



COLOMBIA

Emerging From the Shadows

A Special Report From
Oil and Gas Investor and
Global Business Reports

COLOMBIA: INTRODUCTION

Investor Confidence In A Friendly Fiscal Climate

The oil and gas sector is a major beneficiary of a friendly fiscal climate, investor confidence and improved security.

Colombia's most famous exports remain a combination of the legal and illegal: coffee and coca. Recently, however, President Uribe's government has been trying to introduce a third ingredient—oil. With the stated aim of increasing production to 1 million barrels of oil per day and extending reserves beyond 2015, Uribe has set exacting targets for the industry.

Early results are encouraging. Both production and reserves estimates have increased over the past year. Although less than the 2000 peak, when Caña Limon Field was at its zenith, production rose to 620,000 barrels of oil per day in October 2008 from 517,000 daily at year-end 2007. Proven reserves have increased from supporting a self-sufficient Colombia until 2012 to self-sufficiency until 2015.

Since coming to power on a foreign-investment-friendly ticket, the Colombian government has attracted significant foreign interest due to its friendly fiscal climate, investor confidence and improved security. The oil and gas sector has been the major beneficiary.

In comparison with its close neighbors,

which seem determined to make foreign investment as difficult as possible, Colombia is an oil and gas investor's heaven. Companies with operations based out of Venezuela and Ecuador are refocusing their budgets and corporate strategy on Colombia.

The formation of the Agencia Nacional de Hidrocarburos (ANH) in 2003 has been key to encouraging foreign and local companies to operate alongside state giant Ecopetrol. ANH now controls the bidding rounds and allocation of licenses, which Ecopetrol previously controlled. Ecopetrol is now a purely commercial partner for companies entering into agreements. This has increased confidence and led to ever-growing numbers of both E&P and oilfield services companies entering, or returning to, Colombia.

The large amount of unexplored and undeveloped land, opening up of new areas formerly outside the government's control and prospect of heavy crude in the Caribbean offshore present opportunities for companies of all sizes. "We don't have any practical limitations to



Falco's rig camps are exported for use in Africa.

operating in any part of the country right now," says Javier Gutierrez, president of Ecopetrol. "Attacks on infrastructure have reduced substantially—last year (2007) we had 30 by November. The largest number of attacks is normally in Caña Limon, and this year it has only had two attacks."

Despite this improvement, some areas still require special security considerations. These include the border area with Venezuela and the Putumayo area in the south.

Alongside majors such as Shell,

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Chevron and BP, an increasing array of juniors see potential in Colombia. Many of its fields are smaller than those of its neighbors and fall under the majors' radar. This creates space for companies whose aim is to produce 15,000 to 25,000 barrels of oil per day, such as Petrominerales and Perenco.

Nevertheless, despite government support, the ANH's efforts and the activities of companies in the field, there still hasn't been a find large enough to interest the majors. "Although there has been no major discovery in the recent past, there are many opportunities," says Minister for Energy and Mines Hernan Martinez Torres. "Exploration was down to two or three wells a year in early 2000 because of security problems and uncompetitive contracts. This year we will drill more than 100 wells." With these levels of exploration, the expectation is that sooner or later there will be a discovery worthy of the majors' interest.

Until late 2008, there was confidence that all ANH targets for discovery would be achieved. The fall in oil prices over the last quarter, however, has led some players, particularly from outside the country, to question the sustainability of industry growth. Many fields in Colombia are difficult to access, engendering high transport costs. Oil prices below \$50 per barrel make the margins on these fields slight. Some companies, carried away in the boom times, have over-reached in the most recent bidding rounds.

The ANH operates a strict penalties system that it is willing to apply. The last bidding round's contracts required that exploration and seismic studies be undertaken before the first quarter of 2010, with attendant penalties for failure to meet the deadline. In many cases, only if prices return to close to \$65 a barrel by the end of 2009, will companies be safe from the worst of the international oil price fall-out.

How Colombia's E&P companies deal with these new challenges, and the trickle-down effects on services companies operating in the area (who traditionally have commanded high prices), will be of great interest to the government, local companies and multinationals that are placing their faith in Colombia. □

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Contract Improvements And Technological Innovations

The introduction of new technologies to Colombia's abundant small and mid-sized fields and Ecopetrol's improved contract terms are opening up opportunities.

The discovery of the BP Cana-Limon Field in late 1999 seemed to herald a new dawn for oil and gas production in Colombia. Production reached an unprecedented 1 million barrels of oil per day and reserves increased exponentially. Against a background of civil strife, this was a great achievement. The discovery was a rare bright spot in a tale of gradual decline.

In recent years, however, the decline has been reversed. This is due in part to the Agencia Nacional de Hidrocarburos' (ANH) encouragement of exploration and development, but primarily it is due to companies' introduction of new technologies and techniques to the abundant small and mid-sized fields in Colombia. The government has helped by making small fields more financially viable, reducing royalties to 8% of production.

The formation of the ANH was coupled with the commercialization of Ecopetrol, copying a model laid down in Brazil between Petrobras and the ANP (Agência Nacional do Petróleo). Ecopetrol now takes a much smaller share in agreements with other companies operating in the country. "They changed the Ecopetrol association contract from a 50/50 participation to allow a 70/30 split in favor of the operating companies," says Alejandro Martínez Villegas, president of the Asociación Colombiana del Petróleo.

Ecopetrol, which listed in September 2008 on the NYSE, remains the biggest player in the Colombian market. Virtually every operating company in the country works with it in some shape or form. Javier G. Gutierrez, president of Ecopetrol, says of its growth, "Developing association ventures with other companies is a very important part of our strategy. It strengthens us and we hope to continue these relationships." This strategy has prompted Ecopetrol to look beyond Colombia to the Gulf of Mexico and also at joint ventures with Petrobras in Brazil.

Nevertheless, the company fully understands its role in helping to develop its home turf. "It is important for us to develop within the industry," says Gutierrez. "We want the best for Colombia, and we want to do well as a competitive company. The most important thing is for Colombia to be attractive and competitive. We might not make the discovery, but we are helping to create the correct environment for a major discovery to take place."

Majors like Esso and Shell are returning to the country at the invitation of the ANH, looking for larger fields and offshore development. Yet, as Bernardo Franco Nieto, general manager of Perenco Colombia, says, "Colombia has a niche for all exploration companies, from the super majors to the very small independent companies. Colombia has tremendous potential and prospectivity." It is this prospectivity and the lure of unexplored areas that are attracting new companies.

Some larger companies take advantage of their financial power to buy their way in. Hupecol, which discovered Cara Cara Field, found this out the hard way, when Cepsa Colombia bought the field. Cara Cara was one of the major discoveries of recent times, producing 25,000 barrels per day at its peak. Not only did CEPESA take the field, it also took over the manpower. "We had to let go half of our staff with the Cara Cara sale, as



Javier G. Gutierrez,
president, Ecopetrol


they were transferred with the asset," says Marcela Vaca Torres, Hupecol general manager.




The smaller size of Colombia's fields has created space for independent companies like Petrominerales, a subsidiary of Canadian Petrobank, to operate successfully. Since signing the IPC for Neiva and Orito fields in 2002, Petrominerales has continued to expand its position. "The past year has seen quite a change for the company," says Jack Scott, executive vice president. "We have made a large discovery at Corcel in the Llanos Basin and are building a big production facility so that we are now operating our own production."


Corcel was drilled in July 2007 and brought into production by September of that year. "The cycle on our Corcel wells is 60 days from first spud to production," says Scott. "These are high-impact wells of 5,000 barrels per day. Recoveries on a primary production scheme here are 35% to 40% of reserves and upwards."




Success in Colombia isn't guaranteed. Many operators consider a rate of one well out of seven going into production as

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good. Therefore, the size and geological conditions of the exploration areas are important. Petrominerales' Scott claims, "We are probably one of the largest landholders in the country with 14 exploration blocks. We have about 1.6 million acres of land exploration rights, split between heavy- and light-oil potential." This potential, combined with the company's experience, should bode well for continued discoveries and successful operations.



Mauricio De La Mora,
general manager, InterOil
Colombia

While Canadian interest in the country has been increasing, other foreign independents are also present. InterOil, based in Norway and listed on the Oslo exchange, entered Colombia in 2005 with the purchase of Mercantile Oil & Gas. "When the company was bought we were producing 1,600 barrels per day. Now we are close to 4,500. InterOil's acquisition included Mercantile Colombia, Mercantile Peru and Compania Rio Bravo—a services company," says Mauricio De La Mora, general manager of InterOil Colombia.

InterOil succeeded in increasing output from 14-year-old fields using a combination of fracing and directional drilling. The company faces a typically Colombian challenge, however, on its Altair block, which is home to a tribe of El Medano Indians. De la Mora explains the process involved in protecting their rights and welfare and responding to their traditions: "We are trying to negotiate as cleanly and transparently as possible. You have to accept the values of the tribes. For example, the main negotiator must be male."

The indigenous groups in Colombia are protected by a specific set of laws that

companies must abide by to be invited to work on their land. "With the Indians and the community, you need to get a social license and ask them to be part of the project," says David Arce Rojas, president of David Arce Rojas Consultores & CIA. "But they don't approve or negotiate the project; it is the government that approves the project."

Not all of Colombia is inhabited by indigenous tribes, just as not all of it is covered

by rain forest. This diversity is what makes it such an interesting place in which to operate.

Lewis Energy recently acquired an area near Cartagena. "We just got a large block called San Jacinto in the main round," says Rod Lewis, founder and CEO. "It is everything between Barranquilla and Cartagena in the north of the country. It is a block with a little bit of infrastructure. There are no producing wells and a couple of pipelines."

This is Lewis' first foray into the country as an operator. Previously, it was involved in joint ventures with operators such as Solana and Gran Tierra. It may seem strange to get involved as an operator in a time of lower prices, but Lewis doesn't see it that way. "We are heading into the real world now. Before, at \$147 per barrel, the Starbucks salesman could

come out here and make money."

Lewis Energy hopes to bring its expertise in ancillary services, including drilling and pipeline construction, to the Colombian market. Ecopetrol dominates the pipeline business, but various companies, including Mansarovar Energy, a Sinopec OVL venture, and Lewis Energy, have shown serious interest in becoming involved.

The influx of new technologies and expertise benefits independents. Omega Energy has been pushing to develop a space in the market since obtaining its first contract in the 2003 round. Using new technologies, Omega has been developing La Punta Field. "We are increasing our success rates using new technologies such as 3-D seismic that help us see and interpret what is under the ground," says Omar Leal Quiroz, Omega Energy Colombia's president. "Combining this information which we have about the field formations, we can determine the best potential locations to drill our wells."

Omega continues to develop the market and to surmount the challenge of human resources. This bodes well for its future. "I am convinced we have the right people here at Omega and the industry knows this," says Quiroz.

Opening up the market for foreign players is one aspect of the ANH's job that



Omar Leal Quiroz,
president, Omega
Energy Colombia

"I am convinced of having the right people here at Omega and the industry knows this." Omar Leal Quiroz, president, Omega Energy Colombia



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“Before, at \$147 per barrel, the Starbucks salesman could come out here and make money.”

Rod Lewis, CEO and founder, Lewis Energy

has been achieved. The less-trumpeted news is that they have also made it possible for local players to get involved in the sector. After initial problems, when companies that bid successfully failed to meet the requirements, conditions have been tightened and only capable and committed local companies remain.

There are challenges for the smaller local companies, particularly when it comes to financing, as illustrated by the creation of various short-term alliances. “It is tough for Colombian companies to develop within the market,” says Mario Bolivar, president of TCOil. “A local Colombian company can’t compete against a foreign company which has more money and access to credit. Here in Colombia private companies have to raise money out of our own businesses.”

And there are other issues facing operators in Colombia, according to Bolivar. “There is still a shortage of drilling equipment. To drill a well in Colombia costs more than double a well in the U.S. Sometimes the only rig available is a bad piece of equipment.” This is more often a problem for smaller companies, which are unable to guarantee the drilling companies a long-term contract or investment.

Nonetheless, Colombia remains attractive for many companies, both local and foreign. The ANH November 2008 round resulted in 22 out of 45 licenses issued, and the Mini-Ronda saw 50 of a possible 102 blocks issued with a value of US\$346 million. These figures were slightly below what was expected when the rounds were announced in early 2008 due to slumping oil prices.

Colombia still contains vast unexplored areas, and opportunities in gas, particularly, are largely untapped. Assuming that oil prices rise to the \$60 to \$80 mark, the future for Colombia’s E&P operators looks assured, with one caveat: a significant find is required to justify the exploration costs and maintain interest.

Yet confidence remains high. “The trend is good and we are optimistic. Foreign investment will continue increasing and I hope there will be a new discovery very soon. The heavy-crude area is very prospective, the Caribbean offshore areas as well. Companies are investing serious money in Colombian geology, so that I am optimistic we will make a discovery,” concludes the ACP’s Villegas. □



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The growth of the service industry is evident in the significant increase in Campetrol members, from 32 in 2005 to 63 in 2007.

Although the industry is well served by services and new technologies, E&P companies complain that prices are too high. Service companies respond by pointing to the difficult access in many areas and problematic climate conditions.

The recent renewal of interest in Colombia has led companies such as Baker Hughes to reinvest. "Latin America has been the smallest region for Baker, but it is starting to gain space in the minds of management due to countries like Brazil and Mexico," says Henry Galindo, corporate affairs manager. "Colombia is the third country in our Latin American strategy." Colombia is a key part of many companies' plans.

This return hasn't been problem free. Baker Hughes suffers from the industry-wide boom-time problem of recruitment and is struggling to recruit skilled Colombian workers.

Service companies' interest in Colombia is perhaps best illustrated by the story of Campetrol chairman Jorge Cárdenas' own company, Equipem. Working out of both Colombia and Venezuela, Equipem has changed its priorities. "We decided to prioritize our assets in Colombia, improve them, and increase investment and oper-

ations," says Cardenas.

This potential is what has kept larger companies such as Schlumberger, Halliburton and San Antonio International working in Colombia over the years. Their presence has benefited the industry. Halliburton has assisted the ANH with the mapping and creation of new blocks for the bidding rounds, and has brought its latest technologies to Colombia, working closely with Ecopetrol to introduce multilateral well technology.

There is a well-developed local scene, focused heavily on the Colombian market where local knowledge reaps significant rewards. A country with such diverse community structures and environmental conditions benefits from local knowledge and expertise.

One local company among the many service companies in Neiva is Hydrocarbon Services. "We learned how to construct the necessary equipment with local suppliers and could start offering very good prices," says general manager Juan Carlos Moreno.

The entrepreneurial spirit coming out of Neiva is epitomized by the two brothers who head Mecanicos Asociados, a Colombian operation and maintenance company. Overcoming setbacks of family bereavement and professional loss in the early 1990s, they have grown the company to achieve revenues of more than

\$73 million last year. Antonio José Villegas, president, credits low management turnover for the company's success.

Now competing actively with the major industry players, Mecanicos Asociados is looking abroad for its next expansion, an objective that sets it apart from many other Colombian companies. This expansion will be assisted by Stork from the Netherlands, which acquired a significant portion of the company.

The tough Colombian conditions mean that companies who do go abroad find their products are suited to the most difficult conditions. For example, Falco Campamentos, constructors of modular living systems for the oil and gas and mining industries, claims that its modular camps are strong enough for up to 40 people to dance on their roofs. "The lack of good roads in Colombia caused these camps to break quite rapidly in the past," says Fernando Angel, president. "They did not last long enough. In the petroleum zones the conditions of the roads are even more difficult. Therefore the skids and walls needed to be made stronger to cope with the road conditions in Colombia."

Angel explains how the company meets the logistical and communication demands from Colombia. "We use a combination of sea transport, river transport, helicopters, planes and road transport, depending on the region and area." A recent shipment to the Democratic Republic of Congo traveled perched on the top level of a container ship.

How will the Colombian service and supply market respond to lower oil prices and less cash available from E&P companies? The exploration side of the business should be steady into late 2009 and early 2010, as E&P contracts signed with the ANH have contractual obligations for seismic surveying and exploration drilling. After that, the continued high membership of Campetrol will depend on the price of oil. □



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