Avalon Small Scale Thermal Oil - Investment Opportunity

Long Life - Low Cost - Low Risk

Management Team & Board of Directors

David Bredy, P. GEO, ICD.D
President & CEO and Director
35+ years of oil and gas experience primarily in the exploration and development field including Dome Petroleum and Renaissance Energy. The last 20 years as President and Director of Avalon Resources (2002-2005), Avalon Exploration (2006-2012) and now Avalon Oil & Gas, with the first two developed from grass roots to sale stage by means of the drill bit and resulted in strong returns for all shareholders.

Richard McKenzie, P. Eng
VP Engineering
30+ years of engineering experience including Bow Valley Energy, Czar Resources, Orbit Oil and Gas and Baytex Energy. The last 20 years as VP Engineering for the Avalon group of companies.

Ajit Silas, P. GEO
VP Exploration
30+ years of geological experience in western Canada working with a broad range of companies including Velvet Energy, Vermilion Resources, Renaissance Energy and Wascana Energy.

Aaron Thompson, CPA
VP Finance & CFO
25+ years of experience, the past 20 years as CFO, Controller and Accounting Systems Manager for a diverse group of companies including Paramount Resources, Apache Canada, Perpetual Energy and Strategic Oil & Gas.

Arnie Brownlees, B. Comm
VP Land
30+ years of experience in contracts, mineral land and surface land. Held positions of increasing responsibility at Dome Petroleum, Amoco Canada, Encor Energy and Scott Land & Lease. The last 20 years as VP of Land for the Avalon group of companies.

Shawn Gale, RET, PMP
VP Projects
30+ years of project management/delivery experience including Serafina Energy, Husky Energy and Encana. At Serafina, Shawn successfully delivered four thermal projects ahead of schedule and under budget.

TBD, Team Members at Additional Executive Levels

Board of Directors
Burl Aycock, P. Eng (chairman) – Independent Businessman
Rob Duguid - CEO, PFM Capital
Tyler Bradley - VP, Westcap Management Ltd.
David Bredy
James Richardson – Independent Businessman

Management's Proven Track Record

Saskatchewan Thermal Oil vs Alberta Oilsands

FAVOURABLE LOCATION

- Proximal to utilities & water source
- Local skilled labour force (no camps required)
- Benefits local landowners & businesses
- Multiple oil marketing options (rail, pipeline, truck)

SUPERIOR OIL/RESERVOIR QUALITY

- Low viscosity
- High oil saturations
- Premium pricing
- Low steam/oil ratios

Small-Scale SK Thermal:
Established strategy to maximize recovery of long-life oil reserves, generating premium netbacks and returns on investment

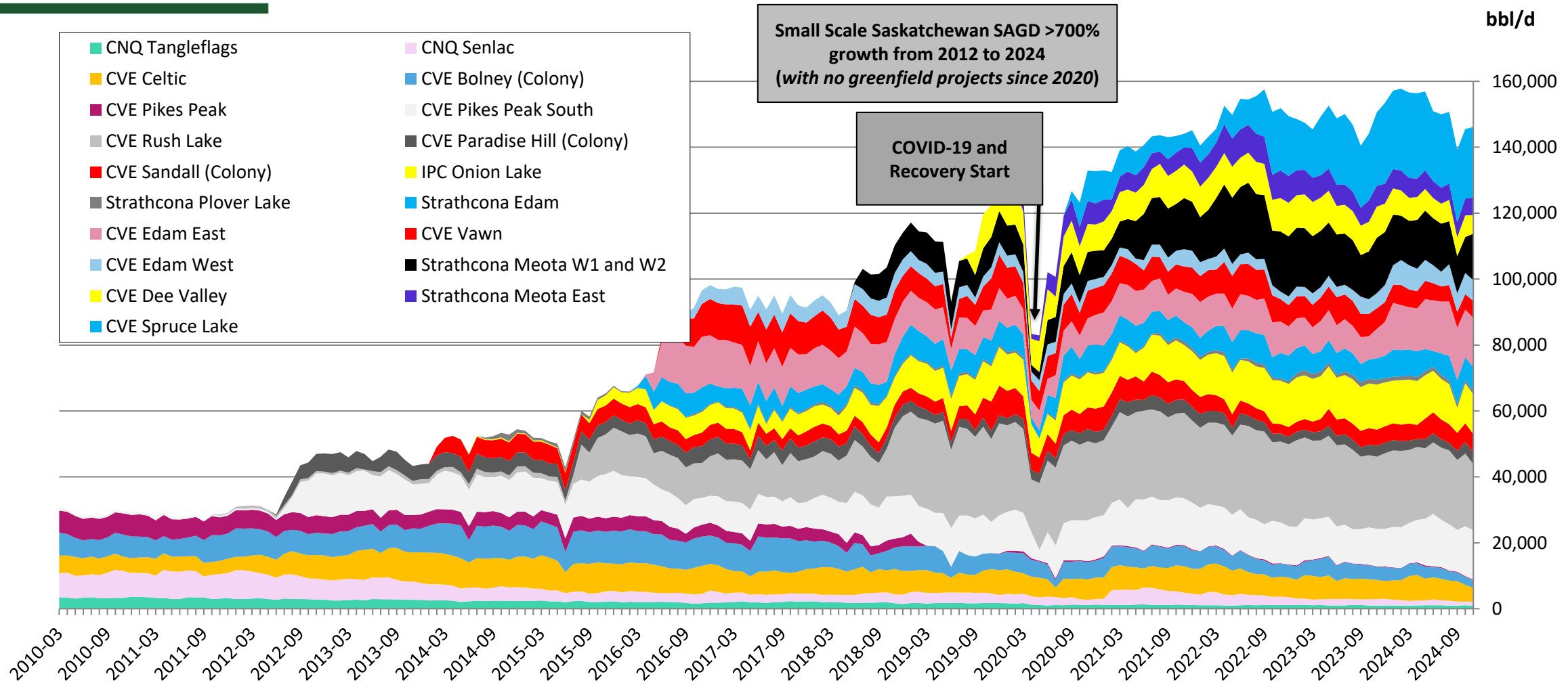
SMALL SCALE OPERATIONS

- Quick pre-production turnaround time (sanction to onstream in 18 months)
- Minimized upfront capital requirement
- Modular design allows for reduced field construction time

SCALABLE AND HIGHLY ECONOMIC

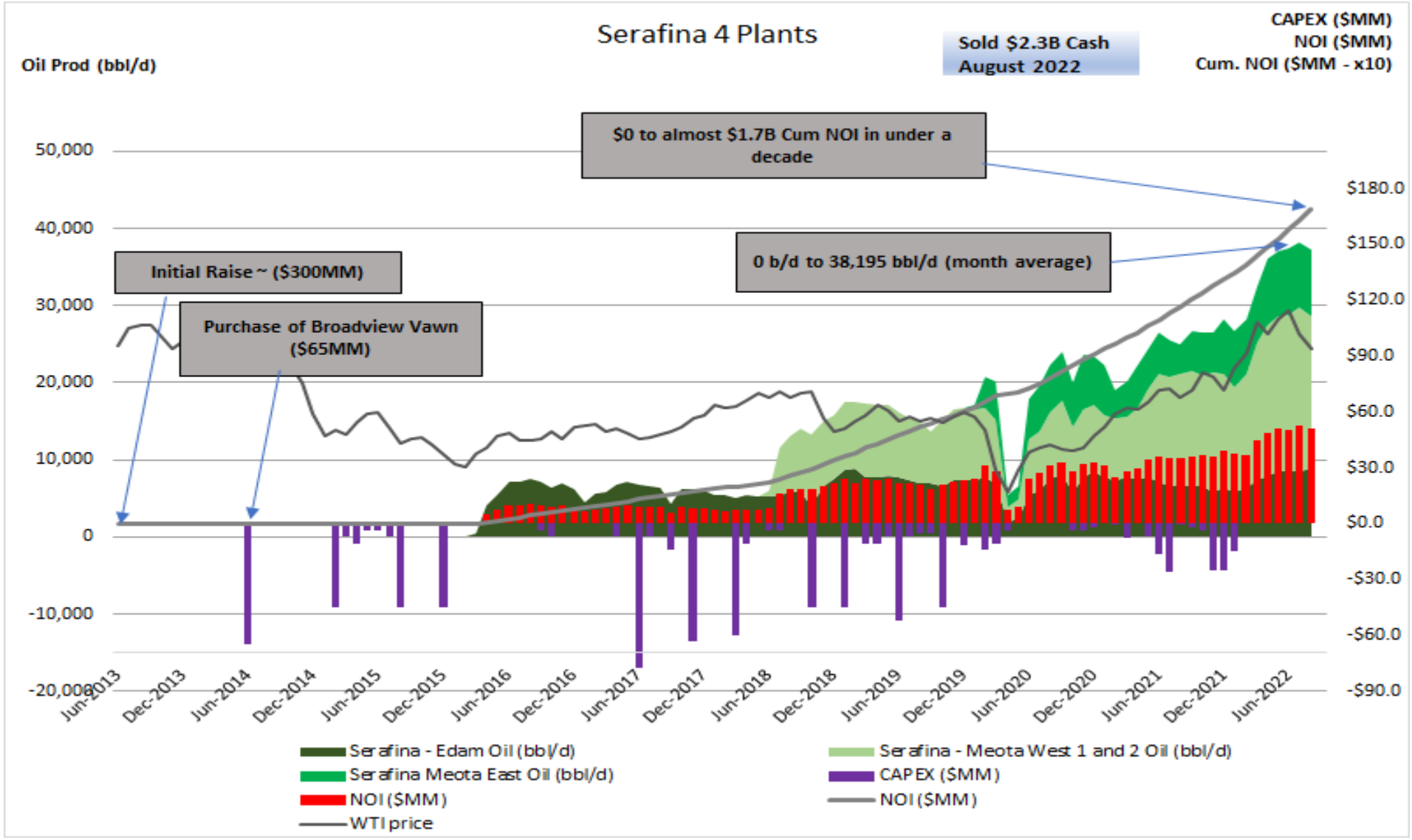
- Large oil in place per section and high recovery factors (tend to outperform forecasts year after year
- Favorable crown royalty structure (1% until payout)
- Future pads and greenfield developments -> to be funded by cash flow

Saskatchewan Small Scale Thermal Projects – Historical Growth

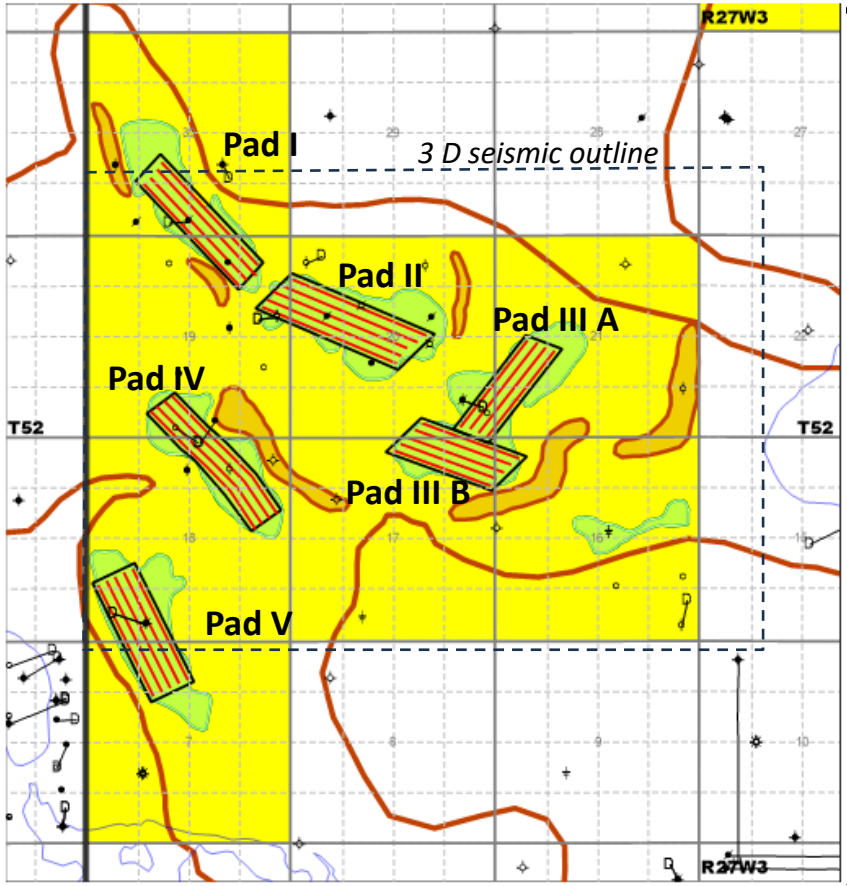


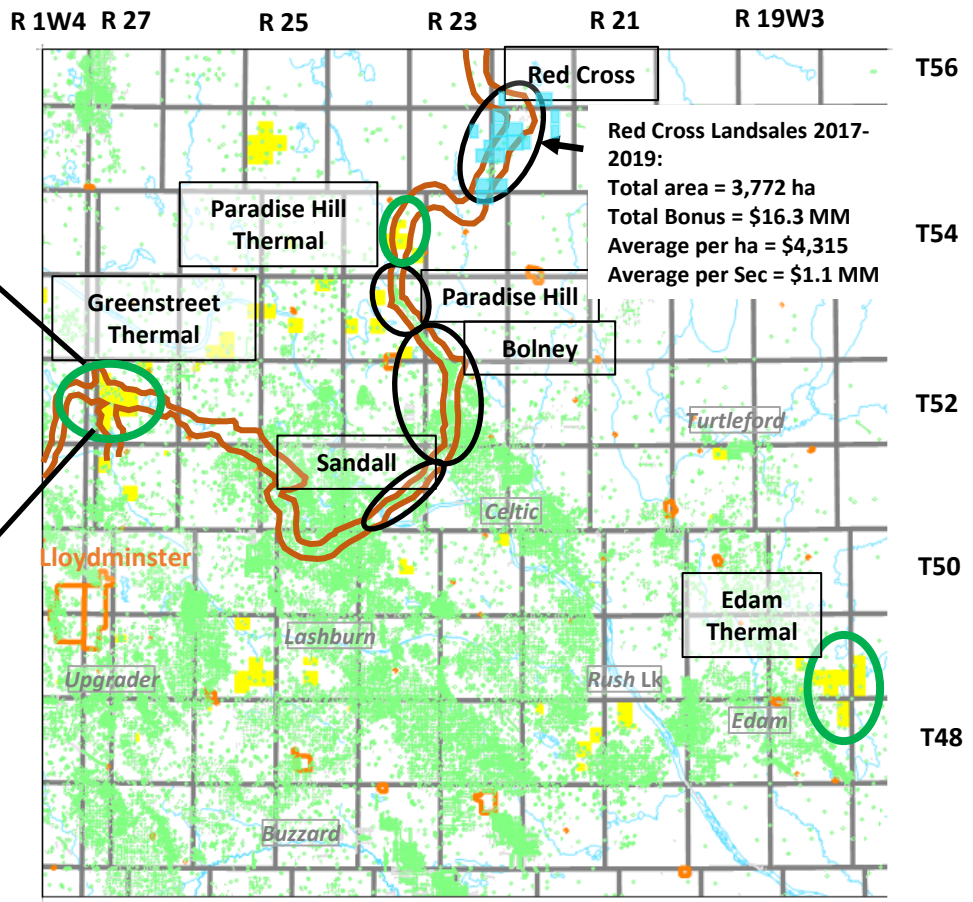
Over 660 million barrels produced from SK small scale thermal projects

The Serafina Story (2013-2022)



Greenstreet, SK - Situation Map

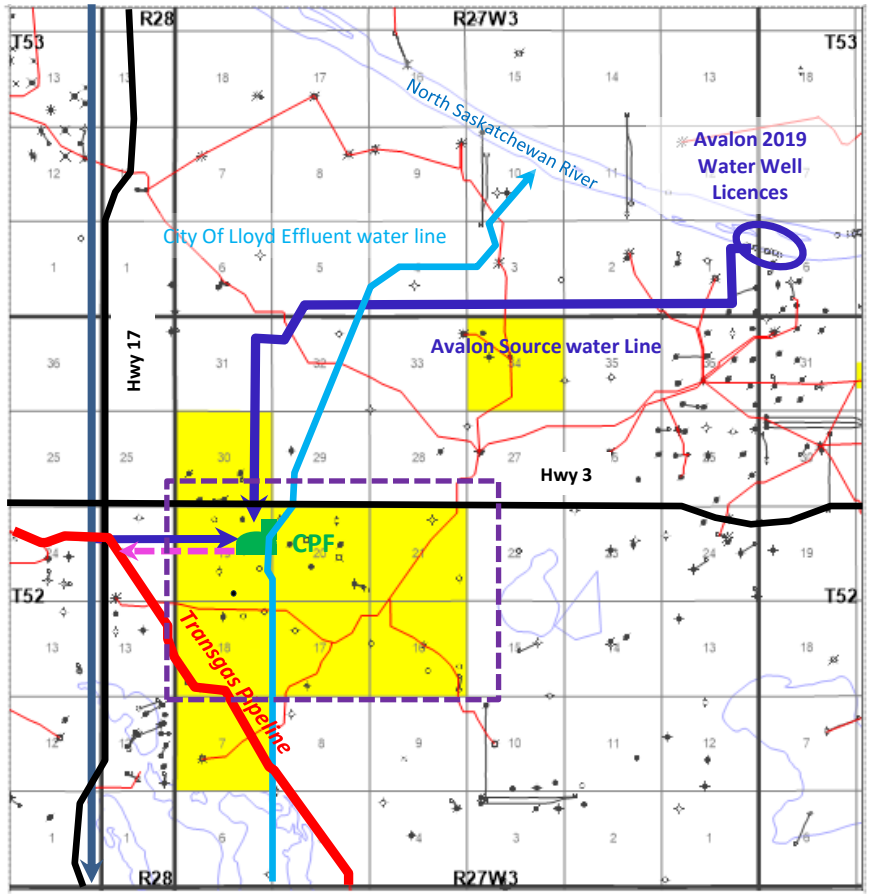




- ***Bolney – Colony – First True SAGD Production in Saskatchewan***
- ***Colony SAGD production on this trend has exceeded 90 MM bbls to date***

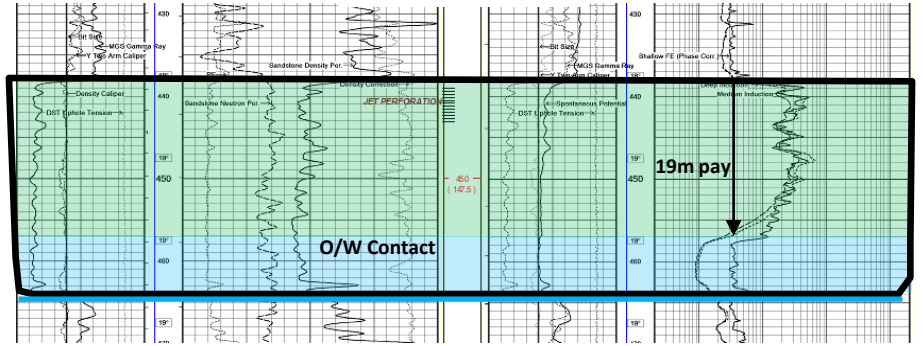
Project Summary

Greenstreet SAGD Project Area



Greenstreet SAGD Type Well

15-19-52-27-W3M



- Project comprises 8 contiguous sections (100% WI) within defined Colony age channel fairway near Lloydminster, SK
- 12 - degree crude and 21,000 mPa.s @ 22 deg C
- Up to 19 m of net oil pay, OOIP of ~40 MM barrels
- 29 wells drilled on Greenstreet lands to assist in delineation
- 10 cores with RCA, PSD, XRD, TS, Oil Analysis, Geo
- 3-D seismic defined
- EOR project approved – no expiry issue
- Water Source wells licensed
- Greenstreet project is easily accessible for crude oil trucking, utilities (gas, water electricity) and an experienced labour force

Greenstreet Economics

ECONOMICS	
Initial capital spend	$135MM
Steam generation capacity	11,000 bbl/d
Initial well pairs	8 – Pads 1 & 2
Peak production (annual average)	5,300 bbl/d
Recoverable reserves	25.2 Mmbbl
Reserve life index (at peak production)	~ 13 years
Finding & development costs	~ $9/bbl
Unit operating costs (incl carbon taxes)	~ $15/bbl

- Initial capital of ~$135MM CAD to construct a 11,000 bbl/d (steam) facility and drill 8 well pairs on the first two development pads.
- Subsequent pad development is planned to be funded by cash flow.
- Robust first year netbacks of approximately **$53/bbl**
- Break-even economics at ~ $30 WTI

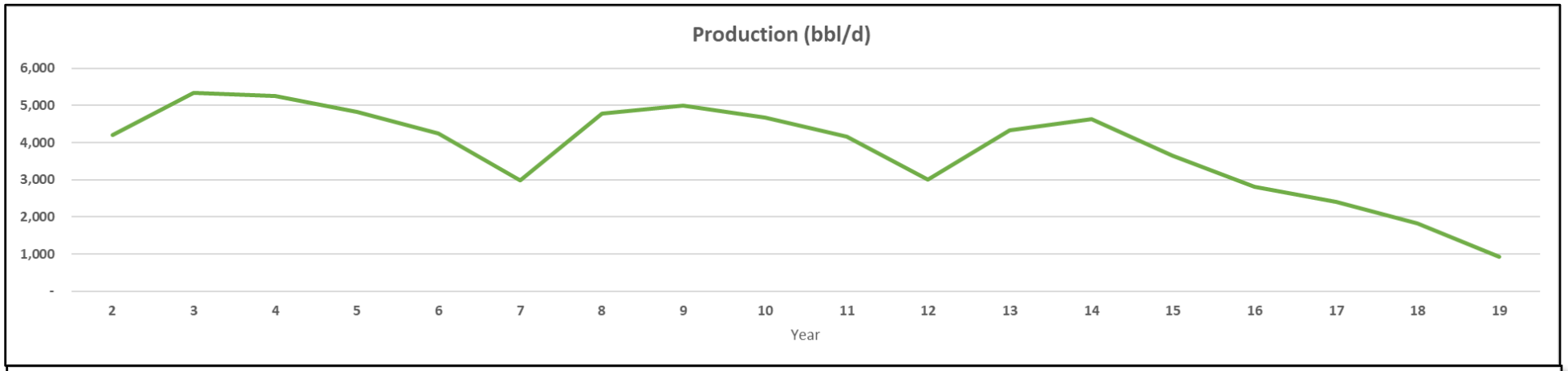
	$70 WTI	$70 WTI esc*
Net operating income	$1,070MM	$1,325MM
Payout (first steam)	1.6 years	1.6 years
IRR, pre-tax	58%	63%
NPV10, pre-tax	$355MM	$445MM

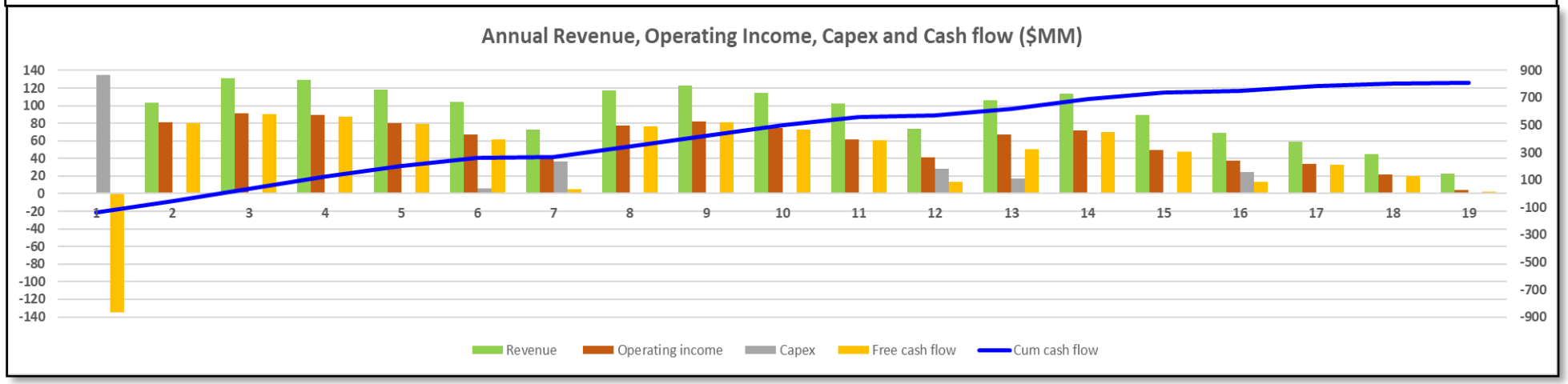
WTI	ROI**
$70 flat	2.6x
$70 esc*	**3.3x**

- **3.3x return on investment**

*$70 WTI, oil pricing and costs escalated at 2% per year.
** calculated as NPV10 divided by initial capital spend

Greenstreet Reserve Life and Cash Flow Generation

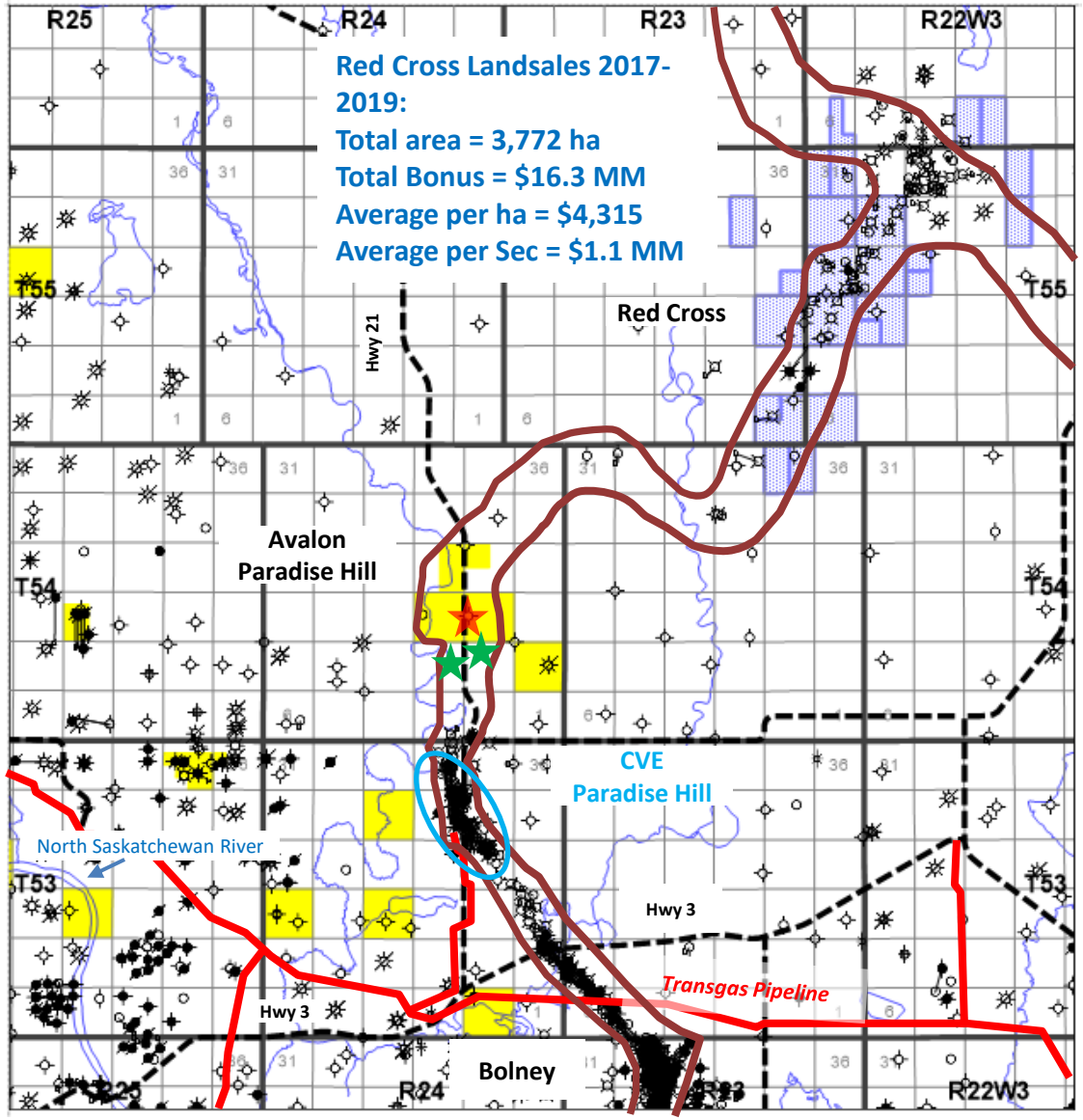




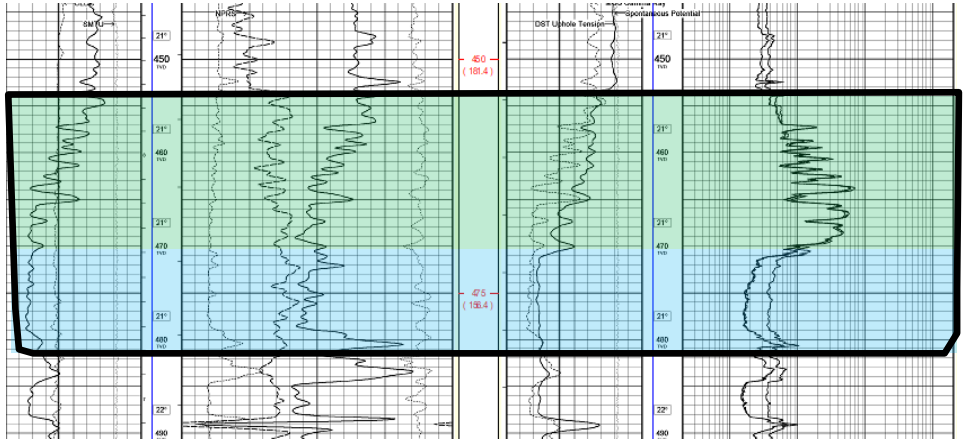
- Phase I (CPF and 8 well pairs) pays out in 19 months from first steam at $70 US WTI
- Over 25 million barrels of recoverable oil reserves on all 5 pads
- First two phases generate in excess of $400MM of operating income at $70 WTI
- Seven drilling phases on five pads generate **~ $800 million** of pre-tax cash flow after capex over the life of the project at $70 WTI*

*WTI price is US $70 flat, WCS diff is set at 16% of WTI and Diluent/tariffs is 15% of sales price

Avalon Paradise Hill North Colony - Overview



12-14-54-24-W3M

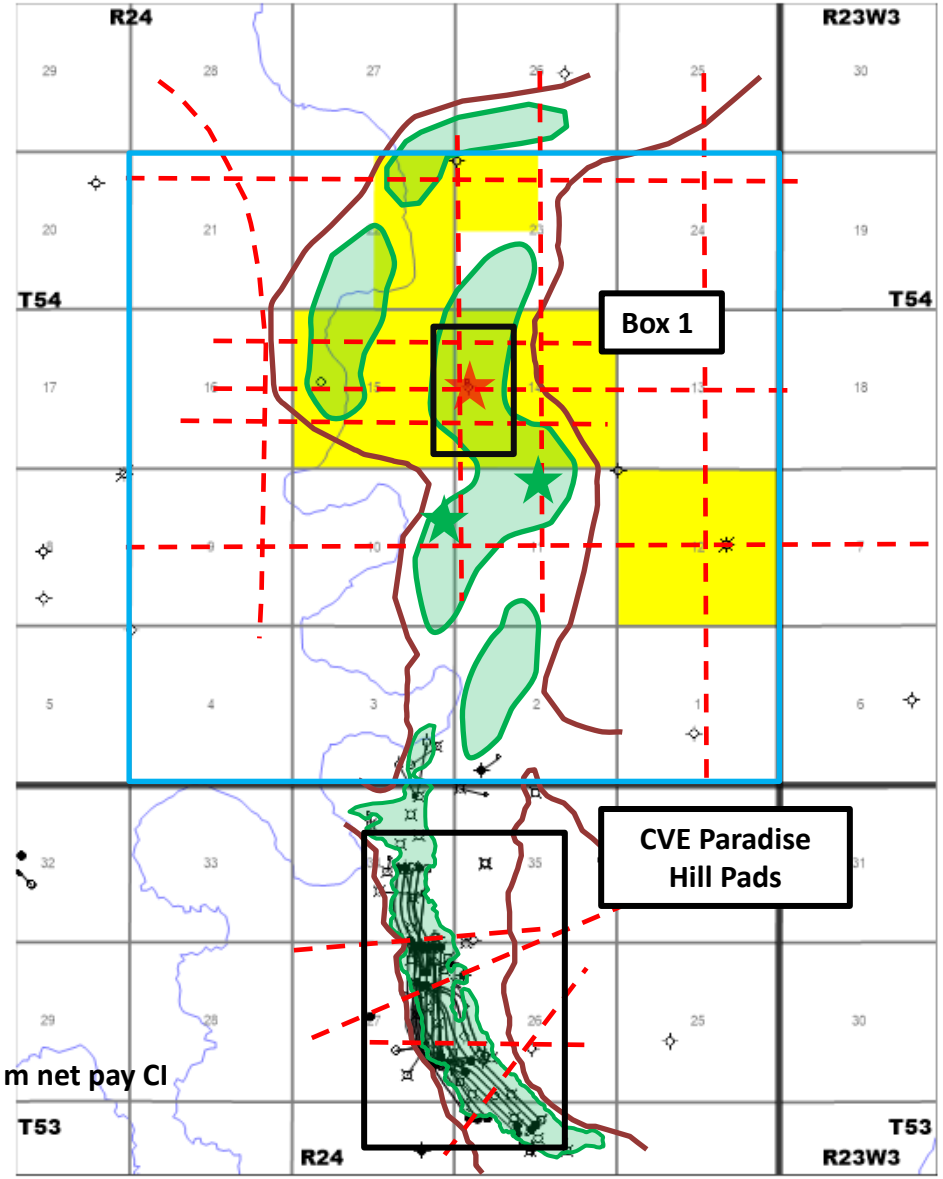


- Excellent lead well on property with 16 m gross pay
- 2 ¾ contiguous sections (100% WI) on defined channel fairway
- 2D seismic defined
- DHOA applied for and will mitigate any tenure concerns
- Proximity to roads, infrastructure
- On trend with CVE Paradise Hill, CTD 16 MM bbls

★ **CVE wells RR Dec 2023**

Paradise Hill - Reserves

Avalon Paradise Hill North
OOIP = 28.4 mmbbls
ROIP = 18.5 mmbbls
Expected Recovery Factor = 65% (Box 1)



Oil Pools > 8 m net pay CI

Cenovus Paradise Hill Reservoir Characteristics

Target Depth	= 480 – 490 m
Net Oil Pay	= 10 – 19 m
Average Porosity	= 31%
Average Oil saturation	= 80%
Permeability (Kmax)	= 3 – 6 Darcies
Initial Reservoir Pressure (Kpa)	= 3,200
Initial Reservoir Temperature (deg C)	= 20
Oil FVF (m3/m3)	= 1.00
Oil Gravity (deg API)	= 11.2 – 11.5
Average Oil Viscosity @ 20 deg C (mPa.s)	= 12,000
Bottom Water Thickness	= 1 to 12 m

(*Source: Cenovus - Paradise Hill Thermal Project - Aug 2019 application)*

★ **CVE well NEW**

Cenovus Paradise Hill Pads A, B, C, PE1 & PE2
OOIP = 32.7 mmbbls
CTD = 16.7 mmbbls
Recovery Factor to date = 51%
Expected Recovery Factor > 65%

First Steam: May 2012
On Prod: June 2012
Cum to Date: 16.0 mmbbls Oil
CSOR 2.7
Max Prod: 5,739 b/d (Jan 2013)
Current: 3,178 b/d (Jan 2024)

Avalon Oil & Gas – Near Term Value Proposition

Land

- Contiguous 8 section land base secured at Greenstreet, 3.75 sections at Paradise Hill
- Water source identified, utilities plan ready for execution

Reservoir

- Estimated 40 MMbbl of original oil in place, 21.5 MMbbl of third-party evaluated reserves
- Currently have coverage with 3D seismic with 21 delineation wells and EOR approval at Greenstreet

Technical expertise

- Key vendor for central processing facility selected, FEED discussions underway
- Key personnel hired and identified with thermal heavy oil experience

Financing

5,300 bbl/d, $355 Million NPV10 + another potential thermal oil project at Paradise Hill

Disclaimer

This presentation contains forward looking statements based on Management's assessments of future plans that involve geological, engineering, operational and financial estimates of future production, capital expenditures, cash flow and earnings. A number of risks and uncertainties that may or may not be within control of the Company may cause these results to vary materially from those predicated herein and the reader is therefore cautioned such information is speculative in nature.

Certain statements contained in this presentation constitute forward-looking statements. All forward-looking statements are based on the Corporation's beliefs and assumptions based on information available at the time the assumption was made. The use of any of the words "anticipate", "continue", "estimate", "expect", "may", "will", "project", "should", "believe" and similar expressions are intended to identify forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. Avalon believes the expectations reflected in those forward-looking statements are reasonable, but no assurance can be given that these expectations will prove to be correct. Such forward-looking statements included in this presentation should not be unduly relied upon. These statements speak only as of the date of this presentation. In particular, but without limiting the forgoing, this presentation contains forward-looking statements pertaining to the following: the rates and reserves associated with future drilling plans; planned development of the Corporation's oil and natural gas properties; and future capital expenditure programs.

The material factors and assumptions used to develop these forward looking statements include, but are not limited to: the ability of the Corporation to engage drilling contractors, to obtain and transport equipment, services, supplies and personnel in a timely manner and at an acceptable cost to carry out its activities and plans; the ability of the Corporation to market its oil and natural gas and to transport its oil and natural gas to market; the timely receipt of regulatory approvals and the terms and conditions of such approval; the ability of the Corporation to obtain drilling success consistent with expectations; and the ability of the Corporation to obtain capital to finance its exploration, development and operations.

Actual results could differ materially from those anticipated in these forward-looking statements as a result of the risk factors including, without limitation: volatility in market prices for oil and natural gas; liabilities inherent in oil and natural gas operations; uncertainties associated with estimating oil and natural gas reserves; competition for, among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel; incorrect assessments of the value of acquisitions and exploration and development programs; geological, technical, drilling and processing problems; changes in tax laws and incentive programs relating to the oil and natural gas industry; failure to realize the anticipated benefits of acquisitions; general business and market conditions; and certain other risks detailed from time to time in Avalon's public disclosure documents.

Barrels of oil equivalent (boe) may be misleading, particularly if used in isolation. A boe conversion ratio of six thousand cubic feet (mcf) of natural gas to one barrel (bbl) of oil is based on an energy conversion method primarily applicable at the burner tip and is not intended to represent a value equivalency at the wellhead. All boe conversions in this press release are derived by converting natural gas to oil in the ratio of six thousand cubic feet of natural gas to one barrel of oil. Certain financial amounts are presented on a per boe basis, such measurements may not be consistent with those used by other companies.