

# Sahtu Exploration Readiness Session

*"Getting ready for a productive, healthy and prosperous work season"*

September 25 and 26, 2012



Prepared by:





## Contents

Introduction .....	1
Common Themes .....	1
Session Summaries.....	2
1. Overview of Oil Exploration Activity and Business and Work Opportunities .....	2
2. Lessons Learned from Northern BC .....	4
3. Hiring and Keeping Healthy and Productive Workers.....	5
4. Guest Speaker: Ethel Blondin-Andrew, Chairperson of the Sahtu Secretariat .....	7
5. Maximizing Benefits for Local Businesses .....	7
6. The Concept of a Sahtu Regional Investment Corporation .....	8
7. An Overview of Access and Benefit Agreements.....	9
8. Creating a Successful Sahtu Workforce.....	10
9. Guest Speaker: The Honourable David Ramsey, Minister for ITI.....	10
10. Beyond Fracking: The long term potential and opportunity of Central Mackenzie Valley shale oil .....	11
11. Imperial Oil Update.....	11
12. Overview of Seismic Data Gathering in the Sahtu .....	12
13. Planning for Canol Shale Projects .....	12
Next Steps.....	14



## Introduction

The Canol shale discovery represents an extraordinary opportunity for the Sahtu and its residents. It is a development that could potentially lead to significant growth in the region, including countless opportunities for the training and employment of local people and significant service and supply opportunities for local businesses.

The purpose of the Sahtu Exploration Readiness Session was to bring stakeholders together to take the first steps toward creating a plan that will keep the benefits of development in the communities of the Sahtu. These stakeholders included leaders from community and Aboriginal government, representatives from exploration companies as well as the territorial and federal government and also local high school students.

## Common Themes

The topics dealt with during the session ranged from the current operations of oil exploration companies in the region to the development of a healthy and productive workforce. Throughout the many conversations and discussions that took place, a number of common themes and concerns emerged:

1. Social issues that prevent the people of the Sahtu from taking full advantage of opportunities, such as addictions and mental illness, must be addressed.
2. Current methods of preparation and training, from the way youth are educated in schools to the way adults are trained for employment, must be re-evaluated. There is a need to provide more opportunities on a local and regional level.
3. All stakeholders need to find ways to work together to find common solutions to problems and create more opportunities for the people of the Sahtu.
4. There is a need to think ahead, not just about the coming season, but about the long-term potential development holds for the next generation of people in the Sahtu.

## Session Summaries

Each presentation and discussion has been summarized for this report. Copies of the presentations delivered during the session have been distributed on USB keys to all participants.

### 1. Overview of Oil Exploration Activity and Business and Work Opportunities

Representatives from three companies: Husky Oil Operations Ltd., ConocoPhillips and MGM Energy Corp. provided updates on their exploration and development activities in the Sahtu region.

Speaking behalf of **Husky Oil Operations Ltd.**, Ken Hanson reported that the company had acquired exploration licenses (EL462, EL463) for parcels of land approximately 40 km SSE of Norman Wells. With the support and cooperation of local leadership, Husky has signed Access and Benefit Agreements and some regulatory approvals are in place for both exploration licenses.

To date, Husky has conducted community consultations related to their projects and completed traditional knowledge and archaeological studies to identify sites that need to be protected.

As a part of the 2011/2012 Slater River Program, Husky has constructed a winter access road, ice bridge, two ice pad drilling locations, an ice airstrip and staging area. It has also conducted low-impact seismic testing on over 220 km<sup>2</sup> and drilled vertical exploration wells at Slater River (H-64) and Little Bear River (N-09).

According to Mr. Hanson, Husky's operations to date have been safe and environmentally sound, meeting all regulatory requirements. The work shows that there are hydrocarbons in the shale, and that the claim is a potentially large resource. In total, Husky has spent over \$60 million on its projects and employed 200 people, including 85 Sahtu Dene and Métis.

Moving forward, Husky has planned additional baseline environmental studies, such as a surface and ground water assessments and wildlife and vegetation studies. They will also conduct permafrost and aggregate studies to explore the possibility of constructing an all season road. In the meantime, Husky will continue to construct ice roads and bridges, and explore other means of extending the drilling season.

Husky intends to run a pilot flow test project in 2012/2013 to establish the volumes and composition of hydrocarbons in the Canol shales. Husky plans to run an oil based hydraulic fracture stimulation at the N-09 well to establish flow rates. During the 2011/2012 drilling, Husky discovered that the shale encountered in the H-64 well was already naturally fractured, and while they will also be conducting flow test on this well they will not need to stimulate additional flow of oil through fracturing.

During 2013 Husky has indicated that they are planning a major infrastructure expenditure program, that will see around \$100 million in spending, including the construction of a permanent 150 person camp, construction of 35 km of permanent roads, two drill pads, storage yards, barge landing sites,

quarries and a 2,500 metre permanent runway. This work is being proposed to support the N-09 and H-64 pilot flow test programs above and their future exploration activity.

According to Cyril Jenkins of **ConocoPhillips**, the company's main focus in the NWT is the Chinook Project (EL470), located south of Norman Wells. The company has made a \$66.7 million work commitment for the next five years.

Recognizing the sustainability is important, ConocoPhillips has made efforts to understand and manage the impacts of development through engaging in meaningful dialogue and by valuing relationships that are open, honest and collaborative.

During the spring and summer of 2012, the ConocoPhillips signed Access and Benefit Agreements and conducted community consultations and its summer environmental program. With ongoing environmental and construction activities in the fall, as well as a groundwater investigation program, ConocoPhillips has targeted a January 2013 start date for drilling two vertical wells on EL470.

If current operations are successful, ConocoPhillips anticipates increased future activity on the claim, including 3D seismic exploration, horizontal drilling and multi-stage hydraulic fracturing, permafrost and gravel resource studies and the further development of all season access to the site.

In addition to primary operations, projected supporting activities for Chinook include expanded surface and groundwater programs, expanded environmental baseline assessments, socioeconomic assessments, increased participation in regional studies and waste management, including the storage, disposal, trucking and shipping of produced water.

Roy Steinhauer, a Senior Advisor for **MGM Energy Corp.** stated that the company only does business in the Canadian North. Founded in 2007, MGM Energy Corp. is the single largest lease holder in the Sahtu and Beaufort Delta regions of the Northwest Territories, focusing on exploration only.

Contractors and equipment are in place to begin work on a vertical exploration well on EL466 in December 2012. MGM has Access and Benefit Agreements in place and all licenses and technical permits are approved. Drilling is scheduled to start in February 2013, with all testing completed by March 2013. Mr. Steinhauer also stated that MGM has an application for a horizontal well in front of the review board. If approved, they will drill a horizontal well instead of a vertical one.

According to Mr. Steinhauer, road improvements in the region would play a critical role in extending the drilling season. He also added that improvements would:

- Reduce the need for seasonal employment and contracting and allow for ongoing training of local personnel,
- Smooth out peaks and valleys in demand for equipment and personnel,

- Reduce project costs and logistical issues, and
- Increase activity throughout the Sahtu.

### Other Observations

- A key concern for participants was that these projects create employment and training opportunities for local workers. Opportunities for training are limited during the exploration phase, when companies are uncertain of their long-term operations in the area. The short drilling season in the North also limits opportunities for both training and employment.
- Road improvements are, by far, the most significant obstacle to an extended drilling season. A road from the south would enable the use of trucks for year-round access to worksites, and would create more opportunities for training and development, as well as year-round employment for local workers.
- Representatives from the oil companies also shared challenges in finding local workers to hire for projects. Having the requisite training and experience is a chief concern, but issues with work ethic, as well as drugs and alcohol also have a negative impact on employment. According to one representative, 5 out of 6 applicants fail drug and alcohol testing.
- Participants also wanted assurances that development would not have a long-term negative impact on traditional ways of life and the environment, and called for continued consultation. Mr. Hanson stated that Husky Oil Operations Ltd. is committed to doing more in terms of sharing information and working collaboratively with local and Aboriginal leadership throughout the Sahtu. The company has just opened its first office in Norman Wells, and may open an office in Tulita as well. They are also providing breakdowns of expenditures to let people know what they are doing in the region.
- While there are concerns over horizontal drilling and hydraulic fracturing, they are currently the only available method for economically extracting oil from shale.
- Shale oil exploration in the Sahtu will lead to short-term benefits in the region but the real value lies in the long-term production potential it represents. If developed properly, an eventual large-scale production project in the Sahtu will create opportunities for life-long employment within the region.

## 2. Lessons Learned from Northern BC

The Fort Nelson First Nation (FNFN) is a Dene and Cree community with 800 registered members in northern British Columbia. Though the oil and gas industry has had a presence in the region since the 1950s, the recent discoveries of nonconventional oil and gas sources has led to a gas boom in the region.

The vision of the Fort Nelson First Nation is sustainable development that meets present needs without compromising the ability of future generations to meet their own. It is coordinated and responsible, and adequately balances the benefits and impacts of development.



Given the community's size and relative isolation, it serves as an ideal reference point for the recent developments in the Sahtu. **Kathi Dickie, former Chief of the Fort Nelson First Nation** spoke during the session to share lessons learned as well as the opportunities created by shale gas development in FNFN territory. Her presentation covered the business opportunities shale gas development has created for FNFN, as well as the environmental concerns caused by shale gas extraction methods like hydraulic fracturing.

### Other Observations

- Ms. Dickie advised oil companies to approach negotiations with Aboriginal and First Nations groups with an open mind to creative solutions.
- Participants agreed with Ms. Dickie's advice to balance business opportunities against any negative impacts to the environment and traditional ways of life, and called for exploration companies to invest more in research and development to find new ways reduce their environmental footprint.
- Oil exploration and development has been accompanied by an increased number of people moving into Fort Nelson. Ms. Dickie stressed the need to make newcomers a part of the community. When FNFN opened a new school, they welcomed all members of the community so children would learn about each other and how to live together from the very start of their education.

### 3. Hiring and Keeping Healthy and Productive Workers

During this session, Mayor Dudley Johnson from the Town of Norman Wells, John Pahl from Akita Drilling Ltd. and Sherry Hodgson of Hodgson's Contracting Inc. shared their thoughts on what steps need to be taken to prepare the Sahtu workforce for the coming developments in the region.

**Mayor Dudley Johnson of Norman Wells** focused on the role of education and training in preparing youth to enter the workforce. He identified poor attendance in schools and training programs as one of the biggest obstacles that needed to be overcome, as well as the need to address social problems like abuse, addictions and lack of support at home that contribute to poor attendance.

He also proposed initiatives that would help students develop a positive work ethic and better prepare them for employment or post-secondary education. He suggested developing work preparedness plans for students to help them understand what to expect once they were ready to enter the workforce, and stated that schools need to do a better job of preparing students for post-secondary education. He concluded by calling for each community to play a more active role in educating and training its residents.

According to **John Pahl from Akita Drilling Ltd.**, up to 75 workers are needed to operate a drilling rig. Given the potential of Canol Shale, he believes that there will be numerous opportunities for employment as projects progress. Mr. Pahl stressed that proper safety training was vital for maintaining a healthy and productive workforce, and cited significant progress in healthy and safety

throughout the industry since the 1980s. He also noted that short seasons not only impact employment opportunities, they limit the availability of training. In addition, long periods of inactivity between seasons mean that skill development is often interrupted.

Mr. Pahl noted that the days of entering the workforce without completing high school were gone, and that it was important for people to pursue education and training in order to progress in the industry. He cited his own experience as an example of the career opportunities created by exploration, having worked his way from an entry level position to management with Akita Drilling. Mr. Pahl also recommended coaching and life skills development programs to support people as they enter the workforce. He concluded his comments by reviewing the qualities that Akita Drilling Ltd. looks for in potential employees, stressing the importance of a good attitude and a healthy lifestyle.

**Sherry Hodgson of Hodgson's Contracting Inc.** shared her experiences as a northern business owner operating in the Sahtu. The company currently employs 30 full time employees. Sixty per cent of Hodgson's employees come from the NWT, and 25% are Sahtu beneficiaries.

She cited loyal, healthy and productive workers as the backbone of her company's success. She reported that over 30% of employees have been with Hodgson Contracting Inc. for more than five years. She attributes this success to working with local employees to find ways to balance their jobs with traditional lifestyles.

Ms. Hodgson identified increased classroom and on-the-job training and finding ways to help employees balance work with traditional lifestyles as key developments that are needed to help grow the Sahtu workforce. She also recommended training programs focusing on versatility that would allow people to pursue a variety of different employment opportunities.

### Other Observations

- There is a need to identify the steps that need to be taken to prepare the workforce for upcoming development. There was a belief that local people missed out on past opportunities because the Sahtu workforce wasn't properly trained and prepared to take advantage.
- There are opportunities for local people to work year-round if they are willing to work for multiple employers. Even though operation seasons are short, there are multiple projects being run by multiple contractors throughout the year.
- Much of the discussion on maintaining a healthy and productive workforce was focused on a community approach to dealing with the abuse of drugs and alcohol, including the introduction of addiction treatment programs in the region, the reintroduction of the ration system for alcohol and an assessment to determine the real impact of drugs and alcohol on communities.

- Industry representatives also stressed the importance of a drug and alcohol free lifestyle, as opposed to “staying clean” for 30 days before a drug test. They reaffirmed that their companies have zero tolerance policies regarding drugs and alcohol.
- There were calls for a community approach to developing the next generation, and moving forward rather than assigning blame. It was pointed out that the participants themselves are leaders and role models in their communities and set a positive example for youth.
- Peter Clarkson noted that there is a treatment centre in Hay River that serves the entire NWT, and that the Department of Health and Social Services was introducing videoconferencing to create community treatment programs. But he noted that issues with drugs and alcohol could not be effectively addressed solely through the efforts of the GNWT. He called upon individuals and communities to do their part in addressing problems and adopting healthier lifestyles.
- Richard Hardy pointed out that there was approximately \$70 million in funding earmarked to deal with the socio-economic impact of the Mackenzie Gas Pipeline, and that perhaps the funding might be accessed to deal with issues arising from Canol Shale development.

#### 4. Guest Speaker: Ethel Blondin-Andrew, Chairperson of the Sahtu Secretariat

With the enactment of the Sahtu Dene and Métis Land Claims Settlement Act (SDMCLCA), the Sahtu Secretariat Incorporated (SSI) was formed by the seven Sahtu land corporations (four Dene land corporations and three Métis land corporations) on June 23, 1994. Provisions in the SDMCLCA include the power to establish implementing bodies that are responsible for a range of services and activities within the Sahtu Settlement Area.

**SSI Chairperson Ethel Blondin-Andrew** was invited to speak at the Sahtu Exploration Readiness Session to share her thoughts on how development could benefit people throughout the region. She credited the Sahtu leadership for taking a long-term view of the region’s potential, and being willing to make difficult choices. She stressed the importance of new infrastructure, programs and services to help prepare people throughout the region for the opportunities to come, as well as address social problems that prevent Sahtu residents from taking advantage of them. She called for a new training centre as well as a treatment centre for addictions, as well as ongoing supports for people who have completed treatment.

#### 5. Maximizing Benefits for Local Businesses

This session included a series of presentations focused on helping local businesses get ready for oil exploration work.

**Leanne Taneton, ITI’s Manager for Trade and Development for the Sahtu** talked about general business readiness as well as the different kinds of support ITI can offer local businesses and entrepreneurs, such as financing for new businesses available from the territorial, federal and Aboriginal governments. She also suggested that land corporations embrace innovative ways to

support local businesses, such as the sharing of limited human resources like accounting and bookkeeping services.

***Geir Utskot of Schlumberger Oilfield Services Ltd.*** reviewed the pre-employment and training programs Schlumberger offers for Aboriginal people in the NWT. Schlumberger introduced its 13-day oil and gas pre-employment program for Aboriginal people in 2006. Offering safety training and basic life skills, the program was introduced to avoid traditional “hire and fire” practices and develop a long-term workforce. Schlumberger has also introduced 1-day aboriginal awareness courses for employees, as well as a basic online safety training program. In addition to offering training for new and potential employees, Schlumberger has also contributed to literacy and breakfast programs throughout the Sahtu. They also introduced a new advance pay system for new employees to help them make it to their first paycheck.

***Darrell Beaulieu, CEO of Denedeh Investments Inc.***, reviewed his company’s joint ventures and discussed how these partnerships have benefited the Denedeh. He stressed the importance of developing a clear understanding of what people in the region want to gain from development and what they want for their communities in order to make informed choices.

According to a database maintained by Denedeh Investments Inc., there are over 500 aboriginal businesses in the NWT. All 27 of the Dene First Nations have an economic development corporation, and there are two regional corporations (Gwich’in, Tlicho).

Mr. Beaulieu provided an overview to two Denedeh businesses, each demonstrating a different approach to development. The first, Kete Whii Ltd., is an example of how First Nations groups can work together to their mutual benefit rather than competing with one another. The second, Shehtah Nabors LP, shows how a partnership with a southern company has helped to build capacity and create more opportunities for northerners.

Mr. Beaulieu concluded by encouraging the continued development of Aboriginal businesses throughout the NWT. He stated that Aboriginal businesses could not rely on their status to drive business, and need to understand their clients’ needs so they can build the ability and capacity to deliver services efficiently, effectively, economically and in a timely fashion.

## **6. The Concept of a Sahtu Regional Investment Corporation**

Roland Bellarose discussed ongoing efforts to create a Sahtu Regional Investment Corporation that would coordinate the efforts of the 27 different corporations in the Sahtu created through various land claims agreements.

The purpose of a proposed regional investment corporation would be to build a cooperative environment that drives industry through regional developments, seeding new opportunities and increasing the buying power of the existing corporations. A regional investment corporation could create a business model that includes all communities and land corporations in development

throughout the Sahtu as well as develop regional enterprises that would be shared by all communities.

#### Other Observations

- The concept of a regional investment corporation is still under consideration, and industry representatives should continue working with their current contacts in the communities and with the land corporations.
- There was also concern over what would happen to existing companies, partnerships and organizations if a Sahtu Regional Investment Corporation was formed. While there is no clear answer to this question, the main role of the regional cooperation would be to facilitate cooperation between existing companies—not to replace them.

## 7. An Overview of Access and Benefit Agreements

Richard Hardy presented an overview of the process, major issues and government requirements for Access and Benefit Agreements. He has served as legal advisor and negotiator for the Dene and Métis people of the Sahtu for the past 30 years, and has negotiated a number of agreements with the federal government and various oil, gas and mining companies with the goal of providing a better economic and social future for the region.

Mr. Hardy reviewed the sections of legislation such as the *Canada Petroleum Resources Act* (CPRA) and the *Canadian Oil and Gas Operations Act* (COGOA) that relate to Benefit Plans, and he is of the opinion that the *Sahtu Dene and Métis Comprehensive Land Claim Agreement* overrides both CPRA and COGOA. Based on this view, Mr. Hardy believes that the application process for exploration licenses might be streamlined if the federal government were to waive CPRA and COGOA as they relate to Benefit Plans.

At minimum, Access and Benefit Agreements require consultation between oil companies and land corporations before exploration, development or production on any claim. Based on his 20 years of experience, Mr. Hardy explained that a typical Access and Benefit Agreement might include provisions for employment and training for beneficiaries, the promotion of local business opportunities and the formation of a committee responsible for monitoring the project.

#### Other Observations

- An Access and Benefit Agreement is a private contract between a land corporation and an exploration company. However, since they are submitted to the federal government for approval, they may be subject to access to information laws.
- There is a legal obligation for land corporations to be involved in the negotiation of Access and Benefit Agreements, but there is no obligation to consult Chief and Council.
- All Access and Benefit Agreements negotiated to date have been lifetime agreements. However, there are provisions that allow the negotiation of short-term agreements that only cover the exploration phase of a project.

- Benefits plans are submitted to the federal government with no obligation to consult with land corporations, but it is regular practice for exploration companies and land companies to consult prior to the submission of plans.
- The development of subsurface lands are not subject to land claim agreements, and the land corporations that own subsurface lands are free to pursue opportunities related to them in any way they see fit.
- It is believed that the federal government will no longer play a role in approving Access and Benefits Agreements once a devolution agreement is in place.
- Social responsibilities of companies to communities are not covered in Access and Benefit Agreements. They do not include implementation plans for the delivery of training or obligate companies to build infrastructure.
- There was a call for agreements to include measureable goals and actions for areas such as training and employment for beneficiaries, so that parties could be held accountable and so agreements could be properly evaluated in the future.

## 8. Creating a Successful Sahtu Workforce

Sarah Baker, Regional Superintendent for ECE, reviewed the current capacity of the Sahtu labour force, as well as the programs and services available through ECE. Ms. Baker also spoke about Sahtu Regional Training Partnership, which has developed a five year training plan that identifies and addresses problems in specific communities and districts from a regional point of view.

### Other Observations

- The Sahtu Regional Training Partnership's training plan is informed by community members and updated regularly. Representatives from the exploration companies were invited to participate in the training partnership and contribute to the training plan by identifying their needs.
- A Student Support Coordinator position is currently in the pilot phase in Fort Good Hope. In addition to helping students in school, the coordinator tracks students after they leave to assess their progress. This kind of information would be helpful in performing a regional assessment of training needs throughout the region. However, participants would rather see training programs put into place instead of conducting assessments.

## 9. Guest Speaker: The Honourable David Ramsey, Minister for ITI

Minister Ramsey confirmed the GNWT's support for oil exploration and development in the Sahtu, and encouraged participants to continue to work together to find the best ways to tap into the immense potential of shale oil deposits in the region.

### Other Observations

- The Minister's statements reflected his belief that the Canol Shale could become a driver of the territorial and federal economies, and that the GNWT needs to do whatever it can to

help maximize its potential while remaining environmentally responsible and adhering to values.

- He stated that devolution would allow northerners to benefit more directly from development, and looked forward to continued negotiations toward an agreement.
- He called for northerners to pursue development on their own terms, rather than letting southern lobby efforts unduly influence how things take shape in the North.
- The minister concluded by encouraging all present to play an active role in moving development projects forward in the Sahtu and throughout the North.

## **10. Beyond Fracking: The long term potential and opportunity of Central Mackenzie Valley shale oil**

Tim Hawkings of Henday Frontier presented a general overview of shale oil development, including a review of shale oil potential in the Sahtu and a comparison of fields in the Sahtu to Eagle Ford in South Texas, a shale oil project that generated more than \$25 billion in revenue in 2011 alone. He concluded that shale oil deposits in the Central Mackenzie Valley have the potential to replace diamond mining as the economic driver of the NWT.

### **Other Observations**

- While acknowledging the significant potential of shale oil in the Central Mackenzie Valley, Mr. Hawkings stressed the importance of focusing on taking the proper steps to access the resource.
- According to Mr. Hawkings, recovery of shale oil in the Central Mackenzie Valley could lead to 25 years of work, leading to the development of a full service economy in the region.

## **11. Imperial Oil Update**

Jim Hawkins of Imperial Oil provided an update of the company's production operations in Norman Wells. He also discussed availability of Imperial's facilities for processing hydrocarbons from shale oil, as well as Imperial's exploration activities on its two Exploration Licenses in the Sahtu.

Imperial is currently producing oil and natural gas at its Central Processing Facility, and uses some of the natural gas to provide key services (heating and electricity) for Norman Wells. Imperial's facility also gathers propane, but it is not at sales quality.

Mr. Hawkins also discussed Imperial's considerations for future opportunities. He stated that Imperial's facility could potentially process Canol shale oil. While acknowledging that local employment was crucial for the success of any long term operation in Norman Wells, Mr. Hawkins also addressed the challenges Imperial and its contractors have encountered while trying to fill skilled positions with workers from the Sahtu. He encouraged local workers to pursue training and employment opportunities in the South so they can return to the region and take advantage of local opportunities. He discussed Imperial's Northern Development Program and how it creates

opportunities for Aboriginal employees, as well as the company's partnership with local partners to deliver training to increase capacity within the region.

Mr. Hawkin's concluded with an update on Imperial's outlook for exploration in the Central Mackenzie Valley. It currently holds two exploration licenses in the vicinity of Norman Wells and Tulita, covering about 1,780 km<sup>2</sup>. It plans to conduct its evaluation of seismic data and drill exploration wells on both licenses in 2014 or 2015, leaving over one year to conduct consultation, acquire permits and licenses and negotiate agreements. He pointed out that Imperial was monitoring the development activities of all operators in the area to avoid placing too much pressure on the environment and local infrastructure.

#### Other Observations

- Competitive markets are driving down prices of natural gas in North America, and Imperial is hesitant to invest further in the Mackenzie pipeline only to see the market collapse. However, any development of infrastructure as a result of Canol shale projects would only help drive the Mackenzie Gas Project.
- Imperial is committed to begin exploration on its two licenses, but has no immediate plans to submit its exploration application to the Sahtu Land and Water Board.

### 12. Overview of Seismic Data Gathering in the Sahtu

Seismic, or geophysical, exploration is used to identify and map oil and gas deposits prior to drilling. Allan Châtenay shared Explor's approach to seismic data exploration and provided an overview of the company's operations near Tulita.

Since 2005, Explor has been active in all three districts of the Sahtu, and is committed to establishing a continuous presence and engaging stakeholders. In total, Explor has spent about \$80 million on projects in the Sahtu, creating more than 300 person years of employment in the region.

### 13. Planning for Canol Shale Projects

Mayor Dudley Johnson, Chief Frank Andrew of Tulita and Edwin Erutse of the Yamoga Land Corporation (Fort Good Hope) addressed the challenges facing their communities as they prepare for increased development.

Mayor Johnson reviewed the impact that resource development would have on Norman Wells. He estimated that the town's population could quadruple over the next 3-4 years, requiring significant upgrades in infrastructure totaling over \$31 million.

Chief Andrew also acknowledged that Tulita needed to upgrade its infrastructure to accommodate resource development in the region. He reported that the Two Rivers Hotel in Tulita was currently being expanded in anticipation of increased business travel to the community, and that additional housing and commercial space would be needed. He called upon development companies to invest in the community by leasing office space or building their own.



As President of the Yamoga Land Corporation, Mr. Erutse addressed what he saw as the most pressing needs for Fort Good Hope. Of chief concern was the quality of the town's water supply. Water for Fort Good Hope is currently drawn from the Mackenzie River, but Mr. Erutse was concerned about drawing water from an industrial transit route.

Mr. Erutse called for communities in the Sahtu to reach out to one another to re-establish relationships, work together to find solutions to shared challenges and conduct an assessment of human and financial resources that would be needed to drive development in the Sahtu.

## Next Steps

Throughout the Sahtu Exploration Readiness Session, participants recognized the need for an action plan to address some of the key issues and challenges posed by oil exploration and development in the region. At the conclusion of the session, participants identified key steps required to start addressing issues and challenges. These next steps, along with recommendations for implementation, are summarized in the table that follows. The table also identifies key individuals and organizations that will help drive progress for each step.

Next Step:	How to implement:	Led by:
<b>1</b> Develop a targeted and measured approach to training.	Start by assessing whether training has led to employment. Then look at ways to deliver training for employment and on the job training in the Sahtu.	Sahtu Training Partnership (through Sara Baker)
<b>2</b> Determine what is needed for future development	Lay out future scenarios for single projects like a multi-stage fracturing for a horizontal well, and use these case studies to determine what would be needed in terms of training, infrastructure, etc.	Geir Utskot, Schlumberger Oilfield Services
<b>3</b> Conduct an annual review at the end of each exploration season	Schedule an annual conference or workshop to follow up on action items, discuss issues, etc.  There is a need to expand the organization committee to make sure everyone is at the table	Department of ITI: Sahtu staff
<b>4</b> Develop a comprehensive waste management strategy	Start a dialogue to develop a strategy for a sustainable strategy that meets the needs of NWT municipalities and industry	Department of ENR Deline Land Corporation
<b>5</b> Conduct an annual assessment of regional capacity to meet the needs of industry	Include annual reviews of capacity in existing forums that are open to all participants	To be conducted by exploration companies and land corporations independently of any processes identified here
<b>6</b> Establish a fund with federal support to invest in infrastructure and address socioeconomic issues in the Sahtu	Approach the federal government to start a fund similar to the Mackenzie Gas Pipeline Impact Fund	Richard Hardy, with support from industry and the communities

Next Step:	How to implement:	Led by:
<b>6.a</b> Address drug and alcohol issues throughout the Sahtu	Using funding established to address socioeconomic issues, develop a comprehensive strategy for addictions prevention and treatment that can be delivered within the region	-
<b>7</b> Make preparing youth for future opportunities a priority	<p>There is a need for a massive, organized education promotion effort in the Sahtu that addresses the following:</p> <ul style="list-style-type: none"> <li>• Underutilization of Aurora College and training programs offered by industry</li> <li>• The involvement of all stakeholders in the Sahtu Training Partnership;</li> <li>• Target youth who have left school to encourage them to pursue their education and take advantage of existing resources for training</li> </ul>	<p>Everyone has responsibility to promote education, but SSI would play a critical role in leading any promotion effort.</p> <p>Leanne Taneton of ITI will check regularly with land corporations, band councils and community governments to make sure that education and training is on their respective agendas.</p>
<b>8</b> Communicate the findings and successes of the Sahtu Exploration Readiness Session	Find funding that will allow for the communication of issues throughout the region (i.e. the construction of a radio station in Tulita)	Community leaders will play an important role in spreading the messages and themes coming out of the session
<b>9</b> Compile a report on community infrastructure and current levels of funding	Reports should be compiled and presented at the next meeting/conference	Department of MACA
<b>10</b> Research emergency preparedness strategy at regional and community levels	Compare current levels of preparedness in each community with levels required to meet the needs arising from expected growth and activity in the Sahtu	Department of MACA
<b>11</b> Explore possible public/private partnerships (PPP) to drive development	Summarize projects currently underway and identify projects for possible collaboration	Mayor of Norman Wells Andy Short, ITI Sahtu





