## OGIB COMPANY ANALYSIS—NOVEMBER 28 2014

## RAGING RIVER EXPLORATION – RRX-TSXV; RRENF-PINK

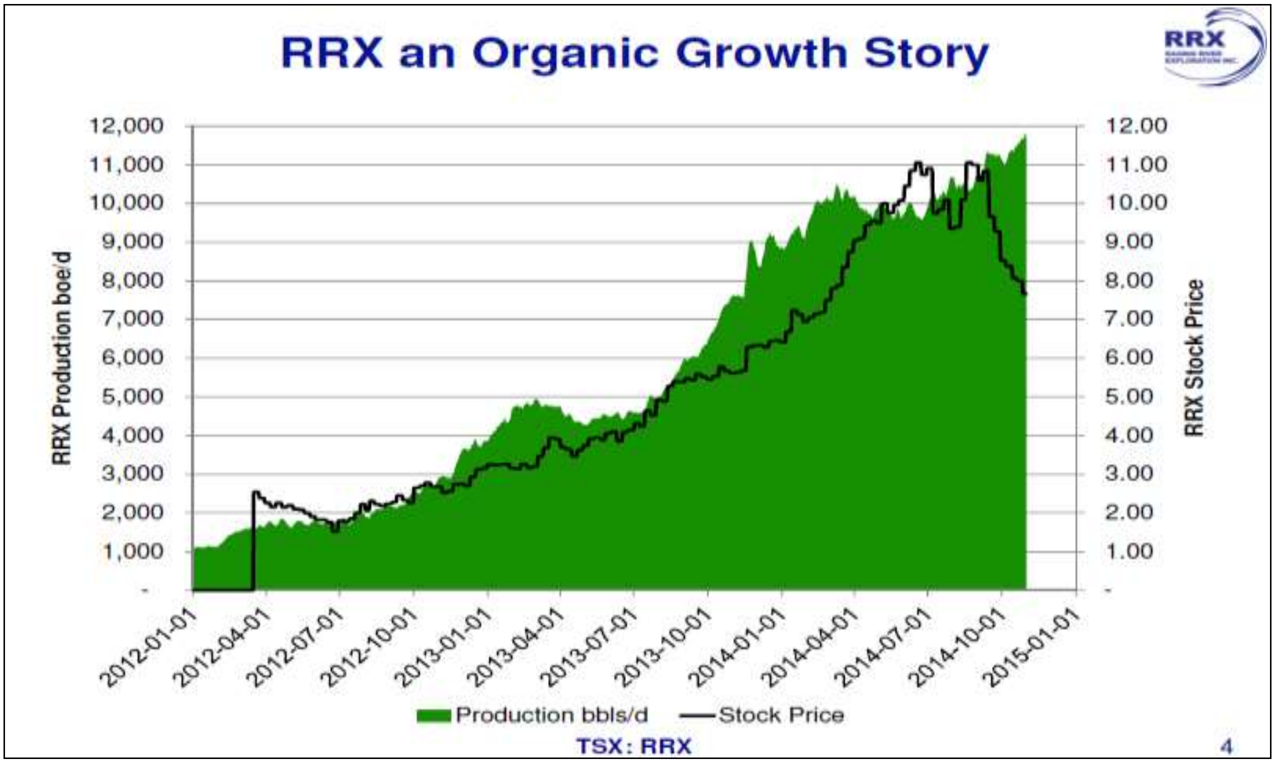
The stock chart on Raging River from inception through August of this year was a work of art. From a starting point of just over $2 in mid-2012 Raging River had more than quintupled its stock price prior to the oil price collapse. The recent oil price driven decline may present a great opportunity on this high quality name.

Here is what you need to know about Raging River in the current oil price environment:

- At $70/bbl WTI Raging River can grow production per share by 5% per year
- That growth can be funded fully from production generated cash flow
- Even at $60/bbl WTI Raging River's Viking wells generate a rate of return of over 30%
- The corporate balance sheet is in great shape (well under 1X debt to cash flow)

How many other North American junior oil producers can keep growing without racking up debt in a world of $70/bbl oil? Not many…if any.

And if oil prices rebound Raging River can hit the accelerator on growth like few others….




Previously, management of this company have built and successfully sold 4 companies.

Raging River Exploration (TSXV-RRX) has provided shareholders with high growth and high profitability from one of the lowest risk plays in Canada—the Viking, in western Saskatchewan. From a starting point of 1,000 barrels per day in 2012 Raging River will exit 2014 at nearly 12,750 barrels per day. More importantly, that growth has translated to similar *per share* growth as well.

In its Viking assets Raging River has everything a junior oil producer needs to grow production in a ***self-sustaining*** manner in almost any price environment. The Viking offers rapid payout periods (under 1.5 years at $85 oil), low drilling costs ($850k per well) and a large number of repeatable drilling locations (over 2,000 at $85 oil). The shallow location of the formation (600-700 meters) is what allows for low drilling costs.

The most exciting part of Raging River and the Viking is the long term potential for waterflooding which will bring huge quantities of cheap oil to develop reserves. Raging River's massive land base sets the company up perfectly for waterflooding which the company is just now rolling out in a significant way.

## QUICK FACTS

| | |
|---|---|
| Trading Symbols: | RRX-TSXV |
| Share Price Today: | $6.15 |
| Share Price Prior To Oil Drop: | $11.25 |
| 2014 Exit Production Guidance: | 12,750boe/d (95% light oil) |
| 2014 Funds Flow Guidance: | $220.0 million |
| Basic Shares Outstanding: | 180.2 million |
| Market Cap: | $1.11 billion |
| Enterprise Value (EV): | $1.24 billion |
| EV per 2014 cash flow : | 5.63 times |
| Debt to cash flow: | 0.4 times |

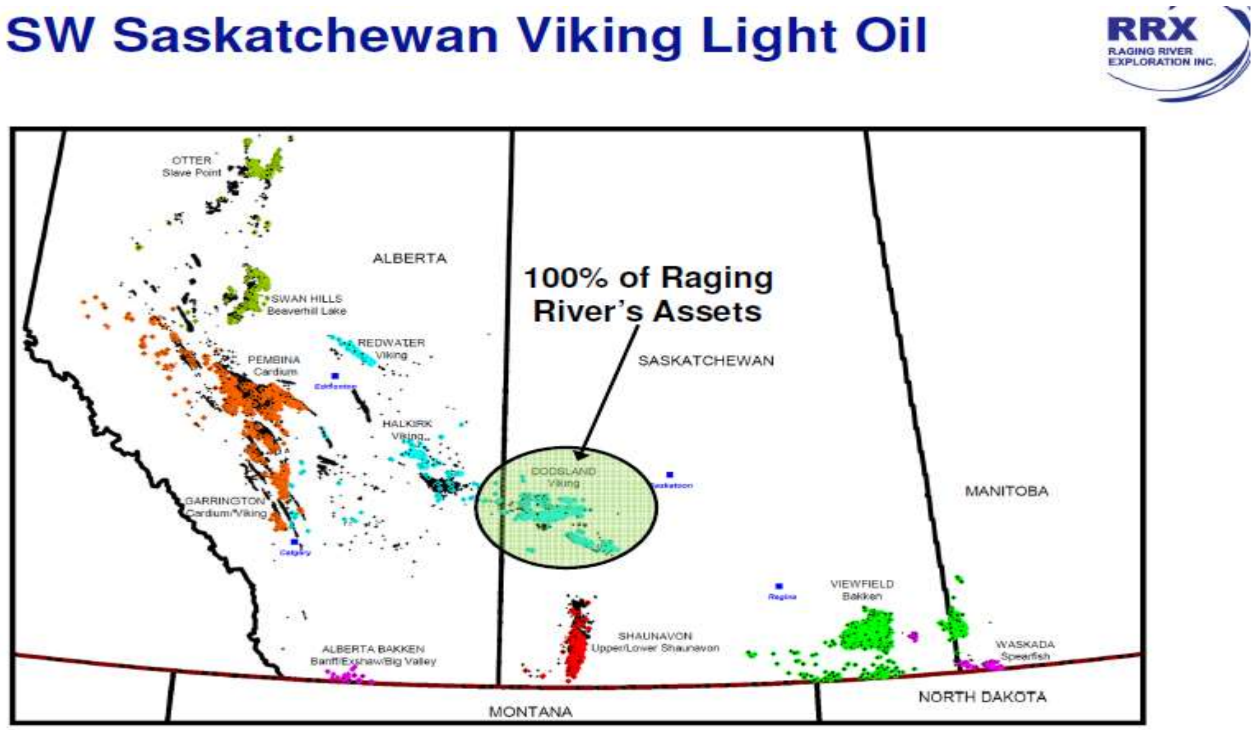
## POSITIVES

- Big land position – 166,000 acres and 2,400 drilling locations
- Pure play on the Viking which has low costs and high netbacks
- Big growth potential at decent oil prices, can still grow using only cash flow at $70/bbl WTI
- Top management team with history of building companies
- Good balance sheet
- Big waterflood potential

## NEGATIVES

- Basically unhedged heading into 2015
- There is no diversification here, the Viking is Raging River’s only play
- The stock is likely dead money as long as oil stays down, although company is in terrific shape to weather the storm

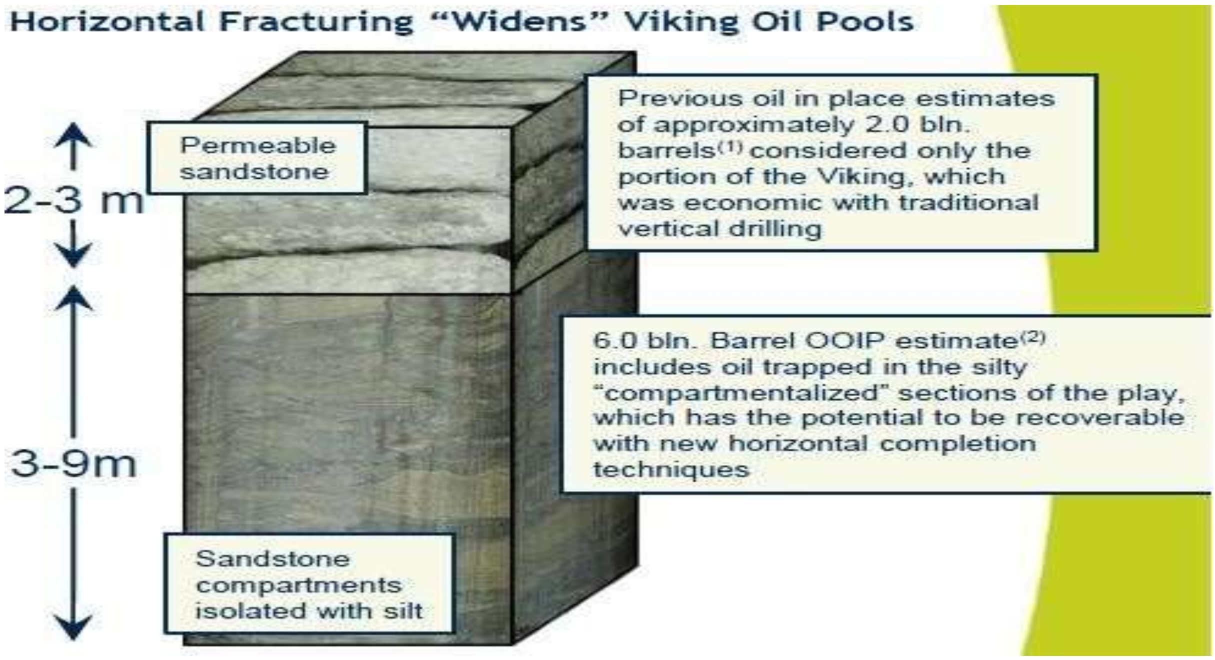
- **THE PROPERTIES**




Raging River is focused solely on the Viking oil play in southwestern Saskatchewan. They have assembled a drilling inventory of 2,400+ net locations on 260 net sections of land (166,000+ net acres).

Like many other resource plays in North America, the Viking is an established play; it's been drilled through vertically thousands of times since the 1950's.

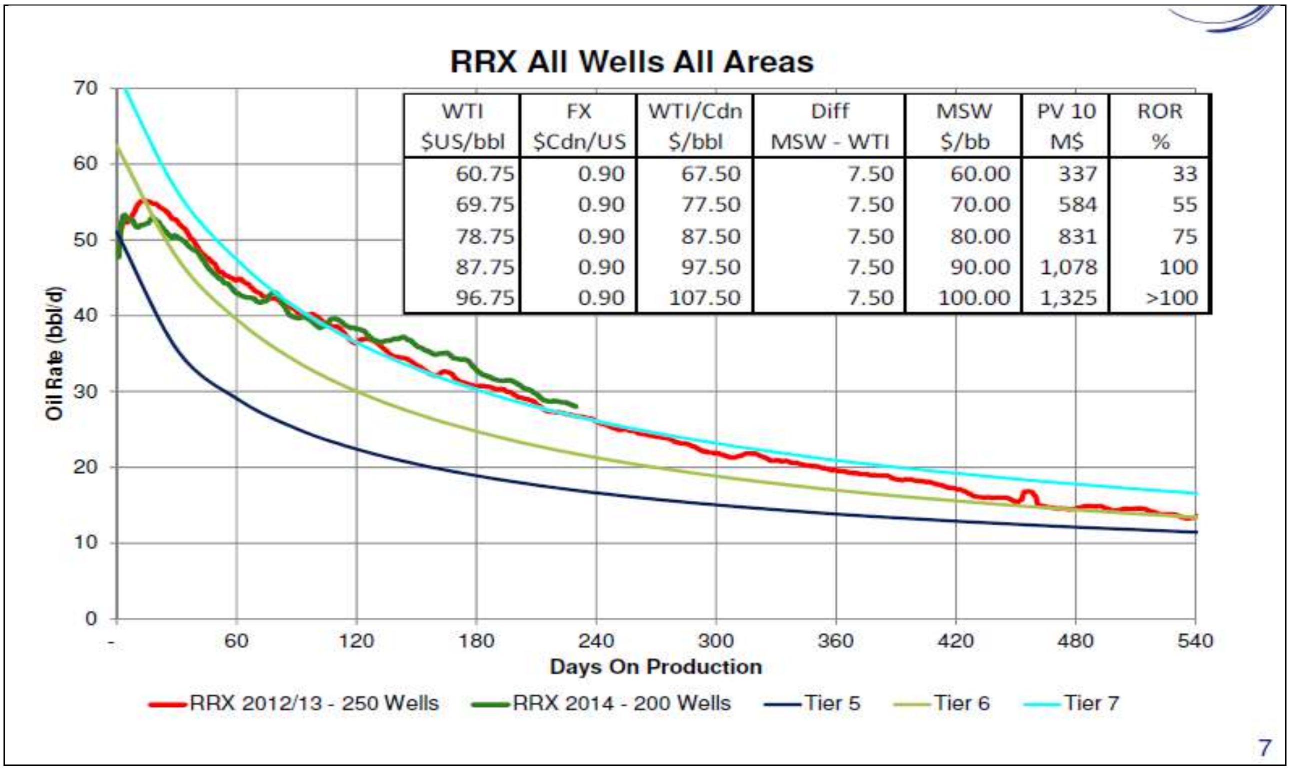
Back then, Original Oil In Place (OOIP) was initially estimated at 2 billion barrels of oil. Horizontal drilling and multi-stage fracturing have now increased that to 6 billion, as the Viking oil pools--sandstone compartments--previously thought to be uneconomic, have been unlocked. Basically, the Viking's 2-3 meter pay zone has expanded to 9 meters with fracking.




The Viking is a shallow formation at 600-700 meters in depth and produces 36° API light oil with less than 10% water or gas.

Because the wells are shallow, they only cost $900K -$950K. But that also means lower initial production (IP) results due to lower pressure. These wells have an in Initial Production rate of 40-50 bopd over the first 30 days (the industry calls this "IP30") with an EUR (estimated ultimate recovery) of ~50,000 barrels of oil.

A "*type curve"* is a graph of production over time from a well.  You can see it in their powerpoint slide below.

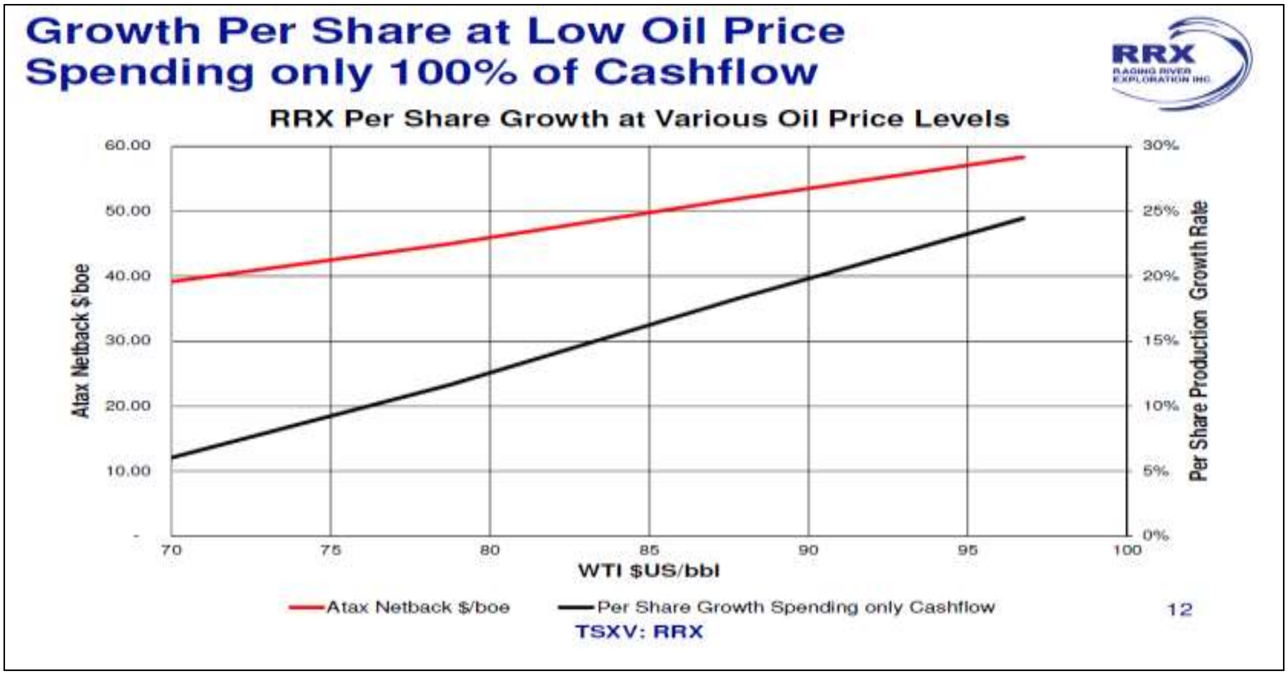



While the well results are not prolific (compared to the Cardium or the Bakken which come on at rates 10 to 20 times as high), the play remains highly economic because of its low costs and one a low breakeven price of ~$50/bbl WTI.

You can see in the image above the rates of return that drilling a Viking well generates at oil prices ranging from $60 per barrel to $96 per barrel.

At $80/bbl the Viking generates netbacks of $45 per barrel and allows for RRX to recycle capital quickly with payouts under a year and a half.  Even at $60 per barrel Viking wells generate a decent return on investment.

In the most recent corporate presentation RRX has provided some updated guidance (see the following image) on what the company can expect to achieve in a world of lower oil prices.




At $95 per barrel WTI Raging River believes it can generate netbacks that are over $55/bbl and grow production per share (remember it is per share that matters) by more than 22%.

That is great, but what is even better is that Raging River can actually grow production at $70/bbl WTI as well without leveraging up its balance sheet.

This is sustainable growth, as in only internally generated cash flow is used to achieve it. That puts Raging River in a much better position to withstand this oil price collapse than most horizontal players in North America.

## THE BIG LONG-TERM PRIZE

I'll explain how Raging River is focused getting as much oil out of the ground here as possible--maximizing the value of all this oil.

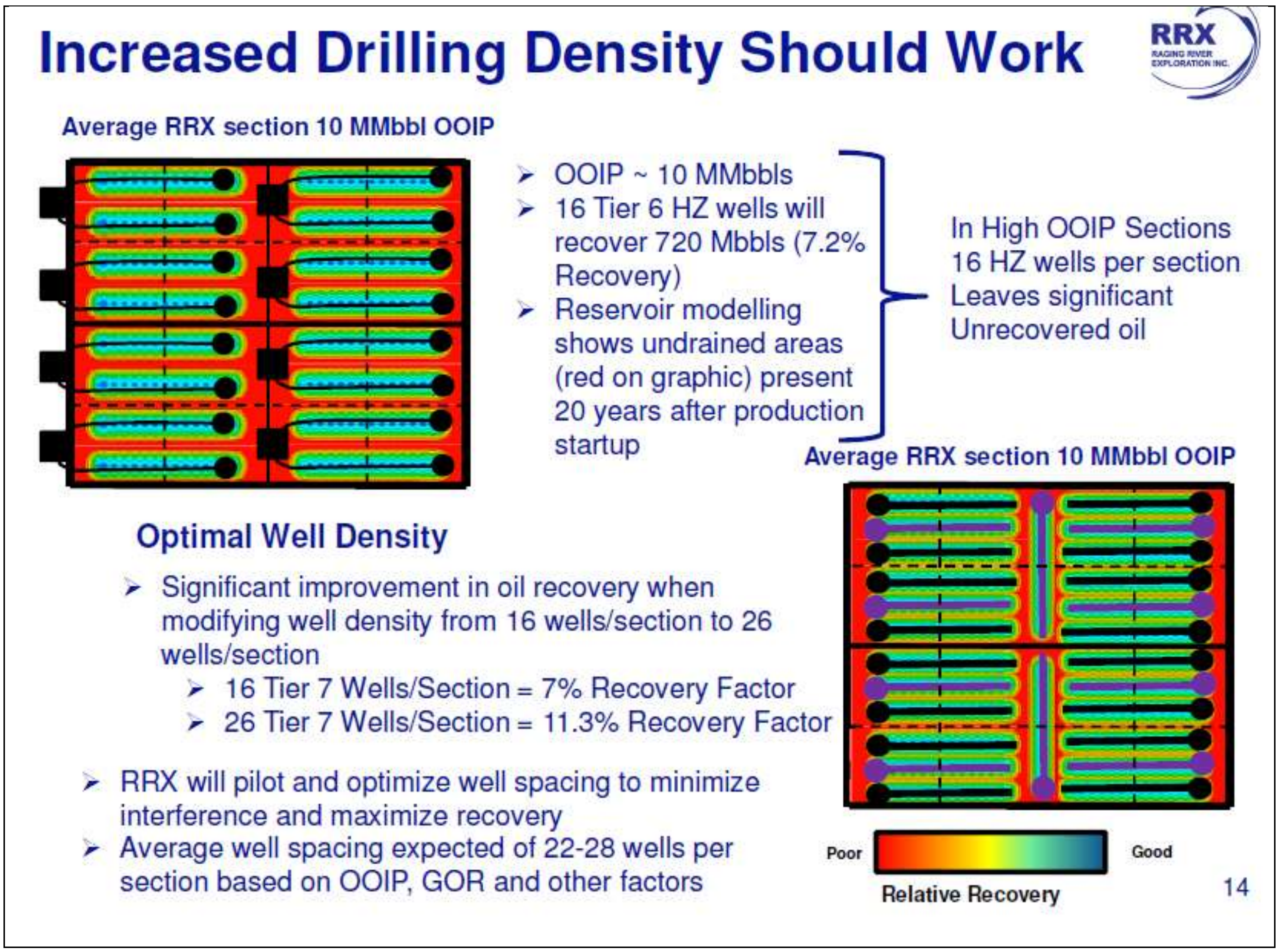
On an average section of Viking land that Raging River controls there is 10 million barrels of oil in place in the ground.

Regular horizontal drilling—which the industry calls "primary" development—is 16 wells per section, each of which recovers about 50,000 barrels of oil.

In total that will recover 16 x 50,000 = 800,000 barrels oil. That will leave more than 90% of those original 10 million barrels in the ground on every section of land.

That is a huge prize to keep chasing.

After the initial phase of development comes stage two. This involves infill drilling or downspacing if you prefer.




This will involve drilling another 10 to 12 wells which will be expected to recover another 540,000 barrels of oil and take recovery factors (RF) up to somewhere around 1.2 million (12%) out of 10 million barrels.

The red portions of the images above show the oil that these infill wells will produce. This is the oil that the primary horizontal wells did not reach.

The BIG DADDY of valuation creation for shareholders will come in stage three.

I'm talking about waterflooding.

The Viking has a long history of successful vertical waterfloods, and results have been as high as 30% Recovery Factor (RF). Raging River thinks waterflooding its horizontal development can take recovery factors to 22%.

## Viking Increasing Recovery Factor

RRX
RAGING RIVER EXPLORATION INC.

**Dodsland Recovery Potential per section (10 mmstb OOIP)**

| Incremental Producing wells | Well Type | Recovery Method | Incremental Oil Mstb | Total Oil Mstb | Total Recovery Factor | F&D $/bbl |
|---|---|---|---|---|---|---|
| 16 | Horizontal Infill's | Primary | 600-840 | 600-840 | 6.0%-8.4% | $18-$24 |
| 12 | HZ Infills – Next Step | Primary | 450-630 | 1050-1470 | 10%-15% | $18-$24 |
| None | Waterflood | Waterflood | 1,000 | 2,200 | 22% | $5-$10 |

That is a big increase in reserves. Primary horizontal drilling was about 7% recovery, with infill drilling it would get to 12%. So jumping to 22% is huge.

But that only tells a portion of the waterflood story. What you need to focus on is what the finding and development (F&D) cost per barrel will be for oil that is produced via waterflooding.

The first two phases (primary horizontal and infill horizontal drilling) the F&D cost per barrel is $18 to $24. For waterflooding it is $5 to $10!!!

Just imagine the cash flow in a $100/bbl world from oil that costs $5 to $10 develop. These barrels rival the high quality light oil that flows from conventional discoveries in the Middle East.

It makes sense that these waterflood barrels would be so profitable. All of the infrastructure (pipelines, roads, oil batteries) were paid for during primary development, so much of the cost of the waterflood has already been paid for.

Equally delightful is the fact that this waterflood production has virtually no decline year to year .

To do a waterflood, you convert several of your existing oil wells to what is called an injector well, which you use to inject water down into the formation (in this case, the Viking). And you usually have to drill a few more new injector wells, which cost $300K-$350K each. But this is small incremental cost for large oil production gains.

Water gets injected into the ground, increasing the pressure in the formation. The water sweeps residual oil into adjacent production wells and helps to increase depleted pressure within the reservoir.

Raging River has been pilot testing waterflooding for three years and is encouraged with the results which are coming in at the company's level of expectations. Waterflooding these horizontal plays is relatively untested, but most companies are achieving good results.

The size of the waterflooding prize is huge, assuming the total RF achieved is 22% and using a chance of success (COS) of 50% (ie 50% of the acreage is able to achieve the RF rate) RRX is *potentially* sitting on more than 280 million barrels in RECOVERABLE oil.

260 net sections * 0.50 (COS) * 10 million barrels of oil (OOIP) * 0.22% (RF) = 286 million barrels….

That is a big number next to the current enterprise value of $1.24 billion….on a per barrel basis it is about $4.33 per barrel.

## FINANCES AND VALUATION

For a pure play on horizontal light oil production--Raging River is in a strong financial position.

- The company has never carried a lot of debt (about $150 million expected at year end 2014) with a cash flow run rate around $250 million
- The Viking is one of the most profitable horizontal oil plays in North America with operating netbacks approaching $40/bbl at $70/bbl WTI
- Canadian production means the lower Canadian dollar—a petro-currency—acts as a natural hedge to the oil price decline

At $70/bbl WTI Raging River believes it can live within cash flow, spending $150 million to grow production by about 5% per share. There are very few horizontal producers that can do that. Off hand, I'm not sure I could name another.

That gives it GREAT leverage to any rise in the price of oil.

One thing that Raging River doesn't have going for it though is an aggressive hedge book heading into 2015. Against production that will exceed 12,000 barrels per day Raging River only has 450 barrels hedged in Q1 of 2015 and another 200 barrels in Q2.

A falling Canadian dollar has helped with the oil price decline, but Raging River will go into 2015 virtually unhedged.

Valuation of an oil producer these days is very tricky business. Do you value the company as though current low oil prices are going to be in place forever? Or do you value the company as though we are going to have a year of depressed prices and then a return to the $90 - $100 / bbl WTI that we had gotten used to?

Raging River, like virtually every oil producer today is cheap if you believe that the current oil price will not last forever. More importantly, Raging River is in a position to much better weather the low oil price storm because of its good balance sheet and high netback production.

Again, Raging River believes that it can grow production at $70/bbl WTI without increasing its debt.

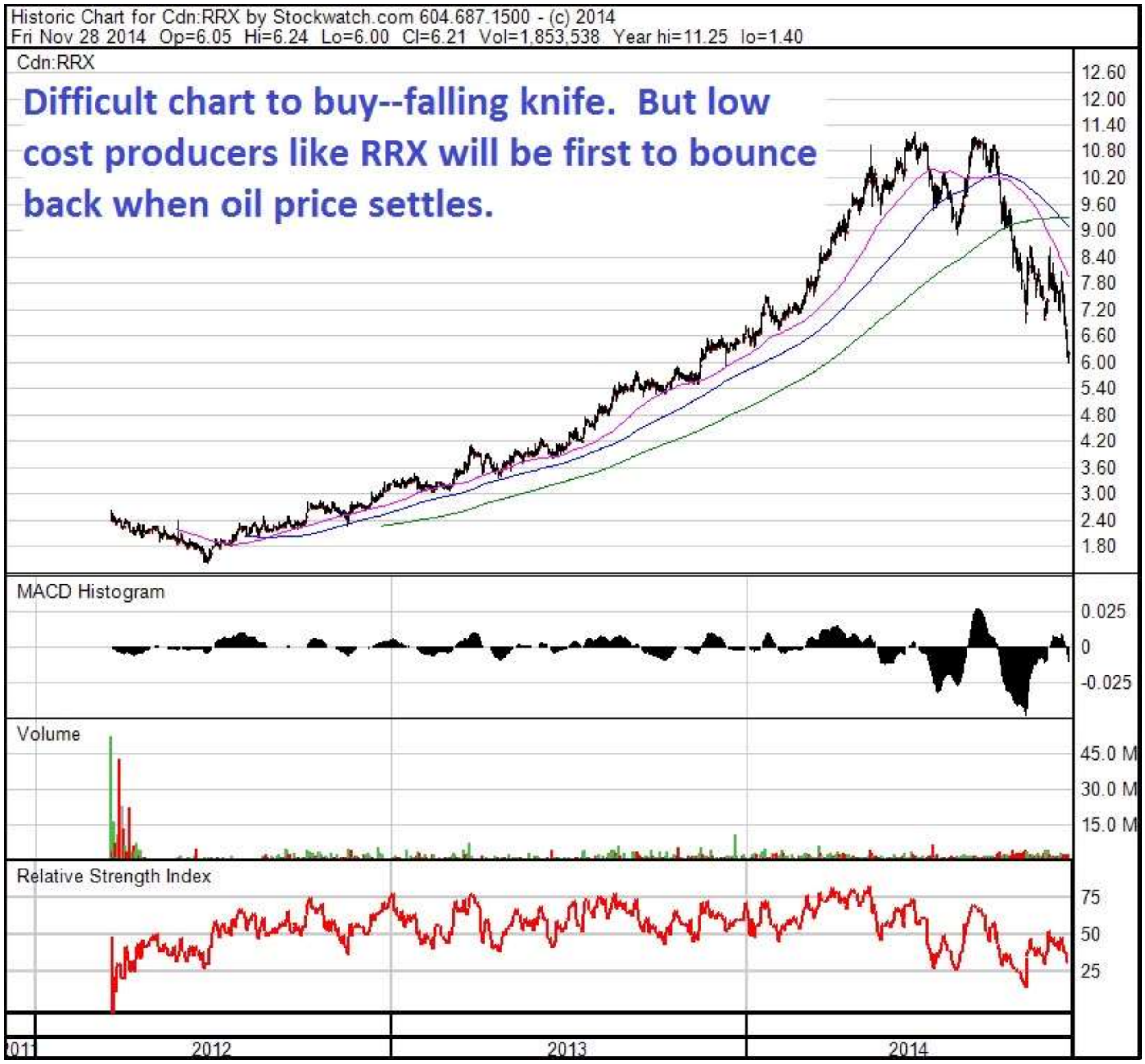
That is part of the reason that Raging River has historically received a premium valuation to its peer group, the other part being the reputation of its management group.

If this depressed oil price persists, Raging River will also be in a position of strength to pick up assets or competitors on the cheap.

## WHAT THE ANALYSTS SAY

| FIRM | 12 MONTHS TARGET PRICE |
|---|---|
| BMO Nesbitt Burns | $7.40 |
| CIBC | $11.00 |
| Clarus Securities | $11.75 |
| Cormark | $11.75 |
| Desjardins Securities | $11.00 |
| Dundee Securities | $12.50 |
| GMP Securities | $12.25 |
| Macquarie | $12.75 |
| National Bank | $11.00 |
| TD Securities | $11.00 |

STOCK CHART…next page




## CONCLUSION

If there was a blueprint for what I would want to see in a junior oil producer this company might be it:

1. a best in class management team that has created shareholder value
2. a big land position--with 2400 drilling locations
3. in a low cost play that works at $70/barrel oil
4 . along with low drilling costs and

In a strong oil price environment Raging River has high growth, high profitability and low risk geology. In a low price environment Raging River still has some growth, more profitability than virtually everyone else and low risk geology.

This company is set to outperform in both high and low oil prices….you can't ask for more than that.

In this difficult oil market capital will only be available to high netback companies like RRX.  These guys should actually be able to acquire land and/or companies even more accretively than if oil were at $100/bbl.

There is a very good chance that Raging River emerges on the other side of these low oil prices in a better position than it went into it.