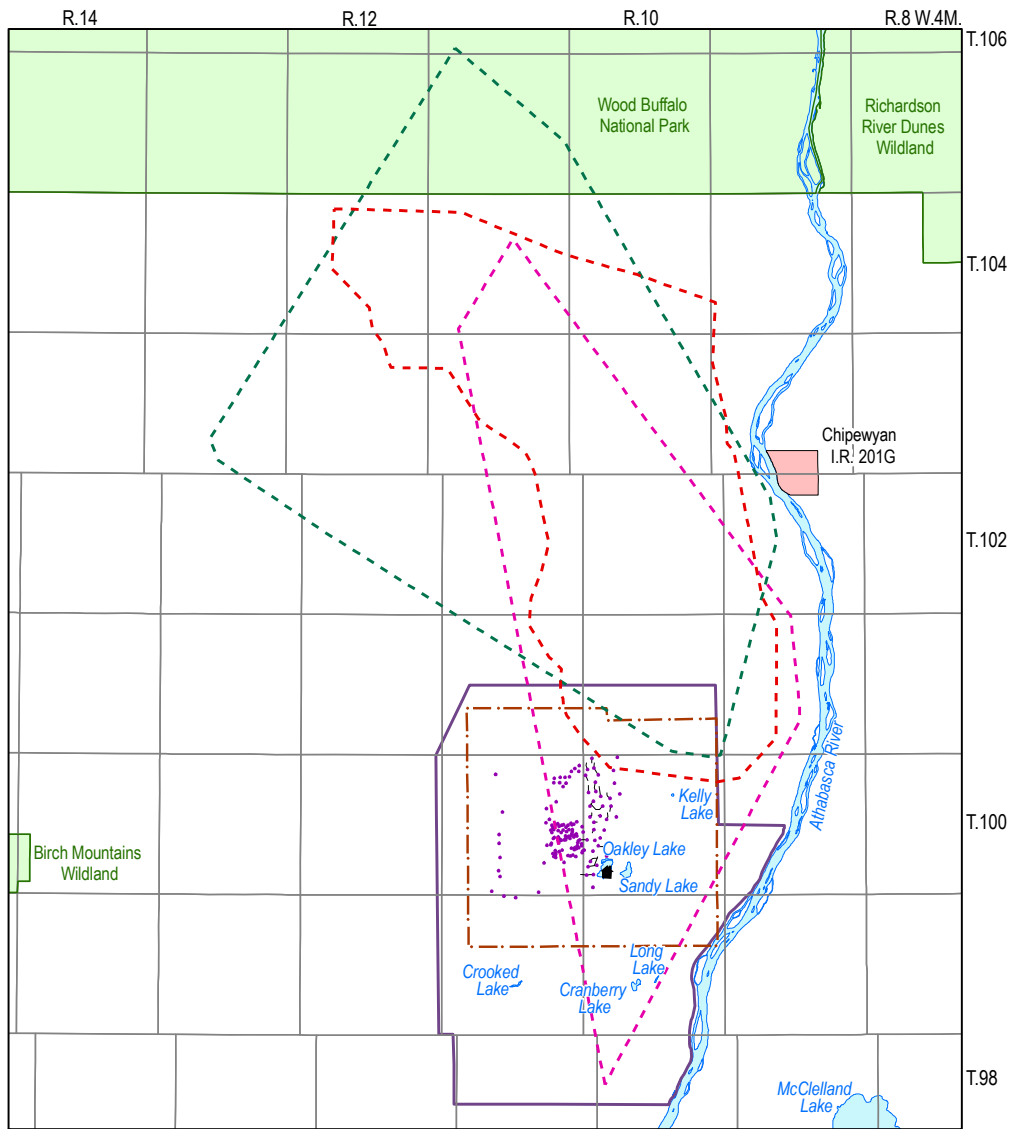


**Legend**

- Study area for Ronald Lake Bison Herd from Government of Alberta's Ronald Lake Bison Winter 2012-2013 Activities Progress Report (Draft)
- Minimum Convex Polygon (MCP) home range for Ronald Lake Bison Herd plotted using observation locations from three scouting flights from the Government of Alberta's Ronald Lake Bison Winter 2012-2013 Activities Progress Report (Draft)
- Minimum Convex Polygon (MCP) home range for Ronald Lake Bison Herd plotted using Iridium collar location from Government of Alberta's Ronald Lake Bison Winter 2012-2013 Activities Progress Report (Draft)
- Corehole program OSE boundary
- Parks
- Roads



**Figure 1. Regional map from Fort Chipewyan to Fort McKay**



**Legend**

- Study area for Ronald Lake Bison Herd from Government of Alberta's Ronald Lake Bison Winter 2012-2013 Activities Progress Report (Draft)
- Minimum Convex Polygon (MCP) home range for Ronald Lake Bison Herd plotted using observation locations from three scouting flights from the Government of Alberta's Ronald Lake Bison Winter 2012-2013 Activities Progress Report (Draft)
- Minimum Convex Polygon (MCP) home range for Ronald Lake Bison Herd plotted using Iridium collar location from Government of Alberta's Ronald Lake Bison Winter 2012-2013 Activities Progress Report (Draft)
- Corehole program OSE boundary
- Hermanson cabin
- Proposed well applications
- Proposed new access disturbance
- RFMA #1275 - Hermanson trap area
- Parks

**Figure 2. Corehole Program map**