#### Iraqs big oil promise clouded by bigger political questions

IRAQ HAS MORE UNDEVELOPED oil and gas potential than almost any country in the world, yet from 1990 was off limits for international petroleum firms.

Despite the United Nations trade embargo imposed against Iraq following the Persian Gulf War of 1991, the Baghdad government in 1997 was negotiating with foreign firms over field developments.

In the aftermath of the Gulf War, Iraq's President Saddam Hussein ensured that oil and international politics were so thoroughly mixed that every call for tighter sanctions from one UN faction was followed by a call for a cautious approach by another.

At the hub of the troubled relationship between Iraq and UN after the war was a UN demand that its inspectors catalog Iraq's arsenal of weapons of mass destruction.

Saddam wanted sanctions to be lifted so exports of oil could resume as before the war, but the UN allowed only limited sales of Iraqi oil to pay for food and medical supplies for Iraqi civilians.

Saddam's troops repeatedly interfered with the inspections process once the program began. Each time the U.S. and U.K. governments called for tougher sanctions.

Yet each time also Russia, France, and China, which were lined up to develop massive fields in Iraq once the UN sanctions were eventually lifted, spoiled the U.S. and U.K. plan.

State firms dominated Iraq's oil industry, but after the Gulf War Baghdad recognized that further development would not be possible without the cash and technology of foreign firms.

The ministry placed its priority on rehabilitation of production facilities once international sanctions were lifted. After this came development of discovered giant fields, then smaller finds, and then exploration in the western desert.

Iraq had capacity to produce 3.5 million b/d of oil at the time Saddam sent his troops into Kuwait in 1990. In 1997 its quota within the Organization of Petroleum Operating Countries (OPEC) stood at 1.2 million b/d.

The country produced an average of almost 1.8 million b/d of oil under the oil-for-aid program and said it intended to raise capacity to 2.6 million b/d by 1 year after sanctions were raised, and 2.9 million b/d after 2 years.

Baghdad detailed a plan under which new developments would take Iraq's sustainable production capacity to 4 million b/d in 2000, to 6 million b/d in 2010, and 7 million b/d in 2020.

The country's total proven reserves were estimated at 120 billion bbl of oil. Of 400 prospects delineated through 1997, more than half were commercial discoveries, mainly of oil.

The oil ministry pegged total crude oil reserves at 112 billion bbl of oil, with potential to reach 214 billion bbl. Total gas reserves were estimated at 3.36 trillion cu m. Another estimate showed that Iraq's remaining undrilled structural prospects could yield at least as much oil as had been discovered to that time.

## Oil developments

The Iraqi oil ministry earmarked 33 discovered and appraised fields, with combined capacity to produce 4.65 million b/d of oil, for development.

Baghdad promised production sharing agreements (PSAs) for giant West Qurna, Majnoun, Nahr Umr, Al Halfaya, and Ahdab fields to foreign companies, the first four of which were expected to produce a combined 2.1 million b/d.

Iraq also negotiated with almost 60 firms from 25 countries for other projects. Middle East Economic Survey (MEES) said 17 of these firms joined the list only in 1997.

These reportedly included Mobil Corp., Conoco Inc., Chevron Corp., Occidental Petroleum Co., Atlantic Richfield Co., Exxon Corp., Texaco Inc., BP Exploration Operating Co. Ltd., Idemitsu Corp., Sumitomo Corp., and Petrovietnam.

Manouchehr Takin, senior petroleum upstream analyst at London's Centre for Global Energy Studies (CGES), said some of the fields offered by Baghdad were partly developed but had been shut-in and neglected since sanctions began.

"The Iraqi authorities wanted to encourage companies to come in," said Takin, "and they pulled all the strings they could in international political circles.

"There were lots of political games going on. The Russians, for example, said they would push ahead with development despite sanctions, but later said they would not break ranks with the international community.

"The companies that lined up contracts were all government-backed. Iraqi authorities had other fields they wished to line up too, and all were candidates for PSAs."

Many companies negotiated with Baghdad for PSAs, said Takin. "Some of the fields on offer had estimated reserves of 2 billion bbl of oil.

"Although some questioned the reserves estimates, any revisions were likely to be on the up-side. Fields of this magnitude, near the Persian Gulf for easy exports, were an ideal place for investment".

The companies that negotiated for developments were told they must also take on exploration of virtually uncharted desert territory, bearing any risk themselves as part of a package with a relatively low risk project.

A Russian consortium comprising Lukoil, Zarubezhneft, and Machinoimport secured an agreement for development of West Qurna field in southern Iraq, the country's largest field with estimated reserves of 19 billion bbl of oil.

West Qurna infrastructure was badly damaged during the Gulf War as Iraqi forces were pursued out of Kuwait and towards Baghdad. Russian companies were involved in the field before the war and surveyed the condition of surface facilities afterwards.

The West Qurna project was expected to last for 23 years and to involve building production capacity to 600,000 b/d of oil. The Russians were allocated the undeveloped northern part of the field.

Baghdad promised development of the Majnoun discovery to Elf Aquitaine SA and Nahr Umr field to Total SA.

Majnoun was appraised by the time of the Gulf War with a total of about 20 wells, but development work was not started. Brazil's Petrobras discovered the field in 1976. The Iraqis estimated reserves at 7-10 billion bbl of oil.

Elf completed initial technical studies for development of Majnoun and declared itself ready to begin work once UN sanctions were fully lifted.

The Iraqis partially developed Nahr Umr field, which was discovered in 1949, but the field was shut in.

Nahr Umr field reserves were said to be thoroughly identified, estimated at 6 billion bbl of oil. The field was expected to be able to produce 400,000 b/d of oil after development.

India's state firm Oil & Natural Gas Commission (ONGC) and Indian private company Reliance Industries Ltd. secured an agreement for development of a 14,000 sq km block that includes Al Halfaya field.

Al Halfaya, discovered in 1977, was under development when the Gulf War interrupted work. The field had estimated reserves of 4 billion bbl of oil and was thought capable of producing up to 220,000 b/d.

Iraq also initialed a production sharing agreement with China National Petroleum Corp. (CNPC) for further development of Ahdab field, which had estimated reserves of 1.4 billion bbl of oil and production capacity of 80,000 b/d.

Field development was expected to take 4 years; the PSA was for 26 years. CNPC was to analyze seismic data acquired by the Iraqis while UN sanctions were still in place.

The Iraqis intended to begin construction work and drilling on behalf of CNPC when UN sanctions were lifted.

Among other potential developments under discussion was Ratawi field in southern Iraq. With estimated reserves of 4 billion bbl of oil, the field was reportedly pursued by Malaysia's Petroliam Nasional Bhd. (Petronas).

Petronas also initialed an agreement for exploration of Block 1 in the western desert, which was virgin territory.

The Iraqi oil ministry was authorized to sign a contract with Romania's Rompetrol for drilling of 48 wells around the Khurmal discovery under a program valued at \$26.5 million. Payment was set to be made in crude oil over 2 years, once UN sanctions were lifted.

MEES said other oil fields under negotiation between Baghdad and foreign firms were Ain Zalah, where enhanced oil recovery was under consideration; Gharraf, with estimated reserves of 1 billion bbl of oil and production capacity of 100,000 b/d; Hamrin; Luhais; Nasriya, with production capacity of 220,000 b/d and estimated reserves of 2 billion bbl of oil; North Rumaila, with remaining reserves of 3-4 billion bbl of oil and potential production capacity of 500,000 b/d; Rafidain; Suba; and Tuba, with estimated reserves of 500 million bbl.

Many other firms expressed interest in western desert exploration Blocks 1-8. In 1997 an Iraqi delegation visited Algeria to discuss a PSA for Blocks 6 and 7.

The western desert was said to be virtually unexplored, with about 80,000 line km of 2D seismic data collected and only a dozen or so wells drilled in an area of more than 100,000 sq km.

Gas plans

Iraq also held talks for development of gas projects in readiness for ending of UN sanctions, notably with the Turkish government.

In May 1997 Iraqi Oil Minister Amir Rashid and Turkey's Energy Minister Recai Kutan signed a preliminary agreement for development of Al-Mansuriyah gas field and construction of a pipeline to Turkey.

Capital cost for the project was estimated at \$2.5 billion. The pipeline was intended to have capacity to carry 10 billion cu m/yr of gas to Turkey, and the sales agreement was expected to cover 20 years.

MEES said Baghdad and Ankara agreed to form an international consortium to operate the gas export project with Iraq's state firm and Turkey's Botas, Turkish Petroleum, and Tekfen together holding 51% of shares.

The other 49% interest in the consortium was expected to be taken up by international companies. MEES said Gaz de France, TransCanada Pipelines, and a Russian group entered negotiations for the remaining interest.

Kutan told a Turkish news agency that the partners would not violate UN sanctions against Iraq in building the pipeline but that preconstruction work would be completed before the embargo was lifted.

Plans called for gas to be transported to Turkey's Anatolia region through a 1,380 km long pipeline with two gas compressor stations. Gas supplies for the project were expected to come from development of six gas fields in northeastern Iraq with total non-associated gas reserves of 270 billion cu m, plus a similar volume of gas from the gas caps of oil-producing fields in the area.

Gas fields and proven reserves allocated to the pipeline project were Al-Anfal 50 billion cu m, Chemchemal 60 billion cu m, Jaria Pika 25 billion cu m, Khashm Al-Ahmar 40 billion cu m, Al-Mansuriyah 90 billion cu m, and Tel Ghazzal 5 billion cu m.

Limited exploration work was said to have been carried out in these fields, apart from Al-Anfal. Initial plans called for development of Al-Mansuriyah and Al-Anfal, with a gas production center in each.

Faleh Al-Khayat, director general of planning at the Iraqi Ministry of Oil, told a conference that a conservative tally of the country's gas reserves comprised 3.1 trillion cu m proven and 4.5-5 trillion cu m possible gas reserves.

This was said to be made up of 620 billion cu m of free gas, 280 billion cu m of dome gas, and 2.2 trillion cu m of associated gas in oil fields. The free gas figures included the northeastern gas finds earmarked for development to supply the pipeline to Turkey.

#### Oil-for-aid deal

Central to the political turmoil surrounding Iraq's recent dealings with the UN was an agreement to export crude oil to pay for humanitarian supplies for Iraqi citizens.

Saddam agreed to the deal reluctantly, and only because he saw it as a step to full removal of UN sanctions. Washington was also reluctant to agree to the program without strict controls on Baghdad's allocation of aid.

Under the first oil-for-food deal, which went ahead in December 1996 after protracted negotiations, up to 700,000 b/d of Iraqi oil was exported for a period of 6 months.

At the end of June 1997 OPEC energy ministers voted to maintain their production quota total at 25.033 million b/d.

OPEC said the rollover reflected a wish to ensure stability in crude oil markets and so maintain members' revenues at acceptable levels. The Saudi Arabian minister was particularly critical of quota violators.

OPEC's output averaged around 27 million b/d for the previous few months as quota violators, of which the most blatant was Venezuela, pushed hard to increase revenues.

After the meeting OPEC announced that members had reiterated a firm commitment to the quota arrangement and "made an undertaking to restrain output to their agreed level of allocation".

While nobody outside OPEC appeared to take this pledge seriously, oil prices surprisingly bounced back from their low in mid-June. Brent crude oil began trading in the \$18-18.50/bbl range, having briefly plunged to near \$17/bbl.

What made the difference was a decision by Iraq to stall its second 6 month period of crude oil sales to fund purchase of medicine and food for civilians under an agreement with UN.

CGES said: "President Saddam's objections to the slow pace of humanitarian aid resulted in an Iraqi refusal to export oil until an agreement was reached with UN.

"What the OPEC conference was not able to engineer was achieved by one of its members without really trying. With oil demand on the boil, the Iraqi barrels` absence made the difference."

CGES said the market was not then flush with oil, while International Energy Agency, Paris, revised upwards by 400,000 b/d its estimate of global oil demand in the second quarter.

"As has been the case since May 1996," said CGES, "Iraq's oil exports, both actual and imagined, came to play a pivotal role in oil price formation.

"Until June 1997, the continuation of Iraqi oil exports was thought to be a formality, but this is no longer the case. If all goes well between the Iraqi leadership and the UN, these exports could be resumed towards the end of July, but the window of opportunity to earn \$1 billion by Sept. 8 is rapidly slipping from Iraq`s grasp."

CGES calculated that if Iraq delayed its exports beyond July 24, 1997, the time limit in the agreement with UN and the country's production capacity of 1.4 million b/d would reduce oil export earnings to less than the target figure of \$1 billion.

If Iraqi did begin to export oil shortly afterwards, CGES predicted OPEC's total output would be boosted to 27.4 million b/d in the third quarter 1997, boosting global oil supplies and weakening the oil price once more.

If Iraq continued to procrastinate, however, and delayed its return to exporting until the fourth quarter, CGES reckoned crude oil prices would climb steadily, with Brent blend exceeding \$20/bbl sometime in the fourth quarter.

"The Iraqi stop-go was at the root of the price uncertainty facing the market," said CGES. "Once again political considerations threatened to unbalance the oil market's plans for the coming winter.

"A 1.4 million b/d surge of Iraqi barrels in August may well cause the price to sag, possibly eliciting a response from other OPEC members in the form of higher output and even more barrels from Iraq itself.

"Depending on how low the price goes, Saudi Arabia may reconsider its position within OPEC and decide to add some weight to the veiled threats it is said to have directed at the over-producers in Vienna."

CGES thought the market faced other potential drags on the price, including Germany's decision to sell off 20% of its oil stocks - 100,000 b/d over 18 months - and the possibility that more oil would emerge from non-OPEC countries - an increase of 100,000 b/d in each of the two remaining quarters of 1997.

"On the other side of the scales," said CGES, "there is Saddam's petulance and intransigence, which could keep Iraqi oil out of the market until October at the earliest."

Meanwhile, MEES reported that OPEC crude oil production fell sharply in June because of the delay in resumption of Iraqi crude oil exports under the UN program.

"According to MEES estimates," said MEES, "OPEC's crude oil output dropped by 410,000 b/d in June to average 26.35 million b/d as compared with 26.76 million b/d in May.

"No Iraqi oil exports under the oil-for-food program were registered during the month of June - the last cargo having been lifted in late May - with the result that Iraqi production was reckoned to have been scaled back by 720,000 b/d to 600,000 b/d in June, as against 1.32 million b/d in May.

"The 600,000 b/d is composed of crude deliveries to Iraqi domestic refineries 500,000 b/d, trucked crude exports to Jordan 70,000 b/d, and crude for direct burning in Iraqi power stations 30,000 b/d."

MEES said the 720,000 b/d Iraqi shortfall was partially offset by increased output from a number of other OPEC suppliers, notably Iran, up 140,000 b/d, U.A.E. up 120,000 b/d, Qatar up 50,000 b/d, and Nigeria up 25,000 b/d.

Later in June 1997, the UN Security Council voted unanimously to renew the agreement, apparently despite complaints from both Washington and Baghdad, with Washington calling for more evidence of distribution of aid to suffering Iraqi civilians.

### Iraq-U.S. stand-offs

After a period of relative calm between Iraq and the U.S., friction between the two governments surfaced once again in October 1997.

The threat of another military showdown between Iraq and the U.S. spooked oil markets, bringing Brent crude oil prices above the \$20/bbl mark for the first time in months.

It all started when U.S. members of the UN inspectorate, in Baghdad to catalog Saddam's weapons of mass destruction, discovered evidence of a chemical weapons arsenal.

Baghdad ordered all U.S. members of the inspection teams to leave Iraq within a week and suspended cooperation with UN inspectors in the face of warnings of "grave consequences" by the U.S.

Even France and Russia, which favored an early removal of sanctions against Iraq and which had oil field developments lined up for when that happened, warned Baghdad against further intransigence.

This move coincided with a UN Security Council vote to maintain comprehensive economic sanctions against Baghdad. The U.S. and U.K. pressed for tougher measures, and in what became a regular opposition group, China, France, and Russia blocked the proposal.

At first uncertainty over the future of the UN/Iraqi food-for-aid deal, under which 600,000-800,000 b/d of Iraqi oil was sold on international markets, helped keep the price of Brent crude oil above \$20/bbl.

Then volatility in worldwide equity markets, as Southeast Asian economies fought to bolster rapidly weakening currencies, and colder weather in Europe sharply increased traded volumes on oil and gas contracts.

London's International Petroleum Exchange (IPE) reported its second busiest month ever: more than 1.4 billion bbl of oil changed hands in October. IPE also noted that its second busiest day ever of Brent crude trading was Oct 3, 1997, when the price for November oil rose by more than \$1/bbl during the day.

"Rumors," said IPE, "that a U.S. aircraft carrier had been ordered to bypass its scheduled stop in Singapore and move to the Arabian Gulf caused oil prices to rise sharply.

"Volumes traded rose to 92,600 lots, equivalent to 92.6 million bbl. This compares with total daily world oil production of around 74 million bbl. Gas oil volumes were also boosted by the news, up more than one third on last month's average daily volumes."

#### Escalation

This spat developed into one of the most serious between Baghdad and Washington since the end of the Gulf War.

One UN report to its Security Council was highly critical of Iraq, citing a failure by President Saddam Hussein to provide "full, frank, and final disclosure" of his biological weapons hoard.

The U.S. and U.K. governments considered tightening the screws on Baghdad while Russia, France, and China called, as they did each time the U.N.-Iraq issue blew up, for no hasty measures.

As the dispute over UN inspections dragged over into November 1997, Baghdad and Washington appeared at times to be contemplating war.

Saddam pulled the strings of world leaders in a bid to boost his flagging popularity at home. Once again he goaded U.S. government into delivering threats of military action, another success for his propaganda machine.

The Iraq-U.S. stand-off became increasingly heated. The UN repeatedly said Iraq must comply with weapons inspectorate requests for information or else "face the consequences."

Thanks to Russia, China, and France, the consequences were watered down to a degree that could only strike Baghdad as laughable. Eventually, in early November, the U.S. and U.K. finally won support for tougher UN sanctions against Iraq, but oil markets were unmoved by the news.

On Nov. 12, 1997, Iraqi Foreign Minister Mohamed Al-Sahaf announced Baghdad was intent on expelling U.S. arms inspectors from Iraq and on shooting down any U.S. spy planes in Iraqi air space.

Then it became clear that the UN's "tougher measures" comprised a decision to impose a travel ban on Iraqi civilian and military officials who impeded UN teams working to catalog Iraq's weapons of mass destruction.

While apparently inconsequential, this measure yet again enabled Saddam to tell the people of Iraq, who feared him but feared U.S. military strength even more, that he was prepared to protect them against their enemy. Once more the UN gave him the means to shore up a crumbling power base and strengthen his grip on Baghdad.

Brent crude oil for December delivery traded around the \$19.60/bbl mark for much of the period as this Iraq/U.N. stand-off progressed, with West Texas Intermediate typically changing hands in New York for almost \$1/bbl more.

While this sort of saber rattling affected oil prices in the past, traders by this time viewed a potential loss of Iraqi exports as a relatively minor concern, since most other OPEC members were producing at full capacity.

Although new production figures showed OPEC output grew less than expected in 1997, a surge in Iran's crude oil output during October 1997 took the organization's total production to a new high of more than 28 million b/d.

CGES said the 1996 OPEC shortfall on anticipated output left most forecasters "looking foolish once again." CGES predicted a 900,000 b/d hike in OPEC average output for 1997, compared with an industry consensus forecast of 1.5 million b/d and a prediction by IEA of a 2 million b/d rise.

"As in 1996," said CGES, "planned upstream projects were delayed for technical and political reasons, and depletion rates at existing fields were higher than expected.

"Although many forecasters, including CGES, tried to take these factors into account when preparing their predictions for 1997, they clearly failed to give them enough weight."

In October 1997 all OPEC countries, even Saudi Arabia, produced above quota, giving a total average of 28.03 million b/d for the month, a rise of 470,000 b/d on the September average.

The figures came from MEES and showed an increase by Iran of 440,000 b/d on the month, attributed to a recovery from technical problems (see table).

Even Saudi Arabia produced 100,000 b/d more than its 8 million b/d quota, a rare occurrence for the OPEC member that had long fought to impress quota violators with the importance of output restraint.

MEES reported that Saudi Oil Minister Ali Al-Naimi called for a rise in OPEC's production ceiling to "a more realistic level" when OPEC energy ministers met to debate quotas in Jakarta in November 1997.

A Saudi official reportedly said the kingdom favored an increase in the OPEC quota total to 27 million b/d from 25.033 million b/d, with Saudi Arabia receiving a quota boost in proportion to its share of total output.

While OPEC prepared to ramp up production, and thus lessen further any potential effect of Iraqi intransigence on oil markets, CGES said non-OPEC producers were finding its difficult to match the pace of field development needed to meet global demand.

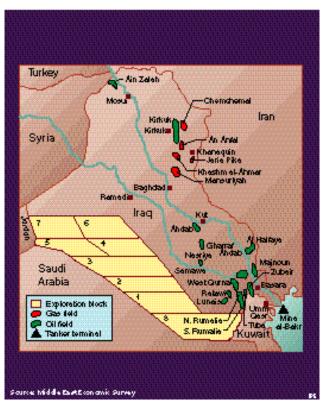
"The main reason North Sea production is persistently lower than forecast," said CGES, "is that the offshore drilling and supply industry is now operating close to full capacity and cannot bring new fields on stream any quicker."

Yet when the November 1997 OPEC meeting ended with a raising of total quotas to 27.5 million b/d, crude oil prices fell despite the fact that the new ceiling was merely more in line with OPEC reality.

Brent crude oil plunged below \$18/bbl for the first time in 6 months, and as Iraq and the UN agreed a third 6-month period of oil exports under the food-for-aid program, oil markets prepared for further price falls.



# Iraq's major fields, exploration blocks



Online Research Center January 01, 1998 volume 1998, issue 1

Article URL:

http://www.ogfj.com/display\_article/115022/58/ARCHI/none/none/1/Iraqs-big-oil-promise-clouded-by-bigger-political-questions/

Copyright © 2009: PennWell Corporation, Tulsa, OK; All Rights Reserved.