

# Energy Strategy – Game On @ The Utica

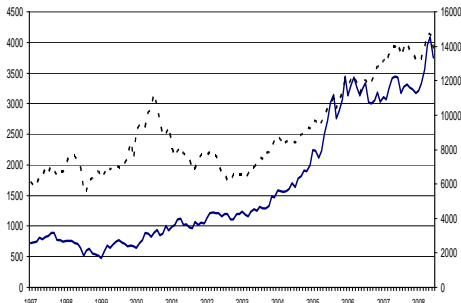
Kim Page, (416) 847-3400; [kpage@wwcm.com](mailto:kpage@wwcm.com)

Dave Hammond, (416) 847-3406; [dhammond@wwcm.com](mailto:dhammond@wwcm.com)

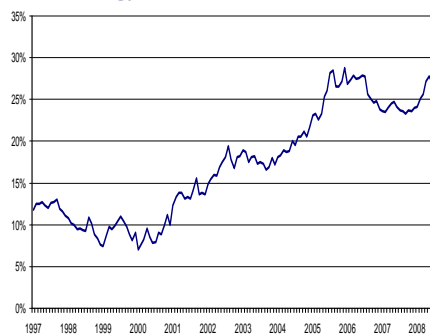


July 22, 2008

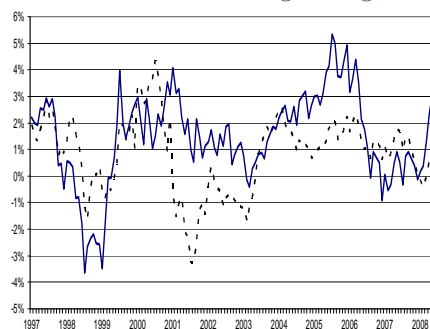
S&P Energy Index vs. TSX Index



S&P Energy Index as % TSX Index



Change in S&P Energy and TSX Indexes based on 12-month moving averages



Philadelphia Oil & Gas Services Index



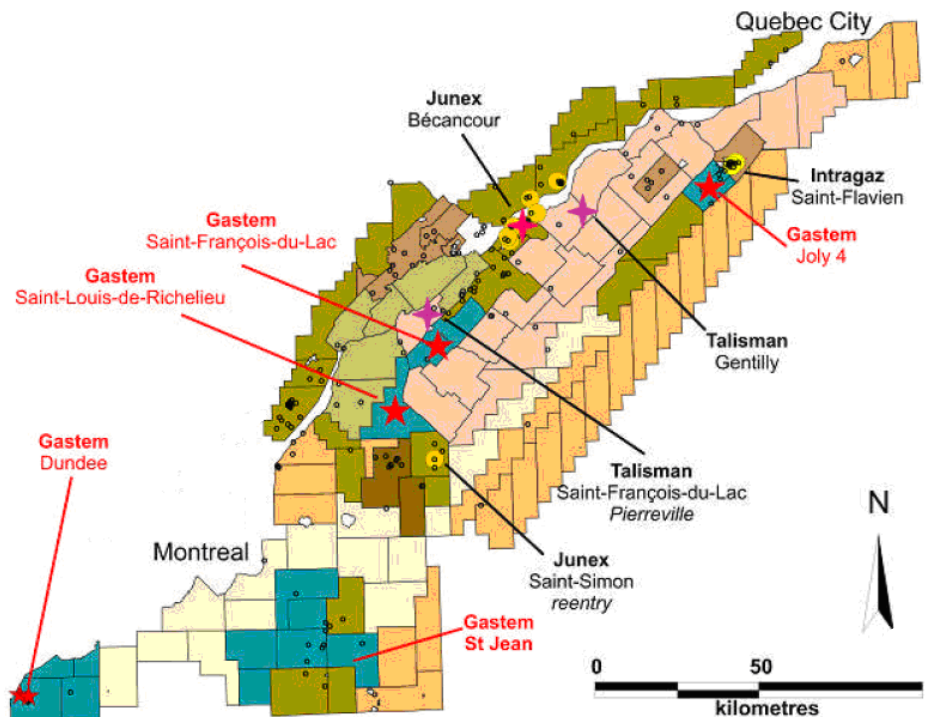
In any double-series graph above, the following legend applies: - - - S&P TSX — S&P ENRS

Source: WWCM, Bloomberg, PCQuote

## Quebec Drilling Programs in Full Swing – Key to Determining Commercial Potential

- **Multiple zones testing across the entire fairway covering ~1.5mm acres**  
Forest is testing all three key zones (Lorraine, Utica, Trenton Black-River) with horizontal test wells; two at Yamaska, one at Champlain NW on trend.
- **Key horizontal well now drilling at St. Louis-de-Richelieu**  
Yamaska permit owners Forest (65%), Questerre (20%), Gastem (15%) and Epsilon (5%) likely waiting with bated breath for results from first 3 hztl.
- **Several vertical delineation wells underway; TLM moving on frac crew**  
Junex is now drilling wells at St. Antoine (Contrecoeur) to St. Augustin (just SW of Quebec City). TLM is setting up to frac Gentilly well.
- **Tell tale production results not likely until after year-end at earliest**  
Plans are to drill & complete multi-stage fracs on three hztl consecutively; sustained flow rate key to demonstrating economic viability of shale zones.

Exhibit 1: Activity Focused Near Key Wells Drilled Along Shale Fairway



Source: Gastem Corporate Presentation

Please see disclaimers on the last two pages of this report.

## Investment Thesis

### *Unveiling the Quebec Shale Play*

**The evolution of drilling and completion technology is having a significant impact on the economics of tight sand and shale resource plays across North America.** The resource potential of the multi-zone shale gas play in the St. Lawrence Lowlands of Quebec has long been known, but up until now, not commercially viable. However, recent data from well testing, coring and petro physical logs, combined with higher natural gas prices, has encouraged stake-holders to move forward with expanded capital programs to further test and delineate the play's potential. In particular, increased capital commitments by Forest Oil Corporation (FST-NYSE) and Talisman Energy Inc. (TLM-T) to further their understanding of the shale's commercial potential has increased market confidence in the potential of this rapidly evolving St. Lawrence Lowland shale play.

### *Enormous Resource Potential Supports Continued Interest*

**We believe these Ordovician shales (Lorraine, Utica and Trenton Black River), if proven commercially viable, have the potential to be one of the largest resource plays in Canada with estimated potential resource in place of 25 Tcf from an area covering over 1.5 million.** Other notable shale trends in Western Canada, such as the Bakken trend in Saskatchewan and the Doig/Halfway/Montney trend in Northeast B.C. have proven highly economic using horizontal multi-stage frac completion techniques to develop these equally extensive plays. In view of this enormous resource potential, we continue to monitor activity within the region and re-iterate our coverage of three of the best positioned junior companies. First mover advantage has allowed these companies to retain massive acreage positions, with relatively low carrying costs, which now provides them with leverage over later entrants into the play, including the majors. **The junior companies we cover are: Gastem Inc. (GMR-T) with a \$4.25 target and Speculative Buy rating, Junex Inc. (JNX-T) with a \$9.50 target and Speculative Buy rating, and Questerre Energy Corporation (QEC-T) with a \$8.75 target and Speculative Buy rating.**

## Drilling Activity Update

### *Activity Ramping Up: Crucial Production Flow Data Now Just Months Away*

**A number of important operations are now underway in the region.**

**Forest Oil is the operator of the first horizontal pilot test well at the St. Louis-de-Richelieu well location** in the southwest quadrant of the Yamaska permits. Working interest partners here are Forest (65%), Questerre (20%), Gastem (15%) and Epsilon (5%). The well is expected to be finished drilling within the next two weeks, after which time the rig will be moved to **the next location northwest along trend at St. Francois-du-Lac.** Both these horizontal wells are at locations twinning vertical wells drilled last summer, hence the lithology is reasonably well defined. **Forest's third horizontal well is planned for the Becancour/Champlain permit** (Forest 85%, Junex 15%) further northeast close to Trois-Rivieres, likely to spud by mid to late August.

**Subsequent to the drilling of all three wells, Forest plans to bring in a frac crew to simultaneously complete all three wells, likely in the September/October time-frame.** Initial production flow rates from these wells, combined with sustained flow rates over a period of several months thereafter, will be crucial data in determining the economic

parameters and viability of the wells. Partners believe initial well costs of over \$5mm will drop significantly over time to under \$2.5mm as more equipment and services migrate into the area.

### *Talisman Moving Ahead With Large CapX Program*

**Talisman, as operator of the large Gentilly and related permits (Talisman ~75%, Questerre ~25%), is reportedly on location with a frac crew.** Intentions are to re-enter the Gentilly well to complete a large tonnage frac of the vertical section and gain more data on response of the shales to fracture stimulation, with particular focus on the Lorraine formation (Talisman believes to be most prospective on permits held). This activity is the first stage of a planned \$100mm to \$130mm program including the drilling of up to 6 vertical wells and 10 horizontal wells in 3 to 4 test areas. Exhibit 2 identifies the planned capital expenditure programs now underway.

### **Exhibit 2: Major Capital Expenditure Programs Will Help Quantify The Play**

<b>Summary of Major Capital Investment Plans - 2008/2009</b>				
Property	Operator / Partners	Capital (\$mm)	# of Wells	Specific Plans
Yamaska	Forest Oil / Gastem/Questerre/Epsilon	~\$20 to \$30	6 to 10	Complete Yamaska earn-in with 2 hztl wells Hztl well completions fall 2008, flow test winter Full scale development possibly 2010
Gentilly	Talisman / Questerre	\$100 to \$131	15-20	Complete earn-in with 3 vertical wells Establish pilots in 3 to 4 areas Drill up to 10 horizontal wells Full scale development possibly 2010
Becancour / Contrecoeur	Forest Oil / Junex	~ \$10 - \$15	3-5	Frac Becancour/Champlain well this summer Forest earn-in CapX is \$8mm at Becancour and \$5mm at Contrecoeur
Others:	Gastem to drill 6 well program (5 vertical, 1 hztl) on <b>New York State Utica project</b> Junex to drill 4 vertical wells with \$6.5mm cpax incl. geophysical activity in SLL			

Source: Company reports, WWCW

### *Junex Using Company Owned Rigs On 100% Wells*

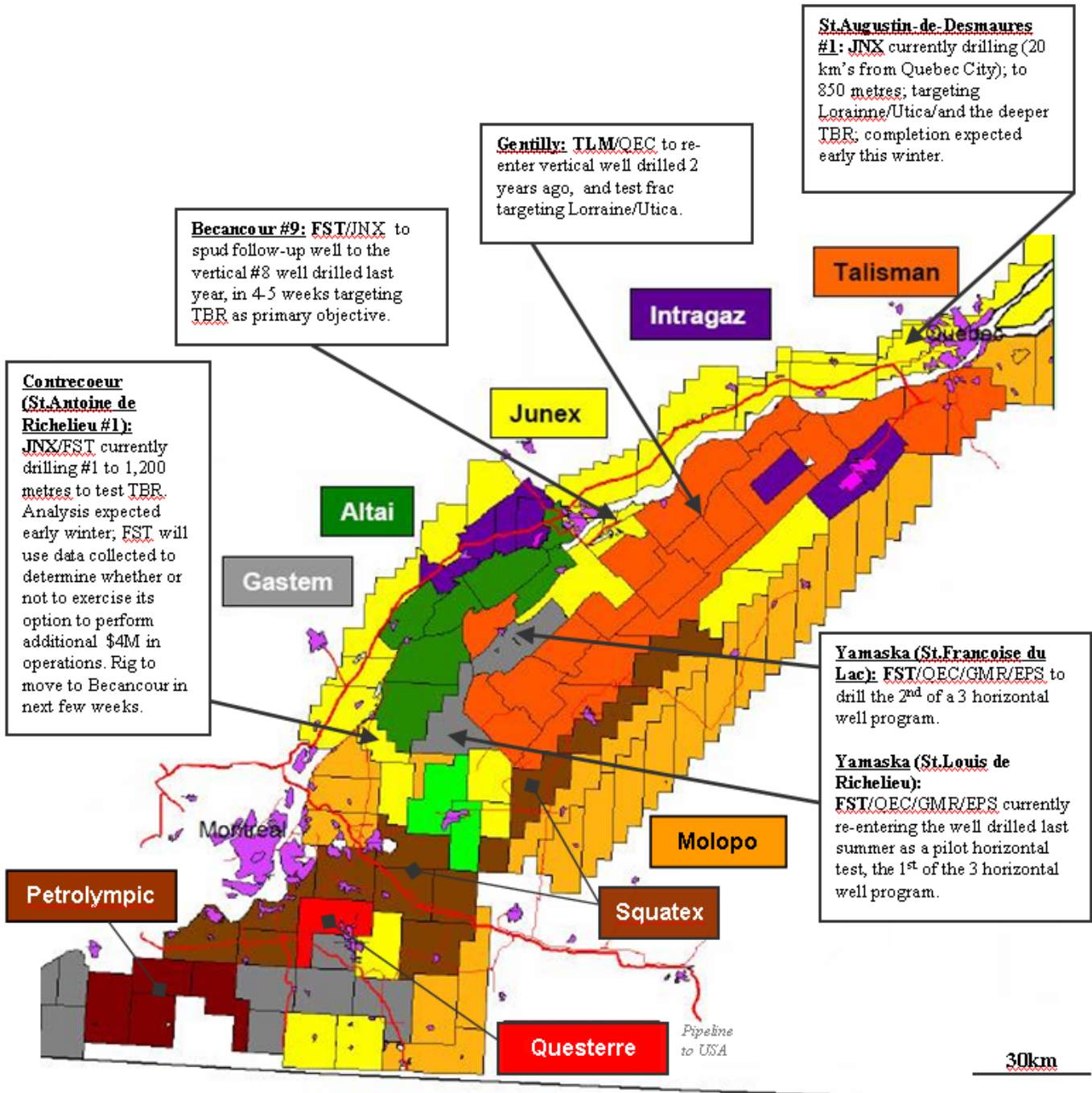
In addition to the aforementioned horizontal wells, a number of vertical well operations are underway. **Junex is operator of a 100% WI well at St. Antoine-de-Richelieu on the Contrecoeur permit** located approximately half-way between Montreal and Lac St. Pierre. This well is drilling at a depth of approximately 760 meters on the way to a total depth of 1,500 meters targeting the Trenton-Black River Group hydrothermal dolomite prospect. **Junex is also currently drilling a well very close to Quebec City in the St. Augustin area** at 100% WI targeting the Utica and Lorraine shale gas horizons as primary objectives (four cores have been cut) and evaluating other zones of interest, including the Trenton-Black River formation. Junex has identified numerous shale gas and hydrothermal dolomite prospects along an extensive “Barnett-type” and “Antrim-type” over-lapping play fairway running the length of the St. Lawrence River.

### *Gastem Moving Forward With New York Program*

**Gastem has allocated approximately \$5mm in cash to complete a six well program targeting the Utica formation in New York State on permits held in conjunction**

with Utica Energy LLC (Gastem 65%, Utica Energy 35%). The company has now received necessary environmental permits and is expecting to spud the first well this summer. Wells here are estimated at drill and complete costs of \$450M for vertical wells and \$1.5mm for horizontal wells, much less expensive in view of much shallower target depths and an established energy services industry.

**Exhibit 3: Lots of Drilling Activity Underway In the Quebec Shale Play**

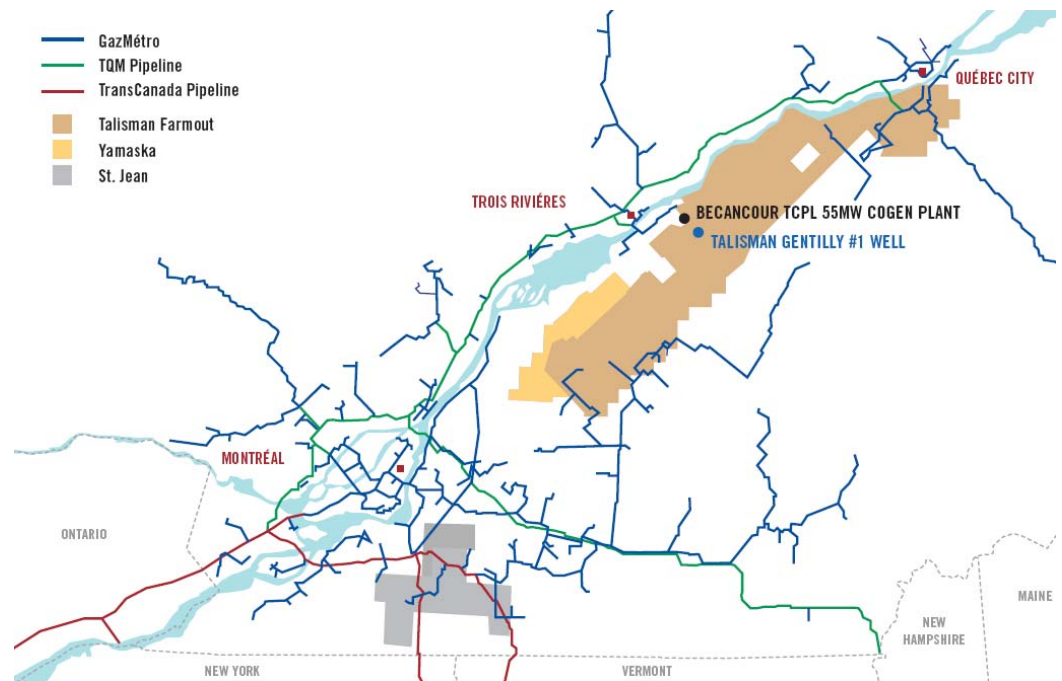


Source: Molopo Company Presentation, WWCM

### *Infrastructure In-Place Helps Support Economic Case*

**Recent developments such as rising gas prices, improved technology, maturing shale gas expertise, and the presence of nearby infrastructure, all combine to make the Quebec shale play compelling from an economic perspective, assuming flow rates meet our “type well” profile.** The St-Lawrence Lowlands is located near extensive infrastructure where an estimated 200 to 400 mmcf/d (seasonal variation) capacity is available on the TransCanada Pipe Line (see Exhibit 4). This capacity would suffice at least early on, as potential shale gas production begins to ramp up. Another strong point for the Quebec Shale play - New York Border pricing typically averages US\$1 above NYMEX Henry Hub, making the pricing environment attractive for producers.

#### **Exhibit 4: In-place Infrastructure Shaves Years Off Development Time-line**



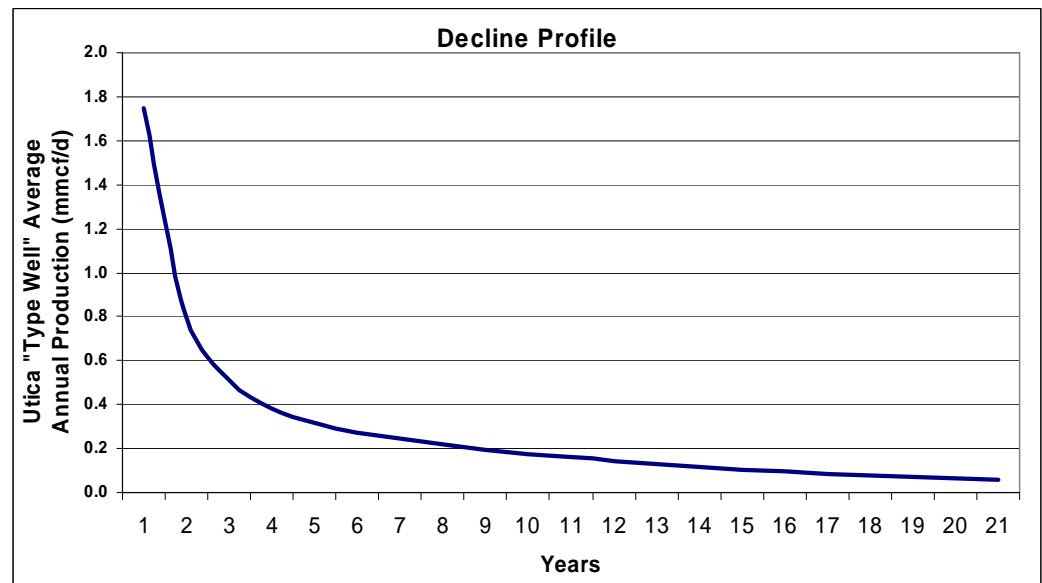
Source: *Questerre Energy Corporation Corporate Presentation*

**Under the assumption of Barnett shale-like production profiles, we model attractive economic returns, evident with a calculated IRR of ~45% based on field gas prices of \$9/mcf.** Initial well drilling and completion costs are expected to drop from the \$4 million to \$5 million range (likely to vary widely based on well depths and completion techniques used) to the ~\$3 million level as services infrastructure is developed. In our “type well” scenario, we have assumed that average all-in costs (including tie-in, facilities, infrastructure, and pipeline), equate to \$4 million per well.

**Our ‘model well’ suggests strong IRR potential.** Exhibit 5 summarizes the expected economic returns of our theoretical Utica “type well” based on the production profile shown, assuming a base natural gas realized price of CAD\$9/mcf, and on an un-leveraged basis. We assume an initial production rate of 2.5 mmcf/d, first year decline rate of 60%, and life of well recovery of 2.2 Bcf/well, which is premised on 93 Bcf/section (as estimated by Forest Oil on their lands) and a more conservative 15% recovery rate.

**Exhibit 5: Economic Assessment of “Type Well” Suggests Strong IRR Potential**

	Type Well	Conversion boe @ 6:1
<b>Well Parameters:</b>		
Well Cost - Drill, Complete & Tie-in/Facilities (\$mm)	\$4.0	
Initial Production Rate (mmcf/d)	2.5	417
Reserves (Bcf)	2.18	0.363
Reserve Life Index (years) - Life of Project Average	7.7	7.7
Average Success Rate	100%	
<b>Financial Parameters:</b>		
Wellhead Gas Price (CDN \$/mcf)	\$9.00	\$54.00
Royalty Rate (%)	12.5%	
Operating & Transpo Expense (\$/mcf)	\$1.50	\$9.00
G&A Expense (\$/mcf)	\$0.75	\$4.50
Leverage (\$/mcf)	\$0.00	\$0.00
Interest Rate (%)	6%	
Tax Rate (%)	36%	
PV Discount Rate	10%	
<b>Result:</b>		
F&D Costs (\$/mcf) - Life of Project	\$1.84	\$11.03
Recycle Ratio	3.1x	
Net Present Value per mcf	\$1.84	
<b>Internal Rate of Return (IRR)</b>	<b>45.7%</b>	



Source: Forest Oil Corporation April 2008 Investors Presentation, WWCM

NB: Economic assumptions include maximum production royalty rate of 12.5%

**Our economic model drives a Net Present Value for reserves in the ground under our full development scenario of \$1.84/mcf.** In Exhibit 6 we provide a sensitivity analysis of calculated IRR and NPV per share based on varying gas prices, well costs and discount rates. We note that under current Eastern Canadian gas prices of over \$10/mcf, economic returns under our “type well” scenario exceed 60% IRR.

## Exhibit 6: Project Economic Sensitivities

Internal Rate of Return (IRR) Sensitivities					
		Wellhead Gas Price (\$/mcf)			
		\$7.00	\$9.00	\$10.00	\$12.00
Well	\$2.0	77%	130%	157%	212%
Cost	\$3.0	39%	73%	90%	126%
(\$mm)	\$4.0	22%	46%	58%	84%
	\$5.0	13%	30%	40%	60%

NPV per mcf Potential Reserves Sensitivities					
		Wellhead Gas Price (\$/mcf)			
		\$7.00	\$9.00	\$10.00	\$12.00
Discount	0%	\$ 2.04	\$ 3.79	\$ 4.66	\$ 6.41
Rate	5%	\$ 1.21	\$ 2.58	\$ 3.27	\$ 4.65
(%)	10%	\$ 0.69	\$ 1.84	\$ 2.41	\$ 3.56
	15%	\$ 0.35	\$ 1.34	\$ 1.83	\$ 2.82

Source: Wellington West Capital Markets Inc.

## Summary Recommendation and Conclusion

We conclude from our analysis of industry data available on the shales/dolomites in the St. Lawrence Lowlands and in New York State that the play is prospective for thermogenic and biogenic natural gas reserves. With limited sustained production data available at this point, however, we do not believe we have sufficient data to evaluate the merits of individual project areas within the prospective envelope, which covers a large percentage of the lands under lease by the group of companies identified in this report.

While still in the very early stages in terms of proving economic viability, we believe that initial indications from well tests to date warrant covering the evolution of the Quebec shale play.

### *Compelling Upside Potential for Juniors*

In view of the enormous resource potential of the Utica, we continue to follow what we believe to be three of the best positioned junior companies. First mover advantage has allowed these companies to retain massive acreage positions, with relatively low carrying costs, which now provides them with leverage over later entrants into the play, including the majors. The junior companies we currently cover are Gastem Inc. (GMR-T) with a \$4.25 target and Speculative Buy rating, Junex Inc. (JNX-T) with a \$9.50 target and Speculative Buy rating, and Questerre Energy Corporation (QEC-T) with a \$8.75 target and Speculative Buy rating.

An update of our valuation table is provided in Exhibit 7. Our valuation is based on an assumption of recoverable reserves of 2.2 Bcf/well under a full development scenario, comprised of one horizontal well per 100 acre spacing unit or 6.4 horizontal wells per section for properties within the main prospective shale corridor, and four vertical wells (1 Bcf/well recoverable reserves) for properties outside the main corridor but still prospective for one or more of the Lorraine, Utica or Trenton Black River zones. We then apply a “prospectivity” factor, which is an estimate of the percentage of acreage within a particular permit that we believe may be productive. And finally, we apply an



## Investment Risks

Our fundamental outlook for oil and gas producers and energy services companies remain favorable, however, several industry operating, political and currency risks could impact specific company's ability to achieve our forecasts, including:

- **Commodity price fluctuations** could have a material impact on a company's re-investment capacity, and hence ultimate growth potential. High netback gas reserves and low cost structure, along with a healthy balance sheet helps to mitigate commodity price exposure, coupled periodically with price protection through hedging strategies.
- **Adverse well or reservoir performance** in any one or a number of producing pools could result in abnormally high production decline rates impacting overall corporate volumes. Long life gas reserves, operated under prudent production practices, and more diversity in producing horizons helps mitigate exposure to high decline well/pool exposure.
- **Field operational hazards** such as well blowouts, explosions and fires within pipeline/gathering/facility infrastructure, mechanical equipment failures could lead to sour gas releases, spills, personal injuries and/or damage to the environment. Industry insurance policies, particularly those which include business disruption, help to mitigate financial exposure to such mishaps.
- **Industry capacity constraints** due to high levels of activities can result in shortages of services, products, equipment, or man power in many or all necessary components of the exploration and development drilling cycle. Increased competition leads to escalated land costs, along with other service costs during peak activity levels.
- **Extraordinary hazards** such as unusual swings in weather patterns, changes in regulatory operating or fiscal terms, or actions by certain groups such as industry organizations, local communities, or militant groups could impact the company's ability to re-invest for future growth

**Changing Political environments and currency exchange rate fluctuations** could have a material impact on a company's ability to operate, retain contractual rights to, and repatriate predictable cash flow from foreign assets. Concentrating on companies operating in more stable political and financial jurisdictions with favorable fiscal terms helps to mitigate some of these risks.

## Disclaimers

The particulars contained herein were obtained from sources that we believe to be reliable, but are not guaranteed by us and may be incomplete or inaccurate. The opinions expressed are based upon our analysis and interpretation of these particulars and are not to be construed as a solicitation of offer to buy or sell the securities mentioned herein. Wellington West Capital Markets Inc. (“WWCM”) may act as financial advisor, fiscal agent or underwriter for certain of the companies mentioned herein, and may receive remuneration for its services. WWCM and/or its principals, officers, directors, representatives, and associates may have a position in the securities mentioned herein and may make purchases and/or sales of these securities from time to time in the open market or otherwise. This report may not be reproduced in whole or in part, or further distributed or published or referred to in any manner whatsoever nor may the information, opinions or conclusions contained herein be referred to without in each case the prior written consent of WWCM.

U.S. Institutions may conduct business through our affiliate Wellington West Capital Markets (USA) Inc. Wellington West Capital Markets (USA) Inc. accepts the contents of this research report, however, the company that prepared this report may not be subject to U.S. rules regarding the preparation of research reports and the independence of research analysts.

This report will be forwarded to our affiliate Wellington West Capital Inc. (“WWCI”). Subject to WWCI management review and approval, this report may be distributed to clients of WWCI. WWCI and WWCM are members of the Canadian Investor Protection Fund (“CIPF”).

### *Wellington West Capital Markets Stock Rating System*

The rating system is based on the stock’s expected absolute total return over the next 12 months. Generally, Strong Buy rating is expected to produce a total return of 25% or more, Buy a total return of 10% to 25%, Market Perform a total return of 0% to 10% and Underperform a negative total return. Speculative Buy rating is expected to produce a total return of 25% or more, but is based on factors and forecasts that have high degrees of uncertainty. The distribution of the recommendations for the last three-month period and their relationship with investment banking business are available on request by emailing to [compliance@wwcm.com](mailto:compliance@wwcm.com).

### *Analyst Compensation*

Research analysts receive compensation based on a number of factors as determined by WWCM’s management. Compensation is affected by all of the firm’s business activities, including revenue generated from capital markets and investment banking. No part of the compensation of the analyst who authored this report is based on the specific recommendation or views expressed in this report.

### *Analyst Trading*

WWCM permits analysts to own and trade in the securities and/or derivatives of those companies under their coverage, subject to the following restrictions: no trades can be executed in anticipation of the initiation of coverage; no trades can be executed for five days after dissemination of launching coverage or a material change in recommendation; and no trades can be executed against an analyst’s recommendation. Exceptions require

prior approval of the Head of Research and can only be executed for a reason unrelated to the outlook of the stock.

### *Dissemination of Research*

WWCM endeavors to make all reasonable efforts to provide research, simultaneously and electronically to all eligible clients and potential clients.

Company Name	Ticker Symbol	Applicable Disclosure
Gastem Inc.	GMR-V	2
Junex Inc.	JNX-V	-
Questerre Energy Corp.	QEC-T	2

### *Applicable Disclosure Details*

- 1) In the last 12 months, WWCM, or its affiliates, have managed or co-managed an offering of securities by the subject issuer.
- 2) In the last 12 months, WWCM, or its affiliates, have received compensation for investment banking and related services from the subject issuer.
- 3) The research analyst or a member of the research analyst's household, or any associate or individual preparing the report, has a long position in the shares and/or the options of the subject issuer.
- 4) The research analyst or a member of the research's household, or any associate or individual preparing the report, has a short position in the shares and/or the options of the subject issuer.
- 5) WWCM or its affiliates is a market maker, or is associated with the specialist that makes a market in the securities of the subject issuer.
- 6) WWCM or its affiliates own more than 1% of any class of common equity of the subject issuer.
- 7) WWCM has a conflict of interest with the subject issuer.
- 8) The research analyst(s) has a conflict of interest with the subject issuer.
- 9) Over the last 12 months, the research analyst has received compensation based on a specific investment banking transaction relative to the subject issuer.
- 10) The research analyst or a member of the research analyst's household serves as a Director or Officer or Advisory Board Member of the subject issuer.
- 11) The research analyst(s) has viewed the material operations of the issuer.
- 12) A portion of the travel expenses of the analyst were paid or reimbursed by *the issuer*.

### *Analyst Certification*

Each analyst of WWCM whose name appears in this research report hereby certifies that (i) the recommendations and opinions expressed in the research report accurately reflect the research analyst's personal views about any and all of the securities or issuers discussed herein that are within the analyst's coverage universe and (ii) no part of the research analyst's compensation was, is, or will be, directly or indirectly related to the provision of specific recommendations or views expressed by the research analyst in the research report.