Delayed Coker Engineering Experience
Horizon Oil Sands Project

Canadian Natural

September 9, 2008

Presentation Overview

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- CNRL and the Horizon Project Oil Sands Project
- Design features of the Delayed Coker for safety and reliability
- Future design actions
- Current status of the Horizon Oil Sands Project

CNRL History

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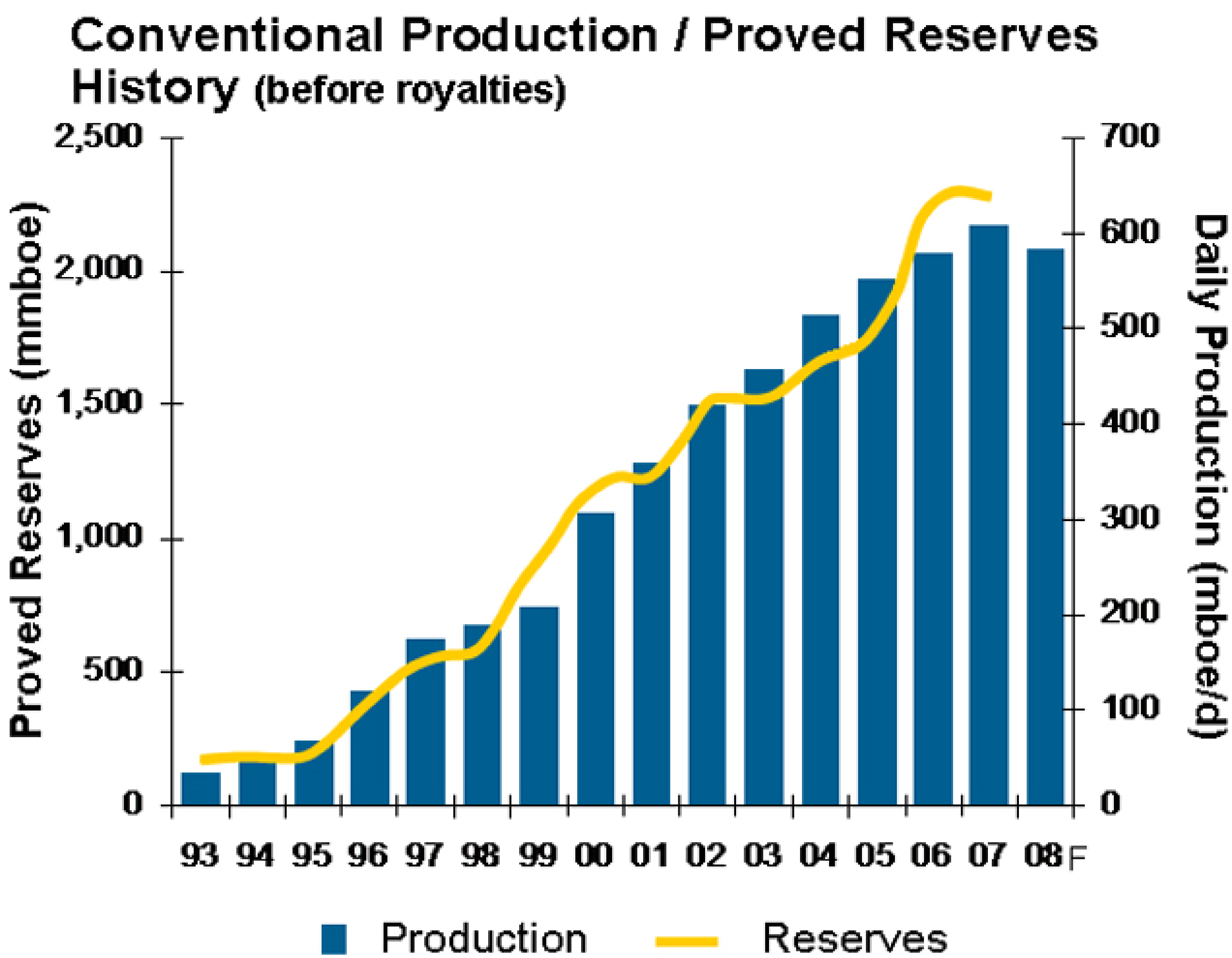
- In 1989, Canadian Natural was an oil and natural gas company operating only in Alberta
  - employed 9 people,
  - produced about 1,400 barrels of oil equivalent per day and,
  - had a market capitalization of about $1 million.
- By adhering to defined growth principles and through opportunistic acquisitions we have grown
  - approximately 3,700 employees,
  - production of over 590,000 barrels of oil equivalent per day and,
  - An enterprise value of approximately $65 billion.

CNRL Growth



Note: Excluding bitumen mining reserves.

Horizon Scope

- **MINING FACILITIES**
  - Overburden - Mining
- **BITUMEN PRODUCTION FACILITIES**
  - Ore Preparation - Extraction -Froth Treatment
- **UTILITIES AND OFFSITES FACILITIES**
  - Co-generation -Interconnecting piperack, Tank Farms – Heat Integration – Main Electrical Distribution - Sulphur Block – Water Systems, Temporary Construction
- **UPGRADER FACILITIES**
  - Primary Upgrading -Secondary Upgrading -Hydrogen plant -Gas Clean-up and Support
- **SITE DEVELOPMENT**
  - Site Preparation -Common Services - Housing & Air Transportation

Horizon Location

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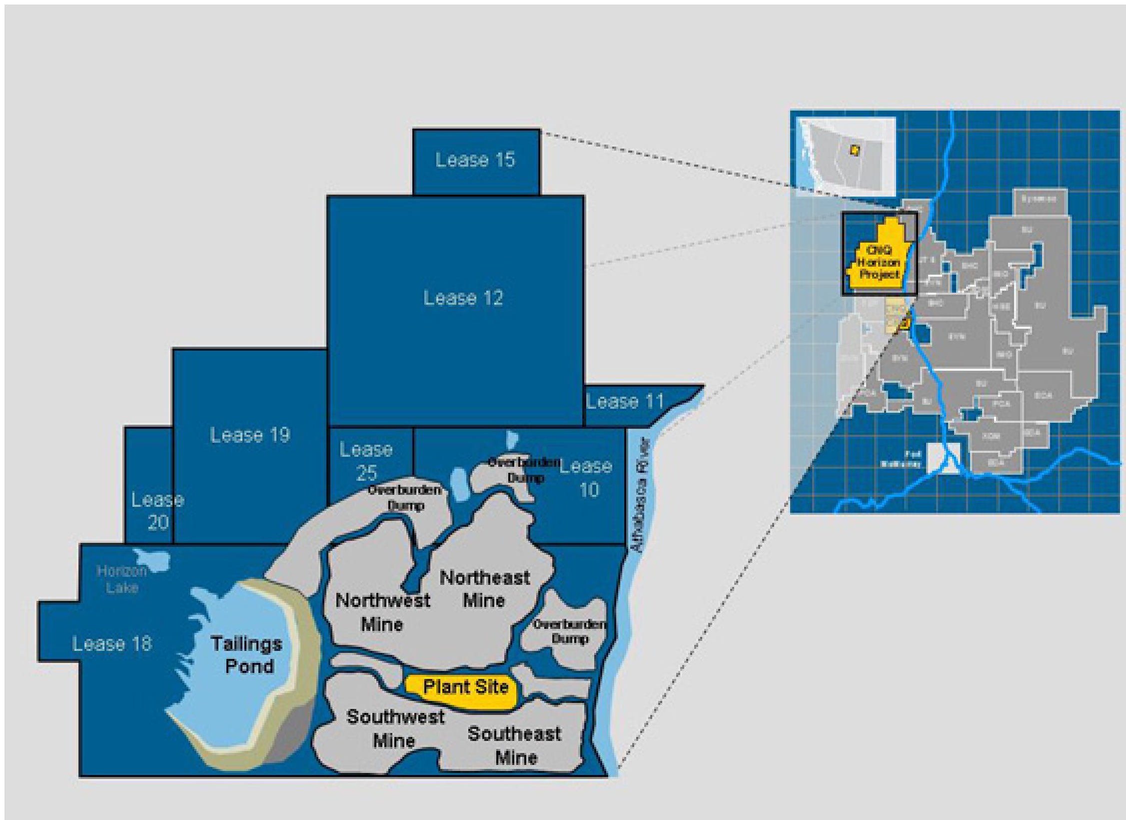

Horizon Plant Site

Mine – Overburden Removal

Primary Upgrading

Delayed Coker Unit

Design features of the Delayed Coker

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- **Minimize Main Fractionator Salt deposition**
  - Two stage overhead condensing system
    - Warm reflux minimizes water condensation and salt deposition.
  - Water wash system
    - Designed to wash the tower top trays with the unit in service in the event of salt deposition

- **Fractionator Coke removal system**
  - Typical close circulation with strainer and sparger ring design.
  - Addition of 1 ½ in. from sparger ring to bottom nozzle
    - Takeoff nozzle of close loop system

Design Features of the Delayed Coker (Cont)

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- **Furnace design features**
  - Eight pass furnace with four cells that operates as independent heaters
    - Design allows one cell to be decoked while the other three are still in service.
- **Coke Drum Valves**
  - All valves with Electric operated actuator
  - Valves interlocked through the SIS of the unit
  - Design facilitates future automation of the decoking cycle

Design Features of the Delayed Coker (Cont)

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- **Coke Drum Unheading System**
  - Top and bottom Delta Valve
  - Interlocked with cutting system PLC
- **Coke Cutting System**
  - Ruhrpumpen System
  - Hydraulics to control winch and electric motor for rotary joint
  - Electrically traced self draining hose
  - Design of the PLC to allow future upgrade to perform remote cutting

Design Features of the Delayed Coker (Cont)

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- **Coker Structure**
  - Deluge system at cutting and switching decks with necessary drain system.
  - Insulated checker plate floor at cutting deck.
  - Crane at switching deck mainly to remove valves to grade level.

- **Other features**
  - Close hydrocarbon drain system.
  - Unit designed to process light and heavy hydrocarbon slop separately

Future design actions

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- **Further development of the 3D model**
  - Model secondary cable trays.
  - Model pipe supports for 60 & 90 % model reviews.
  - In certain cases piping layout by equipment vendor would need to be modeled.
- **Reserve areas for egress and drop zones**
  - Avoid that piping, instrument and electrical disciplines occupy these areas.
- **Electrical tracing design**
  - Location of power supply and temperature sensor need to be model.

Current Project Status

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- **Mining** – Completed, ready to mine oil sands and continues to move overburden
- **Ore Preparation Plant** – Completed, targeted to receive first oil sands in August
- **Hydrotransport** – Completed, ready to accept slurry
- **Piperack** – Completed, live and operational
- **Extraction** – Completed, ready for operation
- **Froth Treatment** – Targeted to be complete by August
- **Delayed Coker/Diluent Recovery Unit** – Commissioning well underway
- **Hydrogen Plant** – Completed, turned over to operations
- H**ydrotreaters** – NHTU and GOHTU completing loop checks. DHTU encountering some scheduling issues.
- **Co-generation** – Completed, producing steam
- **Sulphur Plant** – Completed, turned over to operations
- **Tankage** – Completed, ready for first oil
- **Main Control Room** – Completed, live and operational
- **Utilities & Services** – Completed, live and operational
- **SCO Pipeline** (third party owned and operated) – Completed, ready to accept product with terminaling facilities in Edmonton arranged.

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Forward Looking Statements

Certain statements in this document or documents incorporated herein by reference constitute forward-looking statements or information (collectively referred to herein as "forward-looking statements") within the meaning of applicable securities legislation. Forward-looking statements can be identified by the words "believe", "anticipate", "expect", "plan", "estimate", "target", "continue", "could" "intend", "may", "potential", "predict", "should", "will", "objective", "project", "forecast", "goal", "guidance", "outlook", "effort" "seeks", "schedule" or expressions of a similar nature suggesting future outcome or statements regarding an outlook. Statements relating to "reserves" are deemed to be forward-looking statements as they involve the implied assessment based on certain estimates and assumptions that the reserves described can be profitably produced in the future. There are numerous uncertainties inherent in estimating quantities of proved crude oil and natural gas reserves and in projecting future rates of production and the timing of development expenditures. The total amount or timing of actual future production may vary significantly from reserve and production estimates.

These statements are not guarantees of future performance and are subject to certain risks and the reader should not place undue reliance on these forward-looking statements as there can be no assurance that the plans, initiatives or expectations upon which they are based will occur.

The forward-looking statements are based on current expectations, estimates and projections about Canadian Natural Resources Limited (the "Company") and the industry in which the Company operates, which speak only as of the date such statements were made or as of the date of the report or document in which they are contained and are subject to known and unknown risks, uncertainties and other factors that could cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among others: general economic and business conditions which will, among other things, impact demand for and market prices of the Company's products; volatility of and assumptions regarding crude oil and natural gas prices; fluctuations in currency and interest rates; assumptions on which the Company's current guidance is based; economic conditions in the countries and regions in which the Company conducts business; political uncertainty, including actions of or against terrorists, insurgent groups or other conflict including conflict between states; industry capacity; ability of the Company to implement its business strategy, including exploration and development activities; impact of competition; the Company's defense of lawsuits; availability and cost of seismic, drilling and other equipment; ability of the Company and its subsidiaries to complete its capital programs; the Company's and its subsidiaries' ability to secure adequate transportation for its products; unexpected difficulties in mining, extracting or upgrading the Company's bitumen products; potential delays or changes in plans with respect to exploration or development projects or capital expenditures; ability of the Company to attract the necessary labour required to build its thermal and oil sands mining projects; operating hazards and other difficulties inherent in the exploration for and production and sale of crude oil and natural gas; availability and cost of financing; the Company's and its subsidiaries' success of exploration and development activities and their ability to replace and expand crude oil and natural gas reserves; timing and success of integrating the business and operations of acquired companies; production levels; imprecision of reserve estimates and estimates of recoverable quantities of crude oil, bitumen, natural gas and liquids not currently classified as proved; actions by governmental authorities; government regulations and the expenditures required to comply with them (especially safety and environmental laws and regulations and the impact of climate change initiatives on operating costs); asset retirement obligations; the adequacy of the Company's provision for taxes; and other circumstances affecting revenues and expenses. Certain of these factors are discussed in more detail under the heading "Risk Factors". The Company's operations have been, and at times in the future may be affected by political developments and by federal, provincial and local laws and regulations such as restrictions on production, changes in taxes, royalties and other amounts payable to governments or governmental agencies, price or gathering rate controls and environmental protection regulations. Should one or more of these risks or uncertainties materialize, or should any of the Company's assumptions prove incorrect, actual results may vary in material respects from those projected in the forward-looking statements. The impact of any one factor on a particular forward-looking statement is not determinable with certainty as such factors are interdependent upon other factors, and the Company's course of action would depend upon its assessment of the future considering all information then available.

Readers are cautioned that the foregoing list of important factors is not exhaustive. Unpredictable or unknown factors not discussed in this report could also have material adverse effects on forward-looking statements. Although the Company believes that the expectations conveyed by the forward-looking statements are reasonable based on information available to it on the date such forward-looking statements are made, no assurances can be given as to future results, levels of activity and achievements. All subsequent forward-looking statements, whether written or oral, attributable to the Company or persons acting on its behalf are expressly qualified in their entirety by these cautionary statements. Except as required by law, the Company assumes no obligation to update forward-looking statements should circumstances or Management's estimates or opinions change.

Reporting Disclosures

Special Note Regarding Currency, Production and Reserves

In this document, all references to dollars refer to Canadian dollars unless otherwise stated. Production data is presented on a before royalties basis unless otherwise stated. In addition, reference is made to oil and gas in common units called barrel of oil equivalent ("boe"). A boe is derived by converting six thousand cubic feet of natural gas to one barrel of crude oil (6 mcf:1 bbl). This conversion may be misleading, particularly if used in isolation, since the 6mcf:1bbl ratio is based on an energy equivalency at the burner tip and does not represent the value equivalency at the well head. Canadian Natural retains qualified independent reserve evaluators to evaluate 100% of the Company's conventional proved, as well as proved and probable crude oil, natural gas liquids and natural gas reserves and prepare Evaluation Reports on these reserves. Canadian Natural has been granted an exemption from National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities ("NI 51-101"), which prescribes the standards for the preparation and disclosure of reserves and related information for companies listed in Canada. This exemption allows the Company to substitute United States Security and Exchange Commission ("SEC") requirements for certain disclosures required under NI 51-101. There are three principal differences between the two standards. The first is the requirement under NI 51-101 to disclose both proved, and proved and probable reserves, as well as the related net present value of future net revenues using forecast prices and costs. The second is in the definition of proved reserves; however, as discussed in the Canadian Oil and Gas Evaluation Handbook ("COGEH"), the standards that NI 51-101 employs, the difference in estimated proved reserves based on constant pricing and costs between the two standards is not material. The third is the requirement to disclose a gross reserve reconciliation (before the consideration of royalties). Canadian Natural discloses its reserve reconciliation net of royalties in adherence to SEC requirements.

The Company has disclosed proved conventional reserves and the Standardized Measure of discounted future net cash flows using year-end constant prices and costs as mandated by the SEC. The Company has elected to provide the net present value of these same conventional proved reserves as well as its conventional proved and probable reserves and the net present value of these reserves under the same parameters as additional voluntary information. In addition to the constant price and cost scenario, Canadian Natural has also elected to provide both proved, and proved and probable conventional reserves and the net present value of these reserves using forecast prices and costs as voluntary additional information.

Conventional reserves and net present values of these reserves presented for years prior to 2003 were evaluated in accordance with the standards of National Policy 2-B which has now been replaced by NI 51-101. The stated reserves were reasonably evaluated as economically productive using year-end costs and prices escalated at appropriate rates throughout the productive life of the properties.

Canadian Natural's independent reserve evaluators utilize the proved conventional reserve definition as prescribed by SEC in Regulation S-X 210.4-10 and the conventional proved and probable reserves definitions as prescribed under NI 51-101 in COGEH. Mining reserves are evaluated as prescribed in SEC Industry Guide 7. Internal estimates of Contingent Resources also utilize the definitions as prescribed under NI 51-101 in COGEH.

Special Note Regarding non-GAAP Financial Measures

Management's discussion and analysis includes references to financial measures commonly used in the oil and gas industry, such as cash flow, cash flow per share and EBITDA (net earnings before interest, taxes, depreciation depletion and amortization, asset retirement obligation accretion, unrealized foreign exchange, stock-based compensation expense and unrealized risk management activity). These financial measures are not defined by generally accepted accounting principles ("GAAP") and therefore are referred to as non-GAAP measures. The non-GAAP measures used by the Company may not be comparable to similar measures presented by other companies. The Company uses these non-GAAP measures to evaluate the performance of the Company and of its business segments. The non-GAAP measures should not be considered an alternative to or more meaningful than net earnings, as determined in accordance with Canadian GAAP, as an indication of the Company's performance.

Volumes shown are Company share before royalties unless otherwise stated.

The Premium Value, Defined Growth Independent

The Future Clearly Defined

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