



February 2012

- » Focus on Judy Creek
- » Large oil resource plays
- » Unparalleled drilling inventory

Reader Advisories

Forward-Looking Statements – This presentation contains forward-looking statements as to the Company's internal projections, expectations and beliefs relating to future events or circumstances. Forward-looking statements are typically (but not necessarily) identified by words such as "anticipate", "believe", "plan", "estimate", "expect", "budget", "intend", "potential", "may", "will", "should" or similar words suggesting future outcomes. Although the Company believes that these forward-looking statements are reasonable, undue reliance should not be placed on them as they are subject to known and unknown risks and uncertainties, many of which are beyond the Company's control. Forward-looking statements are not guarantees of future outcomes. There can be no assurance that the plans, intentions or expectations contained in the forward-looking statements or upon which they are based will in fact occur or be realized, and actual results may differ from those expressed or implied in the forward-looking statements. The difference may be material.

Second Wave is subject to the inherent risks associated with the exploration, development, exploitation and production of oil and gas. More particularly, material risk factors that could cause actual results to differ materially from those expressed or implied in the forward-looking statements contained in this presentation include: adverse changes in commodity prices, interest rates or currency exchange rates; accessibility of capital when required and on acceptable terms; lower than expected production of crude oil and natural gas; production delays; lower than expected reserve and resource volumes on the Company's properties; increased operating costs; ability to attract and retain qualified personnel or to secure drilling rigs and other services on acceptable terms; competition for labour, equipment and materials necessary to advance the Company's projects; unforeseen engineering, environmental or geological problems; ability to obtain all required regulatory approvals on a timely basis and on satisfactory terms; and changes in laws and governmental regulations (including with respect to taxes and royalties). This list is not exhaustive. Readers should also review the risk factors described in other documents filed by the Company from time to time with securities regulatory authorities in Canada, including its most recent annual information form, copies of which are available electronically at www.sedar.com and at www.secondwavepetroleum.com.

Reader Advisories

Forward-Looking Statements (continued) – Specific forward-looking statements contained in this presentation include statements regarding: forecast and budgeted exit production rates at year-end 2011; production growth through the latter half of 2011; drilling and completion plans for the remainder of 2011 on the Company's Pekisko, Beaverhill Lake (BHL) and Ellerslie assets at Judy Creek; future drilling locations in the Pekisko, BHL and Ellerslie formations at Judy Creek; expected well parameters for BHL horizontal wells; expected initial production rates; potential increases in recovery factors at Judy Creek; and unrisks economic forecasts for different properties. Statements herein relating to resources (including reserves) are also forward-looking statements, as they involve an implied assessment, based on certain estimates and assumptions, that the resources described exist in the quantities predicted or estimated, and whether they can profitably be produced in the future. In making such forward-looking statements, Second Wave has made various assumptions regarding, among other things: the accuracy of geological and geophysical data and its interpretations of that data; future oil and natural gas prices; future capital requirements; future exchange rates; applicable royalties; the accessibility and cost of capital (including credit); the Company's ability to economically produce oil and gas from its properties and the timing and cost to do so; and its ability to obtain qualified staff, equipment and supplies in a timely and cost-efficient manner.

The forward-looking statements included herein are made as of the date of this presentation and Second Wave undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by securities laws.

Barrels of Oil Equivalent (BOEs) – The term BOE refers to barrel of oil equivalent, with natural gas converted to crude oil equivalent at a ratio of six thousand cubic feet to one barrel. BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of six mcf (six thousand cubic feet) to one bbl (one barrel) is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead..

Resource Disclosure – Estimates of Pekisko resource volumes contained in this presentation are extracted from the Judy Creek Pekisko resource assessment completed by InSite Petroleum Consultants Ltd. with an effective date of April 30, 2011 and apply the resources terminology and categories set out in the Canadian Oil and Gas Handbook (COGE Handbook).

Second Wave's Two Oil Growth Platform

	Beaverhill Lake	Pekisko
Net Acreage	30,000 acres	92,000 acres
Play Type	Light Oil	Medium Oil
Horizontal Wells Drilled to Date	25	23
Net Unrisked Drilling Inventory	120 – 140	600 – 700
Initial 30 day Prod. Rate	290 boe/d	70 boe/d
Unrisked Reserves/well	240 mboe	115 mboe
Waterflood Potential	Yes	Yes
Tertiary Potential	Yes	Yes
Drilling Inventory Years (1 rig)	10 to 12	25 to 29

Key Facts and Figures

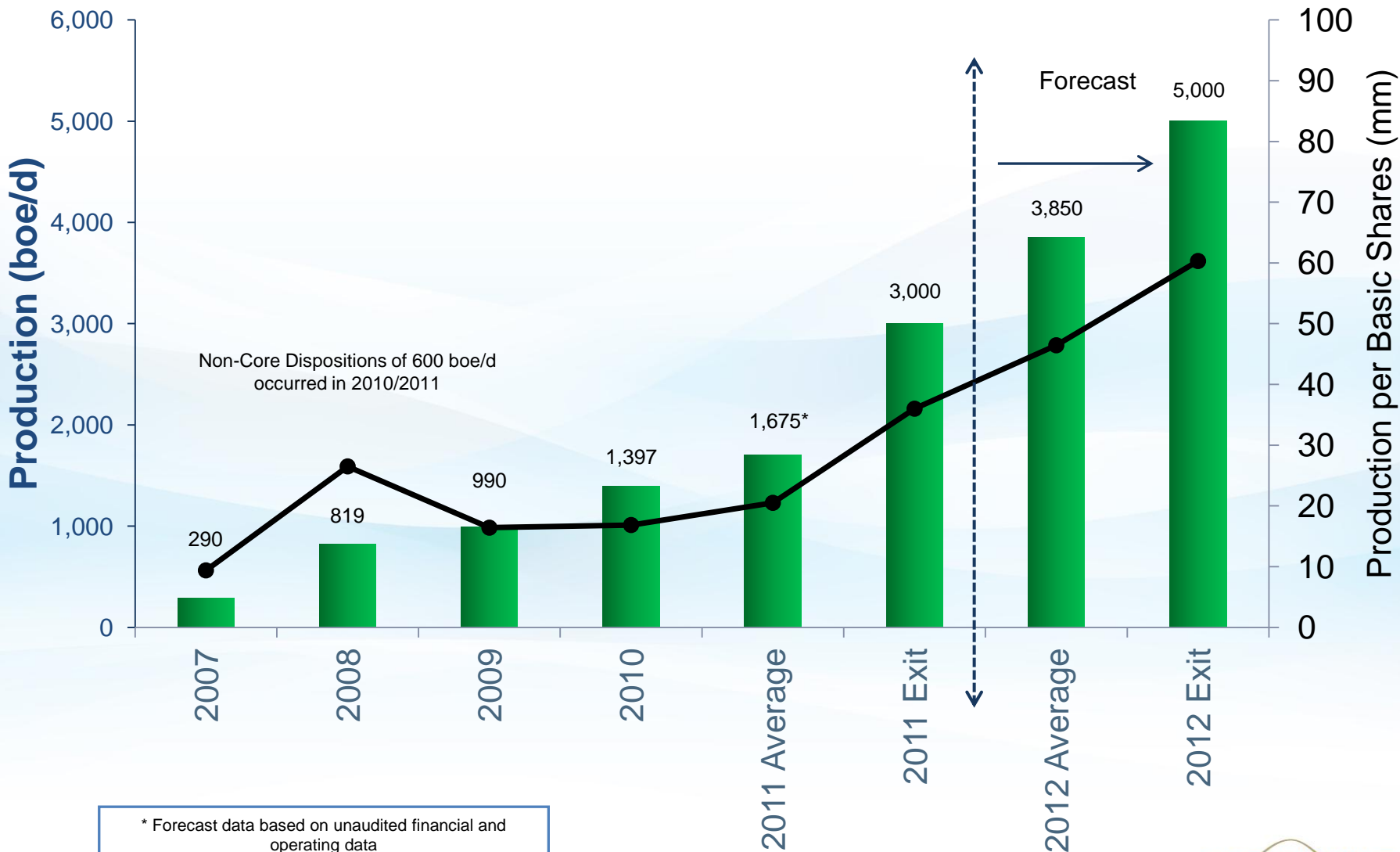
	*Estimate Q4, 2011	Forecast 2012 Average	Forecast Q4, 2012
Basic Shares Outstanding	83.7 million	83.7 million	83.7 million
Stock Options (weighted avg. price \$1.99)	7.6 million	7.6 million	7.6 million
Production (boe/d)	2,150	3,850	5,000 boe/d
Oil and Natural Gas Liquids Weighting	78%	82%	84%
Net Debt* **	\$75 million	\$76 million	\$76 million
Tax Pools	\$230 million	\$250 million	\$250 million

* Q4/2011 estimated based on unaudited financial and operating data

** Credit facility renewed in Q4/2011 and increased to \$80 million. Next review scheduled May 31, 2012

*** Undeveloped land value estimated at \$101 million based on Seaton-Jordan & Associates report dated March 24, 2011

Second Wave Corporate Production (boe/d)



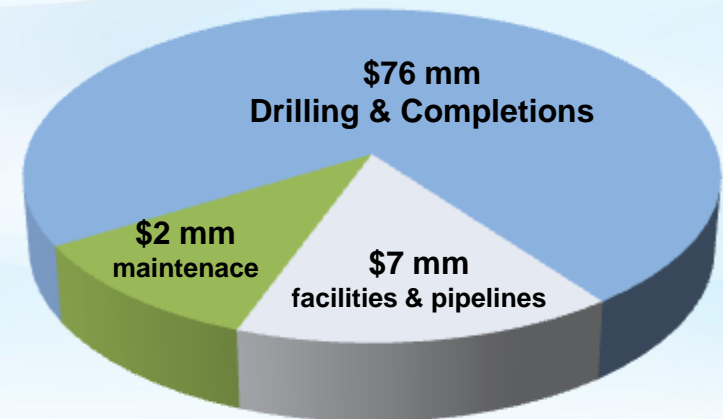
* Forecast data based on unaudited financial and operating data

2012 Capital Budget - \$85 million

Focus on Judy Creek Beaverhill Lake Delineation

- Drill, complete and tie-in 39 (16.8 net) Beaverhill Lake horizontal oil wells
- Initiate first Beaverhill Lake Waterflood in the second half of 2012
- Complete sales oil pipeline tie-in and infield emulsion treating facilities
- 2012 Average Forecast – 3,850 boe/d
 - Liquid Weighting – 80%, Annualized Cash Flow - \$77mm
- 2012 Q4 Exit Forecast – 5,000 boe/d
 - Liquid Weighting of 84%, Forward looking annualized cash flow \$100mm

**\$85 mm
of capital budgeted**



Beaverhill Lake Light Oil Budget Torque in 2012

39 gross (16.8 net) horizontal BHL to be drilled in 2012

*Q4, 2011 – BHL Production estimated at 1,200 boe/d at \$75.00 per boe operating netbacks

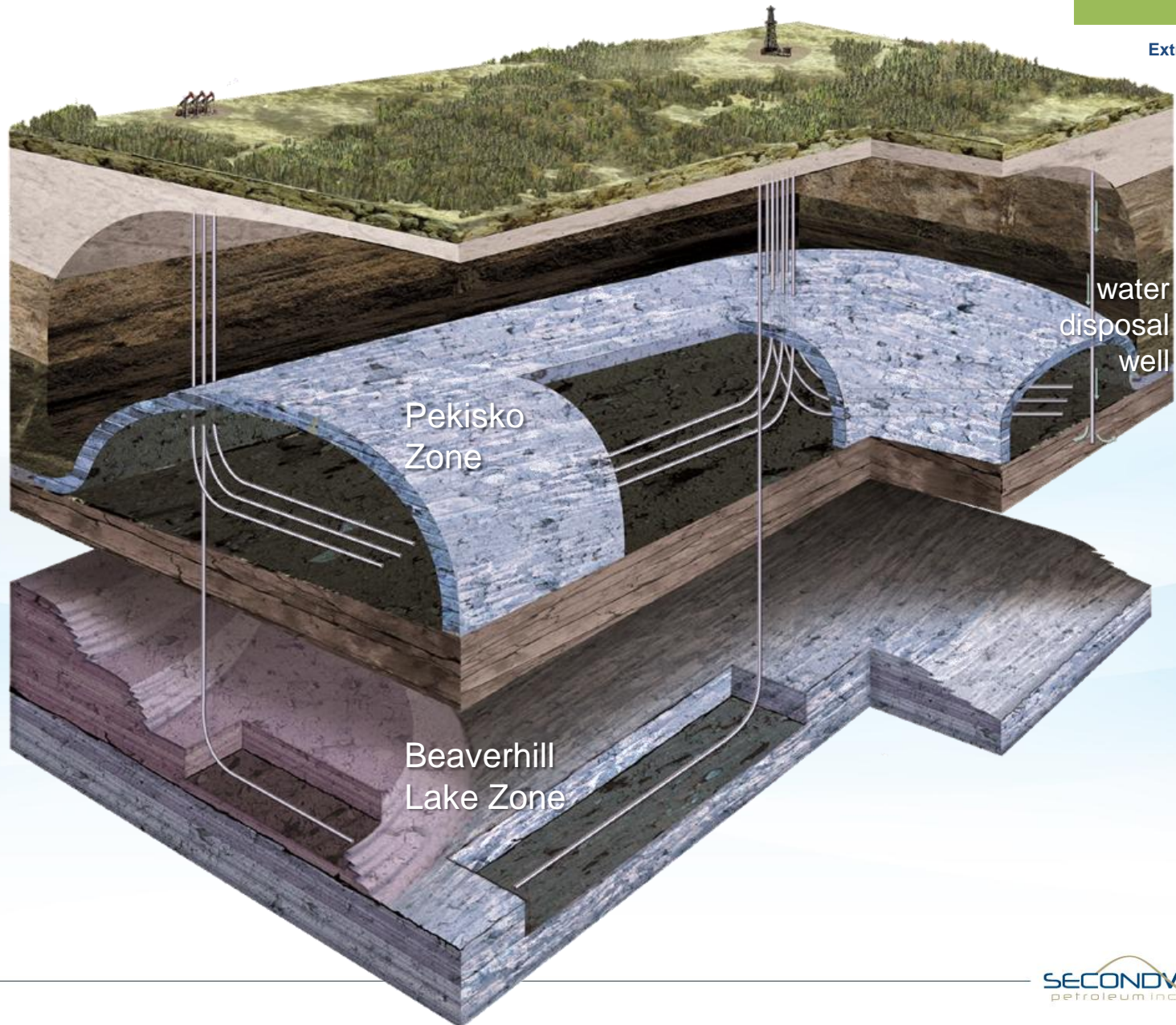
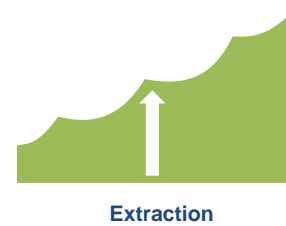
*Q4, 2011 – Corporate production at 2,150 boe/d (77% oil and NGL's) with operating netbacks of \$49.00 per boe. BHL production was 58% of production base in Q4, 2011

BHL Production forecast to increase to 4,000 boe/d by year end 2012 or 80% of production base, Corporate operating netbacks are expected to continue to increase as BHL production weighting increases

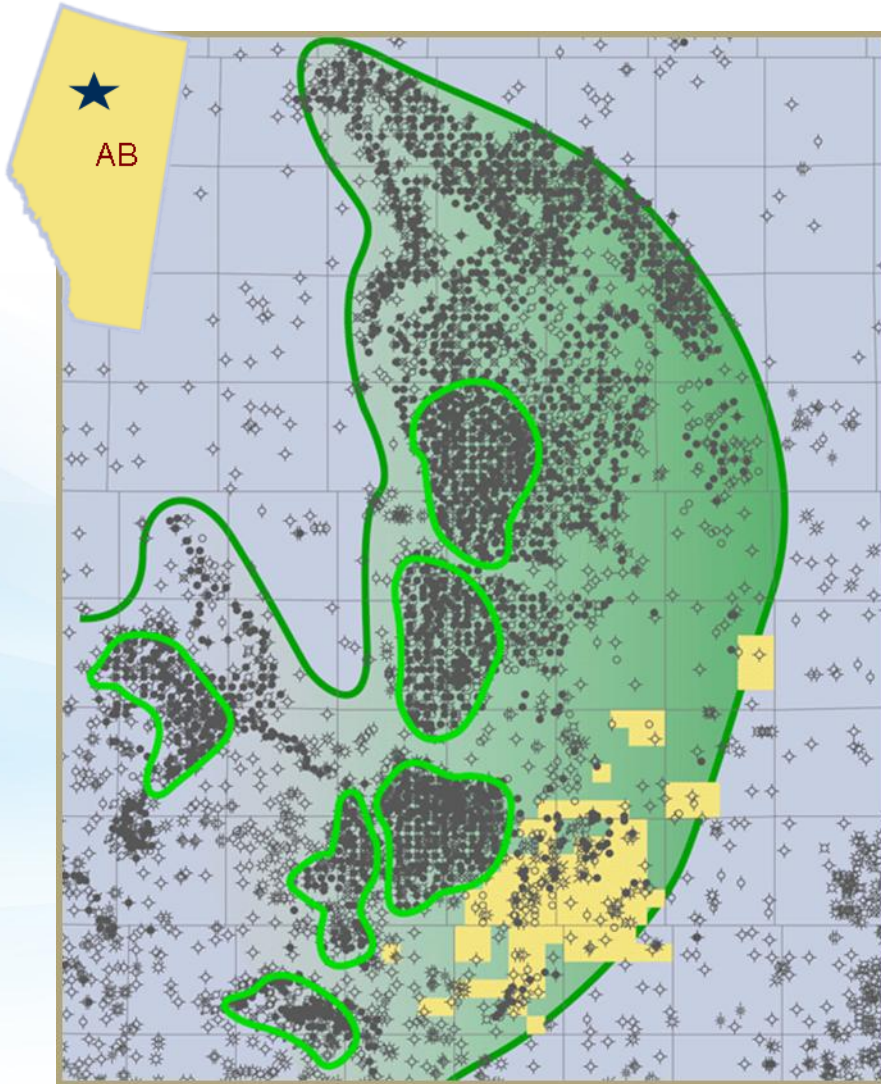
Core Areas



Pekisko and BHL – Drilling Approaches



Beaverhill Lake (Swan Hills/Slave Point) Play Trend



Company-owned facilities

60,000 undeveloped gross acres

25 wells drilled in 2011/2012

39 wells planned in 2012
(16.8 net)

BHL formations – 60,000 acres

- 50,000 acres within JV at 40% W.I.
- 10,000 acres at 100% W.I.

Schematic BHL Slave Point Platform Zones



Judy Creek Beaverhill Lake Play



60,000 gross acres

- 50,000 acres within joint venture agreement
 – 40% working interest retained post earning
- 10,000 acres held or under option at 100% working interest

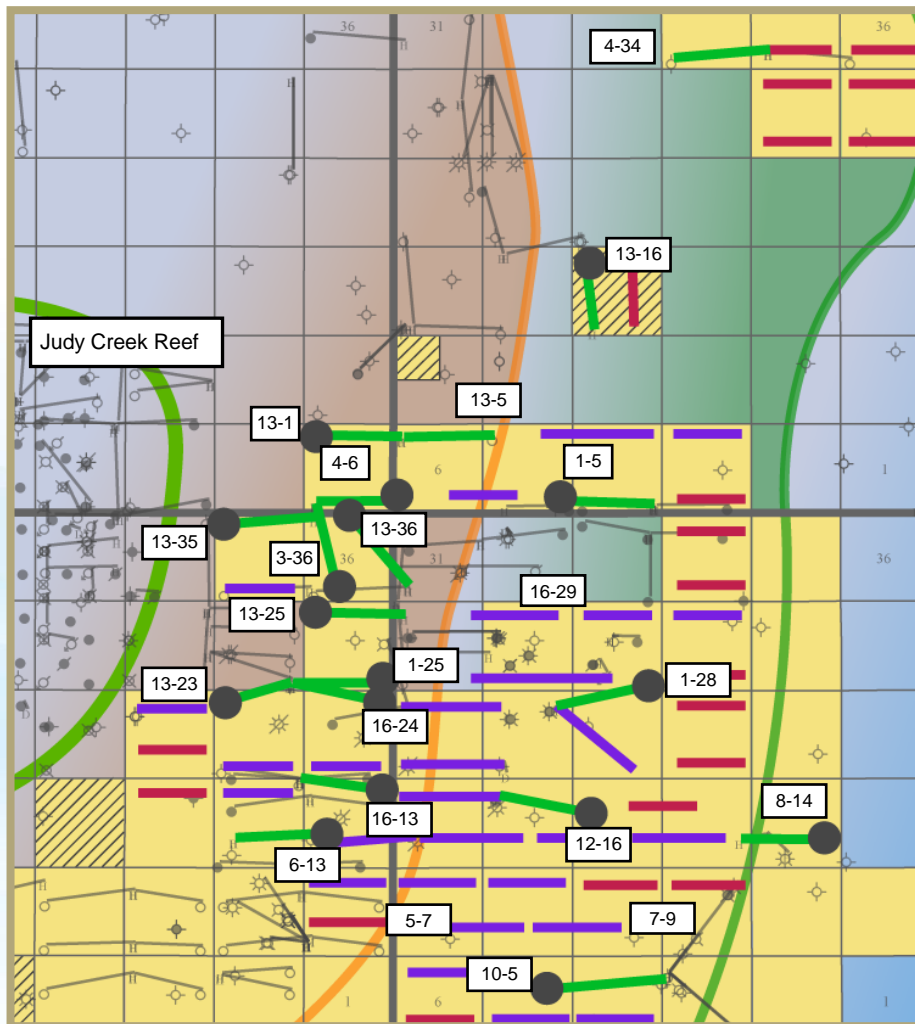
Locations

2011: —

2012: —

2013: —

Judy Creek BHL Second Wave Drilling Activity



- 15-36 tested at rates of 1,080 bbl/d IP30
- 01-28 tested at rates of 444 bbl/d IP30
- 16-13 tested at rates of 400 bbl/d IP30
- 02/01-05 tested at rates of 650 bbl/d IP30
- 04-06 tested at rates of 990 bbl/d IP30
- 12-16 tested at rates of 350 bbl/d IP30
- 13-16 tested at rates of 210 bbl/d IP30
- 13-25 tested at rates of 1,800 bbl/d IP30
- 06-13 tested at rates of 1,800 bbl/d IP13
- 03-36 tested at rates of 1,800 bbl/d IP15
- 13-35 tested at rates of 1,500 bbl/d IP5
- 10-05 tested at rates of 400 bbl/d IP5
- 13-01 tested at rates of 1,625 bbl/d IP7
- 15-22 tested at rates of 1,470 bbl/d IP3
- 01-25 tested at rates of 1,450 bbl/d IP3
- 16-24 tested at rates of 1,250 bbl/d IP3
- 07-09-063-09W5, 05-07-063-09W5, 16-29-063-09W5, 13-5-64-09W5 and 04-34-064-09W5 waiting completion

Locations

2011: —

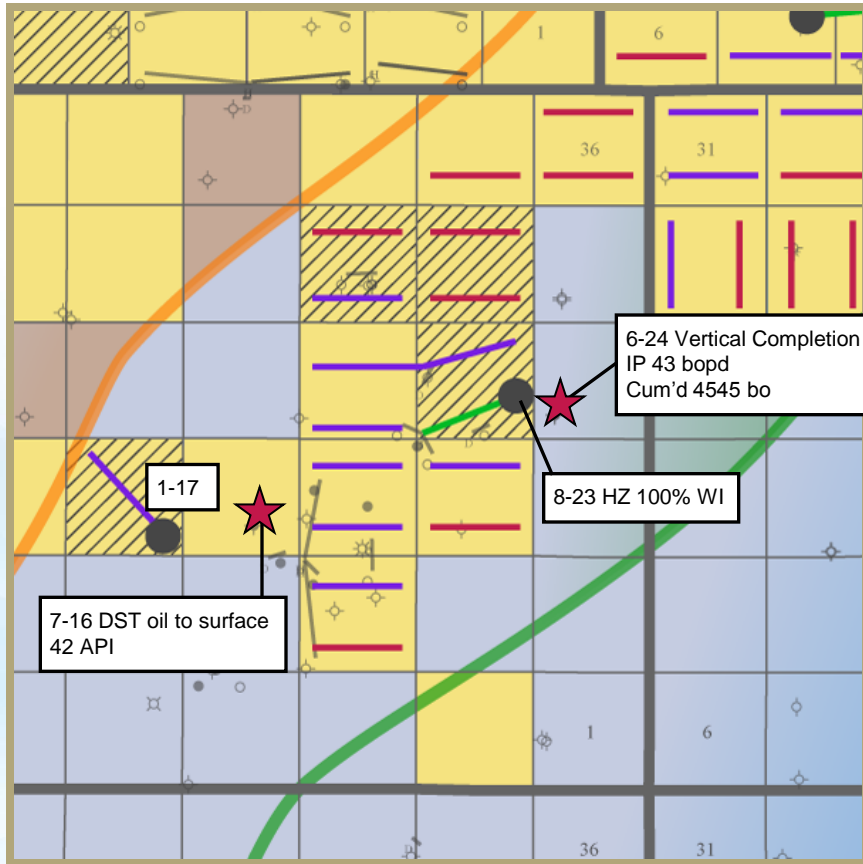
2012: —

2013: —



Second Wave 100% lands

Caribou BHL Second Wave Drilling Activity



33 to 100% working interest retained

2 Potential earning wells in 2012 (SCS pays 15% to earn 40%)

- First horizontal at 08-23-62-10W5 tested in Q4/2011 at rates of 130 boe/d (80% oil) at the end of a 45 day period
- 01-17-062-10W5 tested at X,XXX bbl/d IP3
- Success at 08-23 and 01-17 has delineated the middle/lower BHL over a 14 mile long corridor from 13-16-064-09W5



Second Wave 100% lands

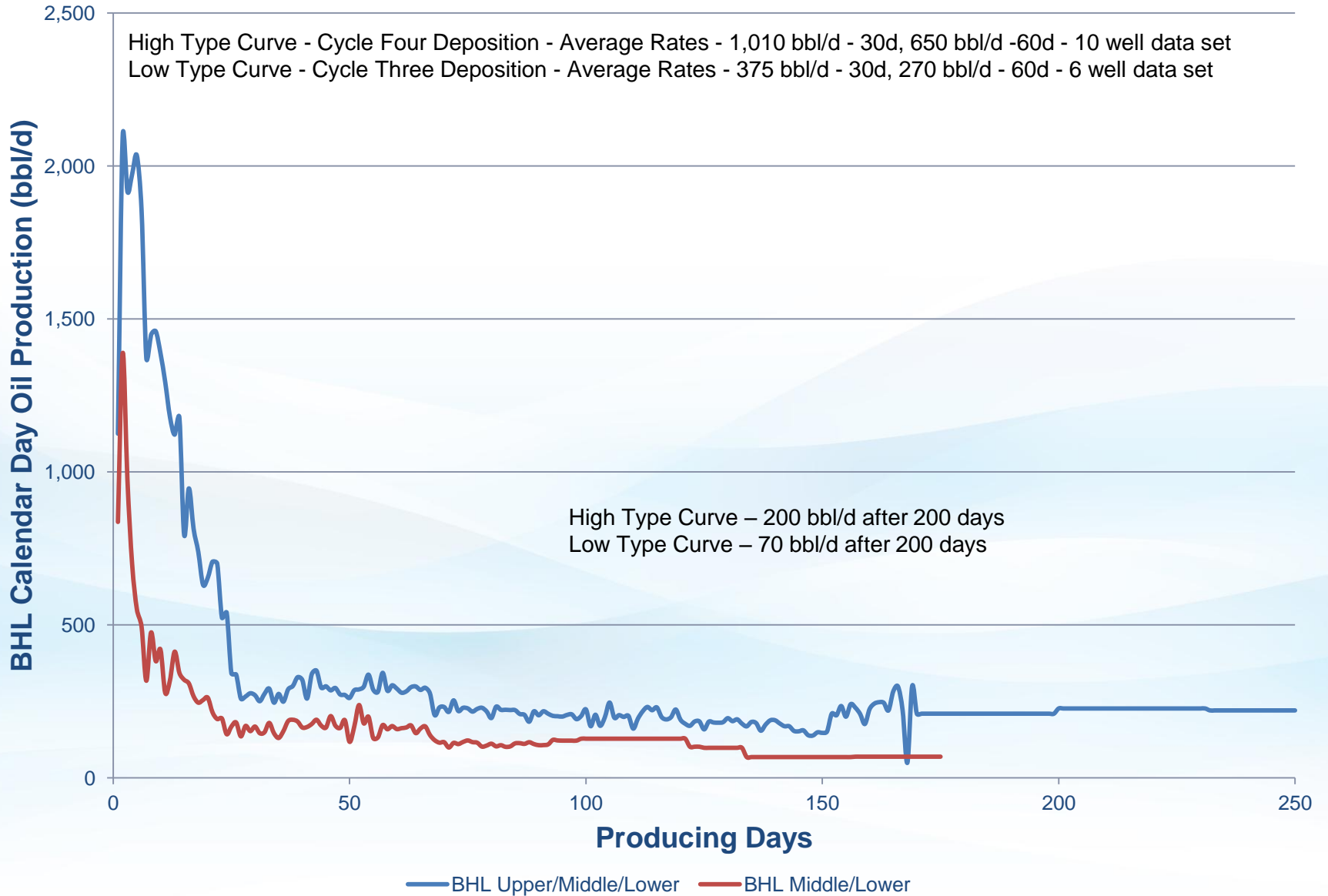
Locations

2011:

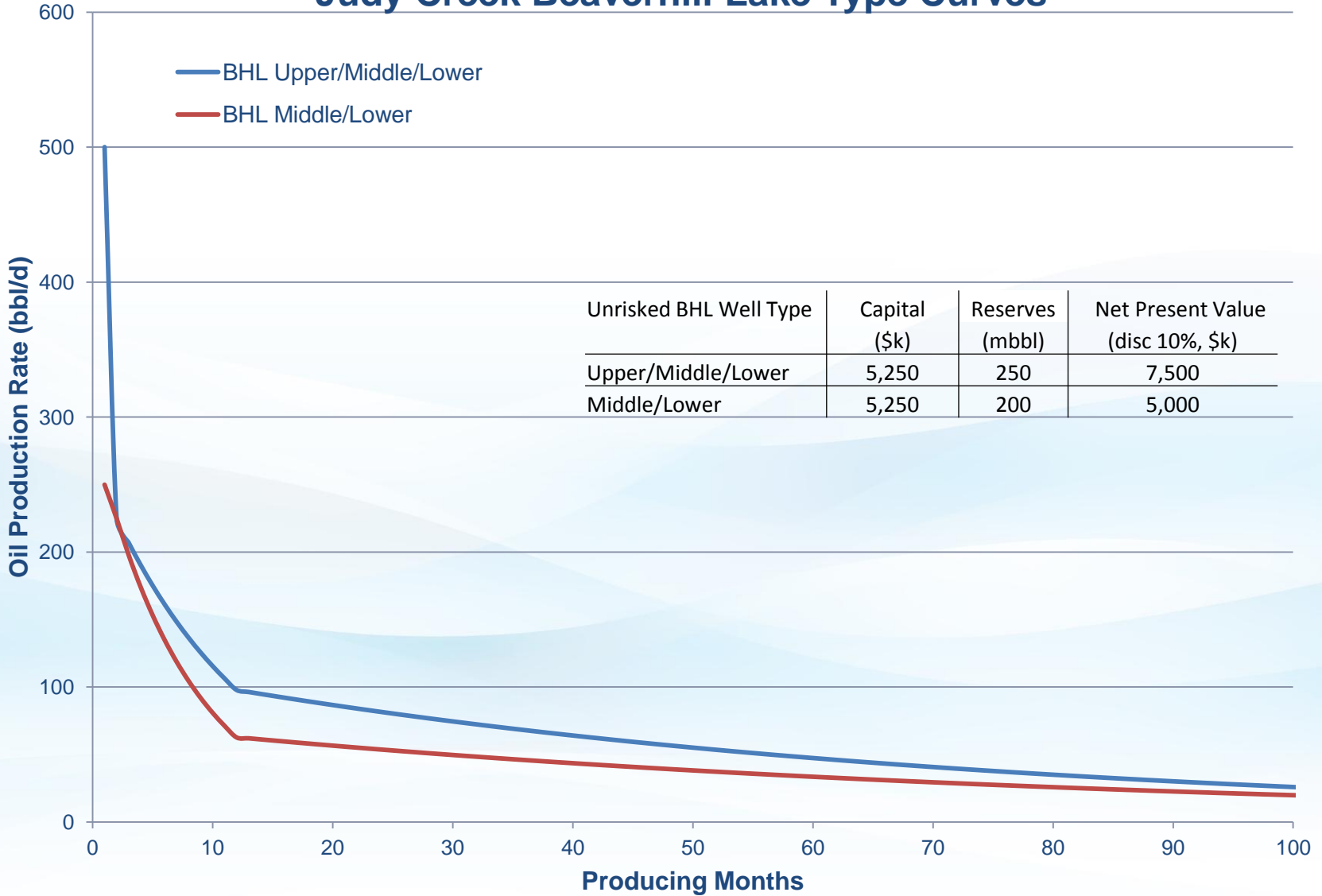
2012:

2013:

SCS - Judy Creek BHL Production Data



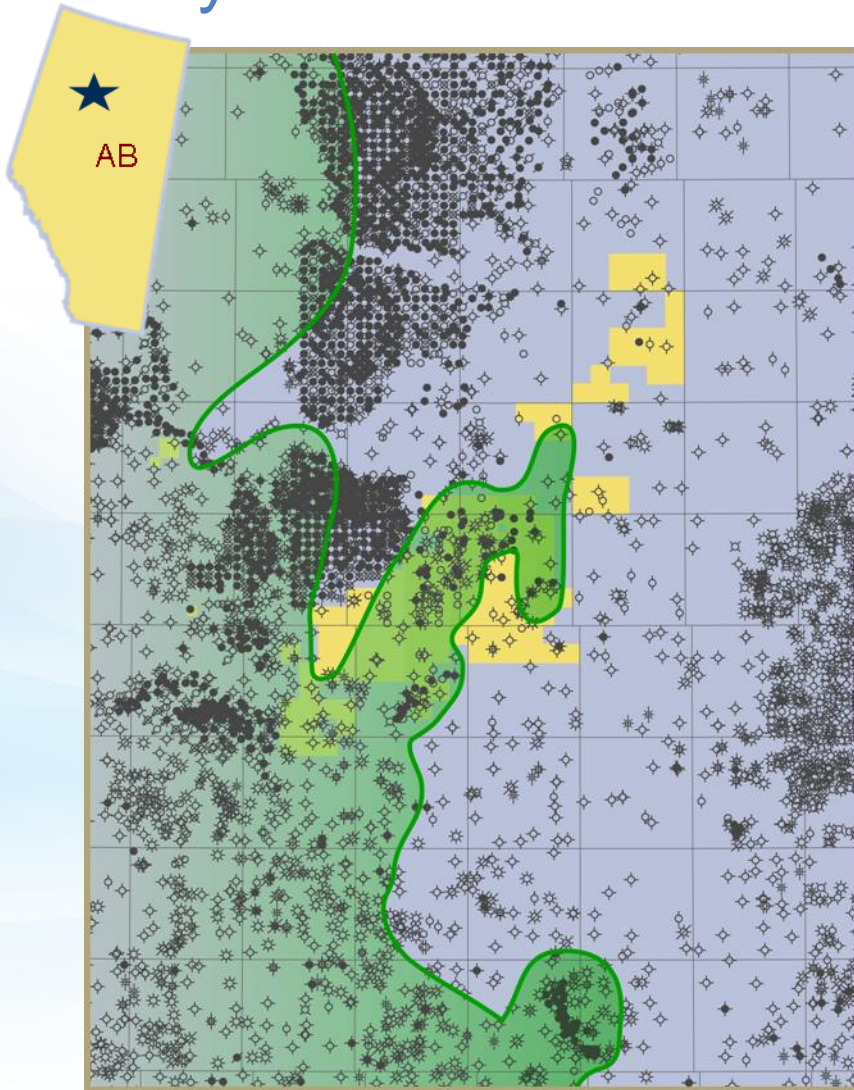
Judy Creek Beaverhill Lake Type Curves



Beaverhill Lake 2012 Capital Budget

- 39 gross (16.8 net) horizontal delineation wells
- Fully delineate land base by the end of Q1/2012
- Initiate BHL waterflood in second half, 2012
- Three separate BHL batteries built and commissioned in Q4/2011
- Pipeline connection and associated truck terminal to be constructed by third party for Q4/2012
- Developmental drilling program on 4 wells per section to start in 2013/2014

Judy Creek Pekisko Play Trend



Company-owned facilities

91,000 undeveloped net acres

23 Horizontal wells drilled since 2009

34 wells planned in 2013
(34.0 net)

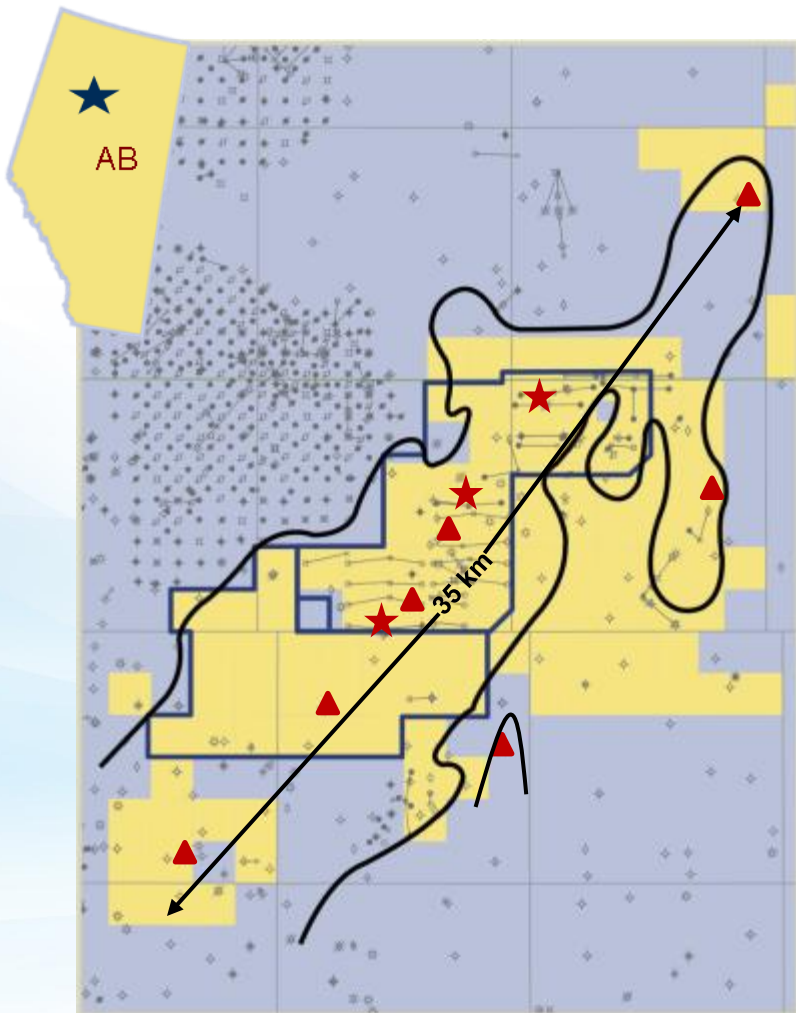
Pekisko formation – 91,000 net acres

Play Type – medium grade oil

Pekisko Resource – 1.1 billion bbl in place

Undeveloped inventory – exceeds 675 wells

Pekisko Resource Delineation



Aerial Extent

54 square miles of 3D seismic covering 75% of pool





150 miles of 2D (25% of pool)

Reservoir Parameters

10 cores

40+ vertical wellbore penetrations

23 horizontal wells drilled to date

-  Second Wave land (100% W.I.)
-  Second Wave cores
-  Other cores
-  3D seismic

Pekisko Resource Delineation

Delineation Drilling

34 wells in 2013 within current facilities foot print

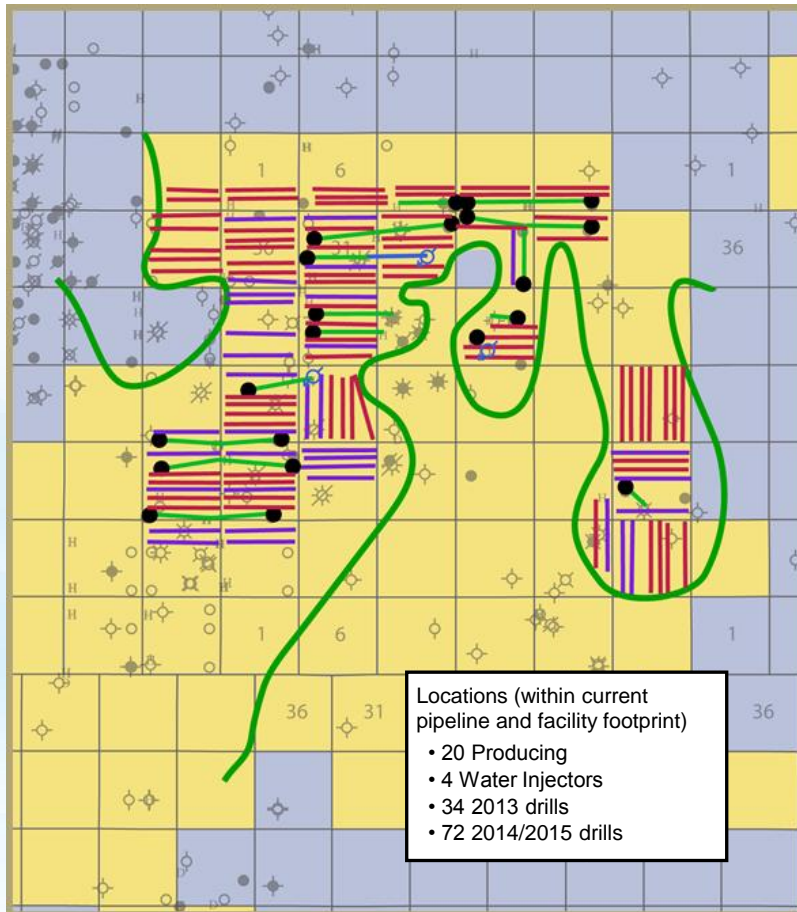
72 wells in 2014/2015 within current facilities foot print

Current development density is **0.8** horizontal wells per section

72 square miles – pool size

1.1 billion barrels of oil in place

675+ wells in drilling inventory



Locations

2013: 
2014/2015: 

Pekisko Resource Assessment – 1 Billion bbls of O.O.I.P.

UNDISCOVERED and Discovered PEKISKO PETROLEUM INITIALLY-IN-PLACE ⁽⁵⁾ *Undiscovered and Discovered PIIP ⁽⁵⁾ – including Unrecoverable ⁽²⁾ portion*

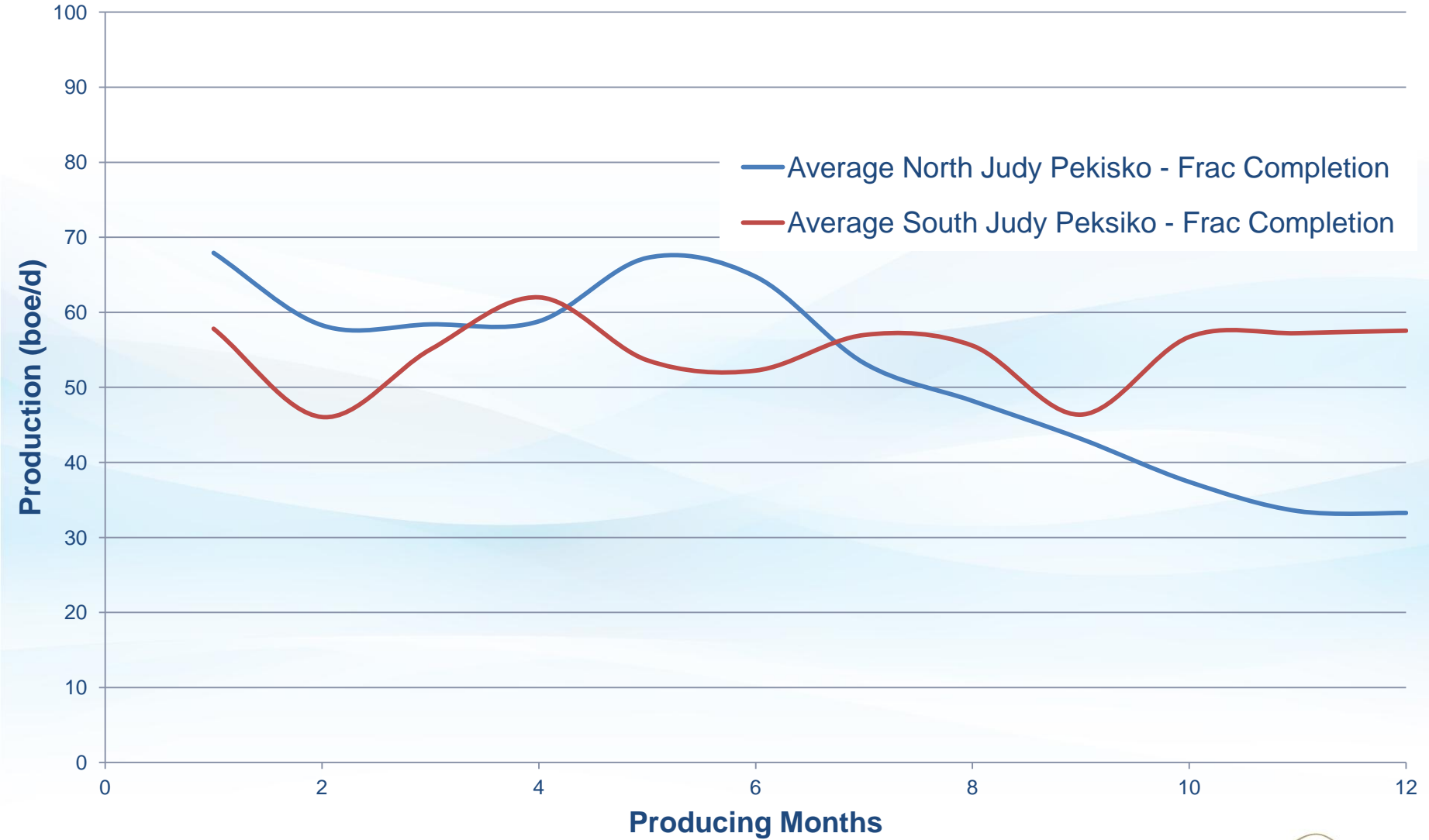
	Porosity Fraction	Water Saturation Fraction	Production Area (acres)	Original Oil in Place (Mstb)	Original Gas in Place (MMcf Raw)	MBOE ⁽³⁾
Low Estimate	0.085	0.45	42,313	866,755	199,353	899,980
Best Estimate	0.090	0.40	42,313	1,001,172	230,269	1,039,549
High Estimate	0.095	0.35	42,313	1,114,859	263,318	1,188,744

Recoverable Discovered and Undiscovered PIIP ⁽⁶⁾

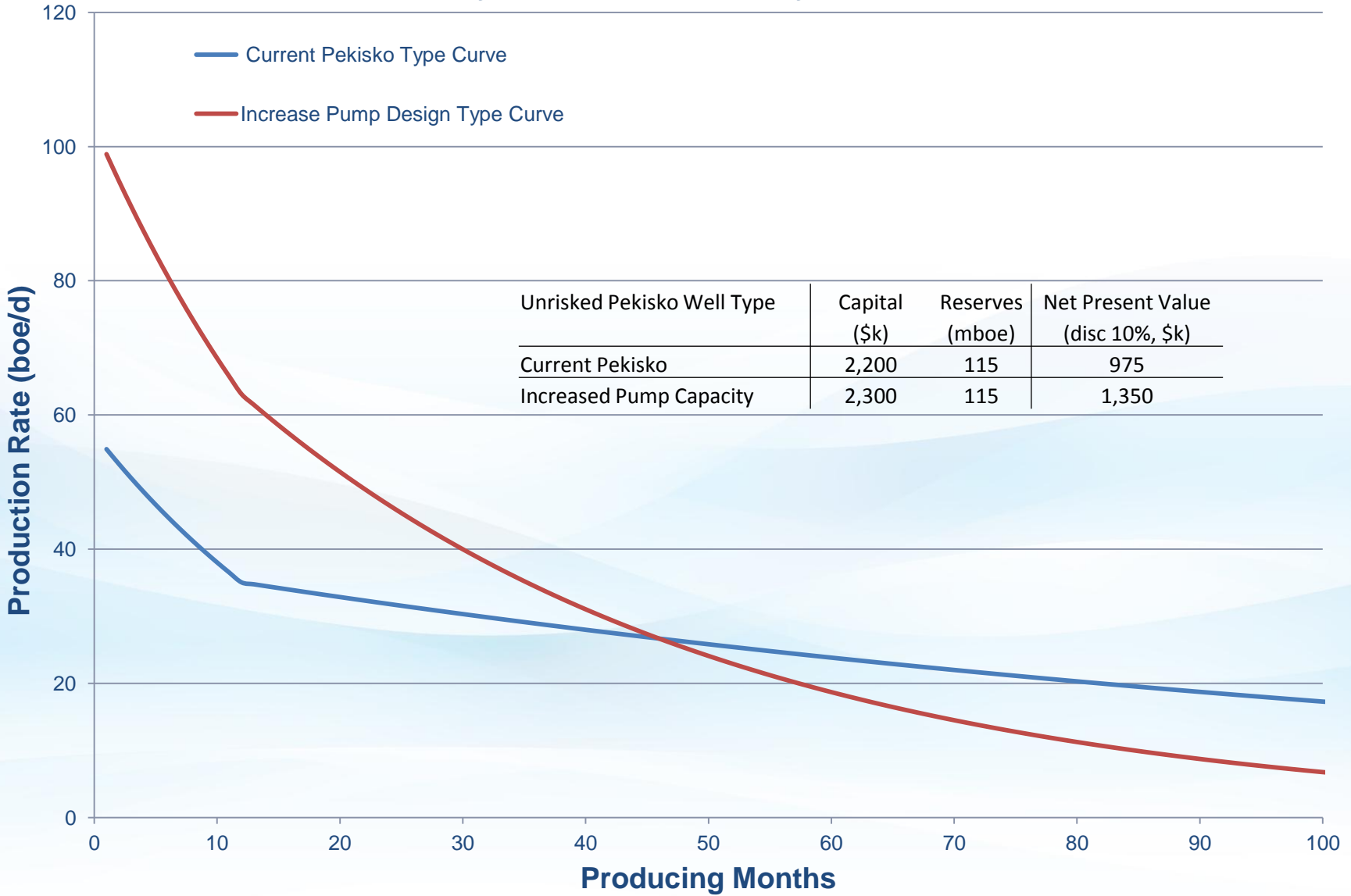
	Prospective Resources ⁽⁶⁾			Total	MBOE/Well
	Oil (mstb)	Sales Gas (mmcf)	MBOE	Wells ⁽⁹⁾ (#)	
Low Estimate	17,335	20,022	20,671	529	39
Best Estimate	35,041	40,473	41,787	529	79
High Estimate	85,864	99,173	102,393	661	155

Resource assessment completed by InSite Petroleum Consultants Ltd. effective April 30, 2011. See notes on Slide #34. **There is no certainty that it will be commercially viable to produce any portion of these resources or, in the case of Undiscovered PIIP, that any portion thereof will be discovered.** For further information regarding the resource information disclosed herein, see the Company's news release dated May 17, 2011.

Pekisko Production Results to Date



Judy Creek Pekisko Type Curves



Pekisko Development

- Delineation phase on four wells per section scheduled over 7 years or 280 wells
- Ultimate unrisks development estimated at 8 to 16 wells per section
- Waterflood implement in late 2010, potential for tertiary solvent flood after delineation drilling phase is complete
- Medium grade Pekisko oil will be blended with light BHL oil to improve netbacks
- All facilities and lands owned at 100% working interest
- Fixed cost associated with leases, infrastructure and operations diluted between BHL and Pekisko play

Judy Creek Unrisked Upside Summary – Internal Estimate

Prospect	Net Area (sections)	Unrisked Net Wells	Unbooked Net Wells as of 12/31/2010	Unrisked Reserves Per Well (mboe)	Capital Per Well (\$k)	Total Unrisked Unbooked Reserves (mboe)	Total Capital (\$k)
Pekisko	72	700	675	155	2,200	104,625	1,586,250
Beaverhill Lake	48	144	144	250	5,250	36,000	720,000
Totals		844	819			140,625	2,306,250

- Greater than 20 years of oil focused drilling inventory identified on existing land base
- Unrisked upside of 1.6 recoverable boe's per share – oil weighting greater than 85%
- 3.2% of unrisked locations and 4.1% of unrisked reserves booked at year end 2010.
- Unrisked upside exceeding \$1.4 billion assuming \$10 per boe of undeveloped resource

Why Second Wave?

- ›› Focus on Judy Creek
- ›› Large oil resource plays
- ›› Unparalleled drilling inventory



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Randy Bergmann, P.Land	<i>VP Land</i>
Douglas Hibbs, P.Geol.	<i>VP Exploration</i>
Devery Neumann, CET	<i>VP Operations</i>

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Colin Witwer, P.Eng.	<i>President & CEO, Second Wave Petroleum Inc.</i>
Robert Goods	<i>Former CEO Second Wave & COO Husky Oil Ltd.</i>
Jim Reid, CA	<i>Managing Partner, Brookfield Asset Management Inc.</i>
Brian Baker, CA	<i>Vice President, Brookfield Asset Management Inc.</i>
Donald Foulkes	<i>President & CEO, AltaCanada Energy Corp.</i>
Alan Steele, CMA	<i>Vice President Finance & CFO, Twin Butte Energy Ltd.</i>
Neil Bokenfohr, P.Eng.	<i>Vice President Exploitation, Advantage Oil and Gas Ltd.</i>

Judy Creek Facilities

Extraction

	Capacity	Current
Pekisko Oil Battery	3,500 bbls/d	~ 450 bbls/d
BHL Oil Battery's	7,500 bbl/d	~ 4,000 bbl/d
Gas Plant	1,500 boe/d	~ 1,200 boe/d
Pipelines	100 to 120 km	
Water Injection	24,000 bbl/d	~ 7,000 bbl/d

- Capacity in place for up to **12,500 boe/d** at Judy Creek
- Infrastructure designed and being constructed to facilitate full development of 40 Pekisko and BHL sections (400+ wells)
- Water injection pipeline run to south west land block to support future water flood development of both Pekisko and BHL pools

Appendix: Analyst Coverage

Desjardins Securities

Allan Stepa

GMP Securities L.P.

Stacey McDonald

RBC Capital Markets

Anthony Petrucci

National Bank Financial

Dan Payne

Scotia Capital Inc.

William Lee

Accumen Capital

David Doig

Resource Terminology and Categorization

Estimates of resource volumes contained in this presentation are extracted from the Judy Creek Pekisko resource assessment completed by InSite Petroleum Consultants Ltd. with an effective date of April 30, 2011 and apply the resources terminology and categories set out in the COGE Handbook. The resource assessment was conducted in accordance with the COGE Handbook and estimates Total and Recoverable Petroleum Initially-in-Place (PIIP) in the Pekisko formation under the Company's lands in the Judy Creek area of Alberta.

The term "resources" encompasses all petroleum quantities that originally existed on or within the earth's crust in naturally occurring accumulations, including discovered and undiscovered (both recoverable and unrecoverable) plus quantities already produced. Total resources is equivalent to Total PIIP, and by definition includes unrecoverable quantities as well as quantities already produced. Relevant definitions of resources and the different classes and subcategories thereof, in each case as set out in the COGE Handbook, are set forth on the following slide.

Any portion of Discovered PIIP, Undiscovered PIIP or Total PIIP that is not included within the estimates of the recoverable portions of each such in-place volume are, by definition, unrecoverable resources. A portion of these quantities may become recoverable in the future as commercial circumstances change or technological developments occur; the remaining portion may never be recovered.

Notes to PIIP Tables

The following notes relate to the tables appearing on Slides 16 through 18.

1. Discovered PIIP is that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production. The recoverable portion of Discovered PIIP includes Production, Reserves, and Contingent Resources; the remainder is Unrecoverable.
2. Unrecoverable is that portion of Discovered and Undiscovered PIIP quantities which is estimated, as of a given date, not to be recoverable by future development projects. A portion of these quantities may become recoverable in the future as commercial circumstances change or technological developments occur; the remaining portion may never be recovered due to the physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.
3. The estimated recoverable portion of Discovered PIIP (and therefore Total PIIP, of which Discovered PIIP forms a part), includes cumulative Production and remaining Reserves currently assigned to the property, which total approximately 2,150 MBOE. Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, as of a given date, based on: the analysis of drilling, geological, geophysical and engineering data; the use of established technology; and specified economic conditions, which are generally accepted as being reasonable and shall be disclosed. Production is the cumulative quantity of petroleum that has been recovered at a given date.
4. The recoverable portion of Discovered PIIP includes Production, Reserves, and Contingent Resources; the remainder is Unrecoverable. Contingent Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development but which are not currently considered to be commercially recoverable due to one or more contingencies.
5. Undiscovered PIIP is that quantity of petroleum that is estimated, on a given date, to be contained in accumulations yet to be discovered. The recoverable portion of Undiscovered PIIP is referred to as Prospective Resources; the remainder is Unrecoverable.
6. The estimated recoverable portion of Undiscovered PIIP is referred to as Prospective Resources. Prospective Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects.
7. Total PIIP is that quantity of petroleum that is estimated to exist originally in naturally occurring accumulations. It includes that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations, prior to production, plus those estimated quantities in accumulations yet to be discovered. Total PIIP is comprised of Discovered PIIP and Undiscovered PIIP.
8. The recoverable portion of Total PIIP includes Production, Reserves, and Contingent Resources (with respect to Discovered PIIP) and Prospective Resources (with respect to Undiscovered PIIP); the remainder is Unrecoverable.
9. The well counts in the tables on Slides 16-18 are for information purposes only and assume Pekisko development based on 8 horizontal wells per section for the low and best-case estimates and 10 wells per section for the high-case estimate.

Low, Best and High Estimates

Estimates of resource volumes contained in this presentation are extracted from the Judy Creek Pekisko resource assessment completed by InSite Petroleum Consultants Ltd. with an effective date of April 30, 2011, which presents low, best and high-case estimates of PIIP. Under the COGE Handbook:

- The "low estimate" is considered to be a conservative estimate of the quantity that will actually be recovered. It is likely that the actual remaining quantities recovered will exceed the low estimate. If probabilistic methods are used, there should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the low estimate.
- The "best estimate" is considered to be the best estimate of the quantity that will actually be recovered. It is equally likely that the actual remaining quantities recovered will be greater or less than the best estimate. If probabilistic methods are used, there should be at least a 50% probability (P50) that the quantities actually recovered will equal or exceed the best estimate.
- The "high estimate" is considered to be an optimistic estimate of the quantity that will actually be recovered. It is unlikely that the actual remaining quantities recovered will exceed the high estimate. If probabilistic methods are used, there should be at least a 10% probability (P10) that the quantities actually recovered will equal or exceed the high estimate.

Low, best and high estimates of Total PIIP, Discovered PIIP and Undiscovered PIIP were made using a range of expected porosity and water saturations, as follows: (i) Low Estimate – 8.5% porosity and 45% water saturation; (ii) Best Estimate – 9.0% porosity and 40% water saturation; and (iii) High Estimate – 9.5% porosity and 35% water saturation.

Low, best and high estimates of Recoverable PIIP were made using a range of expected recovery factors applied to the Discovered PIIP, Undiscovered PIIP and Total PIIP volume estimates, as follows: (i) Low Estimate – 2.0% recovery factor; (ii) Best Estimate – 3.5% recovery factor; and (iii) High Estimate – 7.5% recovery factor.