



The Source for Critical Information and Insight™

Energy
Information for IHS customers

International Oil Letter

Company Profile



Kosmos Energy: A passion for finding oil

In 2003 five men with a passion for finding oil set out to do precisely that. Jim Musselman, Brian Maxted, Greg Dunlevy, Paul Dailly and Kenny Goh had worked together at Triton Energy, where they made a number of significant discoveries. Among those finds was the Ceiba field offshore Equatorial Guinea in 1999 which was brought online in a record 13 months, a feat that led to Triton's acquisition by Amerada Hess in 2001. Reuniting under the banner of Kosmos Energy, their mission was to found a Dallas-based company in order to once again explore offshore West Africa. Four years later, that passion translated into one of the most significant discoveries of 2007. Kosmos Energy's Mahogany discovery offshore Ghana is not only a phenomenal achievement for a start-up company that at the time had a staff of about 20, but is significant for the oil and gas industry as a whole, which has suffered a dearth of large-volume discoveries in recent years, particularly in emerging plays. The Kosmos discovery also has huge implications for the country of Ghana, which had been looking for offshore oil for four decades only to find it in its 50th year of independence. Hence the new field has been christened Jubilee.

"This is going to develop into a very important petroleum province," Maxted told IHS, regarding

the Transform Margin of the Gulf of Guinea that includes offshore Ghana. Partner Tullow Oil estimates Jubilee has reserves between 200 MMbo and 1.4 billion barrels. Maxted says Kosmos is "comfortable" with the upper end of that range, believing the lower range is "very, very conservative." It is no wonder Maxted smiles when he says, "And the great thing about it is we did it with our very first well."

Indeed, from the inception of the company, the partners' objective was to find the hundreds of millions of dollars required to explore an emerging offshore basin, where success rates average one in five. Kosmos would need partners who understood the simple, but high-risk business of finding oil. According to Maxted, the question was: "If we drill four or five dry holes in a row, will they be there for wells six, seven and eight?" While Kosmos has scored on four of its five wells drilled to date, a rate comparable to what the supermajors are enjoying in Angola, the company wanted to find investors who would be willing to stick around for as many as the 10 or 12 dry holes they estimated it could take to deliver their business model.

Consequently, Kosmos spent its first six months looking for funding, eventually securing the backing of what Maxted calls two of the

"supermajors" of private equity, Warburg Pincus and Blackstone Capital Partners. Warburg Pincus already had a portfolio of successful oil and gas companies, including Newfield Exploration and Spinnaker Exploration, but Kosmos was the firm's first foray into international E&P. The investment of Blackstone marked an even larger first, namely that private equity group's first E&P investment. Between the two, Kosmos received US\$ 300 million, US\$ 100 million of which was earmarked for exploration and appraisal, with US\$ 200 million set aside for development.

"What differentiated us from the beginning was our funding," Maxted said. "It was critical, one of the things we did right." That financial backing has proved essential as oil and gas operators have witnessed huge price increases in services and drilling over the past few years. With costs increasing by multiples of three, four and even five, an industry already hesitant to take high-stakes gambles has only become more risk adverse. The Kosmos business model was based on a flat low price but, with the backing of Warburg Pincus and Blackstone, the company has nonetheless been able to move forward in an increasingly higher oil environment. "If we knew then what we know now, from a cost standpoint it would have been a lot more difficult to form Kosmos," Maxted muses.

Pure drillbit approach

Their strategy from the beginning was to find oil in areas where source rocks and reservoirs had been established and potential traps were known to exist, but commercial discoveries had yet to be made. Maxted notes that Kosmos has an approach to exploration that is very different from many other companies, as the company puts emphasis on sources and reservoirs, with traps their final rather than first consideration. Africa's Atlantic seaboard was the chosen playing field, with Kosmos looking at opportunities ranging from Morocco to South Africa. Over a two-year period beginning in 2004, the company acquired seven licenses in five countries; four of these properties are operated, with the bulk of the acreage concentrated in the Gulf of Guinea, which Kosmos felt had potential "hydrocarbon sweet spots."

Kosmos spud its first well -- Mahogany 1 -- on 29 May 2007 in 1,320m of water on the West Cape Three Points block offshore Ghana. Just three weeks later a press conference was held at The Castle, the Ghana seat of government on a cliff overlooking the Gulf of Guinea, where Jim Musselman had the pleasure of telling Ghana President John Agyekum Kufuor that the well was a success. Drilled to a total depth of 3,826m, the discovery encountered 270m of gross oil pay including 90m of net pay in Upper Cretaceous sandstones. Before the summer was out, Tullow Oil had drilled a second successful well about 5.3km to the south-west on the adjacent Deepwater Tano Block. Hyedua 1 intersected 202m of gross reservoir, including 108m of high-quality reservoir sandstone with 41m of net hydrocarbon pay. The two wells, which are on a single continuous trap straddling the two blocks, are now known as the Jubilee field. Kosmos, which operates West Cape Three Points with a 30.875% interest and has an 18% stake in Deepwater Tano, will operate the Jubilee development with support from Anadarko, while Tullow, with a 22.896% share of West Cape and 49.95% of Deepwater Tano, will serve as unit operator. Maxted says Kosmos wanted to drive the pace of the development, feeling it is their job to get things going quickly. An aggressive appraisal program has begun, with Mahogany 2 spudded in early March 2008 by the "Songa Saturn" D/S. It will be the first Jubilee well to be flow tested. A second rig, the recently retrofitted "Blackford Dolphin" S/S, is due to arrive in June to drill Hyedua 2, an updip extension. The Mahogany 3 and Mahogany 4 wells are also to spud prior to year-end 2008. Maxted says first oil from Jubilee is anticipated in 2010 at a rate of 60,000 to 120,000 bo/d.

With each well drilled, the risk of the other offshore Ghana prospects goes down, and the Kosmos-Tullow partnership began 2008 with a second discovery on West Cape Three Points. Prior to spudding the Mahogany 2 appraisal, "Songa Saturn" drilled the Odum 1 well about 18km to the east. This wildcat reached a total depth of 3,387m, intersecting a gross oil column of 60m, including 22m of net pay. Oil gravity is about 29° API. The next step for this discovery is high-resolution seismic, which is to be acquired at mid-year 2008.

Maxted says Kosmos has 18 to 24 months of exploration and appraisal ahead of it in Ghana, where there are a whole range of fairways, with multiple leads and prospects. Teak, another high-impact prospect identified in the 2005 3D seismic survey that found Mahogany, is to be drilled by early 2009. Also on the drawing board for the next 12 months is Tweneboa in Deepwater Tano. Each prospect is believed to have a resource potential of up to 500 MMbo.

Kosmos's success is not its story alone. It is also Ghana's story, where the discoveries have garnered front page headlines. The country will be building its oil industry on the back of this project, and Kosmos has "a lot of confidence" they are going to do it right, praising the GNPC for being . . . "very, honest, open, supportive, a delight to work with." The discoveries have positive implications beyond Ghana, offering incentive for the players in Côte d'Ivoire, Togo and Benin as well.

Benin is the location of the single dry hole Kosmos has participated in to date. Anadarko, which is a partner in both Ghana blocks, drilled the Sota 1 wildcat in 1,924m of water on Block 4 during the summer of 2007. Kosmos has a 40% interest in the well, which was dry with residual oil shows. Anadarko has a 40% interest the 7,777 sq km tract, which it operates through its 2006 acquisition of Kerr-McGee. Petronas holds the remaining 20%.

Currently Sota 1 is in the postmortem stage, and a future exploration strategy is being formulated. Maxted points out one dry hole doesn't write off an entire play, but clearly there is "still work to do in Benin."

The other well drilled by Kosmos is Echim 1 in the deep waters of the Niger Delta offshore Nigeria. Maxted says while the company does not consider it commercial, it believes it has potential. As a small independent it took a long time for Kosmos to be accepted in Nigeria, where the company took over operations of the 1,789 sq km OPL 320 from Pioneer Resources in mid-2007. While its first well failed to prove up commercial reserves, Maxted says the company is "still excited about Nigeria." The company is looking at a "contrarian" idea, involving lows -- that is a combination structural-stratigraphic plays -- rather than the anticlines that have

tended to attract the high-dollar bids in Nigerian bid rounds.

Sleeping geology

In addition to Ghana, Benin and Nigeria, in the search up and down the west coast of Africa for prospects Kosmos chose plays in Cameroon and Morocco. Maxted says the company maintained a strict discipline, focusing on combination structural-stratigraphic traps that had been over looked in emerging basins where source rock had been proven but there had been no discoveries. He says the company saw some great prospects, but if they didn't fit the model, they walked away.

In 2006, Kosmos farmed into a 35% interest in Perenco's Kombe-N'sepe Block, a 3,026 sq km tract in Cameroon that it calls an example of sleeping geology in the Salt Basin. Operator Perenco (40%) has slated drilling for 2008 on the acreage, which runs along the coastal strip of the Douala Basin, extending more than 100km south of Douala. Previous drilling has confirmed the presence of a working petroleum system as demonstrated by the MVia, Kwa-Kwa, Souellaba and N'Koudou accumulations.

Also in 2006, Kosmos was awarded a 100% stake in another Cameroon block, the PH-57 (N'Dian River) block onshore/offshore Rio del Rey area of the Niger Delta Basin. An airborne magnetic survey completed over this 2,510 sq km block in 2007 is now being processed. A farm in is available prior to the acquisition of 3,500km of 2D, which is scheduled for 2008. A drill or drop decision is to be made in 2009. Three wells have been drilled on the acreage, the small Ubene gas discovery made by Gulf Oil in 1982 followed by two dry holes, the last of which was drilled in 1998. Kosmos believes this acreage offers the opportunity to explore the extensions of petroleum systems inboard of the Douala and Rio Del Rey basins, which includes the Ceiba discovery in Equatorial Guinea.

Frontier project of choice

The final asset in the Kosmos portfolio is a huge (nearly 44,000 sq km) block offshore Morocco that the company calls its "frontier project of choice." About half of the Boujdour Offshore exploration permit lies on the shelf, with the other half extending into deep waters. Kosmos holds a 75% interest with the Moroccan National Office

for Hydrocarbons and Mines (Onhym) carried for 25%. The acreage is disputed with Western Sahara, but Kosmos believes it has made the right bet as to which party will prevail. Below ground, Kosmos believes Boujdour presents the opportunity to explore an untested early Cretaceous delta, similar in size to the Niger Delta. Cretaceous reservoirs and large structural traps have already been proven. The risk is a petroleum system has yet to be established, making Morocco an exception to the company's insistence on a proven source rock being a premise for investment.

Kosmos's achievement to date has warranted it honors as both Explorer of 2007 (by the World Junior Oil & Gas Congress) and the 2008 Diamond Arrow Award. The former is granted to the company that makes the year's single most significant contribution to exploration. The group has a separate award for Junior of the Year, so it could be said Kosmos jumped that rung in the ladder. The Diamond Arrow Award, which was bestowed by PMR.africa magazine, is given to the most admired company and/or institution working in Africa in any business, not just oil and gas.

While financing and a well-defined strategy were clearly factors in the company's success story, Maxted puts the Kosmos staff at the top of the list. In addition to the founding partners, the company has a hand-picked technical staff that he says has made Kosmos competitive with the likes of the majors. With the 2007 discoveries, that staff has now doubled to about 40, as well as a joint development team with Anadarko.

So what lies ahead for Kosmos? The first order of business is to delineate and develop Ghana. The second is to make additional discoveries on acreage already under lease, while the third is to add to its exploration portfolio to deliver the next Ghana, which is the company's single biggest challenge. The original goal was to be a US\$ 1-2 billion dollar company within a five-to-seven-year period, a goal Maxted says it is well on target to achieving.

And further down the road? Will Kosmos go public? Does the company see itself as an acquisition target, like Triton was? "As a private company, all the options are open to us," Maxted says, adding, "We still have a lot of value to create."