

Lightstream (LTS) – A Multi-Bagger in the Making

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Note: This is the final piece of my 3 part Unconventional Oil theme. In Part 1 ([here](#)), I described why \$90 is the new “floor” for WTI. In Part 2 ([here](#)), I explained why I believe North American unconventional oil companies are the perfect conduit to implement a bullish oil view. And in this note, I cover a specific idea within this theme that I suspect will make investors a lot of money over the coming years.

I am bullish oil. It’s my highest conviction trade (you can read why [here](#)). But implementing a bullish oil view isn’t easy; the options are many. What part of the capital structure do you invest in? Is it through equity in oil services companies? Debt in pipelines? Companies focused on deepwater drilling? Deepwater exploration? The ultradeep? Oil sands? Conventional producers? Where? In Brazil? Poland? Russia? What about monocrystalline sand producers? Chemicals suppliers? The list goes on.

For the reasons outlined in Part 2 ([here](#)), I believe implementing a bullish oil view via equity in North American unconventional oil producers is the best place to deploy capital. **My plan is simple: get exposure to as many barrels of oil in the ground as possible and ride the dual tailwinds of (1) higher future oil prices, and (2) improved extraction technologies.** Both of these trends will dramatically increase profit per barrel and firm cash flow.

But investing isn’t blind; success is determined by the price you pay. For North American unconventional oil producers, the key is to find a company trading at a reasonable valuation based on current production and reserves and get cheap / free optionality on the undeveloped land. If you find a company with those characteristics, you should pull the trigger. Immediately.

And with that backdrop, I present **my highest conviction trade in my highest conviction theme:**

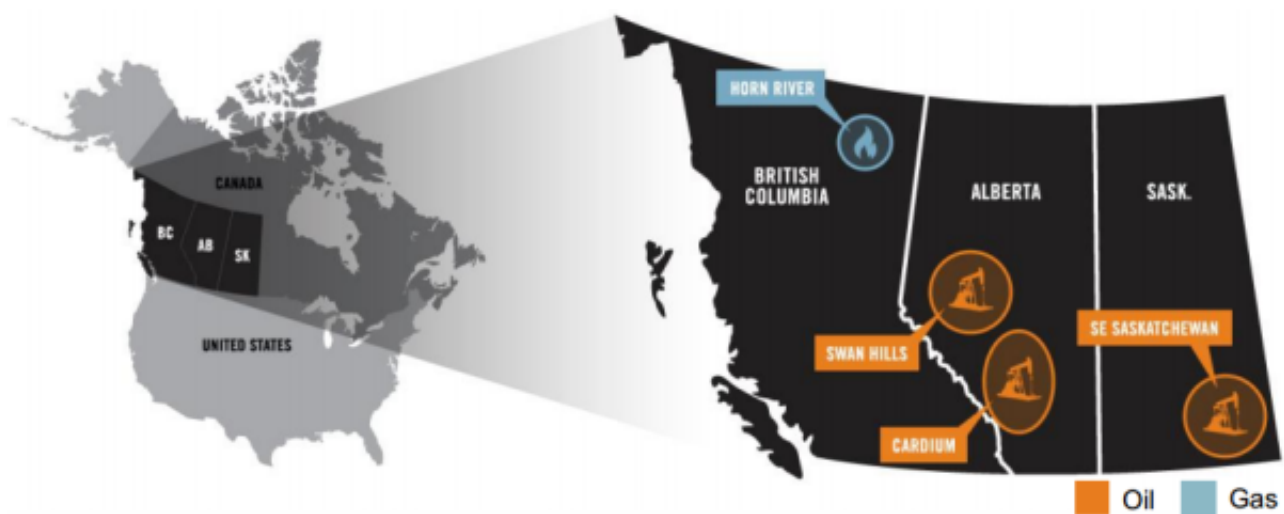
Meet Lightstream Resources (LTS).

Lightstream (formerly Petrobakken) is run by John Wright. I have tracked John over the past few years and have come to respect him for his honesty – even in difficult environments, he has proven himself to be completely trustworthy. I can’t express how important this is. Finding a CEO that is 100% aligned with shareholders and who you can trust to make the right decisions is crucial, especially in the energy space. Why is that? Because at the core, you’re buying management decisions about how to deploy capital. And given the high cost nature of the business, wrong decisions can be incredibly value destructive (side note: if you want to understand John’s ethos, you should read his very first letter to shareholders on pages 3 – 5 [here](#)).

Lightstream is focused on light oil in the Western Canadian sedimentary basin (hint: you have to go to Canada to find value in this sector today). LTS’ business model is predicated on

accumulating a large land bank cheaply (historically, they have been early mover into some of the most prolific plays in Canada), and then applying as much innovative technology as possible to squeeze every last drop of oil out of the rock (LTS cracked the code in the Bakken in 2006 as an early adopter of multi-stage fracking; since then, the Company has been on the forefront of new technology including bilateral wells, slickwater fracking, natural gas flooding and more).

Today, Lightstream is one of the largest landholders in both the Alberta Bakken and Cardium and has a portfolio of more than 2,000 drilling locations, 750k undeveloped acres and 200MM boe of 2P reserves. In addition to the Bakken and Cardium, they have a significant foothold in two other major light oil plays – Swan Hills and the Conventional Saskatchewan – as well as land positions in emerging plays such as Nordegg, Montney, and Duvernay, and undeveloped natural gas deposits in Horn River. Here’s a snapshot of their land holdings:



Business Units	Q1 Production (boepd)	Drilling Inventory (locations)	Q1 Average Production
Southeast Saskatchewan	20,742	>1,200	43,959 boepd
Cardium	18,893	>530	Drilling Inventory
AB / BC	4,324	>360	> 2,000 locations

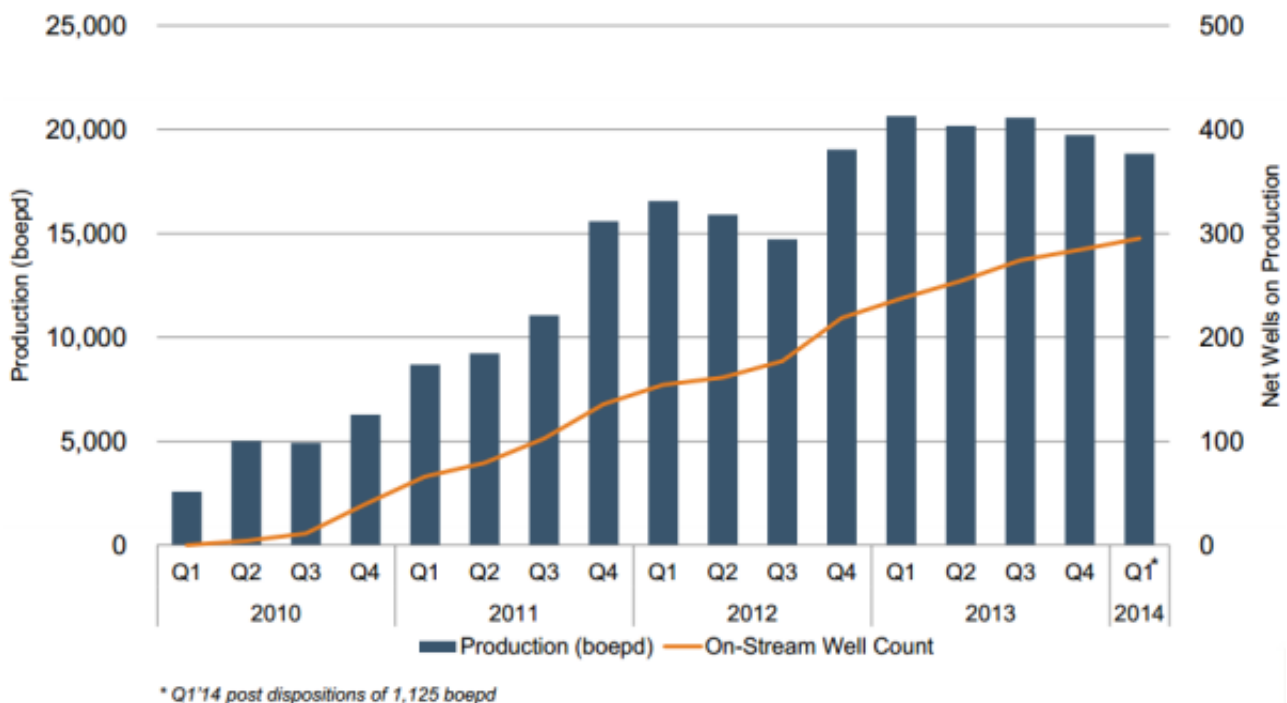
Source, p 4: <https://www.dropbox.com/s/rk8fxgepn1xx5hq/LTS%20May%202014.pdf>

I think the best way to understand the story of Lightstream is not by reviewing their assets and operating metrics, but by giving an historical example of their history in the Cardium:

- LTS aggressively moved into the Cardium by buying three companies in early 2010 for just north of \$1BN (they spent less than \$10k / acre):

Announcement	Acquirer / Target	Enterprise Value \$ millions	Proved plus probable mboe	Current production boepd	Net land acres	Price per boe ¹ P+P	Price per boepd ¹	Producing Asset Value ² \$ millions	Implied Land Value ³ \$ millions	Implied Land Value	
										per acre	per section
4-Jan-10	Petrobakken Energy Ltd. Berens Energy Ltd.	336.0	10,972	3,650	25,600	30.39	91.353	182.5	153.5	5,996	3,837,461
28-Jan-10	Petrobakken Energy Ltd. Result Energy Inc.	480.0	2,900	1,300	67,200	163.20	364,062	65.0	415.0	6,176	3,052,381
2-Mar-10	Petrobakken Energy Ltd. Rondo Petroleum Ltd.	253.4	11,000	1,200	14,720	22.91	209,969	60.0	193.4	13,141	8,410,209

- Note that in 2010, many parts of the Cardium were perceived to be uneconomic / non-productive. But John Wright knew something that others' didn't. Leveraging his experience in the Bakken, he knew that the technology was available to make the economics work. So he bet big before others could figure it out.
- From a standing start in 2010, LTS's production in the Cardium grew from a few thousand boe / d to ~20k boe / d.



Source, p 19: <https://www.dropbox.com/s/rk8fxgepn1xx5hq/LTS%20May%202014.pdf>

- It is now LTS' biggest business unit by production and most significantly, turned into a positive cash flow generator for the Company in 2013. This is an important point, so let me dig in a little here and demonstrate how this play works:
 - Cardium wells aren't cheap to drill; they cost around \$4MM to drill, complete, equip and tie-in. And like all unconventional oil wells, they decline quickly. So in the early part of a developing play, the operator is running on a very fast treadmill to grow production. New wells must come online at a geometric rate. But as a play matures, decline rates attenuate. And that means less capital is required to make up for the depletion. At some point, the company crosses a threshold where revenues from production are greater than operating costs and

capital expenditures, and it starts to contribute positive free cash flow to the parent. In 2013, LTS crossed that magic threshold in the Cardium. So after three years of operations, the Cardium went from cash hole to cash cow. And now that LTS is over the hump, each year the cash flow profile from the Cardium improves. Why? Because falling decline rates enable LTS to keep production flat while spending significantly less capital and because the Company learns and applies better technology / techniques to increase production.

- The current portfolio of producing Cardium wells will throw off free cash flow for the next 30 – 50 years, giving investors a long-term annuity and direct exposure to rising oil prices and improved recovery rates due to better extraction technology. Non-producing wells (of which LTS has >400 undrilled net locations representing 2/3 of its Cardium inventory) are the “hidden value” and provide even further upside.

Lightstream’s Cardium property is a case study for the entire Company – every one of the Company’s developed properties follows a similar playbook. As you can see, the model works. Investors that understand this have a significant edge over the market.

So where is Lightstream today?

Today, Lightstream operates in 4 main plays, 3 of which are mature and generate positive FCF to the Company (Conventional, Bakken and Cardium units; Swan Hills is still in the investment / growth phase). As you can see below, 2014 is a very important year for LTS as it marks the first year the Company will produce positive FCF overall:

Unit	2013		2014	
	CapEx	FCF after CapEx	CapEx	FCF after CapEx
Conventional	\$50	\$60	\$45	\$40
Bakken	\$240	\$130	\$120	\$160
Cardium	\$320	\$35	\$250	\$90
New Areas (Swan Hills)	\$108	(\$102)	\$135	(\$50)
Total	\$718	\$123	\$550	\$240
- G&A		\$45		\$45
- Interest		\$125		\$125
Total FCF		(\$47)		\$70

Source: Buyside Notes, Company calls

A brief side note on Swan Hills: from zero production two years ago, this play is shaping up to be a core growth area for Lightstream (background on Swan Hills [here](#)). Here’s what the Company said at the First Energy Conference back in March:

It took us a while to crack the code in Swan Hills which is a different animal as it is a carbonate. Typical completions there had been vertical wells with acid squeezes. We are doing a modified completion with a propped acid frack.

It is costing about \$5.3 million per well. The well results have been fantastic and represent our 100% operated wells.

These wells will give us 90,000 to 100,000 barrels of oil in the first year which is way past payout. The beauty of these wells is that they are 90% oil.

That isn't a small outperformance. At six months these wells have produced almost 50% more oil than was expected. At ten months the same thing with 90,000 barrels produced versus an expected 60,000 barrels.

With a payback period of less than 1 year and a recycle ratio of > 2, Swan Hills is looking like an absolute home run for Lightstream (shorter payout time and higher recycle ratio = more efficient use of capital).

At this point, two things should be clear: (1) despite high decline rates, the Lightstream business model works, and (2) the inflection point of FCF has arrived.

Now it's time to address the obvious:

Why is the stock down so much?

There are two reasons:

1. Concerns about the debt level
2. Concerns about the sustainability of the LTS model

Concerns about debt

A company that wants to own and operate its properties (e.g., no JV) has two choices: fund using debt or fund using equity. Being large owners of the Company, management decided a long time ago that it would rather fund using leverage over dilution. For years, management has communicated this preference – it has been foundational to their strategy. So no one should have been shocked to see above average peer-group leverage of

We have made no bones about the fact that **we are willing to run at higher leverage levels** in order to do what we need to do, and some investors don't like that. We have other investors that aren't concerned about our level of leverage.

I am one of those investors that isn't concerned. The reason I'm not concerned is due to the nature of their debt – LTS has financed itself using a cheap credit facility (\$935MM drawn of

\$1.3BN total available at May 2014; 3.5% effective interest; secured; due June 2017, but will be extended from there) and \$900MM of high yield, unsecured bonds (8.625% interest; due Feb 2020). Once you dive into the details, you begin to appreciate that this is permanent capital. And permanent capital with no near-term maturity or call options equates to significantly less funding risk than other companies with similar debt profiles.

The unsecured piece has very few covenants and the credit facility has three – all of which the Company is comfortably in compliance with:

1. 3:1 max secured debt (credit facility debt) to trailing 4Q EBITDA (at 1Q14, it was 1.4:1)
2. 50% secured debt to liabilities + equity (at 1Q14, it was 27.3%)
3. 4:1 max total debt (including any converts and HY notes) to EBITDA (at 1Q14, it was 2.6:1)

Nothing here points to balance sheet risk. Effectively, Lightstream is matching the duration of its liabilities with the cash flow profile of its assets. **This is precisely what every company should do!** The after tax cost of LTS' debt is attractive and it's a strategy I much prefer over the alternative – issuing dilutive equity.

In any event, the Company became frustrated about the public market response to their leverage and announced in November a plan to sell \$600MM of their non-core assets by year end 2015 (\$300MM each year) and to reduce debt levels to 2.5:1 (that is [debt]:[net operating income minus G&A minus interest]; more [here](#)).

Since that announcement, LTS has exceeded their guidance, selling \$351MM worth of assets at \$116k per boe / d and 8x cash flow ([here](#)). On the 4Q14 conference in March, John Wright made three noteworthy comments on asset sales:

We have always said that there are no sacred assets in our portfolio and at the right price any asset is for sale. Through 2013 there was next to no capital and little interest in assets. In 2014 that has reversed and we have plenty of interest in both our non-core and core assets.

Oil prices are better, the Canadian dollar is down and **there is a different tone in the market for the assets.**

[...] **the asset sale market is ROBUST** which is a 180 degree turn from where it was last year. We are confident that we can meet or exceed our disposition guidance.

With a high degree of conviction, I can say that Lightstream will meet their YE15 target on debt reduction (for those interested, [here's the next asset on the block](#)). That, coupled with their assets producing excess cash flow means that **any investors concerned about the Company's capital structure are looking in the wrong direction.**

[Concerns about the sustainability of the LTS model](#)

I'm going to beat a dead horse here because understanding this is critical. Let me start with three key points:

1. I believe we are at the inflection point for Lightstream, where it flips from using debt to finance its growth plus dividend model to being fully self-sustaining through internally generated cash flow.
2. The market doesn't seem to understand the impact of lessening decline rates on this company and its cash flows.
3. Operationally, the company continues to execute the plan it set out years ago. Despite the stock price gyrations, this is a relatively boring "oil manufacturing" company.

Point 1: Cash Flow Inflection Point

The unconventional model dictates that E&Ps spend a large amount of capital early to offset high natural decline rates. This means digging a big capital hole (filled either by debt or equity) until production matures and the decline rates move lower. For investors that want to minimize funding risk, the key is to identify the period when a company becomes self-sustaining; this represents the inflection point in the business.

You can identify this inflection point by tracking a company's cash flows. As you can see below, 2Q13 and 3Q13 were the first cash flow positive quarters in Lightstream's recent history (see column labeled 'FCF'). This is the first sign of a sustainable business (you'll note that 4Q13 and 1Q14 were negative cash flow quarters... this is because 4Q-1Q are the most active drilling quarters for LTS; what's more important in those quarters is to note the Y/Y change in cash flow column on the right... you can see that the company spent \$175MM less in 4Q13 than it did in 4Q12 and \$109MM less in 1Q14 than 1Q13).

Quarter	Total Wells Drilled	Funds Flow	CapEx	FCF	Cash Dividend	Sustainability	Y / Y Δ
1Q10	59	\$189	\$185	\$4	\$45	(\$41)	
2Q10	28	\$155	\$123	\$32	\$45	(\$13)	
3Q10	83	\$141	\$241	(\$100)	\$45	(\$145)	
4Q10	77	\$161	\$263	(\$102)	\$45	(\$147)	
1Q11	77	\$173	\$307	(\$134)	\$45	(\$179)	(\$138)
2Q11	4	\$153	\$113	\$40	\$45	(\$5)	\$8
3Q11	69	\$152	\$271	(\$119)	\$45	(\$164)	(\$19)
4Q11	54	\$231	\$239	(\$8)	\$45	(\$53)	\$94
1Q12	47	\$185	\$206	(\$21)	\$26	(\$47)	\$132
2Q12	9	\$121	\$109	\$12	\$17	(\$5)	\$0
3Q12	82	\$122	\$275	(\$153)	\$17	(\$170)	(\$6)
4Q12	79	\$168	\$369	(\$201)	\$17	(\$218)	(\$165)
1Q13	53	\$177	\$302	(\$125)	\$33	(\$158)	(\$111)
2Q13	7	\$168	\$117	\$51	\$35	\$16	\$21
3Q13	28	\$180	\$145	\$35	\$35	\$0	\$170
4Q13	27	\$146	\$154	(\$8)	\$35	(\$43)	\$175
1Q14	50	\$175	\$199	(\$24)	\$24	(\$49)	\$109

Source: Buyside Notes

What this table shows you is that after years of investment, the business is now at a level where it's *largely* self-sustaining (cash from operations equals cash out for CapEx, interest and dividends). Sometime over the next six quarters (depending on oil prices), the Company will

move from *largely* self-sustaining to *fully* self-sustaining as the decline rate lessens and the Company makes enough cash to cover operating costs, financing costs, CapEx, and a \$0.48 / share dividend.

The numbers tell the story: the inflection point of sustainability has arrived.

Point 2: Attenuating Decline Rates

Every unconventional oil producer faces a similar challenge: initially you have to raise a lot of capital, put holes in the ground and work real hard just to run in place. But as time passes, the decline slows and you can spend less and less to show the same amount of growth. If you can manage to get through the early stages of growth and get the financing you need, you'll have an annuity that will last for three decades or more, accumulating huge amounts of cash flow for the benefit of shareholders.

For Lightstream, the decline rate in 2010 was 40%. The decline rate in 2011 and 2012 was in the mid-30s. For 2013, it was approx. 31%. This year, LTS is forecasting high 20s. This base decline rate will continue to move down 2 – 3% per year each year before bottoming out somewhere in the very high teens or low 20s going forward.

What does that mean? It means instead of spending \$900MM per year to offset decline rates and grow production, the Company now only has to spend \$550MM to get the same amount of production. I believe the impact of this attenuation – from 40% base decline rate to high 20s in 2014 – is not well understood by the market.

Point 3: A Boring Company Operationally, Despite Wild Stock Swings

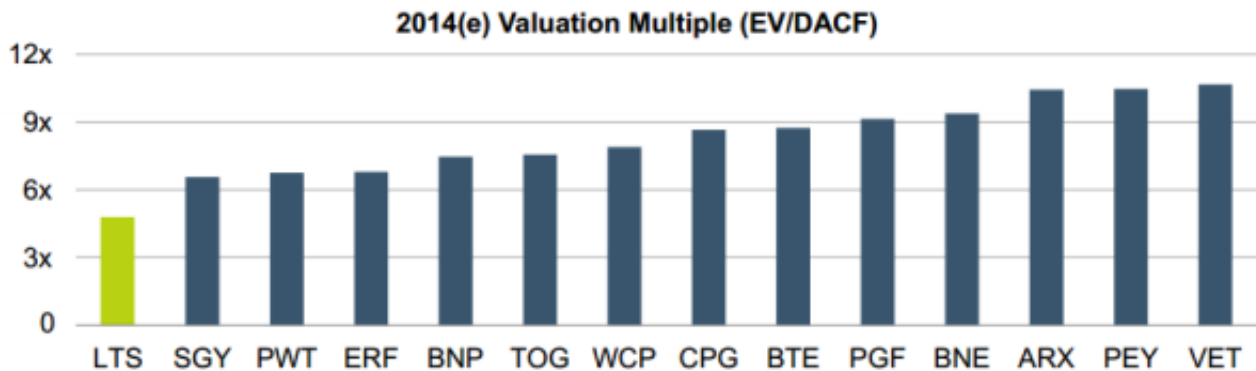
The truth is, John Wright & Co. have a fairly boring “oil manufacturing” business. With a drilling success rate approaching 99%, it's a fairly predictable business from an operating perspective: drill, test, iterate, test some more, apply lessons to the next well, repeat. For the past two years these guys have accomplished everything they set out to accomplish; nothing exciting, just execution of a plan laid out years ago. Yet despite all of management's operational achievements, the market has panned them. And for that, I'd like to thank the market. Because it's not often you get the opportunity to make multiples of your money on top of a 5.6% dividend yield.

Conclusion

I believe the concerns about LTS' business are completely overblown. I'd go so far as to say they are flat out wrong.

In Lightstream, I see a company run by honest management who work every day to maximize per share cash flow to shareholders. This is exactly what every owner / operator should do. And they are true co-owners of the Company – John Wright has the majority of his wealth tied up in Lightstream yet bought even more stock recently, spending over \$6MM to buy shares in the open market.

It's a company with a fantastic asset base, top-tier netbacks, and a termed-out balance sheet that is becoming more rational by the day. And it's trading at the lowest multiple in its peer group:



Source, p 29: <https://www.dropbox.com/s/rk8fxgepn1xx5hq/LTS%20May%202014.pdf>

There's only one question left to answer: what's it really worth?

Let's take a deeper look at the valuation of LTS:

Stock Price	\$8.50
Diluted Shares	202,716,000
Diluted Market Cap	\$1,723,086,000
+ Working Capital Deficit	\$185,054,000
+ Decommissioning / Other Liabilities	\$242,384,000
+ Credit Facility	\$935,000,000
+ HY Notes	\$900,000,000
EV	\$3,985,524,000

Est 2014 Avg Production	44,500 boe / d
Est 2014 Funds Flow	\$650,000,000
2013 DACF	\$785,250,150
2P Reserves, net	173,065,000 boe
NPV of 2P Reserves, discounted at 10%, post tax	\$3,476,819,000

EV / Flowing Barrel	\$89,562
EV / Funds Flow	6.1x
EV / 2013 DACF	5.1x
EV / 2P	\$23.03
EV / NPV	1.1x

Source: Buyside Notes

Every way you slice it, the Company is cheap. To frame the cheapness, consider this:

LTS recently executed 2 non-core asset sales ([here](#)) at 8.0x cash flow and \$116k boe / d. Remember, those are non-core sales multiples. If you put that same valuation on all of LTS (an extremely conservative approach), you'd have a \$14.50 stock, representing 70% upside from here.

Now let's look at it another way. Assume LTS sells its entire Bakken unit. It could easily fetch \$120k per flowing barrel (likely a low assumption in this market). At \$120 boe / d, Lightstream would net over \$2BN, leaving the Company with no debt and still producing over 27,000 boe / d. What is that worth? Conservatively, I think \$20 / share, a multi-bagger from here.

The problem with flowing barrel calculations is that they don't ascribe any value to the undeveloped land – that's 70% of LTS' very valuable land that carries no value! As I noted in Part 2 ([here](#)), the non-earning, unflowing resources are what make an unconventional oil company cheap. So let's look at this from a strategic acquirer's perspective: a strategic buyer is generally willing to pay 90% - 100% of the independent engineering value of an asset plus some percentage of the upside from undeveloped land. The math is:

(100% of independent engineering value) + [X% x (Number of drilling Locations) x (NPV per location)]

The NPV of 2P Reserves after tax discounted at 10% (AKA "engineering value") is \$3.5BN (you can see it on page 19 [here](#)).

Next is to figure out the right hand side of the equation. From past presentations, we know the NPV10% per well. They are:

Bakken: \$5.1MM

Cardium: \$4.8MM

Conventional: \$3.0MM

Swan Hills / Other: Undisclosed, so ignore for now

If you multiply the number of drilling locations in each play times the NPV10%, you get a value of over \$8BN, ignoring Swan Hills – their high capital efficiency growth area.

The only thing left is to take a guess at X. What percentage of undeveloped land would a strategic pay for? Let's say it's 30%.

So the math is:

$\$3.5\text{BN} + (30\% \times \$8\text{BN}) = \$5.9\text{BN}$, or \$18 per share, not including Swan Hills or the Company's undeveloped land positions in emerging plays such as Nordegg, Montney, Duvernay, and Horn River.

There are two issues I have with this math: (1) the oil price assumptions underlying the NPV are too low (page 21 [here](#)), and (2) there is no benefit assumed from already-proven enhanced oil recovery methods.

In my view, LTS is worth \$20 today, minimum. If oil prices remain over \$100, I think this stock is worth \$30 / share. Enhanced oil recovery techniques should provide another 25% - 50% upside from there (LTS thinks the ultimate recovery in the Bakken using EOR will be 25%, which is multiples higher than what they are currently assuming; see page 48 [here](#)).

To me, the conclusion is as clear as day: Lightstream is a multi-bagger in the making. Size your investment accordingly.