Seeking Alpha α

Big Profits And Big Oil In The Great White North

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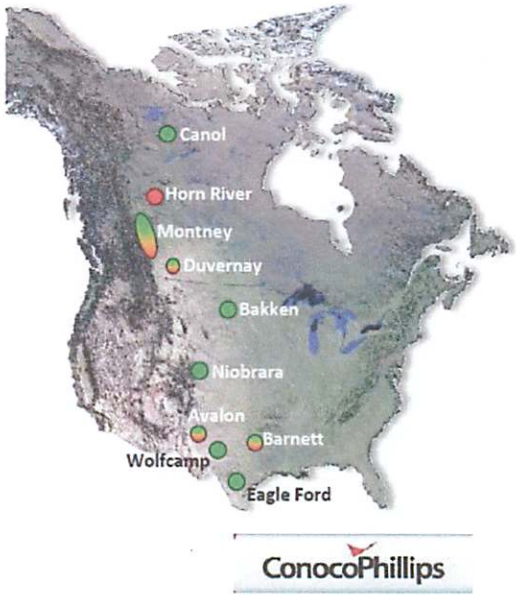
| includes: COP, ENB, HUSKF.PK, IMO, MGMCF.PK, PRMRF.PK, RDS.A, XOM

Disclosure: I am long MGMCF.PK. **(More...)**

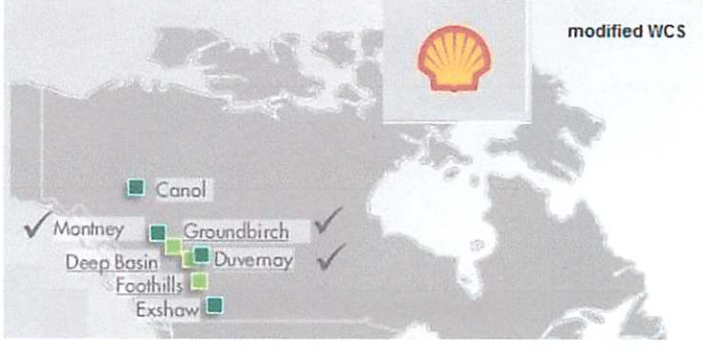
The Canol oil shale offers a compelling investment opportunity for risk tolerant investors as its potential has not been reflected in company share prices. This play potentially exceeds the Bakken and Eagle Ford, but is unusual in that it is controlled by the major oil companies with only one small company involved. Very little information has been released to base an evaluation upon as companies were competing to accumulate land positions. That is about to change, as the play is now in the de-risking stage of development with five wells presently being drilled and/or tested. An introduction to the Canol is available in a previous article.

Map 1



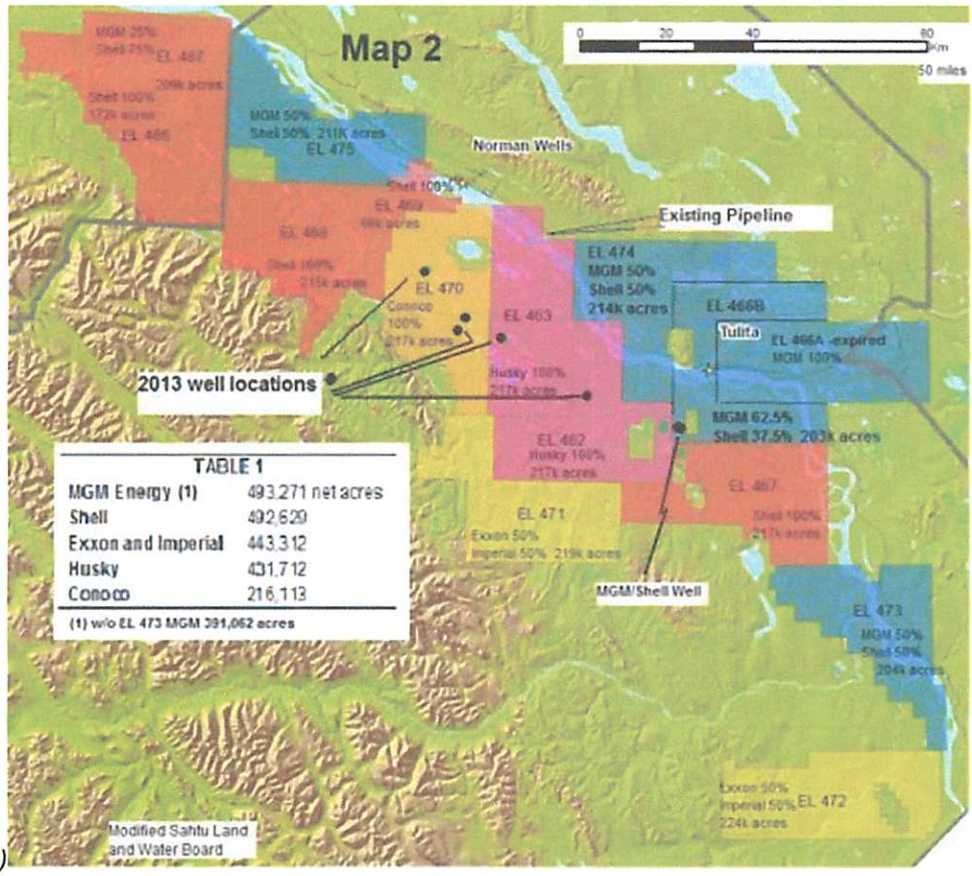
Conoco (COP) is typical of the super majors involved in the play. As Map 1 shows, Conoco has a large portfolio of shale resource plays which are bracketed on the south by the Eagle Ford and on the north by the Canol. The Canol is near the Arctic Circle where temperatures can dip to minus 45^0 F, diesel gels in fuel tanks and exposed flesh freezes in minutes. The reason they operate in this beautiful but difficult country is that the Canol has the potential to add Eagle Ford like reserves.

Another major with large interests in the Canol is Shell (RDS.A). By partnering with the small company MGM Energy (MGMCF.PK) and through land purchases, Shell is now the largest player in the Canol. Russ Ford, Shell's executive vice president for onshore operations in the Americas, explains the appeal of shale oil plays: *"The attraction of shale for big, deep-pocketed oil companies is that if you want to throw a lot of capital at it, you can achieve a lot of growth in a short amount of time.... Development in the new properties...will help the company meet its ambitious goal of producing 250,000 barrels of oil equivalent a day world-wide from oil-rich shale by 2017."* WSJ 09/13/2012



This is an ambitious goal as Shell will have to increase shale oil production by five-fold within four years from the 50,000 Bopd that it produced at the end of 2012.

Extensive Land Holdings



(click to enlarge)

The Canol shale is located under the Central Mackenzie River Valley between the Mackenzie and Franklin Mountains in northern Canada. The uplift of these mountain ranges is an important part of the geology of the Canol as it contributed to the natural fracturing of the shale which will greatly improve the shale's ability to flow oil. There are two small communities in the valley which will serve as supply centers: Norman Wells and Tulita. An existing 50,000 barrels of oil per day (BOPD) pipeline is located on the east side of the river which companies are already in discussions with Enbridge (ENB) to expand.

Map 2 shows the land holding of the players in the Central Mackenzie Valley. In 2011 and 2012 Conoco, Shell, Exxon (XOM), Imperial Oil (IMO), Husky Energy (HUSKF.PK) and MGM Energy committed $626 million to lease almost 2.1 million acres. (Refer to Table 1 contained within Map 2 for details on individual holdings.) MGM Energy has extensive holdings in the valley with 391,062 acres prospective for the Canol. Conoco has the smallest land holdings of all the companies at about 216,000 acres; however, this is still significant to them. Their holdings in the Canol are about the same size as their 228,000 acres in the Eagle Ford, which produced almost 89,000 BOED in 4th quarter of 2012 and are projected to produce 135,000 BOED by 2016.

Multi-Zone Potential

The picture to the right shows the Canol shale as it breaks through to the surface (outcrops). While the Canol is the primary exploration target, the Bluefish is a significant secondary target and is located 400 feet deeper. The Canol averages 230 feet thick while the Bluefish averages almost 70 feet. Both zones have unusually high porosity and Total Organic Content (TOC) which are positive factors for oil shale production. They also have unusually high silica content and low clay content which makes them very brittle which is positive for hydraulic fracturing. Table 2 compares the Canol and Bluefish to the Eagle Ford. *(click to enlarge)*

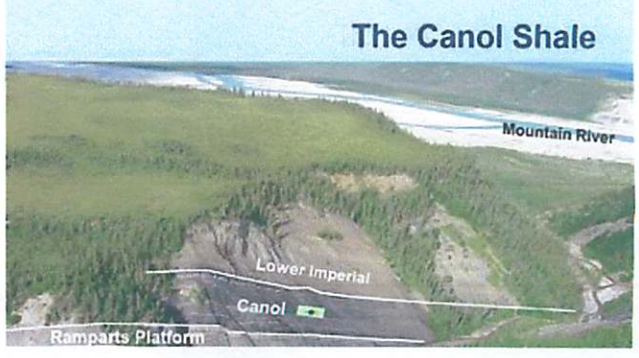


TABLE 2

Area/ Formation	CMV Canol[1,4]	CMV Bluefish[1,4]	Eagle Ford[2]	Canol vs. Eagle Ford
Avg Depth (m)	1000 to 2,000 avg 5,000ft	1100 to 2,200 avg 5,400 ft	1,500 to 3,700 avg 9,000ft	poorer- less pressure
Gross Thickness (m)	30 to 170; avg 70 (230 ft)	10 to 25; avg 20 (66 ft)	30 to 100 avg 65 (212 ft)	better
Phi (%)	Phi_T 8 to 18; avg 12	Phi_T 8 to 12; avg 11	6 to 14 avg 10	better
TOC (%)	6 to 24; avg 8	4 to 10; avg 6	2 to 6 avg 4	better
Kerogen Maturity (Ro %)	0.8 to 0.95; avg 0.9 OIL PRONE	0.85 to 1.1; avg 0.95 OIL PRONE	1.0 to 1.6 OIL, WET GAS, DRY GAS	more oil less gas
Quartz Content (%)	60 to 90	56 to 80	5 to 20	better
Clay Content (%)	<5	5 to 10	15 to 25	better
Brittleness (expected)	(Very High)	(Very High)	Moderate	better

Notes: Values for Canol and Bluefish from MGM ELs. 1 after GSC, NWTGO and MGM; 2 after Core Labs and Peters and Co 4 After EOG Report on Canol and Bluefish MGM Energy Modified

It is estimated that MGM has an undiscovered potential of 8.3 billion barrels of oil equivalent ((BOE)) net to MGM. This is the most likely estimate (P50) for oil, gas and NG's in place and is based upon numbers published by MGM and modified as noted.[1] This estimate does not include potential Bluefish resources.

TABLE 3

	Net to MGM	
Oil OOIP[2]	6.3	Billion Barrels
Associated Gas OGIP[2]	6.3	Tcf
NGL in place	0.9	Billion Barrels

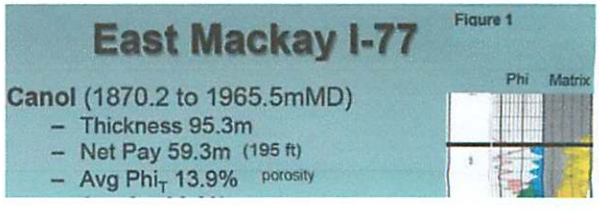
8.3 Billion Barrels Oil Equivalent in Place. Gas converted to oil @6 Mcf:1bbl

Exploration Activity is Ramping Up

The winter drilling season extends from January to mid-March. Conoco is presently drilling and coring two wells and setting surface casing on a third. They will follow up with two horizontal wells. Husky is testing two wells that it drilled last year. It also has received approval to construct 25 miles of all-weather road, an airstrip and a 100 person camp. This will allow Husky to drill and test year round. They are also planning to drill horizontal wells this year.

MGM and Shell are presently drilling East Mackay I-78 and should be finished testing by mid-March. Shell has agreed to pay 100% of the well costs in order to earn a 37.5% interest in this well. This is a relatively low risk exploration well as there are two old wells (I-77 and I-55) nearby. These wells were drilled and abandoned before the industry became aware that oil could be produced from shale.

The MGM/Shell well is located about 1.5 miles to the north of the old well I-77. The logs for this well are shown on the right; the green shading is oil. This log shows that there is 195 feet of oil in the Canol and 37 feet in the Bluefish for a combined oil column of 232 feet. This is about as high as 25 storey building.



The amount of oil existing in the rock can be calculated in a

similar manner to Table 2.[3] The Canol in the I-77 well contains about 187 MMBOE (million barrels of oil equivalent) per square mile while the Bluefish contains 21 MMBOE per square mile for a total resource in place of 208 MMBOE per square mile. This is over six times the Eagle Ford oil density of 32 MMBOE per square mile reported by EOG Resources(EOG).[4] It is this unusually high resource density and large acreage of the Canol that is so attractive to the large companies.

Turning Oil into Share Value

Unlike conventional reservoirs, the big risk factor in shale is not the amount of oil in place or finding the oil deposit as shale is the most common sedimentary rock in the world. Rather risk is associated with how much of this oil can be recovered and whether it can be recovered economically; these are referred to as "technically and economically recoverable reserves" respectively.

Factors Affecting Technically Recoverable Reserves

As shown in Figure 3 above, it is estimated that MGM lands contain 8.3 billion BOE. This is the amount of oil that exists in the rock and is referred to as the Original Oil in Place (OOIP). This winter's well testing will help clarify what percent of this oil can be extracted from the shale (recovery factor). However, to get ahead of the crowd, we can compare the Canol to the Eagle Ford and attempt to make an educated guess based upon EOG Resources reported recovery factor of 6%. As Table 4 shows, the Canol compares favorably to the Eagle Ford.

TABLE 4
Canol vs. Eagle Ford

Higher TOC and porosities correlate to higher permeabilities and flows rates	positive
Wells are shallower and hence have lower reservoir pressures.	negative
Shale is more brittle which allows for better hydraulic fracturing	positive
Shale is naturally fractured by Mother Nature during mountain building	Very positive

Factors Affecting Economically Recoverable Reserves

The capital costs and operating costs in the north are high. However, there are advantages which will help to offset this.

1. Royalties are 1% for the first 18 months escalating to 5% in 6 years. This compares favorably to Alberta, Texas and North Dakota where royalties are about 20%.
2. Companies do not pay for the land, rather they bid to do a certain dollar amount of work such as seismic and drilling. This greatly reduces the full cycle costs of development. As a basis of comparison, in the Eagle Ford land costs are about $1.5 million per well.
3. Wells are shallower than other shale oil plays which reduces capital costs.
4. The Canol has resources in place per well which are much larger than those contained in the Bakken or Eagle Ford.

A Compelling Investment Story

Few have heard of the Canol and hence its potential value is not reflected in stock prices. While the Canol is material to the large companies, MGM Energy is the most leveraged to the play. A reasoned argument can be made that this is a high impact investment opportunity for risk tolerant investors who seek a many fold return on their investment.

There is empirical evidence supporting the thesis that the Canol contains a large amount of oil and may have reserves exceeding the Bakken and Eagle Ford. The super majors have provided some independent confirmation by committing almost $630 million to acquire their large Canol land positions. Shell has also provided confirmation that the MGM lands have oil potential when they bought into all of their lands. Further, Shell agreed to fund 100% of the costs of the well currently being drilled before exploring its 100% owned lands.

MGM is a mouse playing among the elephants. It is also a deep value stock as it is heavily out of favor. Investors have lost heavily on the stock as it was issued at $6.50 in 2007 and had a 52 week low of $0.13. When the company was formed in 2007, the Mackenzie Valley Gas Pipeline looked like it would be built and the company was formed to exploit the very large gas reserves in the Mackenzie Delta. The management did a stellar job and made some very significant gas discoveries amassing reserves of about 820 Bcf. When natural gas prices fell, the Mackenzie Valley Pipeline became a pipe dream. Since that time, the company has been re-invented, but investors are an unforgiving lot.

MGM's principal shareholder and CEO is Clay Riddell who owns 32% of the company. Mr. Riddell has a great track record of building oil companies through the drill bit; Trilogy (TETZF.PK) and Paramount (PRMRF.PK). Clay is a geologist who has 50 years of experience in the oil industry. He has assembled a committed management team skilled in deal making and frontier exploration. Henry Sykes is the President and was formerly the president of Conoco Phillips Canada. Rick Miller is the CFO and John Hogg is the VP Exploration. Both are seasoned oil men with many years of experience exploring in Canada's North. In December 2012, the management and directors personally invested about $5.9 million in the company by fully participating in a $11.8 million rights offer. The company now has sufficient liquidity to fund its operations until the end of 2014. At that point in time, the Canol will have gone from the de-risking to the development stage.

The drilling that is being undertaken this winter will significantly de-risk the Canol oil shale. The large companies are already planning year round operations based upon last year's drilling results. This will dramatically increase the amount of information available and help investors better align the large potential intrinsic value of the Canol to company share prices.

Additional Investment Information

Investors should be advised that while most of the companies mentioned in this article are well capitalized, MGM Energy is a thinly traded micro-cap affected by systematic and unsystematic risk factors. It tends to experience volatile price movements and is high risk and speculative in nature. MGM Energy has little institutional coverage and hence information can be difficult to find. While every effort has been made as to the accuracy of the information presented, readers are advised to do their own due diligence. This article is written for educational purposes only and is not in any way to be construed as investment advice.

Footnotes

1 The MGM estimate was done by a third party engineering firm (Sproule). It did not include reserves for the newly acquired EL 487 and didn't account for the reduced interest in EL 466B due to the Shell farm-out.

2 OOIP-Original Oil in Place, OGIP-Original Gas in Place is based upon a GOR of 1,000 Scf/Bbl. NGLs in place assume a yield of 140 Bbl/MMSCF.

3 Amount of Canol oil per square mile = thickness x porosity x (1- water saturation)=195 feet x 0.139 x 0.791 x one square mile (27.9 million sq.ft.) = 597.7 million cubic feet or 142 million barrels of oil per square mile, adding in the associated gas and NGL's results in 187 million BOE per square mile.

4 EOG are reporting 1.6 billion barrels equivalent (BOED) of potential reserves on their 644,000 net acres in the Eagle Ford. This works out to a resource density of 32 MMBOE per square mile assuming a formation volume factor of 1.2 and a 6% recovery factor.