



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

April 10, 2009

## Long-Life, Clean Oil Sands

### Summary and Recommendation

Investors willing to act on a longer time horizon than the stock market and willing to take an objective view on environmental consequences might look again at buy-recommended **Canadian Oil Sands Trust (COSWF)**. A favorite income stock in the last cycle, now at US\$23 a unit, we expect COSWF to exceed its old high of US\$56 a unit, as sound stocks usually do, eventually. Of course, we are quick to point out that the stock might not do so well if everything falls apart in the global economy. “That has already happened!” an astute client was quick to retort recently when we added our qualifier. Taking the same constructive approach, we update our discounted cash flow model that supports our current estimate of Net Present Value (NPV) of \$US 42 a unit. Naturally, the estimate is sensitive to oil price, currency rates, natural gas price and expected rate of return among many factors, some of which we discuss. At the same time we reexamine our conclusion that high-quality synthetic crude oil is a more attractive fuel environmentally on a complete basis than perhaps half of the world’s energy supply.

### Long-Life Resources Keep Giving

The most visible investment advantage of oil sands is that once the resource is outlined and the infrastructure is up and running, production can continue for a long time at a constant rate with minimal upkeep and at moderate operating cost. The initial capital cost for an oil sands mine and upgrader is high. Facilities are necessarily large to take advantage of economies of scale. The Syncrude venture (36.7% COSWF) at capacity of 350 thousand barrels daily is the energy equivalent of 9 giant 1000 megawatt nuclear power, or coal plants. An important distinction for COSWF is that the investment in current capacity has been made and the valuation challenge is to determine what the product of that investment might be worth.

The discounted cash flow technique is standard analysis. COSWF discloses in its Annual Information Form filed with the regulators in Canada the results of calculations by its independent engineer. We translate those results to NPV of about US\$38 a unit assuming a 10% a year unlevered return, or US\$75 a unit assuming a return of 5% a year. The calculation depends on many variables, some of which are disclosed explicitly. Rather than interpreting further the engineer’s calculation we offer our own simple model (see table, next page, Present Value of Future Cash Flow). If you want to skip the numbers, go to the next section, Clean Oil Sands on page 3.



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

April 10, 2009

## Canadian Oil Sands Trust Present Value of Future Cash Flow

Nymex Crude (US\$/b):  NPV (US\$/unit)  Discount rate (%/yr):   
 Canadian Dollar/\$US  Nymex Nat Gas (\$/mmbtu)

Year	Volume		Price (US\$/bbl)	Revenue (C\$mm)	Prod Cost (C\$/bbl)	Natural Gas (C\$/bbl)	Other & Maint. NonOper (C\$/bbl)	Capital (C\$/bbl)	Royalty (C\$mm)	Cash Flow (C\$mm)	Disc Factor	Present Value (C\$mm)
	Syncrude (mmbd)	Trust (mmbd)										
Total 2010 through 2054; years ending on 3/31												
	2105			179050					22411	77814	0.30	23700
2010	314	42.1	54.60	2557	25.15	4.35	2.00	6.00	139	837	0.97	809
2011	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.90	1581
2012	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.84	1477
2013	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.79	1381
2014	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.74	1290
2015	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.69	1206
2016	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.64	1127
2017	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.60	1053
2018	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.56	984
2019	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.53	920
2020	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.49	860
2021	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.46	804
2022	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.43	751
2023	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.40	702
2024	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.37	656
2025	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.35	613
2026	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.33	573
2027	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.31	535
2028	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.29	500
2029	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.27	468
2030	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.25	437
2031	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.23	408
2032	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.22	382
2033	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.20	357
2034	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.19	333
2035	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.18	312
2036	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.17	291
2037	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.16	272
2038	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.15	254
2039	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.14	238
2040	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.13	222
2041	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.12	208
2042	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.11	194
2043	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.10	181
2044	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.10	169
2045	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.09	158
2046	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.08	148
2047	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.08	138
2048	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.07	129
2049	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.07	121
2050	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.06	113
2051	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.06	106
2052	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.06	99
2053	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.05	92
2054	350	46.9	77.00	4011	20.00	9.44	2.00	6.00	506	1749	0.05	86



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

April 10, 2009

Understandably, changing the variables will change the outcome. Here are some results from changing the variables in the cells bordered by a box outline:

- Increase oil price by US\$5 a barrel and NPV increases \$5 a unit.
- Increase the Canadian dollar by ten cents and NPV decreases by \$3.
- Reduce natural gas price by US\$5 a million btu and NPV increases \$4.
- Increase discount rate by 1% and NPV decreases by \$5.

The first row in the projections is what we are currently expecting for the next twelve months for revenue, production cost and natural gas cost. After that we keep everything constant at a level intended to approximate a steady state equivalent. Since there is no adjustment for inflation, the discount rate is also a return before inflation.

The calculations ignore corporate income tax for two reasons. First, the analysis is from the point of view of a buyer or investor in the properties whose taxable position is unknown. Second, Canadian corporations do not usually pay much cash corporate tax on oil and gas operations.

Having visited with management twice last month we are reasonably current on further details. There are also rather complete relevant discussions in the Annual Report and Annual Information Form just released.

## **Clean Oil Sands**

Visualize world energy supply as one-third coal, one-third oil and one-third natural gas, nuclear and hydro. Along the clean spectrum, coal is at one end, oil in the middle and natural gas at the other end. Oil sands, part of oil supply, is between coal and conventional oil on the clean spectrum. Fudge-like oil sands are not solid, like coal, or fluid, like oil. The physical consistency coincides with inherent characteristics that make oil sands cleaner than one-third of world energy. Local resource management practices can also make a difference. Because of Canada's high environmental standards, we rate Canadian oil sands as cleaner than half of world energy supply.

We believe in strict environmental standards. From a selfish point of view, the stricter the better. But we also have to be fair. Developing countries have a different tradeoff between clean and economic progress. We can't in good conscience shut down all the world's coal plants for environmental reasons. As long as coal is a serious polluter in China and the U.S. among other countries, we need to be balanced in imposing restrictions on cleaner fuels such as synthetic crude oil and refined oil products.



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

April 10, 2009

The U.S. generates half of its electricity from coal. Clean coal is the likely answer, but it would come slowly because it is expensive. Economies of scale can help.

During the late 1960s when we were studying the outlook for energy in a rising price and increasingly environmentally conscious economy, we visualized giant coal-based industrial facilities that converted some coal to liquid, some to natural gas, removed pollutants at the molecular level and used the waste heat for electricity and industrial processes. We were not thinking about carbon dioxide at that time, but it could be handled too, for a price. We were also optimistic about the future for tar sands as we knew the resource then.

In the ensuing forty years we see that the coal facilities were built-----in South Africa. Otherwise clean coal has been a bust in the U.S. with one gasification facility in North Dakota. At the same time, tar sands, now oil sands, has been a great economic success as the costs have been reduced to competitive levels. In other words, clean coal is still a dream, but clean oil sands have become a reality. If clean coal is in our future, we'll increasingly appreciate the superior economics of clean oil sands.

## **Oily Demise for 1600 Ducks**

Despite the relative cleanliness of oil sands, accidents happen. An unfortunate accident in February claimed the lives of migratory birds that landed on a tailings pond at Syncrude. Water used to separate bitumen, the raw hydrocarbon material, from sand is then recycled through settling basins where the sand separates. Though the surface of the ponds may be safe enough, it becomes deadly when a duck dives under water into an oily mixture and drowns. Normally, noise generating cannons keeps the birds at a safe distance and we are not aware of any such serious duck kills in the past thirty years. The accident this winter occurred when waterfowl migrating earlier than expected were drawn to the Syncrude ponds while surrounding bodies of water were still frozen. Apparently the noise cannons had been disabled by a snowstorm and Syncrude's migration tracking system was inaccurate. Announcing changes to its waterfowl protection program, Syncrude chief executive, Tom Katinas, acknowledges, "Our stakeholders expect the very best from us when it comes to protection of wildlife." (see International Oil and Gas Newspaper, *Upstream*, 3 April 2009). A research effort is also underway to find a means for reducing the size of settling basins. One consideration is to use spinning centrifuges to speed the separation of sand and oil residue from water to be recycled.

Kurt H. Wulff, CFA



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

April 10, 2009

Table 1										
McDep Income and Small Cap Energy Portfolio										
Debt, Business Segments and Income Yield										
						Present Value				
			Price			by Segment (%)				
	Symbol/Rating		(US\$/sh)	EV/	Enterprise	NAmer.		Dist.	Dist.	
	B = Buy		9-Apr	Market	Value	Natural	Oil	NTM	Yield	McDep
	H = Hold		2009	Cap	(\$mm)	Gas	Prod'n	(\$/un)	(%)	Ratio
<b>Canadian Income Trusts (US\$)</b>										
Canadian Oil Sands Trust	COSWF	B	23.27	1.10	12,300		100	0.49	2.1	0.58
Penn West Energy Trust	PWE	H	10.60	1.82	7,900	29	71	1.46	13.8	0.57
Pengrowth Energy Trust	PGH		6.18	2.03	3,200	40	60	0.98	15.8	0.56
Enerplus Resources Fund	ERF		18.56	1.25	3,800	46	54	1.76	9.5	0.48
<i>Total or Median</i>					27,200					
<b>Small Cap Independent Producers</b>										
Encore Acquisition Company	EAC	H	27.37	1.79	2,570	26	74	-	-	0.75
Berry Petroleum Company	BRY	H	14.46	2.69	1,750	36	64	0.30	2.1	0.60
Birchcliff Energy Ltd. (US\$)	BIR.TO		5.14	1.35	850	72	28	-	-	0.59
Cimarex Energy Company	XEC	B	23.70	1.44	2,830	66	34	0.24	1.0	0.52
<i>Total or Median</i>					8,000					
<b>U.S. Royalty Trusts</b>										
Sabine Royalty Trust	SBR		38.59	1.00	560	54	46	2.64	6.8	0.82
Permian Basin RT	PBT		9.82	1.00	460	33	67	0.92	9.4	0.52
Cross Timbers Royalty Trust	CRT		19.10	1.00	120	76	24	1.96	10.3	0.46
San Juan Basin Royalty Trust	SJT	H	15.24	1.00	710	100	-	1.03	6.8	0.45
Mesa Royalty Trust	MTR		27.98	1.00	50	75	25	2.81	10.0	0.42
Hugoton Royalty Trust	HGT	B	10.40	1.00	420	91	9	0.89	8.5	0.37
<i>Total or Median</i>					2,320					
<b>U.S. Master Limited Partnerships (MLPs)</b>										
Linn Energy, LLC	LINE		15.25	2.00	3,480	48	52	2.52	16.5	1.04
Encore Energy Partners, L.P. (3)	ENP		15.04	1.25	200	34	66	2.00	13.3	0.91
Dorchester Minerals, L.P.	DMLP		17.27	1.00	490	68	32	1.38	8.0	0.72
<i>Total or Median</i>					4,170					
<b>Composite (excl COSWF)</b>										
<i>Enterprise Value Weighting</i>					29,400	44	56			0.59
<i>Equal Weighting</i>						56	44			0.61
<i>Equal Weighted Buys</i>						69	31			0.45
* Percentages in Symbol column refer to current market Enterprise Value weightings; Rating column, equal weightings.										
* Percentages in Price column refer to equal weighted buys.										



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

April 10, 2009

Table 2								
Oil and Gas Income and Small Cap Stocks								
Net Present Value and McDep Ratio								
			Price (\$/sh)		Market Cap (\$mm)	Net Present Value (\$/un)	Debt/ Present Value	McDep Ratio
	Symbol/ Rating		9-Apr 2009	Shares (mm)				
<b>Canadian Income Trusts (US\$)</b>								
Canadian Oil Sands Trust	COSWF	B	23.27	482.0	11,220	42.00	0.05	0.58
Penn West Energy Trust	PWE	H	10.60	410.0	4,350	25.00	0.26	0.57
Pengrowth Energy Trust	PGH		6.18	255.5	1,580	16.00	0.28	0.56
Enerplus Resources Fund	ERF		18.56	165.3	3,070	44.00	0.10	0.48
<i>Total or Median</i>					20,200		0.18	0.57
<b>Small Cap Independent Producers</b>								
Encore Acquisition Company	EAC	H	27.37	52.6	1,440	44.00	0.33	0.75
Berry Petroleum Company	BRY	H	14.46	45.2	650	40.00	0.38	0.60
Birchcliff Energy Ltd. (US\$)	BIR.TO		5.14	122.0	630	10.00	0.15	0.59
Cimarex Energy Company	XEC	B	23.70	83.2	1,970	55.00	0.16	0.52
<i>Total or Median</i>					4,690		0.24	0.60
<b>U.S. Royalty Trusts</b>								
Sabine Royalty Trust	SBR		38.59	14.6	560	47.00	-	0.82
Permian Basin RT	PBT		9.82	46.6	460	19.00	-	0.52
Cross Timbers Royalty Trust	CRT		19.10	6.0	120	42.00	-	0.46
San Juan Basin Royalty Trust	SJT	H	15.24	46.6	710	34.00	-	0.45
Mesa RoyaltyTrust	MTR		27.98	1.9	50	67.00	-	0.42
Hugoton RoyaltyTrust	HGT	B	10.40	40.0	420	28.00	-	0.37
<i>Total or Median</i>					2,320			0.45
<b>U.S. Master Limited Partnerships (MLPs)</b>								
Linn Energy, LLC	LINE		15.25	114.0	1,740	14.00	0.52	1.04
Encore Energy Partners, L.P. (32%)	ENP		15.04	10.6	160	17.00	0.18	0.91
Dorchester Minerals, L.P.	DMLP		17.27	28.2	490	24.00	-	0.72
<i>Total or Median</i>					2,390		0.18	0.91
B = Buy, H = Hold								
McDep Ratio = Market cap and Debt to present value of oil and gas and other businesses								
Present Value presumes long-term prices of \$75 a barrel for oil and \$10 a million btu for natural gas.								



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

April 10, 2009

Table 3								
Oil and Gas Income and Small Cap Stocks								
Value Multiples - Rank by EV/Ebitda								
			Price			Adjstd		
			(\$/sh)	Revenue	Dist/	Resrvs/	PV/	EV/
	Symbol/		9-Apr	Royalty	Equity	Prod	Ebitda	Ebitda
	Rating		2009	(%)	Ebitda	NTM	NTM	NTM
<b>Canadian Income Trusts (US\$)</b>								
Canadian Oil Sands Trust	COSWF	B	23.27		0.22	23.2	18.7	10.8
Pengrowth Energy Trust	PGH		6.18		0.87	7.8	14.3	8.0
Penn West Energy Trust	PWE	H	10.60		0.65	8.2	11.1	6.4
Enerplus Resources Fund	ERF		18.56		0.49	8.9	12.3	5.9
	<i>Median</i>					8.5	13.3	7.2
<b>Small Cap Independent Producers</b>								
Birchcliff Energy Ltd. (US\$)	BIR.TO		5.14		-	9.5	20.5	12.1
Encore Acquisition Company	EAC	H	27.37		-	12.0	11.5	8.6
Berry Petroleum Company	BRY	H	14.46		-	11.8	14.0	8.4
Cimarex Energy Company	XEC	B	23.70		-	7.3	9.4	4.9
	<i>Median</i>					10.7	12.8	8.5
<b>U.S. Royalty Trusts</b>								
Sabine Royalty Trust	SBR		38.59	100	1.00	9.6	17.8	14.6
San Juan Basin Royalty Trust	SJT	H	15.24		0.79	9.2	25.9	11.6
Permian Basin RT	PBT		9.82	32	0.87	10.4	17.8	9.2
Cross Timbers Royalty Trust	CRT		19.10	84	0.93	12.4	20.0	9.1
Mesa Royalty Trust	MTR		27.98		0.87	13.6	20.8	8.7
Hugoton Royalty Trust	HGT	B	10.40		0.61	12.1	19.4	7.2
	<i>Median</i>					11.3	19.7	9.2
<b>U.S. Master Limited Partnerships (MLPs)</b>								
Linn Energy, LLC	LINE		15.25		4.37	17.7	24.3	25.3
Encore Energy Partners, L.P.	ENP		15.04		1.61	10.9	13.7	12.4
Dorchester Minerals, L.P.	DMLP		17.27	64	0.95	8.2	16.4	11.8
	<i>Median</i>					10.9	16.4	12.4
EV = Enterprise Value = Market Cap and Debt; Ebitda = Earnings before interest, tax, depreciation and amortization; NTM = Next Twelve Months Ended March 31, 2010; P/E = Stock Price to Earnings; PV = Present Value of oil and gas and other businesses								



# Income and Small Cap Weekly

Analysis of Oil & Gas Stocks

April 10, 2009

**Disclaimer:** This analysis was prepared by Kurt Wulff, Manager of McDep LLC. The firm used sources and data believed to be reliable, but makes no representation as to their accuracy or completeness. This analysis is intended for informational purposes and is not a solicitation to buy or sell a security. Past performance is no guarantee of future results.

McDep does no investment banking business. McDep is not paid by covered companies including revenue from advertising, trading, consulting, subscriptions or research service. McDep shall not own more than 1% of outstanding stock in a covered company. No one at McDep is on the Board of Directors at a covered company nor is anyone at a covered company on the Board of Directors of McDep.

McDep or its employees may take positions in stocks the firm covers for research purposes. No trades in a subject stock shall be made within a week before or after a change in recommendation.

**Certification:** I, Kurt H. Wulff, certify that the views expressed in this research analysis accurately reflect my personal views about the subject securities and issuers. No part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research analysis.

**Research Methodology/Ratings Description:** McDep LLC is an independent research originator focused on oil and gas stocks exclusively. The firm applies the thirty years of experience of its analyst to estimate a present value of the oil and gas resources and other businesses of covered companies. That value is compared with a company's stock market capitalization and debt. Stocks with low market cap and debt relative to present value tend to outperform stocks with high market cap and debt relative to present value. Buy recommendations are expected to deliver a total return better than 7% per year above inflation. Hold recommendations assume the attributes of the underlying business are reflected in the current price of the stock. Sell recommendations are expected to deliver a total return less than inflation.