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May 23, 2007

## **Submission to Alberta Royalty Review Panel**

### **Introduction:**

Good afternoon and thank you for the opportunity to present to you today.

My name is Glen Schmidt, President and CEO of Laricina Energy Ltd. Laricina is an emerging oil sands producer, founded in 2005 by members of the former executive and board of directors of Deer Creek Energy Limited.

Laricina is focused on exploration, enhanced recovery and development of *in situ* resources that are found in deposits that are less developed and less mature than current producing *in situ* projects. Laricina's business strategy includes a concentration on advanced bitumen recovery technologies while mitigating both the environmental and cost impacts of extraction. Our niche is to leverage technology by using the strength of our experienced technical teams to innovate and adapt extraction and development techniques in order to capitalize on the huge untapped potential of *in situ* reserves for the benefit of all Albertans.

Since our inception 18 months ago, Laricina has raised private equity capital of nearly \$200 million, established a land position of approximately 58,000 net operated hectares, completed its initial winter exploration program and is currently preparing the engineering and regulatory studies to advance two potential "step-change" prototype projects.

Two such examples of our purposeful strategy are represented in our oil sands Grand Rapids and carbonate plays in west Athabasca. To develop this next generation frontier, companies such as Laricina fill an important role in Alberta's overall resource development. We are pushing the envelope further and faster in this outer boundary than many larger entities. In fact, we need to do this in order to be successful.

According to the EUB, the carbonate plays themselves represent over 450 billion barrels of initial oil in-place and roughly 38 billion barrels potentially recoverable. The financial impact to all Albertans in the continuing development of our unconventional resources will be felt in future years as more and more of Alberta's oil production comes from oil sands and more unconventional opportunities; like the carbonates. A stable fiscal regime that encourages investment today, and maximizes growth objectives, while looking forward into the future, will provide ongoing benefits to all Albertans.

This submission to the Royalty Review Panel is provided to share Laricina's perspective on the issue of royalties, specifically as they relate to the oil sands.

### **Principles Supporting a Royalty Review**

Laricina supports an active and regular review of the royalty regime in Alberta. Responsible and effective stewardship of Alberta's resources requires that such reviews be completed on a periodic basis.

Fort McMurray is not rolling in oil sands profits; it is rolling in money being invested in the oil sands, in hope of a profit.

The existing regime has been a major factor in attracting investment to the sector and has assisted a viable and sustainable industry with competitive standing globally. The win – win that has been realized between Albertans and industry is evident with more than 40 years of success in developing oil sands as a major economic sub-sector. The significant amount of capital being devoted to the oil sands sector since the implementation of the current royalty regime has promoted Alberta as a recognized leader in the extraction and processing of heavy oil and bitumen. It has been a successful policy as a result of its long-term view of development, and it is now delivering results.

However, making modifications to the regime simply because it feels like “time for a change” is not the answer. The many issues we are facing in the industry today are interrelated, as the oil sands consultation forums have demonstrated. Establishing new goals, that contend with the issues today and give attention to the multi-dimensional make-up of the oil sands industry, will help sort through these complex inter-relationships and support a framework for any future recommendations.

Laricina's view is that policy development incorporates the following principles:

- effective throughout evolution;
- dynamic and in stages to incorporate input;
- allow for testing and response;
- present a degree of adaptation; and
- incorporate and recognize the economic fragility in the system.

Underlying these principles is our outlook into an oil sands universe that is very dynamic, and that covers a spectrum of companies of various sizes and stages of development, and that incorporates a large number of projects that range in scale, scope, recovery mechanisms and returns. A diverse industry may require a royalty landscape setting that is adaptable not only to various economic assumptions but to size, process of recovery and technology.

Goals to consider for the royalty regime include:

- equitable economic rent to the province of Alberta while meeting growth objectives;
- recognize multiple business segments in resource extraction;
- encourage continued expansion and development in immature deposits, difficult fields and frontier plays;
- support new and incremental investments or marginal play opportunities that have long lead times and are highly capital intensive;
- promote a stable re-investment ratio that supports sustainable development and technology advances;
- acknowledge legacy assets and project profitability compared to future growth over time and varying economic scenarios.

These suggested goals, require a royalty framework that is tailored within the industry, considering project type, size, recovery mechanism, geography, geology, technology, and economics. Addressing these items in a single policy framework is not easy.

### **Equitable economic rent to the province of Alberta while meeting growth objectives**

Principle of Partnership – Alberta has created tremendous success in applying its royalty programs on the basis of partnership with industry. This partnership is unique if compared to the royalty structures of other nations.

Historically, the 4.2 miscible flood royalty program had many of the features of the generic oil sands royalty structure where risk was taken by industry to implement processes and the province achieved incremental resource recovery without capital exposure. This idea formulated when a profit was achieved by the producer, the ability to pay was available and afforded a sharing of the profit. That historical leadership by the province helped put Alberta into the position as a world leader in hydrocarbon miscible flood technology.

The generic oil sands royalty also has been a success. It has stimulated industry to take the risk to develop resources and when a profit was made, a trigger generated royalty revenues to the Crown. This concept of “ability to pay” is fundamental to sustainable development. Under this regime, government participation is greater than 50% of the profits available over the life of the project. Furthermore, significant resources have moved from a dormant phase to a revenue source for the Crown.

Resource extraction contributes to the province in many dimensions; land sales, royalties, and taxes are the direct revenue measures that need to be considered on a cumulative basis. Economic rent is extracted as a series of payments and recognition of the total rent must recognize the cumulative burden. More strategic than revenue, is the creation of Alberta’s high tech resource sector, and the material long-term benefits from fostering an environment that supports a dynamic industry where there is room for home-grown Alberta companies in addition to multi-nationals.

In the *in situ* business, companies like Laricina will be investing hundreds of millions of dollars to open up untapped resources. We plan to invest materially in new and innovative technology. Laricina has already begun work on field testing of different carbonate recovery approaches. We are an active part of an emerging high-tech, Alberta-lead, resource sector, whose seeds were first sown in the 1980’s with the AOSTRA underground test facility.

The oil sands are the area for future growth in royalties and are expected to offset much of the decline in conventional oil and natural gas royalties. This in itself supports a very cautious review of the current royalty structure of Alberta to ensure we do not undermine the risk-reward balance and future prosperity, to the detriment of all Albertans.

### **Recognition of multiple business segments in resource extraction**

The oil sands are not a monolith. There exists different business segments of mining, *in situ* and upgrading each of which include differing extraction methods, geography, geologic formation, maturity, scale and cost.

- Mining
  - Mining is the most mature; with significant legacy assets which benefit from a lower historical cost and significant cash flow and production.
  - Now dominated by multi-national or large integrated producers.
- *In Situ*
  - An emerging business; representing the largest potential future growth with few legacy assets.
  - Significant presence of Alberta-based and founded companies, developing a wide range of new technology applications.

- Upgrading
  - An emerging business; seeking to balance cost, benefits, and environmental performance.

Any framework put forward from this royalty review should recognize that the economics, costs, differing environmental profiles and future potential vary within each of these sectors and any potential change to the royalty structure will need to accommodate these differences.

**Encourage continued expansion and development in immature deposits, difficult fields and frontier plays;**

*In Situ* Oil Sands Sector - What is it?

- Largest future growth in resource potential for oil sands.
- Includes the emerging carbonate resource, which will require prototype field demonstrations to shape commercial recovery design.
- Consists of a significant number of Alberta-based companies as participants.
- Different scale and pace of development.
- Large number of technical initiatives, research and innovation underway.

The royalty framework must consider the context of the resource through its development life cycle. The “one size fits all” solution has likely changed since 1997 with today’s dynamic picture. Additionally, comparisons to other jurisdictions like Texas, Norway and Alaska is risky if not looked at with adjustments for the costs and quality of oil produced in these frontier plays. However, the original thesis of the existing royalty structure still holds true today when looking outside traditional oil sands projects.

**Support new and incremental investments or marginal play opportunities that have a long lead time and are highly capital intensive**

New technologies need to be developed and tested, and investors need confidence in the fiscal regime for these long-term initiatives. Currently, expanded incentives for industry and universities to bolster research are encouraging to see. These investments in research and development now need to be supported in the field to demonstrate recovery and productivity of marginal fields. The existing oil sands royalty regime supported this culture with great benefit to overall development of the oil sands and gross domestic product. As we expand the resource potential this framework still applies.

**Promote a stable re-investment ratio that supports sustainable development and technology advances**

Industry is responding to numerous recovery and environmental challenges:

- Goal to reduce water consumption met with recycle now approaching 95%; new evaporator/crystallizer design, mitigate ponds and disposal concerns. Deer Creek prototyped a simpler scalable, modular design for facilities, incorporating this solution.
- Goal to manage natural gas consumption through improving thermal efficiency and fuel choices. OPTI Canada Inc., Petrobank Energy and Resources Ltd, Quadrise Canada Fuel Systems Inc., are all examples of Alberta-based companies testing new solutions.
- Goal to mitigate environmental emissions, sequestering and EOR alternatives. Solvent processes and sequestering has been and is being tested, or proposed in the field by companies including Suncor Energy, Encana Corporation and Laricina.
- Smaller scale and staged development lends itself to technology improvements, being adapted at each stage. Water recycle, lift technology, well design, and construction modularization are all such examples.
- *In situ* developments occur at a scale that is 1/10<sup>th</sup> to 1/5<sup>th</sup> the footprint of upgrading or mining projects.
- Development cycle is typically over a decade, from geologic delineation to field testing, through a series of staged developments.

Industry working with Alberta has built a foundation that is creating a significant number of Alberta-based, and founded, high-tech resource companies; OPTI Canada Inc., Petrobank Energy and Resources Ltd., Oil Sands Underground Mining Corp., Laricina, Quadrise Canada Fuel Systems Inc., and Alter Nrg Corp. are some examples.

**Acknowledge legacy assets and project profitability over time, at varying economic scenarios, compared to future growth projects in infancy stage**

Typical *in situ* economics show IRR's of 10-15% at \$50 WTI pricing and current cost intensities, under historical heavy oil price differential and royalty assumptions. Operating net backs under these cases are generally \$10-12 per barrel. Increased net revenues are not necessarily generated with higher WTI prices. Differentials, increased operating and capital costs affect operating net backs and full cycle returns. The main operating costs for *in situ* production is mostly energy related and economics do not necessarily improve with high oil prices. The implications of these influences on *in situ* economics include:

- IRR's are modest, given the scale, time and uncertainties for development. Cost of capital for emerging companies often exceeds 20% during the early development stage.
- New environmental costs for GHG emissions are estimated at \$0.50 to \$1.00 per barrel. Counting for this tax increase; the impacts may be as large as 25% to 50% over the prior income tax base of \$1.50 to \$2.50 per bbl.
- Royalties on a net versus gross basis are required given a fairly small net cash flow base. At the margin, any gross royalty could shift returns materially.
- Bitumen is the product of the *in situ* resource; given that *in situ* is most often scaled, and in staged development, it becomes more challenging to integrate than mining.

Pre-commercial investment in marginal and frontier plays, or testing of new technologies, occurs many years before commercial production can begin. Even the existing royalty regime does not recognize the tremendous sunk capital by companies to get ideas to mainstream, as most historical costs prior to the previous 3 years from royalty approval will never be included in the cost base. In Laricina's example, hundreds of millions of dollars will be invested in frontier resources, new technologies, recovery schemes, emissions management, and environmental performance improvements that will likely never be part of the historical cost base since they will have occurred 6 to 8 years before any commercial production. Yet Albertans will benefit enormously from these early investments.

As an *in situ* producer, Laricina would suggest the panel consider, in its review, the following points:

- Cost of capital for small cap companies.
- Material capital costs for new Alberta companies are a barrier to entry. Laricina will have invested \$200 million in land acquisition, drilling and evaluation, engineering and design in its first two years of operations. It expects that prototype development will consume \$125 – \$175 million over the next 4 to 6 years, and the first 10,000 barrels of bitumen per day commercial project will require \$300 million.
- Small cap producers contribute significantly to technological innovation and are a sector that merits a royalty regime that recognizes its ability to pay. In particular, certainty and clarity of the economics, and expected return from the cumulative rent to governments in crown land, royalty and taxes, is required.
- Long lead time studies, research, testing, analysis and small-scale field activities should be incorporated into a projects historical cost base, despite the span of time since such activities occurred.

### **Opportunities**

We see many opportunities for the oil sands industry and government in this royalty review to provide clarity on our common goals and objectives. I would encourage the panel to consider the following comments:

- Maintain the right climate to support investment, and continued development and progress in marginal plays;
- Create a stable and equitable royalty framework, with sufficient economic participation for Albertans to meet both societal, economic and environmental goals;
- Focus on enhanced petroleum recovery which could have a dual support for promoting environmental considerations;
- Support development outside of the main Athabasca fairway;
- Foster creation of high-tech, resource extraction, companies and recognize the ability to pay when project profitability is obtained;
- Review provincial funding model for high growth areas and challenge internal government workings;
- Continual review of policy framework to monitor where we are headed and respect time to get the right answers;
- Consider a sliding scale structure to accommodate differences in the spectrum of companies and projects not anticipated when establishing the original framework.

### **Concluding Comments**

My entry into the oil business on graduation in 1981 was supported by the principle of partnership in the miscible flood royalty structure of the past. The creation of companies like Laricina is another example of the success of the Alberta government's foresight, in seeking to create technological leadership in resource extraction.

The province of Alberta has seen a material transition of dormant resource potential converted to revenue generating projects, without capital at risk. The oil sands industry has and continues to develop technology to address recovery and environmental impacts as a direct result of the key principles of the generic oil sands royalty regime. We put forward to you, consider the value of Alberta-based solutions that small entrepreneurial companies offer. The provincial royalty policy needs to support these initiatives and facilitate investment. A timely conclusion to this issue is necessary as industry needs this uncertainty removed.

At Laricina we want to be part of the solution, and believe an improvement in recovery rate with technology advances more than offsets a short-term view of higher royalty rates today. We would be pleased to provide supporting information as requested by the panel.

Thank you for the opportunity to present Laricina's views on this important matter.

Sincerely,

Glen C. Schmidt  
President and CEO

# Alberta Royalty Review Presentation



LARICINA  
E N E R G Y L T D.

May 23, 2007

# Laricina Energy Ltd.

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- Who are we?
  - Emerging Oil Sands in situ producer
  - Founded in November 2005 by some former Deer Creek executive and directors
  - Focused on emerging oil sands opportunities and technological innovation to improve in situ extraction
  - Raised ~ \$200 million of private capital
  - Established the business, and developing two field prototypes to advance in situ extraction

# Glen Schmidt – President & CEO, Laricina

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- Native Calgarian
- P. Eng., BSc. U of C 1981
- Former President and CEO Deer Creek
- More than 25 years in the industry



# Support for Royalty Review

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- Prudent stewardship
- Opportunity:
  - To evaluate program success
  - To reaffirm/confirm program goals and principles
  - To confirm and/or refine the royalty structures

# Oil Sands Development

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- Program Successes:
  - Dormant assets being converted to production revenue, \$3.4 billion in royalties forecasted for 2007
  - Growth from;
    - 3 active companies to more than twenty
    - exploitation of 3 geologic horizons to more than 6
  - Fostered an emerging Alberta founded, junior oil sands sector, in addition to multi-national participants

# Program's Successful Attributes

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- Certainty and stability
- Flexibility to specific project economics; imbedded in a net vs. gross structure.
  - Established the principle of “ability to pay”, i.e. profit triggers government participation.
- Equity, i.e. if success occurs ~50% share to the government and ~50% share to the investor.
  - Albertans capture 50% of the profit from each venture without capital at risk.

# Supportive Royalty Regime

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- Laricina a high-tech resource company, founded because of a supportive royalty regime
- Laricina's Contribution to Alberta to date:
  - ~\$200 million of capital attracted to date, to create opportunities.
  - Significant ownership by Albertans, not just employees
  - ~\$125-175 million to be invested in the next 4 years in technology prototypes to address; carbonate oil sands recovery, improvements in thermal efficiency and environmental performance, before a commercial project is launched.
  - In the first 18 months of operations more than 12 University coop work terms created.
  - Three technical papers published with a focus on fostering an open text technical environment

**Alberta has fostered an environment where a high-tech resource recovery centre of excellence is being created by Albertans.**

# Future Considerations

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- Recognition of multiple sub-sectors; mining, in situ and upgrading, each with specific attributes.
- Stability, certainty, and flexibility attract capital
- The principle of “ability to pay” in a net vs. gross royalty manages project complexity.
- Recognition that while large in scale, oil sands offers a low rate of return and capital at risk is significant.
- What may appear to be a small change can move a project to deferral vs. development, the Alberta based companies have a fragile existence.

# Recommendations

- The generic oil sands royalty has and is working; it is a success let's build on it.
- Maintain the principles that made it a success:
  - Ability to pay
  - Flexibility, certainty and equity
- Continue to foster an environment that is creating an Alberta based high-tech sector, built by Albertans



Laricina offers strength in the oil sands:

- ◆ Experienced technical team
- ◆ Financed to capture opportunities
- ◆ In situ technology and recovery process design innovations
- ◆ Portfolio of high quality, undeveloped assets
- ◆ Board and management with full cycle oil sands experience

Laricina is a privately held, Calgary-based company focused on capturing opportunities in the oil sands areas of Western Canada. Our Company is creating value through developing a diverse portfolio of oil sands assets using current and future innovations of *in situ* technology. Our experienced people provide a technical expertise not readily available in the industry.

Laricina has identified five development areas that present production potential in excess of 150,000 barrels of bitumen per day. These assets range from the familiar oil sands in the McMurray formation to less developed and less mature Grand Rapids and carbonate plays, all of which offer significant resource potential.

## Targets

- ◆ Oil sands in Western Canada, excluding Athabasca mining area
- ◆ *In situ* projects in staged development of approximately 10,000 barrels of bitumen per day
- ◆ Less developed and less mature resources
- ◆ Partnerships using our technical expertise to evaluate and develop partner's assets
- ◆ Acquisitions of high quality, undeveloped assets



**Laricina: The Boreal Tamarack species of the Larch family.**

A tough determined pioneering species, capable of thriving in adverse climates, others follow.

May 2007

### Key Senior Management

- ◆ Glen Schmidt, President & CEO
- ◆ Dave Theriault, COO & VP Operations
- ◆ Neil Edmunds, VP Enhanced Oil Recovery
- ◆ Karen Lillejord, VP Finance & Controller

### Board of Directors

- ◆ Jonathan Farber, Managing Partner, Lime Rock Partners
- ◆ Barry Jackson, Chairman, TransCanada Corporation
- ◆ Brian Lemke, Chairman, Cordero Energy Inc.
- ◆ Gordon Kerr, President & CEO, Enerplus Resources Fund
- ◆ Robert Lehodey, Corporate Securities & Energy Lawyer, Osler, Hoskin & Harcourt LLP
- ◆ Glen Schmidt, President & CEO Laricina Energy Ltd.

## Laricina Energy Ltd.

### Strategic Differentiation

- ◆ Experienced oil sands engineering and geological staff using proprietary techniques for screening and ranking formations
- ◆ Primary focus on the resource and its recovery, generating selective acquisitions with a risk weighted approach
- ◆ Advancing technology and innovative recovery processes through combination of research studies, new initiatives, simulation and tailored reservoir schemes
- ◆ Land base that is exploitable near term
- ◆ Projects close to infrastructure and outside the congested Fort McMurray region
- ◆ Positioned in emerging carbonate plays with significant resource potential and adjacent to clastic projects providing synergy in operations
- ◆ Adaptive, staged development, incorporating the evolution of process enhancements while creating scale and optimizing costs

### Current Update

- 71 core-hole and ~ 100 km seismic program completed
- Commenced a variety of lab work and special studies on carbonate acreage to assist resource definition and examining depletion designs
- 2007 planned capital and operating expenditure program set at \$66.2 million

Basic Common Shares  
29.4 million  
Fully Diluted Common Shares  
35.8 million  
Insider Ownership  
9.0% of basic  
(as at March 31/07)

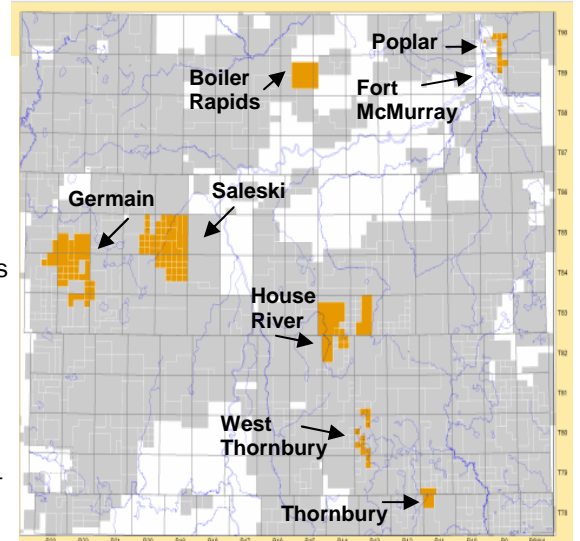
# Key Milestones

- ◆ Founded in November 2005 and assembled experienced Board of Directors
- ◆ Raised \$77.5 million in December 2005, \$95 million in 2006, and \$21.6 million in early 2007 in equity financings
- ◆ Spent ~ \$94 million to date on land acquisition with \$61 million for Crown land sales and \$33 million in a private transaction
- ◆ Accumulated ~ 37,050 hectares of development property and 21,000 hectares of additional exploratory acreage that provides potential growth areas from exploration and technological enhancements
- ◆ Participant, with 1% working interest, in the Joslyn oil sands project, a > 200,000 bbls/d (gross) development operated by Deer Creek Energy Limited
- ◆ Built solid senior management and technical teams including 20 employees and several technical partnerships

## Highlights

- ◆ Own 58,042 net hectares
- ◆ Established 5 development areas in Germain, Poplar, Thornbury and Saleski
- ◆ Over 4 billion barrels estimated exploitable net bitumen in place
- ◆ Internal estimate 1.0 – 1.5 billion barrels of net recoverable bitumen
- ◆ Sept. 30/06 estimate by GLJ on four development properties identified 1.2 billion barrels best, and 2.2 billion barrels high, net recoverable bitumen
- ◆ Accessible infrastructure provides opportunity for large-scale *in situ* projects
- ◆ Gross potential production in excess of 150,000 bopd from development areas

## Laricina Lands



Legend: LEL lands (orange)  
Open lands (white)  
Leased lands (grey)

Joslyn and 5th development area lands not shown on map.

Laricina is focused on extending reservoir knowledge and operational efficiencies through advanced evaluation techniques and innovative recovery processes in less developed and undervalued assets with substantial growth potential. Production recovery process improvements can expand the *in situ* opportunities and allow Laricina to venture into new areas with reservoir characteristics that have yet to be recognized as proven.