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## ASX Announcement

### Market Update

#### MARCELLUS & UTICA SHALES

#### POSSIBLE AND PROSPECTIVE OIL & GAS RESERVES

Over recent weeks the Company has been approached by a number of shareholders seeking clarification on Empire Energy's landing holding and possible reserves and prospective resources in New York and Pennsylvania States ("Region").

At present there is a hydraulic fracturing ("fracking") moratorium in New York State. Several commentators have suggested this may be lifted in the short term. The rationale for lifting the moratorium being mainly related to the significant jobs and income (through severance taxes) that the shale oil and gas industry would bring to the State. The Company cannot make any further comment on the political position in New York State.

#### Current Reserves and Resources

In 2010 the Company had independent consultants and engineers review the Reserve and Resource Potential of all the Company's resources in the Region, in summary the prospective shales resources were:

FORMATION	Type	Reserve Type***	P50 BCF	ML* MMBbl	Acres calculated	Actual Acres (Gross)	Actual Acres (Net)
Marcellus Shale	Gas	Poss/Res	49.5		20,006	230,000	186,240
Marcellus Shale	Oil	Poss/Res		70.3	100,422	230,000	186,240
Utica Shale	Gas	Res	925.7		18,571	224,759	175,788
Theresa**	Gas	Poss/Res	75.6		16,691		
Trenton**	Gas	Poss/Res	3.7		1,116		
<b>TOTAL</b>			<b>1,054.5</b>	<b>70.3</b>			

\*Most likely on acreage specified at a 3% recovery factor

\*\* The Theresa and Trenton Black River formations are not shales, but have been included due to prospectively. At current gas prices the Company is focusing on oil development programs.

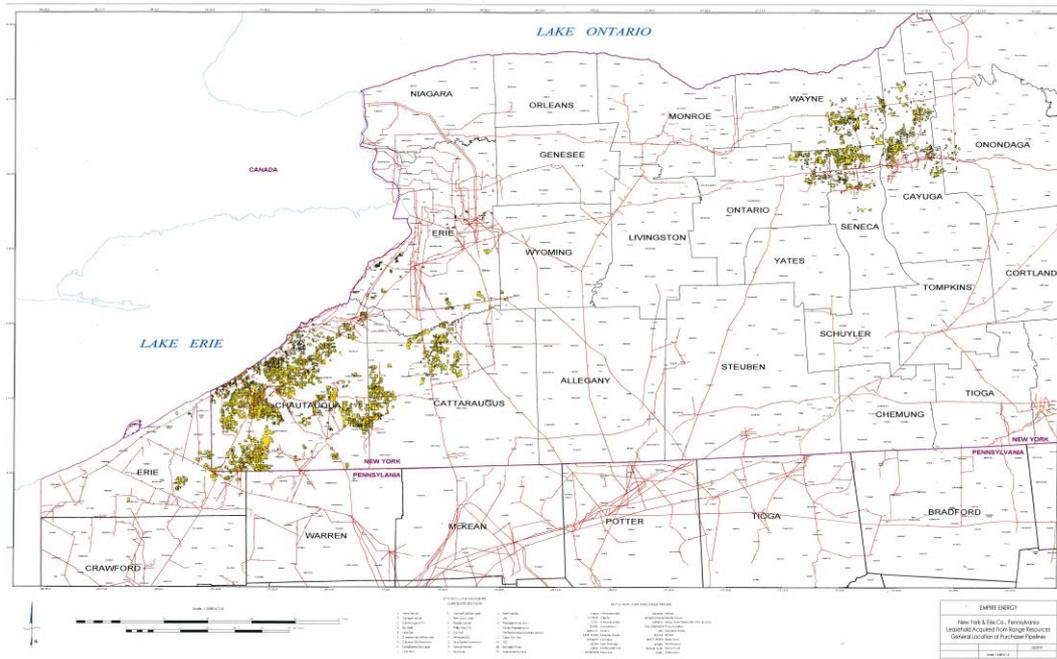
\*\*\* Poss = Possible; Res =Resource

These reserves/resources are in addition to the 3P Reserves of 18MMBoe recently reported.

## The Marcellus and Utica Shales

How do Marcellus and Utica shale relate to the Company? To provide shareholders with an understanding of this potentially significant resource play, attached is a recent article summarising many of the questions asked about the resources in the region where the Company operates.

The following map outlines the Company's leases in New York and Pennsylvania. In total, the Company holds around 3,800 leases in this region covering approximately 300,000 acres.



The map above shows Empire Energy acreage (in yellow). This can be compared to the maps shown in the attached article.

If shareholders have any questions relating to this announcement they may either contact the office on 02 9251 1846 or alternatively forward questions via email to [info@empiregp.net](mailto:info@empiregp.net).

*The information in this announcement which relates to the Company's reserves is based on information compiled by Ralph E Davis Associates Inc, Houston, Texas, a certified professional engineering group, with over 40 years experience.*

*Neither Ralph E Davis Associates Inc, nor any of its employees have any interest in Empire Energy E&P, LLC or the properties reported herein.*

# UTICA SHALE – THE NATURAL GAS GIANT BENEATH THE MARCELLUS?

*Adapted from article on [www.geology.com](http://www.geology.com)*

## Marcellus the Opening Act

The Marcellus Shale captured public attention when leasing and drilling activities began pumping billions of dollars into local Appalachia economies and citizens began debating the environmental, social and economic impacts. All of this began suddenly in 2004 when Range Resources Corporation drilled the first Marcellus well using modern drilling technology.

Now, just a few years later, the Marcellus Shale is being developed into one of the world's largest natural gas fields. However, what we are seeing today from the Marcellus is only the first step in a sequence of natural gas plays. The second step is starting in the Utica Shale.

## What is the Utica Shale?

The Utica Shale is a rock unit located a few thousand feet below the Marcellus Shale. It also has the potential to become an enormous natural gas resource. The Utica Shale is thicker than the Marcellus, it is more geographically extensive and it has already proven its ability to support commercial production.

It is impossible to say at this time how large the Utica Shale resource might be because it has not been thoroughly evaluated and little public information is available about its organic content, the thickness of organic-rich intervals and how it will respond to horizontal drilling and hydraulic fracturing. However, the results of early testing indicate that the Utica Shale will be a very significant resource.

## Where is the Utica Shale?

The potential source rock portion of the Utica Shale is extensive. In the United States it underlies portions of Kentucky, Maryland, New York, Ohio, Pennsylvania, Tennessee, West Virginia and Virginia. It is also present beneath parts of Lake Ontario, Lake Erie and part of Ontario, Canada. This geographic extent of potential Utica Shale source rock is shown on the map labelled as Figure 1 below. If the Utica is commercial throughout this extent it will be geographically larger than any natural gas field known today.

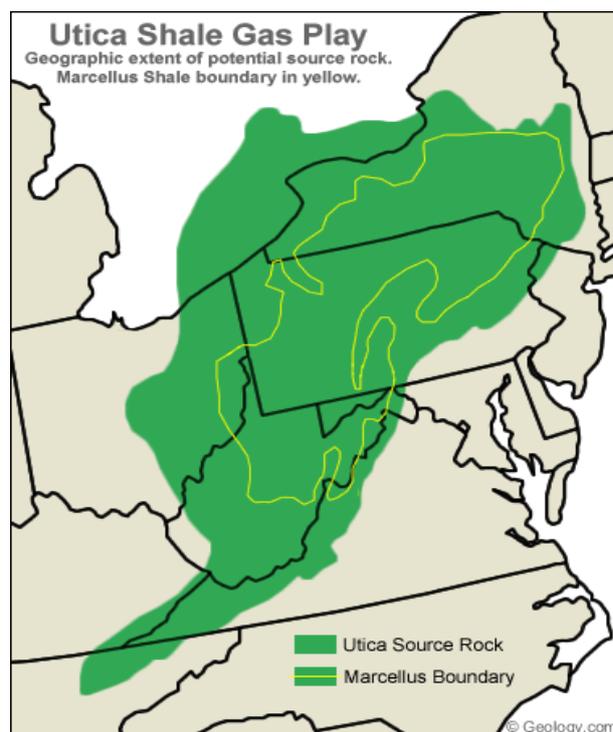


Figure 1

This map was compiled by Geology.com using data provided by the Energy Information Administration [1], the USGS [2] and the Pennsylvania Geological Survey [3].

## How Deep is the Utica Shale?

The Utica Shale is deeper than the Marcellus. In some parts of Pennsylvania the Utica Shale can be over two miles below sea level. However, the depth of the Utica Shale decreases to the west into Ohio and to the northwest under the Great Lakes and into Canada. In these areas the Utica Shale rises to less than 2000 feet below sea level. Beyond the potential source rock areas the Utica Shale rises to Earth's surface and can be seen in outcrop.

These depth relationships of the Utica Shale and the Marcellus Shale are shown in the generalized cross sections shown below as Figure 2.

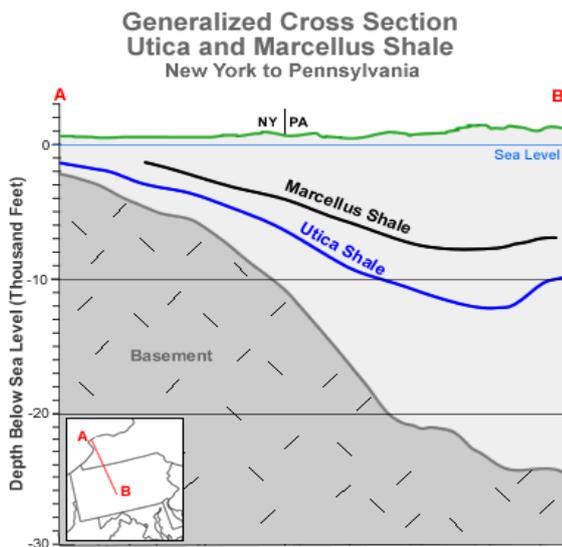


Figure 2

This cross-section was compiled by Geology.com using data provided by the EIA [1], the USGS [2], the Pennsylvania Geological Survey [3], and the USDE [4].

Most of the major rock units in the Appalachian Basin are thickest in the east and thin towards the west. The rock units that occur between the Marcellus Shale and the Utica Shale follow this trend. In central Pennsylvania, the Utica can be up to 7000 feet below the Marcellus Shale but that depth difference decreases to the west. In western New York State the Utica can be less than 3000 feet below the Marcellus.

## Current Development of the Utica Shale Gas Play

In early 2011, most of the mineral rights leasing and drilling activity tied directly to the Utica Shale was in eastern Ohio and Ontario, Canada. In these areas the Utica Shale is less than 4000 feet below the surface and the Marcellus Shale is not present. (If the Marcellus is present it becomes the target because it is shallower, less expensive to drill and has a proven potential.)

The generalized cross-section for the Utica and Marcellus Shale shown above as Figure 2 illustrates why the Utica is being developed in some parts of the Ohio and Canada instead of the Marcellus. It is not being developed in New York State due to the current hydraulic fracturing moratorium.

Where Cross-Section 2 traverses the Pennsylvania-New York State boundary the Marcellus Shale is above the Utica and would be preferentially drilled because it is a shallower target. However, the productive portion of the Marcellus Shale does not extend into northern New York - but the Utica Shale does. In those areas the Utica Shale is less than one mile below the surface. In Ohio were the same situation occurs a few companies are leasing and drilling the Utica Shale for natural gas.

## Utica Shale Petrology and Stratigraphy

The Utica Shale is an organic-rich calcareous black shale that was deposited about 440 to 460 million years ago during the Late Ordovician. It overlies the Trenton Limestone and is a few thousand feet below the Marcellus Shale (see the generalized stratigraphic column shown as Figure 5 in the right column of this page).

The Utica Shale has a much higher carbonate content than the Marcellus Shale and a lower clay

mineral content. This difference in mineralogy produces a very different response to hydraulic fracturing treatments. The methods used in the Marcellus do not produce as much fracturing in the Utica. However, future research might be able to significantly improve the fracturing rate. (In Texas, the Eagle Ford Shale also has a high carbonate content. Drillers there have discovered ways to make the brittle carbonate zones fracture at a much higher rate than other gas shale rock units.)

## Thickness of the Utica Shale

The thickness of the Utica Shale is variable. Throughout the potential source rock area it ranges in thickness from less than 100 feet to over 500 feet. Over the rock unit as a whole there is a general thinning from east to west. A thickness map of the Utica Shale is shown as Figure 3 below. Although thickness of a reservoir rock can be important, the organic content and presence of gas are what determines the true potential of a gas shale. Very little public information is available on the organic content of the Utica shale.

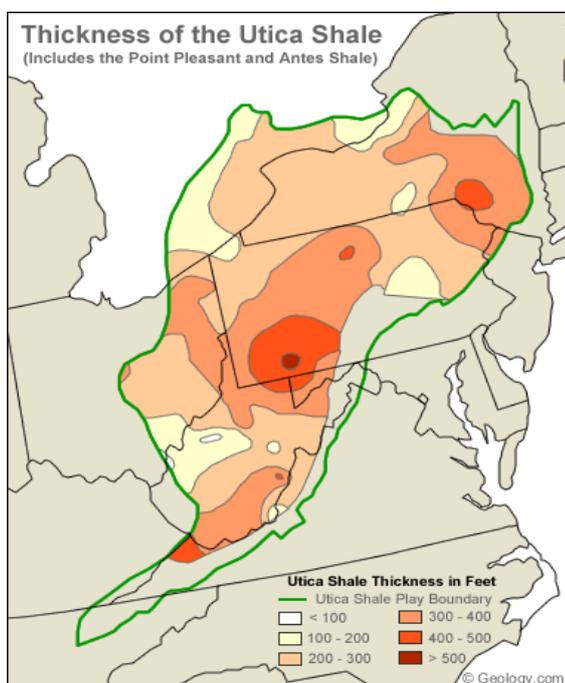


Figure 3.

This map was compiled by Geology.com using data provided by the EIA [1], the USGS [2] and the Pennsylvania Geological Survey [3].

## Future Development of Utica Shale

Two important challenges for developing the Utica Shale are its depth in the region where active Marcellus shale drilling is taking place and due to the New York State moratorium, and a lack of information.

Much of the leasing activity in 2011 for the Utica has been, as might be expected, in Ontario and Quebec where the resource is quite accessible. However, the first commercial drilling is said to be in Pennsylvania (Butler County). Range Resources (RRC) drilled what it believes to be the pioneering commercial well in 2010 and plans more drilling in 2011. Consol Energy (CNX) drilled a discovery well in the Utica and will shift exploration resources to this play in 2011. Shell and Chevron (CVX) (via the acquisitions of East Energy and Atlas Energy respectively) are well positioned to be significant in the Utica. Chesapeake Energy (CHK) supposedly is building a land position in this play, most likely in Ohio. Private equity and MLP investors have also been briefed on the nascent Utica play and the response is said to be encouraging.

It is worth recalling that the Marcellus excitement began just a few years ago with a small pioneering company, RRC. The resource potential was initially viewed as quite limited and neither the majors nor government agencies thought there was much commercial significance. Today the Marcellus is estimated to have a technically recoverable resource of over 250 trillion cubic feet (about a mid teens ultimate recovery rate). In a mere 6 years the play went from novelty to world class. It is this trajectory and record of success that inspires the half dozen or so companies that are now seriously investigating the Utica. If there is validation then one would expect the number of companies committing money, technology and management time to the Utica to jump significantly by end 2011.