

TAG CEO HAS STRONG BELIEF IN THE NZ PETROLEUM SECTOR

Drew Cadenhead is the chief executive officer and president of Calgary, Canada-based TAG Oil with holdings of 4,063,706 gross acres of high potential exploration lands in New Zealand.

Mr. Cadenhead's background includes senior positions at Canadian Hunter Exploration, Summit Resources and Ulster Petroleum, as well as a three year tenure at PetroCorp, the New Zealand government-owned oil and gas exploration company. He holds a Bachelor's degree in Geology from the University of Calgary. Mr. Cadenhead lives in New Plymouth, New Zealand.

Recently, Mr. Cadenhead provided Oil & Gas Australia with an insight on New Zealand's current energy supplies and TAG Oil's future prospects for oil and gas discoveries.

TEN years ago TAG Oil, formerly known as Durum Energy, was a small junior international sniffing around the Australasian area when an opportunity to Joint Venture in the Canterbury Basin of New Zealand came to light.

According to Drew Cadenhead, New Zealand's political, fiscal and economic climate, as well as its technical opportunity, made it extremely attractive to TAG.



TAG ceo, Drew Cadenhead, has a good deal of experience in the New Zealand oil and gas sector.

"New Zealand is a safe, democratic, English speaking government that welcomes North American companies into the oil patch. The country has a world-class fiscal regime, with a one per cent royalty on all new gas discoveries for the next five years, as well as high net-back production. To date there has been very little drilling - a total of just 350 wells - with some very impressive large scale discoveries. We think there are more of those to be made.

"As for TAG's current operations, we're in a growth mode. I am a geologist with experience in New Zealand and I joined TAG, then Durum Energy, three years ago. We changed the name to TAG, took the company onto the TSX and became serious explorers in New Zealand. We expanded our land base (now 4,063,706 gross acres), shot 2D and 3D seismic over our newly acquired land base and launched a 15 well drilling programme.

"Our plan is to control as much of the high potential areas of New Zealand as possible. We're well financed, having raised NZ\$22.5 million dollars, and are five wells in to our 15 well drilling programme. The results? Two discoveries so far and three dry holes. We're also shooting seismic over newly acquired lands and taking over inactive companies in the area."

NEW ZEALAND'S ENERGY SUPPLIES: 1980s - 2006

Since the early 1980s, New Zealand's world class Maui reservoir has met 85 per cent of the country's total natural gas demands. In early 2003, an independent expert reassessed the recoverable amounts of oil and gas from the Maui reservoir. The results of this "redetermination" clearly confirmed the fast approaching end to the cheap Maui gas era and created much anxiety on the part of the New Zealand power producers, as well as, large natural gas customers.

"After considering the impact of some of New Zealand's new sources of natural gas,

due to come on-stream over the next 18 months (the Pohokura and Kupe developments), there is still a considerable gap between the amount of natural gas that can be supplied and the expected consumption once the Maui supply is no longer available," Mr. Cadenhead says.

"The New Zealand Government has stated a strong preference for solving the looming energy supply problem through domestic natural gas supplies as opposed to other alternatives such as imported LNG. The government realises that the country's consumption of energy is relatively small, giving it little leverage in the global LNG market.

"New Zealand is under explored compared with most other notable oil and gas producing regions of the world. The few wells that have been drilled and the resultant large discoveries confirm there is still plenty of potential for the development of domestic natural gas supplies that can reliably meet the country's needs well into the future.

"New Zealand is a superb opportunity for an aggressive and capable company such as TAG and the company looks forward to exploring numerous world-class prospects."

FUTURE ENERGY SUPPLIES

The New Zealand Ministry of Economic Development's Crown Minerals group is responsible for the effective management of the country's petroleum reserves.

In January 2005, Crown Minerals published a "programme" for petroleum minerals, which outlined a sensible framework for promoting oil and gas exploration and development.

"The government recognised that 'indigenous' petroleum reserves are unsubsidised, competitively priced and utilisation of these reserves contributes to New Zealand's economy in a substantial

way. Promoting these resources is strategically important for the country.

“The government realised that incentives were needed to increase the rate at which exploration was taking place. Notwithstanding that New Zealand, like most nations, wants a fair return on its assets; the new programme substantially reduces royalties. Between now and December 31, 2009, the wellhead royalties have been reduced to one per cent for natural gas and five per cent for oil. The accounting profits royalties have been reduced to 15 per cent on the first \$750 million of gross profits for offshore discoveries and 15 per cent on the first \$250 million of gross profits for onshore discoveries. Above these thresholds, accounting profit royalties are fixed at 20 per cent.

“Furthermore, the new programme allows companies to deduct all exploration and developments costs for the purposes of calculating gross profits (not just the costs associated with a specific discovery).

“Crown Minerals has increased its attention to petroleum exploration permit (PEP) conditions. Historically, Crown Minerals has not tightly enforced full compliance with the work programmes outlined in various PEP conditions. Now, Crown Minerals expects that companies fulfill their obligations and failure to do so may result in forfeiture of permit rights where there are no valid reasons for work programme delays.

“Progressive, well financed and effectively managed companies like TAG see enforcement of permit compliance as a positive step, which quickly eliminates exploration companies that are not serious about the opportunities that exist in New Zealand.

“Crown Minerals has recently taken the proactive steps of acquiring large amounts of high quality 2D seismic over under-explored areas of New Zealand at its own cost, and providing this data (at no cost) to potential explorers. The Ministry is hoping this free data will encourage exploration interest from both active

explorers and potential new entrants in the country's exploration scene.

“Recently, several large natural gas customers have entered into agreements with exploration companies for the funding of drilling programmes. Under the terms of these agreements, these downstream companies have been willing to cover a substantial portion of the drilling costs and in return receive the right to enter into a gas supply agreement based on prevailing market conditions (no farm-in rights). TAG sees these types of agreements as an excellent way to reduce the cost of drilling high-risk thigh-reward prospects and mitigating shareholder risk” Mr. Cadenhead said.

GAS TRANSPORTATION

There are approximately 3400 kilometres of high pressure gas pipelines covering the North Island of New Zealand. Many of the pipelines transporting natural gas from the production sights to the downstream usage points are now under-utilised as existing reserves dwindle.

“The existing pipeline infrastructure is managed on a ‘non-discriminatory open access basis’ allowing flexible arrangements between producers and customers. This open infrastructure system ensures TAG can transport any new gas discoveries made on the North Island to market in a timely and economical fashion.

“There is also a 300 kilometre ‘Maui Pipeline’ which carries gas from South Taranaki to the Huntley thermal power station, just south of Auckland, the largest power usage area in New Zealand. As a result of the decreasing Maui reserves, there is also an open access regime for use of the Maui pipeline.

“The South Island is not reticulated for natural gas transmission and is currently serviced by bulk LPG transportation. When a significant South Island natural gas reserve is identified, the current pricing structure will certainly support the cost of building gas transmission infrastructure to carry natural gas to the logical markets. The city of Christchurch is the largest city on the South Island of New Zealand and is situated adjacent to a deep water port at Lyttleton. Any oil discoveries made in Canterbury can be easily transported to Lyttleton for shipping to international markets.

The Natural Gas Corporation of New Zealand operates a substantial portion of the existing gas pipeline network (a full map of the North Island pipeline infrastructure can be found at <http://download.ngc.co.nz/general/pipelinemap.pdf>)

NEW ZEALAND'S ATTRACTIONS

Mr. Cadenhead listed a number of key benefits TAG saw in investing in



New Zealand oil and gas exploration. They include:

- New Zealand has a stable democratic government, which has demonstrated a willingness to promote oil and gas exploration. Even though there was an election in September 2005, both the predominant political parties (National and Labour) have publicly stated strong ongoing support for domestic oil and gas exploration.
- New Zealand has a superior fiscal regime, with royalties substantially below other possible investment locations with similar (very low) political risk profiles.
- There is the potential for large scale discoveries as the region has not been explored to the extent that other regions have. For example, the drilling density in the Taranaki region is approximately one well for every 120,000 acres (compared with one well for every 1500 acres across Western Canada). In the Canterbury Basin (South Island), the drilling density drops to one well every 600,000 acres in an area that has world class prospects.
- There has been a three to five fold increase in domestic natural gas prices over the past 18 months as a result of the dwindling Maui reserves.
- Low operational costs and existing infrastructure access results in high profit potential, at least twice what would be normally expected in North America.

TAG'S OBJECTIVES IN NEW ZEALAND

Mr. Cadenhead said TAG has developed a risk managed business plan that combines shallow (less than 2500 metres) low risk oil opportunities with deeper (4000 metres), high reward gas opportunities.

“TAG will initially build our reserve and cash flow base on several shallow oil targets that are drill-ready now and presently waiting rig availability. It is expected that six to eight of these shallow wells will be drilled over the next 12 to 18 months. These 3D seismically identified prospects

are expected to deliver good results and provide strong cash flow to support further work. Given the type of crude that is generally found (sweet 42° API), development costs are low. There is generally little formation water associated with these Miocene-aged reservoirs, and crude can be locally trucked to a point of sale. Cash generation is ‘immediate’ and ongoing operational costs are extremely low.

“Complementing TAG’s shallow low-risk oil programme are a number of deeper, primarily gas prone prospects, which can be considered TAG’s ‘home run swings’. These world-class prospects offer the potential of significant reward but bring with them higher drilling costs and hence higher risk.

“TAG also looks to acquire 100 per cent ownership/operatorship in each of the permits that we consider ‘key’ to our ongoing success. This approach allows TAG to control both the timing of operations and the associated cash flow generated from success, which in turn maximises shareholder return.

“By balancing our drilling portfolio with both low and high risk targets, TAG has created a sustainable business model. TAG’s objectives can therefore be simply stated as ‘creating value for shareholders through a balanced, risk-managed exploration programme in a proven but underexplored region with a stable and investment friendly government’.”

WHERE IS TAG EXPLORING?

Mr. Cadenhead said TAG’s primary exploration area is within the onshore Taranaki Basin of the West Central North Island. This is the only existing oil and gas production area of New Zealand and has the associated infrastructure necessary to bring new discoveries to early commercialisation.

“Within the eastern part of the Taranaki Basin is a proven discovery ‘fairway’ that extends in a North-South direction to the East of Mount Taranaki. This onshore region has been producing from about a dozen different pools for more than 40

years and is well serviced by all weather roads, as well as gas and oil pipeline infrastructure. All seven of TAG’s Taranaki Permits are situated within this fairway, in many cases surrounded by existing pools.

“Two of our prospects in the Northern section of Taranaki (‘Supplejack’ and ‘Waitoriki’) have aggregate P50 resource potential estimates of approximately 11 to 15 million bbls of oil and 65 bcf of gas (Sproule International Independent Resource Assessment.)”

TAG is also active in the Canterbury Basin, located on the East coast of the South Island. The Canterbury Basin has a similar Basin style to prolific oil and gas areas of Southern Australia, California, and the Gulf of Mexico. This is a largely unexplored region of New Zealand, but importantly, two of the four offshore wells drilled to date in the Canterbury Basin have discovered hydrocarbons.

TAG has three permits in the Canterbury Basin totalling four million acres (1.4 million acres net), which is larger than the entire Taranaki Basin. TAG’s offshore Petroleum Exploration Permit PEP-38258 contains a number of very large prospects and leads. Based on the results of previous drilling and testing, Sproule International has estimated the resource potential of one of TAG’s offshore prospects, “Corvette”, at 700 bcf and 150 million bbls on a P50



TAG is building a strong portfolio.

basis. Corvette is one of many prospects in this Permit that TAG is moving to the drill-ready stage.

“Perhaps the most exciting prospect that TAG currently has is ‘Kate’, which is located in the onshore portion of one of our Canterbury permits. The Kate prospect is located at a surface ‘anticline’ which is essentially a 15 sq. km ‘mound’, protruding out of the surrounding Canterbury Plains. A number of high grade oil seeps are visible at the surface along the perimeter of this anticline. The seeping oil has been confirmed as ‘thermogenic’.”

“Initial 2D seismic has been completed and has confirmed that the anticline formation continues at depth. A potential reservoir is located at approximately 1200 metres depth and if this reservoir structure is full, TAG’s volumetric calculations indicate as much as 200 million barrels of oil may be associated with this structure. Further seismic is planned in the next six months to locate an optimal drilling location to test this very exciting prospect,” he said.

THE FUTURE FOR NZ ENERGY SUPPLIES

Mr. Cadenhead said TAG supports the current government initiative to promote exploration and development.

“We believe that there is very real potential in New Zealand, but the country faces the dilemma of being a small fish in a big ocean. Although TAG believes the potential for discovery in New Zealand is enormous, we believe this potential will continue to slide under the radar screen of most of the world’s larger explorers. This leaves an opportunity for smaller companies like TAG to have a realistic opportunity at international size discoveries without the pressure of competing against multi-nationals.

“TAG remains confident that New Zealand’s natural gas needs can be met indigenously without the need for alternatives such as imported LNG.”

WORKING WITH GOVERNMENTS

“We see New Zealand as a very stable location to operate and government policy is consistent.

“New Zealand has put in place legislation and regulations to protect the environment. These regulations are well understood and have little impact on exploration and development by those, such as TAG, who act responsibly.

“Rules and regulations governing exploration and the subsequent granting of mining licences are also well developed and well understood. As a result of the urgent need for an increase in natural gas supply, Crown Minerals has been more closely enforcing permit conditions to ensure that exploration commitments are met. TAG has every intention of meeting all of our permit commitments and welcomes stricter permit compliance.

“Therefore, TAG does not see any ‘challenges’ in dealing with any level of New Zealand government.”

RISKS OF WORKING IN NEW ZEALAND

“Mr. Cadenhead said although New Zealand is remote, it is not as isolated as some might think.

“There is certainly not the oil and gas exploration and production support that is available in North America, however there is adequate support for the present levels of activity.

“TAG is well organised and disciplined with respect to completion of our explora-

tion activities. With careful planning and management of those providing services to us, we are highly confident that we can accomplish what we want without undue delays caused by lack of support services.

“We are also confident that the significant increase in drilling activities will bring with it an increase in locally available services, including drilling equipment.

“If we see bottlenecks ahead of us, we can and will take steps to minimize or eliminate any delays that could occur. These steps might involve bringing in additional support services from North America and/or reorganising schedules to make maximum use of equipment and services that are locally available.”

OVERVIEW

TAG Oil holds interests in six oil and gas exploration permits in the Taranaki Basin and three permits in the Canterbury Basin, totalling 4,063,706 gross acres in New Zealand. In Taranaki, TAG Oil is focusing on shallow oil and gas pools in known Miocene reservoirs and on deeper gas prospects in the producing Tariki and Kapuni Sands, which are widespread throughout the basin.

TAG Oil’s frontier interests in Canterbury include a number of untested structures and provide the company exposure to high-impact oil and gas exploration at reasonable drilling costs. ●



The large Kate prospect looks promising.