

# Seismic reflections

## Tullow's breakthrough discovery

Tullow Oil's announcement last week that it has discovered oil off the coast of French Guiana points to the opening up of a new play along the coast of South America, with further similar prospects in several basins across French Guiana, Suriname and Guyana. The Zaedyus exploration well encountered oil in a fan system similar to that found along the West African coast, especially in the company's Jubilee field offshore Ghana. Demonstrating that its African success can be replicated across the Atlantic vindicates Tullow's theory that offshore West Africa and South America share common geological origins, and the company now has much to play for, with the scale of the remaining prospects likely to match current upper estimates for Zaedyus.

### It's all in the fans

The Zaedyus exploration well encountered 72m net oil pay across three sands with light oil in the 39m main sand. The well was targeting a turbidite fan system, analogous to those found in the Jubilee field offshore Ghana. The discovery is consistent with pre-drill P10 estimates of 700mmbbl for the prospect and can be compared to the up to 1bnbbls estimated at Jubilee. The well was drilled at the apex of the fan and Tullow is confident that further appraisal wells will find thicker and better developed reservoir downdip from the current well.

But it is the confirmation that this play extends regionally that suggests there is much more to come, both across South America and West Africa, and Tullow has built itself a niche as an expert in the targeting of the sweet spots where the fans are located. Its shares rose just over 15% on the back of the news. Partner Northern Petroleum with just 1.25% of the licence saw a 26% increase in share price, while Wessex Exploration, also with 1.25%, saw its shares more than double in value.

### And more to come

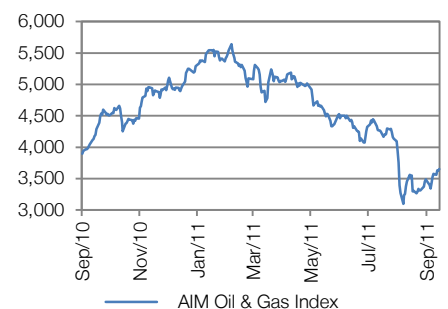
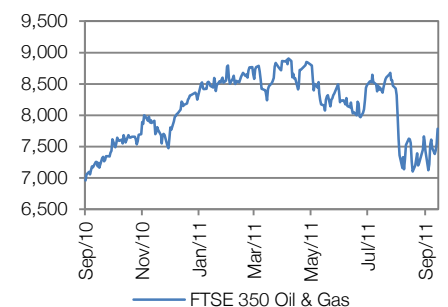
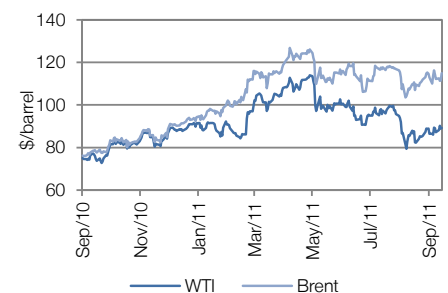
But it is not just Tullow that is working to exploit the potential of fan systems in the Atlantic. On a smaller scale, [Rockhopper Exploration](#) is currently appraising its Sea Lion discovery with a current mean prospective resource estimate of 326mmbbls. And next year, Falkland Oil and Gas will drill its Scotia prospect, targeting the Mid Cretaceous Fan play, analogous to the West African fan plays and with a mean prospective resource estimate of 1.06bnbbls.



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**Exhibit 1: Best and worst performers**

		1 week			
No.	Best performers	% change	No.	Worst performers	% change
1	NORTHERN PETROLEUM	35.4%	1	ROXI PETROLEUM	(17.1%)
2	EXILLON ENERGY	27.2%	2	FRONTERA RESOURCES CORPORATION	(16.0%)
3	FORUM ENERGY	22.1%	3	PETRO MATAD	(15.8%)
4	GULF KEYSTONE PETROLEUM	18.7%	4	PRESIDENT PETROLEUM	(12.6%)
5	NAUTICAL PETROLEUM	17.4%	5	ENEGI OIL	(12.1%)

		1 month			
No.	Best performers	% change	No.	Worst performers	% change
1	NORTHERN PETROLEUM	37%	1	PETRO MATAD	(48.2%)
2	GULF KEYSTONE PETROLEUM	34%	2	FRONTERA RESOURCES CORPORATION	(45.2%)
3	LOCHARD ENERGY GROUP PLC	31%	3	MELROSE RESOURCES	(27.9%)
4	TULLOW OIL	30%	4	JKX OIL AND GAS	(17.2%)
5	MAX PETROLEUM	22%	5	EXILLON ENERGY	(17.2%)

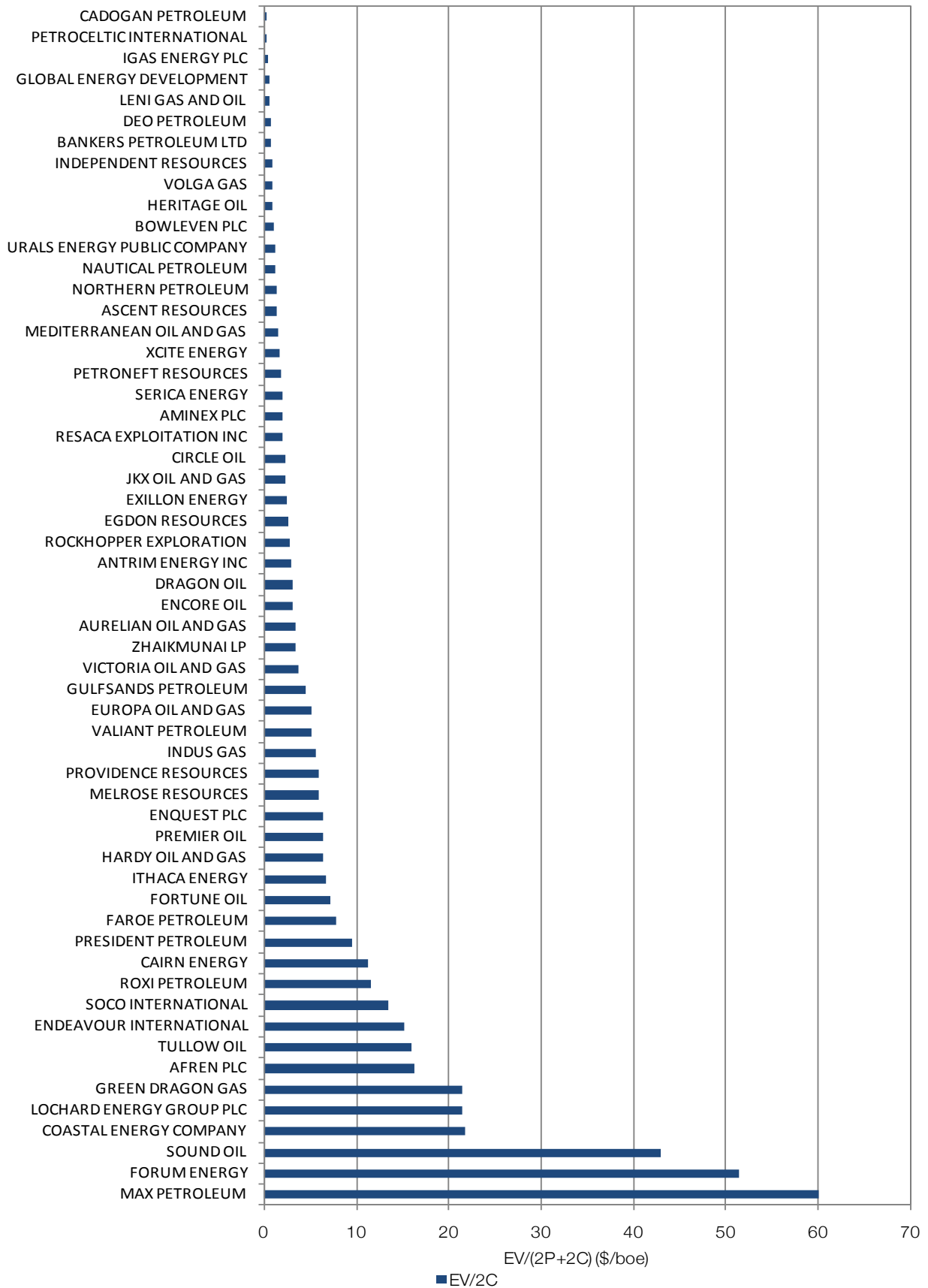
		3 months			
No.	Best performers	% change	No.	Worst performers	% change
1	COASTAL ENERGY COMPANY	53.4%	1	FRONTERA RESOURCES CORPORATION	(70.0%)
2	PRESIDENT PETROLEUM	32.3%	2	PETRO MATAD	(67.2%)
3	FORUM ENERGY	26.5%	3	BOWLEVEN PLC	(61.5%)
4	GULF KEYSTONE PETROLEUM	26.2%	4	KEA PETROLEUM PLC	(54.1%)
5	GLOBAL ENERGY DEVELOPMENT	25.0%	5	PETROCELTIC INTERNATIONAL	(53.4%)

		6 months			
No.	Best performers	% change	No.	Worst performers	% change
1	COASTAL ENERGY COMPANY	58.7%	1	FRONTERA RESOURCES CORPORATION	(71.4%)
2	GULF KEYSTONE PETROLEUM	45.6%	2	PETRO MATAD	(63.8%)
3	HARDY OIL AND GAS	25.5%	3	BOWLEVEN PLC	(61.9%)
4	CADOGAN PETROLEUM	9.1%	4	KEA PETROLEUM PLC	(57.6%)
5	SOCO INTERNATIONAL	3.4%	5	EUROPA OIL AND GAS	(56.8%)

		1 year			
No.	Best performers	% change	No.	Worst performers	% change
1	COASTAL ENERGY COMPANY	162.5%	1	DESIRE PETROLEUM	(83.0%)
2	RANGE RESOURCES	131.7%	2	NIGHTHAWK ENERGY	(77.9%)
3	BPC LIMITED	128.1%	3	FRONTERA RESOURCES CORPORATION	(75.3%)
4	CADOGAN PETROLEUM	118.2%	4	PETRO MATAD	(72.9%)
5	SOUND OIL	74.6%	5	ENEGI OIL	(59.9%)

Source: Bloomberg

**Exhibit 2: EV/2P + 2C rankings**



Source: Bloomberg, company releases, Edison Investment Research

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