How BP helped Trinidad and Tobago make the leap into gas

BY DAVID RENWICK

BP Group, the world's third largest super-major, has enjoyed the longest association with Trinidad and Tobago of any petroleum company operating in the country today. Indeed, the relationship spans 71 of the two-island Caribbean state's first 100 years of commercial petroleum production, though with gaps, like between 1979 and 1998, when BP was temporarily absent from the local oil patch.

BP put in an appearance in Trinidad as early as 1937 when Trinidad and Tobago was still a fully-fledged British colony and was naturally attractive to UK companies. Under its then name, the Anglo Iranian Oil Company, it joined forces with Trinidad Leaseholds Limited (TLL) – eventually to become Texaco Trinidad Inc – and United British Oilfields Limited (Shell) and formed a company called Trinidad Northern Areas (TNA) to initiate an exploration programme in the land area lying between the Northern and Central ranges of Trinidad. This was largely unsuccessful and TNA was subsequently granted an offshore licence for exploration in the Gulf of Paria, situated between the west coast of Trinidad and Venezuela.

Unlike the Northern basin effort, this one was a winner, with the High Seas well 1, later re-named Soldado 1, discovering oil in 1954. The giant Soldado field has proved probably the most dependable oil producer in Trinidad and Tobago, and though it peaked at 76,948 b/d in 1968, still provides around 30,000 b/d of current crude output of about 118,000 b/d, the single biggest contributor to the country's total.

BP can therefore regard itself as having played a sterling role in the creation of key oil producing centres off both the west and, later, the east coasts, where it acquired and developed oil and, perhaps even more importantly, gas assets from the US company, Amoco.

Robert Riley

In 1956, the same year that Texaco purchased the country's major refinery at Pointe-a-Pierre, BP returned to the land area, buying out Trinidad Petroleum Development (TPD), another British company which had been formed in 1918 in the earlier years of the first petroleum century. It formally established a local personality in 1957, when it set up BP (Trinidad) Ltd. In 1960, BP (Trinidad) acquired Apex Trinidad Oilfields, adding Kern Trinidad Oilfields the following year, thus assuming a prominent place in onshore, as well as offshore, oil production.

Its onshore involvement was to last for only 13 years, however, and came to an end, as noted elsewhere in this publication, in 1969 when BP concluded that its production had stagnated and would inevitably fall, while future discoveries of new oil on its existing leases were unlikely. It therefore decided to dispose of them.

Ironically, by surrendering its land interests and share in the offshore Soldado field, BP, in effect, provided the first building block for the emergence of the 'national identity in energy', as referred to by local petroleum guru, Dr Ken Julien elsewhere in this publication. The government became the majority owner of the Trinidad-Tesoro Petroleum Company, formed to assume control of BP (Trinidad's) assets.

When it eventually returned to Trinidad in 1998, it was on a much grander scale. The acquisition of US company Amoco's worldwide holdings as part of then BP Group CEO Lord (John) Browne's rapid asset growth strategy included Amoco's oil and gas holdings off Trinidad's east coast. Indeed, Lord Browne was said to have seen Trinidad as one of the 'jewels' in the Amoco crown.

And no wonder. At the time, Amoco Trinidad Oil Company (ATOC) controlled around 51,600 b/d of oil and 450 mn cfd of natural gas production and was just about to plunge into LNG, which would jack-up gas production several fold in the years ahead. It held 120 exploration and production (E&P) licences in the Columbus Basin, amounting to around 900,000 acres. Its remaining proven oil reserves were then well over 100 million (mn) barrels and condensate reserves in excess of 58 mn barrels. Perhaps most significant of all, its proven gas reserves amounted to about 15 trillion cubic feet (tcf), 70 per cent of the country's then total.

A prime collection of assets indeed, and one that Amoco had itself painstakingly built-up over the previous 37 years. Under its then name, Pan American Trinidad Oil Company, whose ultimate parent was Standard Oil of Indiana, Amoco had first arrived on the local petroleum scene in 1961, with full support from the government, which was anxious to see large-scale exploration off the east coast, as an add-on to land and offshore west coast production.

"Trinidad and Tobago was actually Amoco's first venture outside of its US base," remembers petroleum consultant Trevor Boopsingh.

Exploratory drilling commenced in 1963, with Amoco being partnered by two other US companies named Sun Oil and Pure Oil. The first well, known as Offshore Point Radix 1, was dry and the two partners quickly called it quits. Amoco was not giving up that easily, however, and persevered. It moved to a different location and finally hit pay dirt after drilling eight exploratory wells, with the South East Galeota 1 and South East Galeota 2 wells in 1968, which identified the first gas and condensate reserves off the east coast. Like most explorationists of the time, the company really wanted oil (as, indeed, did the government, since the taxation system for oil production was well established, while that for gas was non-existent).

BP Trinidad and Tobago's sprawling complex at Galeota Point in south-east Trinidad

So, Amoco returned to the original offshore Point Radix area and in the following year, 1969, made the breakthrough for which it had been fervently hoping, finding oil with the ORP 2 well, as well as gas. This subsequently became the Teak field. The Samaan oil discovery followed in 1971 with the OPR 14 well and the Poui field, with the West Tournaline 1 well, in 1972.

Robert J. (Bob) Allison Jr, now Chairman Emeritus and Director of Anadarko Petroleum Corporation, which itself today has a small exploration interest in Trinidad and Tobago, was an Amoco petroleum engineer in the late '60s, based at headquarters in Chicago until he was transferred to work on the company's exploration programme off the east coast in the capacity of chief petroleum engineer. He remembers Teak being a "tremendous oil discovery with over 400 feet of pay, producing at 8,000 b/d. Amoco found many other fields later on and it was very fortuitous for the company the way things turned out."

The exploitation of these three discoveries, which was to send Trinidad and Tobago's oil shooting up to 230,000 b/d by 1978 (139,163 b/d of it from the east coast), commenced in 1972 from Teak and Samaan, and from Poui in 1975. Amoco, then afterwards in its incarnation as BP, maintained its position as the country's leading oil producer for 33 years, until 2005, when it finally yielded pride of place to the state-owned Petroleum Company of Trinidad and Tobago (Petrotrin) which, by virtue of the purchase by the government over time of the BP, Shell and Texaco shares in land and marine assets, had amassed a growing crude production base.

But, by then, BP had resolved to opt out of Teak, Samaan and Poui anyway, the better to concentrate on gas production. This provided a further boost to Petrotrin's own oil output, since it took a 15 per cent share in the consortium of Repsol YPF, NGC and itself, which had been formed to assume ownership of the three fields. "Managing the TSP asset no longer fitted in with bpTT's strategic portfolio," explains its Chairman and CEO, Robert Riley.

In fact, it was not long after the TSP oil discoveries in the 1969-1972 period that the 'strategic portfolio' began to turn gaseous. The giant Cassia gas find in 1973, monetised 10 years later in 1983, enabled the government to plan the development of the gas-based industrial estate at Point Lisas with the assurance that sufficient gas supplies would be available.

In fact, Amoco, even after it became bpTT, never made any major oil discoveries following TSP and was already re-inventing itself as a gas company by the early 1990s.

The period between 1994 and 1998, the year in which it fell into the BP fold, was the most frenetic period of exploration by Amoco since the late 1960s and early '70s.

It was also a very rewarding one: non-stop exploratory drilling during those years identified no fewer than 13 tcf of new gas reserves, not to mention around 300 mn barrels of the very light oil, called condensate, that comes with the gas. "That programme added more than 50 per cent to the country's then total of gas reserves," recalls Robert Riley.

Today, bpTT produces around 450,000 b/d of oil equivalent (oil plus gas converted to its energy equivalency in barrels) of which liquids constitute only around 6.2 per cent or about 28,000 b/d, and even 20,000 b/d of that is condensate, which would not be available were it not for the gas. Its output of gas has hit the 2.7 billion cubic feet a day (bn cfd) mark, high for one company even in international terms. Since its major exploratory drilling effort in the 1990s, bpTT has made at least six more gas discoveries.

Its present production level owes much to the arrival of the liquefied natural gas (LNG) industry in Trinidad and Tobago in the late 1990s. As the country's biggest gas reserves holder, BP is the main shareholder in all four trains – 34 per cent in Train 1, 42.5 per cent in Trains 2 and 3 (built together, as a package) and 37.78 per cent in Train 4 (at a gas intake of 800 mn cfd and LNG output of 5.2 mn tonnes a year, it was the biggest single LNG train worldwide at the time). The vast majority of bpTT's gas is now exported as LNG.

It is indubitably a great achievement on the part of bpTT and its predecessor to have been the company which has dominated the worlds of both oil and gas in Trinidad and Tobago for so long. But Mr Riley is reluctant to express an opinion on which of the two he considers the more significant contribution to the country's development. "It is difficult to say," he contends. "Both were important to the wider Trinidad and Tobago economy and came at different times. Gas is a different business from oil, with different characteristics and allows for a different pace and type of development. Due to the nature of the gas market, Trinidad and Tobago has time to set its pace of development."

The bpTT Chairman and CEO does stress, however, that being the principal gas producer in a country now dependent on gas for the majority of the public revenue derived from petroleum and for a whole new industrialisation thrust "places a huge responsibility on bpTT's shoulders, in terms of being a safe and reliable supplier over the long term, because any failure will have a direct impact on the local economy." He expects this "safe and reliable supply" to "last at least for the next 20 years at a level of around 500,000 boed."

Mr Riley wants it known, however, that the company has certainly not turned its back on oil and will "seek out all exploration opportunities within Trinidad and Tobago, including oil." Indeed, that's one of the reasons why bpTT retained the deep horizon acreage under its TSP fields when it sold them to Repsol YPF/Petrotrin/NGC. It sees "one or two oily prospects, including Poui Deep which we are thinking about how to exploit."

However, its disappointment over the results of the Ibis Deep well it drilled to 19,000 feet in another company's block in 2006 has made it cautious about taking on this kind of expenditure single-handedly in the future so, at the time of writing, it was searching for a farm-in partner.

As far as gas is concerned, bpTT still has about six gas discoveries awaiting development and that will proceed in an orderly fashion over the coming years in order to maintain that 500,000 boed production level. Indeed, the company now sees itself as essentially having emerged from a mode that strongly emphasised exploration and rapid annual growth into one that must adroitly manage a "steady state" situation of "sustainability" and "optimal development of hydrocarbon resources."

Mr Riley says his role is that of "keeping the business going for as long as possible, filling out all of our existing contracts and really consolidating the position of nationals in the company as leaders both technically and in business terms."

The company slimmed itself down in the last year of the petroleum century, retrenching 82 local staff and repatriating 21 international employees, out of a workforce of 855.

2008 marked Mr Riley's eighth year as head of bpTT, the first national to assume such a position in the Trinidad and Tobago operation of a global petroleum company.

"It has been a pioneering experience for me," he says "and it has been very satisfying to see the development and growth of nationals in the industry and to have been part of that growth."

Other multi-national energy companies have since followed suit in Trinidad and Tobago, to the point where an expatriate head of such a company is now a rarity. Riley says he was determined to prove that "a national could run a company like bpTT effectively" and it is clear that he has done so. His other two main goals have also been accomplished – "bringing in-house to Trinidad functions like exploration and geo-sciences" and "building local content", as evident by bpTT's re-introduction of offshore platform fabrication to Trinidad and Tobago. ❑

bpTT's Mango platform off the east coast of Trinidad