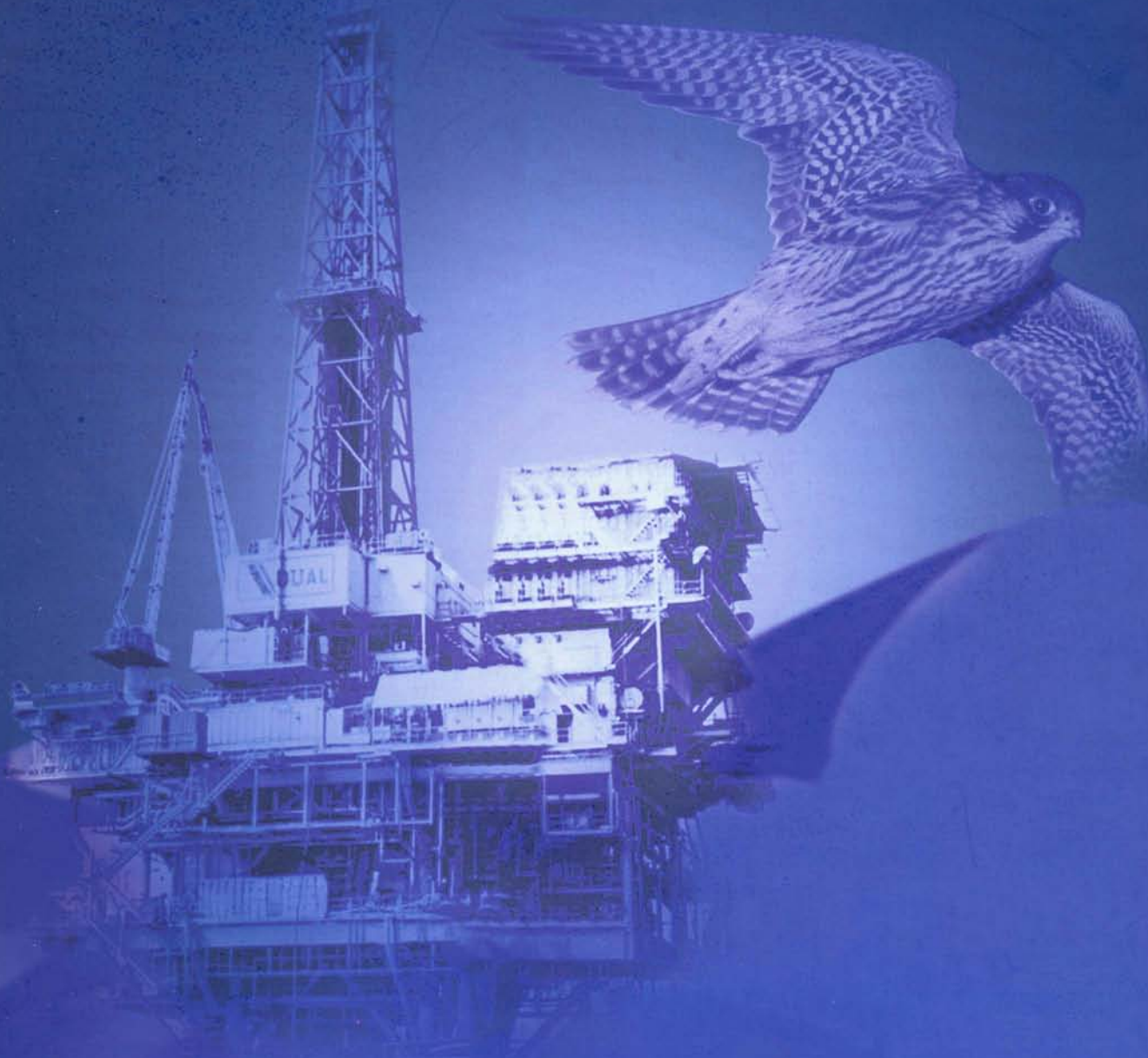


Against All Odds

THE KUFPEC STORY



Kuwait Foreign Petroleum
Exploration Company (K.S.C.)

Celebrating KUFPEC's Twentieth Anniversary

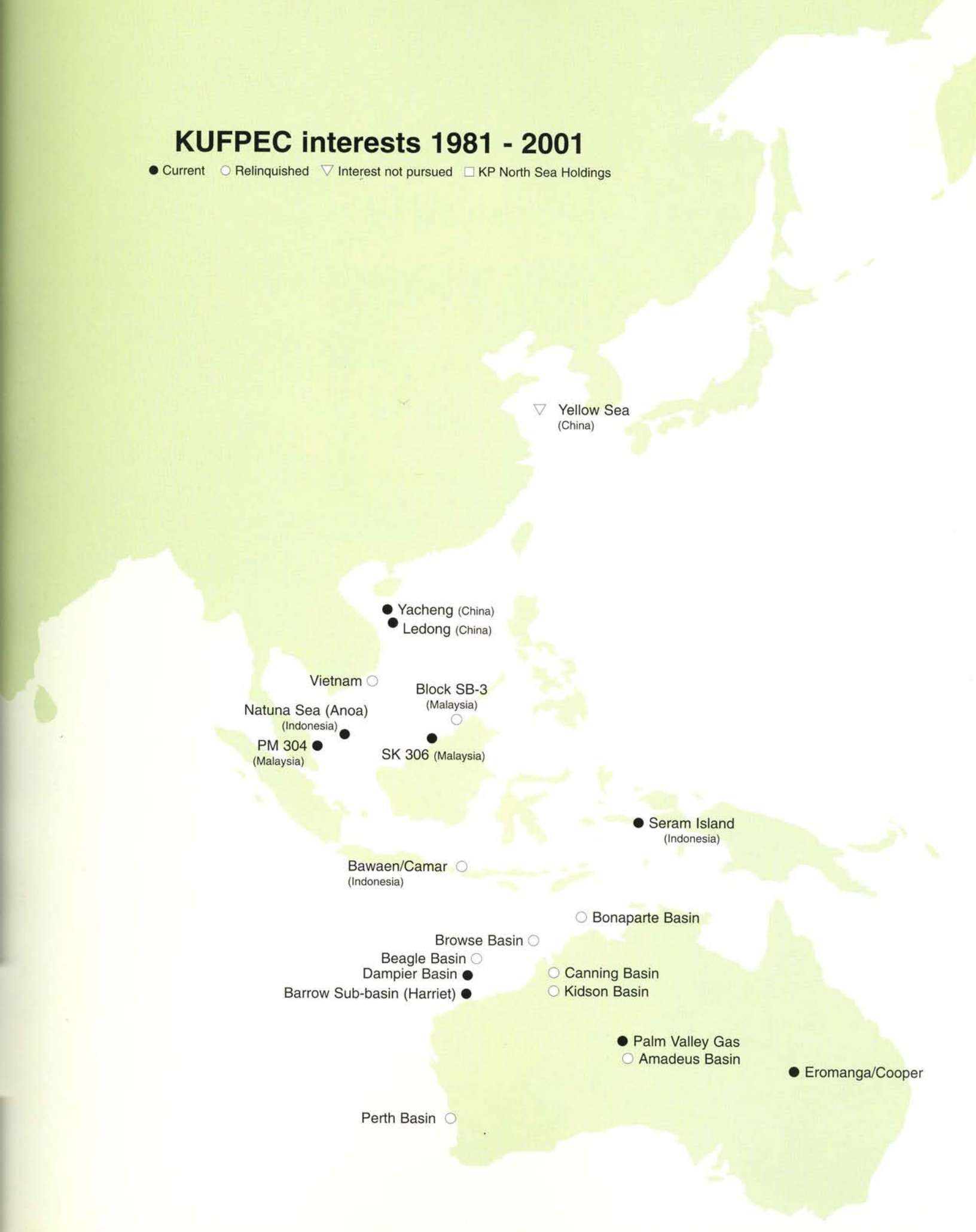


1981-2001



KUFPEC interests 1981 - 2001

● Current ○ Relinquished ▽ Interest not pursued □ KP North Sea Holdings



AGAINST ALL ODDS
The KUFPEC Story





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THE K U F P E C STORY

**Kuwait Foreign Petroleum
Exploration Company (K.S.C.)**

1981-2001



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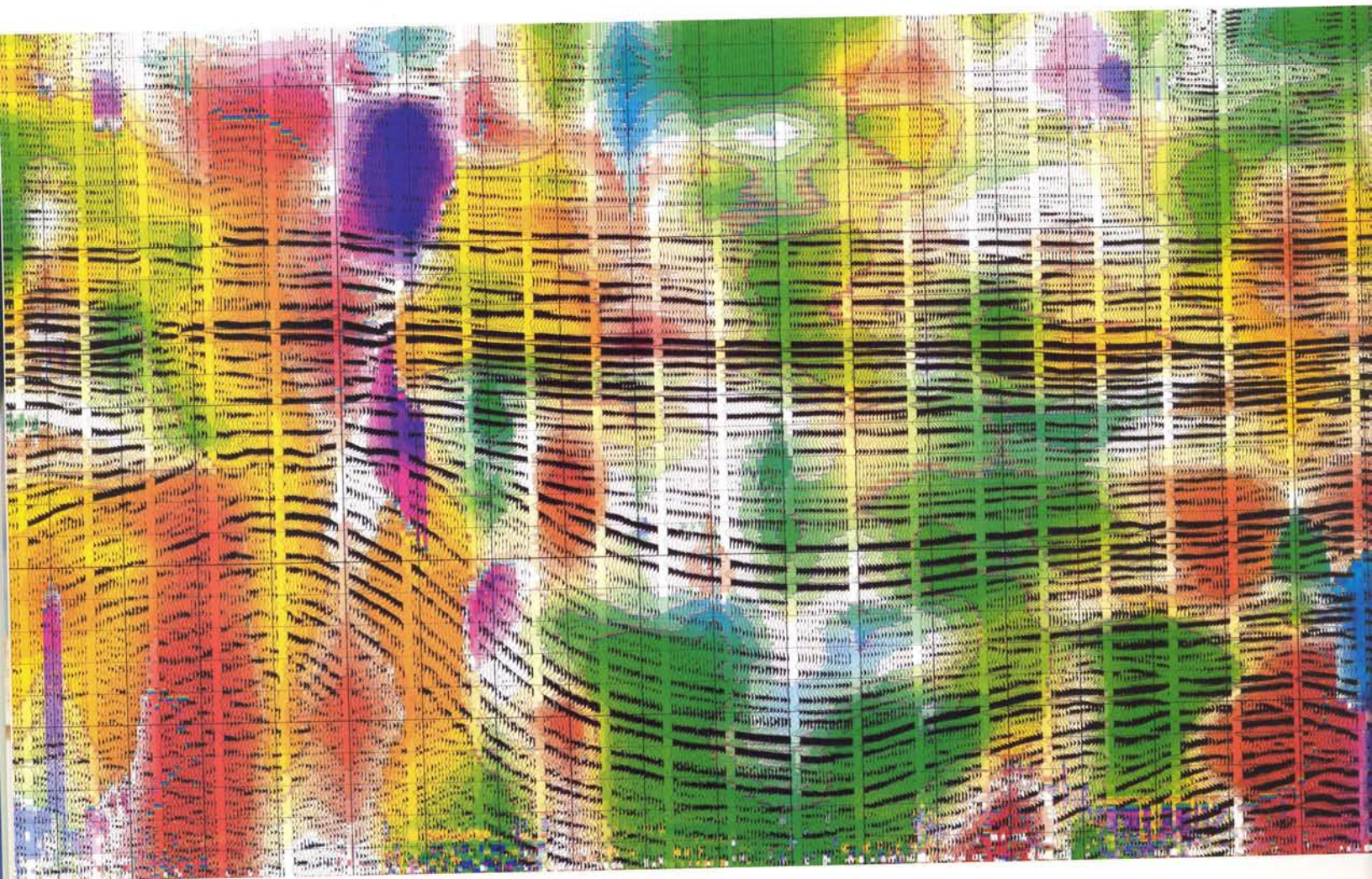
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Photo opposite title page: Installing a wellhead platform at Yacheng. (Photo: ARCO)



Wide azimuth 3D seismic data processed to show subsurface fracture azimuth in colour.

A Word from the Minister

AS MINISTER FOR OIL AND CHAIRMAN OF KUWAIT PETROLEUM CORPORATION, IT IS INDEED a great honour to introduce this official history of KUFPEC, one of KPC's smaller subsidiaries but certainly one of the best known internationally. For twenty years, the Company has carried the flag of Kuwait and KPC abroad with national pride, business integrity, technical skill, and a true commitment to its obligations, earning the respect of our partners on six continents.

I commend KUFPEC for producing this outstanding book. It is by any measure a courageous undertaking to record one's own history faithfully, to celebrate the ups as well as acknowledge the downs. That KUFPEC has done so in such a balanced and informative way, retaining the humanity and humour that are part of our daily business lives without sacrificing hard fact, is a tribute to its vision. It serves not only to recognise the work of those who have made the Company what it is, but also provides a foundation for those who are yet to serve. For without a full understanding of our own history, we can never truly understand who we are ourselves.

KUFPEC has certainly survived against all odds, from an opening portfolio not of its own choice, through the collapse of oil prices in the mid-1980s and again in the late 1990s, the disruption caused by the Iraqi invasion, and, for much of the past decade, a Shareholder who held serious reservations about the wisdom of retaining KUFPEC within its portfolio.

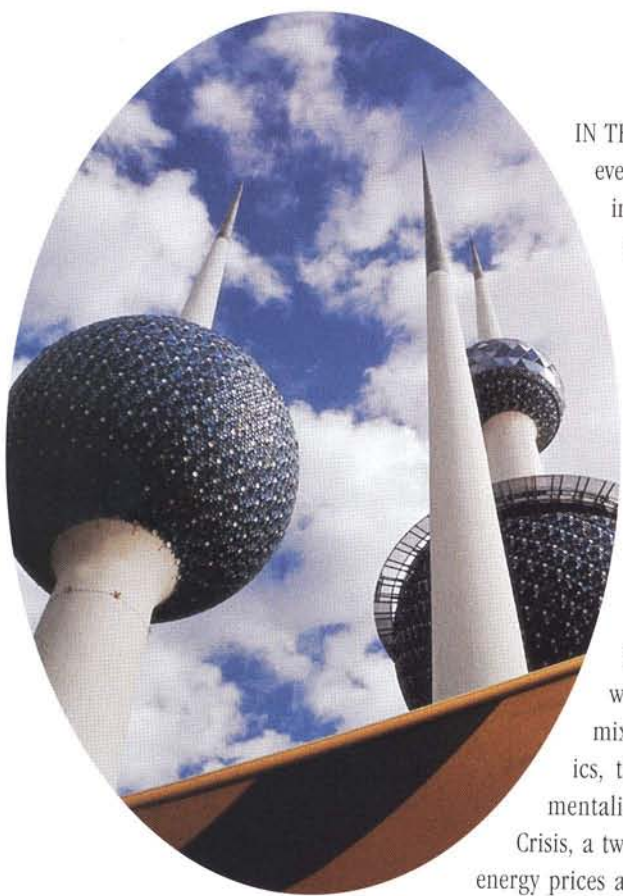
The fact that this Company is now providing a handsome return to its Shareholder and Kuwait is testament to the dedication and vision of its directors, management and staff over the past generation. In overcoming the challenges of an inherently difficult industry, they have proved by their work that any successful business rests as much on the people and personalities as it does on projects and profits.

Kuwait Petroleum Corporation is committed to the successful implementation of KUFPEC's new strategy for production of 100,000 barrels of oil equivalent per day by the year 2010. We salute the achievements of the past and pray God that the Company will be blessed in future years with the prosperity such a fine organisation deserves.



Adel Khalid Al-Subeeh, PhD
Minister for Oil
State of Kuwait

FOUNDING FATHERS: The Origins of KUFPEC



The Kuwait Towers, a prominent landmark and powerful modern symbol of the State of Kuwait.

IN THE ARAB WORLD, PEDIGREE IS everything. As elsewhere, a man, an institution or a company is ultimately judged by its fruits, but the first point of reference for the Arab – of whatever faith – is always his family, his origin, how respected they are in society and by their peers, and their reputation for integrity, honesty, even piety.

So it is with KUFPEC. It is an intriguing story, intertwining some of the more fascinating personalities of the world's upstream business with a mix of global politics and economics, the new international environmentalism, the tragedy of the Gulf Crisis, a twenty-year roller-coaster ride of energy prices and the growing need for clean and affordable energy. Throughout this, KUFPEC has often served the greater good by enabling developing countries to exploit their own oil and gas resources on a sound business basis.

MOTHERS AND FATHERS

Any history of this company must first explore its roots. KUFPEC's mother is rightly seen as Kuwait Petroleum Corporation, the holding company of the Kuwait oil sector. KPC itself – one of the world's top ten energy conglomerates – is barely a year older than KUFPEC, but its predecessor companies date to the 1930s. Briefly, it

serves to co-ordinate and finance the operations of Kuwait's oil business, finding, extracting, refining, selling and transporting oil and gas, for the ultimate benefit of the people of Kuwait. Its core mission is to make the very best use of the 10% of the Earth's oil reserves the tiny country is blessed with. And KUFPEC is an integral part of that KPC family, a fiscal tribe with worldwide consolidated assets approaching \$30 billion and annual revenues of a similar magnitude.

Sheikh Ali Khalifa Al-Athbi Al-Sabah, Kuwait's Oil Minister from February 1978 through June 1990 was the driving force in completing the consolidation in January 1980 of the various elements of the then disparate Kuwait oil industry into one integrated organisation. Quite simply, he turned Kuwait into an oil power to be reckoned with. He saw it through the trials of the Iran-Iraq War, and bequeathed to Kuwait its own indigenous energy industry, fully under Kuwaiti control.

But good parenthood lies not in merely creating a child, but in nurturing it, seeing it through to adulthood, and finally letting it prosper on its own strengths. Mostly, this is what KPC has done with KUFPEC. There were the difficult teenage years when KUFPEC's very *raison d'être* was questioned. Other KPC siblings involved in foreign upstream activities have withered or been disposed of, but KUFPEC has, almost against all odds, survived.

If KPC is KUFPEC's mother, then its father is Abdul Razzak



Mulla Hussein Al-Turkait, KPC's first Deputy Chairman. In Kuwait, the Minister plays a dual role of Cabinet officer responsible for petroleum affairs – through which OPEC dealings are conducted – and KPC Chairman. KPC's Deputy Chairman serves as, in effect, the CEO. Mr Mulla Hussein, as he is known, took KUFPEC under his own wing, becoming its founding Chairman and

Managing Director, with Mr Faisal Jassim Al-Kazmawi, a senior Kuwait Oil Company Executive, as his Deputy. KUFPEC's authorised and issued capital upon incorporation on April 1st, 1981 was KD100 million, deposited in US dollars.

A TASTE OF THE TIMES

"To fully understand KUFPEC," said founding Chairman Abdul Razzak Mulla Hussein, "you need to understand the times. The philosophy for KPC not only from the Minister but also the entire KPC Board was to make it a truly international oil company. To do that, you had to go international. There was talk then of Kuwait producing 500,000 boe/d (barrels of oil equivalent per day) abroad. It sounds high, a quarter of Kuwait's production today, but it was and is possible.

"There were two main elements to the thinking behind KUFPEC. Firstly, to expand Kuwait's oil production without breaking our OPEC quota. This could be done only by producing outside. And secondly, to put KPC's money into something it knew about. That was oil.

"At the time," continued Mr Mulla Hussein, "we were on a high. It was 1981. Prices were good. It was barely six years since Kuwait had completed the takeover of the major domestic upstream element its own oil industry from foreign majors. We had even surprised ourselves that we were running things so successfully. The Board backed us in going international, so we did.

"One relevant question is why we chose to expand internationally upstream first instead of downstream. Nowadays, KPC is well-known internationally for its refineries and petrol stations in Europe and Asia, but we had none of that then. We had no problem selling our oil so downstream was less of a priority. Besides, we knew upstream. We were indeed looking for downstream opportunities, but they came later.

"In fact," explained Mr Mulla Hussein, "KPC had quite substantial foreign exploration interests before KUFPEC, and more in the pipeline. There was a 50% share in the Williston Basin in Montana and North Dakota, and 45% of properties in the Hammam, Melloulou, Lebene, Mda and Drader Maritime areas of Morocco with operator Elf Aquitaine. The Moroccan interest had been acquired by the Ministry of Oil even before KPC was formed and was passed over to KPC upon incorporation. Then KPC had 21.25% of International Energy Development Corporation (IEDC) with US, Canadian, Swedish and Swiss partners. IEDC had been established about a year before KUFPEC and Sheikh Ali saw the huge areas it was going into in just a few months. Bursting with confidence as we were, there was a sense of 'If they can do it, we can!', so we did. Of course, we also needed somewhere to put Williston

Key Dates in the Kuwait Oil Sector and the Birth of KUFPEC

1934 Kuwait Oil Company (KOC) formed by Anglo-Persian Oil Company (later Anglo-Iranian, now BP) and Gulf Oil to exploit Kuwait concession.

1938 February – Oil discovered at Burgan in Kuwait.

1946 June – first Kuwait oil exports.



Kuwait Amir HH Sheikh Ahmad Al-Jaber Al-Sabah turns the symbolic silver-handled valve to commence loading the first exports of Kuwaiti crude in 1946. (Photo courtesy BP)

1949 KOC starts refining operations with Mina Al-Ahmadi refinery.

1957 Kuwait Oil Tanker Company (KOTC) formed privately.

1960 Kuwait National Petroleum Company (KNPC), 60% government, 40% Kuwait private sector, formed for domestic refining.

1963 Petrochemical Industries Company formed, part private/part government. Starts operations 1964 in fertilisers manufacturing.

1968 KNPC starts refining operations, Mina Shuaiba.

1974 January – Kuwait acquires 60% participation in KOC from BP and Gulf. August – Supreme Petroleum Council formed.

1975 February – Ministry of Oil separated from Ministry of Finance. First Kuwaiti Oil Minister Abdul Mutalib Al-Kazemi. May – Kuwait acquires private sector's 40% of KNPC. December – Kuwait acquires remaining 40% of KOC.

1976 March – Government acquires PIC and 49% of KOTC.

1977 September – Mina Abdullah refinery acquired from AMINOIL.

1978 January – HH Sheikh Jaber Al-Ahmed Al-Sabah become Amir. February – Sheikh Ali Khalifa becomes Oil Minister.

1979 June – remaining 51% of KOTC acquired.

1980 January – KPC formed effective January 27th. August – KPC becomes founding shareholder in IEDC.

1981 March – KPC forms KUFPEC effective April 1st.

Basin and Morocco, and a specialised subsidiary to watch over and work with IEDC. KPC was also in the process of acquiring 25% of the 28,974 sq.km Saiwan Block in Oman together with IEDC and Sumitomo, again with Elf Aquitaine as operator. And so KUFPEC came into being.

"I stress, though, that KUFPEC was never born out of IEDC, although there was certainly some inspiration. Being in IEDC proved very useful to us strategically as one arm of our foreign upstream operations. For one thing, it gave us excellent experience in how to deal internationally with lawyers, investment analysts and so on, and an education in the use and abuse of joint ventures and partnerships. They were hard and often expensive lessons but well worth it. Secondly, it would allow us to buy into new properties, piggy-backing on the excellent technical team IEDC was building.

"But we had our own agenda. With IEDC, although ostensibly profit-driven, there was an element of Third World aid. One of their stated objectives was exploration in developing countries. Even some of the studies they did were financed by international aid funds. KUFPEC was different, more overtly commercial. We were happy to go into some of the same Third World countries but through investment for mutual benefit. At times there was a political element to KUFPEC's work in that it promoted interests of Kuwait abroad — as it does today — but it was always commercially based. After all, we were in business."

NAMES, LOGOS, AND LONDON

"Strategy, inspiration and agendas were great," said inaugural Deputy Chairman Faisal Al-Kazmawi, "but in April 1981, we didn't have anything that resembled a company. The only people running KUFPEC at first were Abdul Razzak as Chairman and the other Board members: Nawal Al-Rushaid and Fawzia Al-Houti from the Ministry of Oil, and Abdulla Baroun, Saud Al-Nashmi, Mustafa Al-Adsani and myself from KOC. Even though we all had full-time jobs elsewhere, it was a working Board. I remember I used to finish my duties at KOC in the afternoon and then rush up to Kuwait City to see Abdul Razzak. He was busy with KPC, so we'd work on KUFPEC in the evenings. The great thing was, all our Board members were real upstream people, every one of them a geologist or petroleum engineer, so they understood the business.

"Of course, before all that, one of the first orders of business was a name. The company had been registered in Arabic under its literal legal name — *Al-Sberika Al-Kuwaitia Lilestikshafat Al-Petrolia Al-Kbarjia* — but that wouldn't work abroad. So Abdul Razzak and myself sat down... We had to have the words 'Kuwait' and 'exploration' in it, plus something about 'foreign' or 'overseas' that gave us a workable acronym. We tried 'Kuwait Overseas Petroleum Exploration Company', which became KOPEC. No good. Too much like OPEC. Someone later told me that it was also some East European currency, so it's just as well we didn't use it. We tried the name 'Kuwait Foreign Petroleum

Sheikh Ali Khalifa Al-Athbi Al-Sabah

Oil Minister 1978-90



In Kuwait's oil history, there is no doubting the role of Sheikh Ali Khalifa Al-Sabah, the man who became the nation's second Oil Minister and the face of the industry at home and abroad for a dozen years.

"Bear in mind that Ali had Cabinet responsibility for the country's main natural resource endowment at the tender age of thirty-two," said a former associate, "and this less than three years after Kuwait had fully assumed ownership of the upstream element of its own oil industry."

Educated to secondary level at Cairo's prestigious Victoria College, and then with a BSc in Economics from the University of San Francisco, (later earning a University of London Masters in Economics), young Sheikh Ali headed

the Economic Department of the then-combined Kuwait Ministry of Finance and Oil from 1968-73. He was Assistant Undersecretary from 1973-75, during the difficult time of the Arab oil embargo after the October 1973 War, and then the inaugural Undersecretary of the Ministry of Finance to February 1978 following the split into two separate Ministries.

"Throughout this time," recalls a colleague, "he was always a key Kuwaiti representative at OPEC, having the misfortune to be caught up in the kidnapping of the Ministers and their delegations at Vienna in 1976, even when he was at the Ministry of Finance."

But greater (and safer) things awaited the young economist with ideas. Six weeks after His Highness Sheikh Jaber Al-Ahmed Al-Jaber Al-Sabah assumed power in January 1978, Sheikh Ali was

appointed Minister of Oil. In less than two years, he had completed the restructuring of the Kuwait oil industry (a process that had been going on, partly under his supervision, since 1974), and formed Kuwait Petroleum Corporation. A year later, there was KUFPEC. Then he went downstream abroad, building a truly integrated and international oil conglomerate years before much larger fellow OPEC members started following the same path.

After leaving the oil portfolio in June 1990, Sheikh Ali served as Minister of Finance until April 1991, mostly during the dark days of the Iraqi occupation of Kuwait, before entering private business. He was Chairman and Managing Director of the Kuwait Real Estate Bank from 1998 through to 2000. A father of six, he now lives in retirement.

Exploration Company', but got KFPEC. It was unpronounceable. We still needed a vowel in there somewhere. Then Abdul Razzak had the idea of using the 'u' from 'Kuwait', and we had it. A perfect, catchy, two-vowel name that described what we do."

"Then there was the need for a logo," added Mr Mulla Hussein, "so we held a competition with local advertising agencies, and the winner was the one you see now. I can't recall the firm, but it was perfect. It looked like the cutting end of a drilling bit, and like an eye, looking for oil. There was some motion to it. It was alive. It said what we did. It also reminded me of the fossils that geologists use to help them find oil. And it was simple, in two tones of blue. Nice and warm. I was later told that the two sides of it represented two sides of a partnership or a team working closely together. That wasn't the original concept as I recall, but if that's what people saw, then with us in a business where we work with partners worldwide, it's fine."

The next task was to establish a staff and an office. Kuwait had to be the location for the corporate head office and so it settled itself on the fifth floor of the recently-built Salhiya Complex, next to Abdul Razzak's office. But it needed a technical team with geoscientists, engineers, legal and finance people to put together Board proposals, and to then acquire the properties, manage them, and deal with partners.

"At the time," said Faisal Al-Kazmawi, "there wasn't a sufficient pool of experienced people with those skills in Kuwait. And those here were fully involved in Kuwait Oil Company. Nowadays, with two generations of Kuwaitis trained in the world's top universities and having accumulated the necessary practical experience, we could do it. But not then. Also, this was before faxes, let alone e-mail. International communications were still by letter and telex. We had to go abroad for an effective technical office. London was the natural choice. For a start, KPC, KOC and KNPC were all there, as was IEDC with whom we would get increasingly involved. And London was much closer than the other world oil capital, Houston. Besides, we in Kuwait were long used to dealing with our British friends, since 1899 in fact. So we took premises in New Bond Street, London.

"We then had to find a Kuwaiti to head up London. Strangely, this wasn't easy. Few senior Kuwaitis wanted to go. The high cost of living in London, the British taxes, even the weather, being away from home, considerations for the children's education, the loss of possible promotion opportunities in Kuwait, being out of the mainstream here, were some of the factors that made it difficult. But we found a gentleman called Haji Mohammed Ali from Kuwait Oil Company, and he became our first General Manager in April. With help from IEDC – who then had their own London office – he hired Arthur (Art) Menzies from Esso

Continued on page 16

The Quintessential Gentleman of the Old School

Abdul Razzak Mulla Hussein Al-Turkait

KUFPEC Chairman 1981- April 1987



If Sheikh Ali Khalifa was the man with the big ideas in Kuwaiti oil for more than a dozen years, Abdul Razzak Mulla Hussein was almost always the one who made the ideas happen. Quiet, modest and reserved, he provided an anchor of stability and a voice of reason throughout the turbulent days when Kuwait was battered not only by the market but also the Iran-Iraq War.

"One thing that impressed me most about Abdul Razzak besides his razor sharp mind and copious memory was his sense of perspective," said a former colleague. "He was Chief Executive of one of the world's biggest oil conglomerates in a country with one of the highest per capita incomes, but he never forgot that he had grown up in a Kuwait that was poor. Oil was discovered only the year before his birth and was not first exported until after the Second World War, when he was a boy. People of his generation still spoke of the days when Kuwait survived on pearling and the lumber trade, and the collapse of the pearl industry in the 1920s. Kuwait then had perhaps only 60,000 people and city walls."

"Indeed," added another, "the Mulla Hussein Al-Turkait family has a tradition of government service over generations, and are well-respected as efficient administrators of great integrity. They served in the government itself, the Ministry of Planning and in the Police as well as

in the oil sector. Not only did Abdul Razzak's background fit him perfectly for his role, but he himself as an individual was scrupulously honest, to a tee, and always gracious. He was, to me, a quintessential gentleman of the old school."

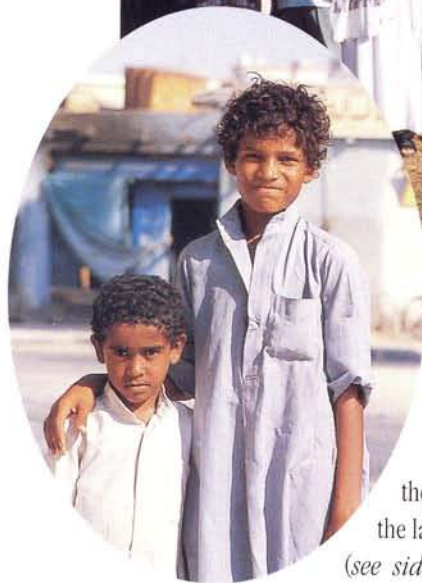
Others remember his uncanny gift of seeing an argument from the outside and being able to find an acceptable way through almost any impasse, when all others were deadlocked. This was to prove extremely useful on many occasions in the history of KUFPEC, IEDC, and particularly KPC. "Without that incredible ability he had to bring people to common ground," said one former KUFPEC executive, "we might have never survived, or it would have cost us a lot more to do so."

Abdul Razzak obtained his BSc in Petroleum Engineering from the prestigious University of California (Berkeley) in 1963 – "in the days of the Beatniks, well before the hippies and Vietnam," he recalls with fondness – before returning to Kuwait. He served Kuwait Oil Company for two years as one of its first Kuwaiti engineers before joining the Ministry of Oil (then Department of Finance and Oil) where he eventually rose to Assistant Undersecretary from 1973-80. During this time, he was also a Board member of Kuwait National Petroleum Company and Kuwait Aviation Fuelling Company. In 1968, he had been appointed a Board Member of Arabian Oil Company (a Kuwaiti-Saudi-Japanese concern) and a Trustee of the Kuwait Institute for Scientific Research, positions he held for twenty-five years.

Abdul Razzak Mulla Hussein retired from KPC in 1993, and lives in contented retirement in a modest home in Kuwait's suburbs.

International Energy Development Corporation (IEDC)

To the Third World: Enlightened Self-Interest and a Noble Idea



At the time, IEDC (logo at right) was certainly a noble idea. The developing world was in a Catch-22. These countries needed more oil to build their industrial bases, but couldn't afford it with the sky-high oil prices of the late 1970s.

To understand the earliest years of KUFPEC and even some of its current history, one has to understand the story of International Energy Development Corporation (IEDC). It is, by any measure, an interesting tale.

IEDC was born out of the economic dislocation in the developing world caused by the sky-high oil prices of the late 1970s and the vision of Canadian Maurice F Strong (see sidebar, right) to be a vehicle for accelerated energy development in what was then known as the Third World. Strong, the Chairman of AZL (Arizona Land) Resources, his US-based oil and ranchland company, was particularly well-connected with the UN, World Bank, and other international institutions. He hoped to use IEDC – and himself – as a catalyst to leverage public development aid funds into the Third World energy sector.

At the time, IEDC was certainly a noble idea. The developing world was in a 'Catch-22'. It needed more oil to build industrial bases, but couldn't afford it. Growth was being stunted, even reversed. There was, however, an upside. These countries accounted for about half of the world's total potential oil-bearing regions, but less than 5% of exploration. The 70 oil-importers among them had 2% of the world's proven reserves but were thought to account for 15% of ultimately recoverable reserves. By any standard, they were a major potential source of new hydrocarbons, and seriously underexplored.

Furthermore, the World Bank and International Finance Corporation were establishing major new programmes of financial support for Third World energy development. Then there was

the OPEC Fund, swelled by the bounty of the 1970s and the conscience of the OPEC States – mostly developing countries themselves. Maurice Strong, with his unrivalled network of contacts, saw an opportunity.

During July 1979, Strong had obtained capital commitments of \$2.5 million each from his own AZL, from Calgary-based oil independent Sulpetro, headed by his friend Gus Van Wielingen, and from Sweden's Volvo, headed by another friend, Per Gyllenhammar. He then set up a small office in London and started building a very impressive management team.

Foremost among these was Nordine Ait-Laoussine, a brilliant young Algerian geologist who had served recently as Executive Vice-President of Algeria's national oil company, Sonatrach, and John Godfrey, a former Vice-President of PetroCanada, which had also recently been chaired by Strong. Ait-Laoussine became IEDC's Managing Director, Godfrey joint Managing Director and later General Manager of the London-based technical operation, with Strong as Chairman. The core team was rounded out by economist and former OPEC Secretary-General Francisco Parra, who had been with Venezuela's national oil company; American Keith Huff, formerly Exxon's World Exploration Manager; William Holt as Chief Financial Officer; and Australian David Moroney as General Counsel.

"It was a circle of connections," said Ait-Laoussine. "Most of the top IEDC people knew each other as friends. I'd never spoken with Maurice Strong before 1979, but he knew Frank Parra from his time in PetroCanada, and Frank and I knew each other from OPEC where he had been part of Venezuela's delegation and I was part of Algeria's. At first, I had reservations about the concept of mixing a commercial venture with helping the Third World, but Maurice Strong is a very persuasive personality."

With \$7.5 million in hand, Strong went shopping with Ait-Laoussine, Parra and Huff for further capital among OPEC countries, including the Gulf states, and other places.

"One of our first stops was Kuwait," recalls Ait-Laoussine. "We had actually come to see OAPEC, which is headquartered there, and Secretary-General Ali Attiga. They weren't particularly interested then, but Frank and I knew Sheikh Ali Khalifa for some years from OPEC, so we paid him a courtesy call. We didn't even have a presentation for him but he was intrigued by the idea of IEDC. When he learned that such a respected company as Volvo was in IEDC, he was very interested. If he'd been out of town that day, we might have missed him and history would have



been different. Coincidentally, the meeting was on January 26th, 1980, one day before the law creating KPC came into effect.”

In fact, there were already links between KPC and one of IEDC's shareholders, Strong's own AZL. Sheikh Ali had met some AZL people at a conference and had been offered Williston Basin acreage in the US. He had asked Kuwait Oil Company to review the technical aspects, and Kuwait's Ministry of Oil acquired 50%. The other 50% was held by Solar Petroleum, an AZL subsidiary.

Within weeks, KPC joined IEDC as one of the four subscribing shareholders. For \$2.59 million, some loan funds and a pledge to contribute further capital later, it got 25% of the Geneva-based IEDC holding company, IEDC SA, on par with AZL, Sulpetro and Volvo. These holdings were later diluted to 21.25% when SOGENER, a Swiss company controlled by Strong and representing IEDC management, was allocated 15% of the company.

Then, even with money in the bank, things slowed down. Switzerland had been chosen as IEDC SA's base because of its international and neutral character. It had no relevance to the oil industry. However, with strict Swiss company law, Strong had to bring World Bank and UN pressure to bear before the Swiss Parliament passed a special law allowing the company to be incorporated. Share certificates were issued in August 1980.

In the meantime, IEDC SA had established several key subsidiaries, principally Netherlands-based IEDC BV, to deal with the delay in incorporating IEDC SA. Initially, all of the properties that IEDC acquired were owned through IEDC BV; IEDC BV itself was owned by the IEDC SA shareholders. Then the Arab Petroleum Investments Corporation (APICORP) – owned by the governments of the OAPEC States – decided to invest, but only in the Third World properties.

Curiously, IEDC had been introduced by Keith Huff to a number of exploration permits in Western Australia, hardly developing world. These were spun off into a separate subsidiary – IEDC Australia Pty Ltd – owned 100% by IEDC SA, and the other properties corralled into IEDC BV. With this early restructuring and cash from APICORP, IEDC BV became 60% owned by IEDC SA, 10% by APICORP, and the remaining 30% held variously by the other shareholders.

IEDC's first venture was actually in Australia in mid-1980, in the Canning Basin, but by early November it had its first Third World venture, in Sudan. By the time KUFPEC was operational a year later, IEDC interests covered 553,000 sq km gross or 146,000 sq km net onshore Australia, Oman, Sudan, Tanzania and Turkey, and offshore Congo – an area equivalent to France. In its first year, it also considered prospects as far afield as Jordan, Mauritania, Vietnam, Egypt, Costa Rica, and Bangladesh, often in conjunction with International Bank for Reconstruction and

The Crusading Canadian of Contradictions

Curiously, for a self-made oil millionaire, IEDC founding Chairman Maurice F Strong is best known as an environmentalist and Secretary-General of the historic June 1992 Rio UN Earth Summit. Described as a ‘Michelangelo of networking’ and the single most influential person in international environmentalism (and, thus, ‘Father Earth’), the peripatetic Strong has always worked the interstices between politics, public service and business. As with IEDC, his signature has been the mingling of public and private interests in the cause of public policy, using business success for political leverage, and vice versa. He is, in his own words, “socialist in ideology, capitalist in methodology”.

Smart, shrewd, with an iron will and supreme self-confidence, Strong was born in Depression-era Manitoba, Canada. One of his earliest jobs was as a pass officer at the UN in New York. By nineteen he was an investment analyst; at twenty-five Vice-President of Canada's Dome Petroleum; by thirty-five, head of Power Corporation of Canada, making his fortune turning around ailing companies. Through political connections, he then became Founding President (1966-70) of the Canadian International Development Agency, then Secretary-General of the 1972 Stockholm UN Conference on Human Environment, and founding Executive Director of the Nairobi-based UN Environment Program. He returned home in early 1976 at the behest of PM Pierre Trudeau to head up semi-national PetroCanada. Politically well-connected, he almost stood for Parliament in 1979 but withdrew to start IEDC.

After leaving IEDC in 1983, Strong continued to chair Canada Development Investment Corp – a job acquired in 1981 – and his own AZL Resources. He returned to the UN in 1985 after a ten-year absence to direct the \$3.5 billion relief efforts in famine-hit Ethiopia and Somalia. From there, he became Secretary-General of the World



Commission on the Environment which produced the 1987 Brundtland Report. This led to Rio on a road that had started in Stockholm fifteen years earlier.

After Rio, Strong returned to industry, heading Ontario Hydro, North America's largest utility, for three years, often controversially but with undeniable results. During that time, he was briefly touted as a successor to then UN Secretary-General Boutros Boutros-Ghali and worked closely with Mikhail Gorbachev in launching the Earth Charter. He returned to the UN in 1997 as Secretary-General's Executive Coordinator for Reform of the UN bureaucracy.

Now seventy, Strong divides his time between the UN, Chairmanship of the Earth Council at Costa Rica's University for Peace, and a home in a Colorado mountain valley where he and his wife, Hanne, have set up an ‘international spiritual community’ under their Manitou Foundation. Strong is, or has been, Chair of the World Resources Institute and Co-Chair of the World Economic Forum; member of the Club of Rome, Toyota's International Advisory Board and the Commission on Global Governance; Senior Advisor to the World Bank President and World Wildlife Fund; and President of the World Federation of UN Organisations. Although he never finished high school, he holds forty-one honorary doctorates and is a Fellow of the UK and Canadian Royal Societies.

He has recently published his autobiography and his views on the future effects on mankind of the changes in the environment in *Where On Earth Are We Going?*

Headquarters of IEDC Services (UK) Ltd at Lower Mill in Ewell, Surrey.



Development or World Bank funds. It received enquiries from Malaysia, India and Guinea Bissau, and investigated opportunities offshore Cuba and in Equatorial Guinea through Hispanoil. Apart from an investment offshore Egypt in the Gulf of Suez – which KUFPEC, in part, still held as late as 1998 – none of these were pursued.

By early 1981, IEDC had a head office in Geneva and a technical operation in London, run from a beautiful old house called Lower Mill, at Ewell, Surrey. There, General Manager John Godfrey with Exploration Manager John Bobbitt and the legal and financial people ran the day-to-day business. Strong, Ait-Laoussine and Parra covered the head office and various other consulting subsidiaries from Geneva. There was also a Connecticut office and later one in Bermuda, ostensibly for tax planning. A minor gas consulting subsidiary, International Gas Development Corp, ran out of Houston under George Carameros Jr.

Meanwhile, IEDC had become operator for the Tanzania and Turkey properties. Operating offices were established there under Nezet Ozakman and Bob Spackman respectively. In Australia, a Sydney office was opened – just before KUFPEC was formed – by ex-Santa Fe man, C Jere Graham.

“Sydney Office was unusual,” said Graham, “considering that all the properties we had were on the other side of the continent. The oil market was incredibly bullish and Maurice Strong’s intention was to eventually take IEDC Australia public. Sydney is the

financial heart of Australia and I think some people in IEDC Geneva and London thought they’d make a fortune from share options. In any event, as soon as I arrived in Australia in 1980, it was clear that Sydney wouldn’t work. So, with the work being in the West, we opened an office in Perth in June 1981 in a facility vacated by previous Canning Basin partners. Brian Luecke as IEDC Vice-President Exploration, Eastern Hemisphere headed it up first. I closed Sydney and moved to Perth in early 1982. It later became KUFPEC’s Perth Office, and is still there today, in different premises.”

“By early 1982,” said then KUFPEC Financial Controller Christopher Honeywill, “IEDC had been going for about eighteen months. Significantly, it was decided early on that IEDC’s own shareholders could participate directly in projects where IEDC itself had an interest. So, as part of building its own portfolio, KUFPEC acquired half of IEDC’s interests in Congo, Egypt, Sudan, Tanzania, Turkey and Oman. This was in addition to the 25% of Oman that KPC had first acquired. Two areas were off-limits for participation by KPC and Volvo: the US and Canada where AZL and Sulpetro had interests.

“However,” continued Honeywill, “by then it was clear that Maurice Strong’s intent was to use IEDC’s distinguished corporate partners to gain entrée into Third World concessions, do some preliminary work, and then farm out to other parties to recoup costs, turn a profit and share the major drilling and development expenditures. They were to be a promoter with a clever line. This is a valid commercial role but wasn’t quite to KPC’s liking. Kuwait didn’t want to be associated with that side of the industry, especially in the Third World where so much of its political capital resides. Instead, we wanted to develop the properties, to get the real benefit ourselves.”

The problem then was that AZL (always more of a ranchland company than an oil firm) and Sulpetro were running into financial problems and couldn’t afford to finance the necessary work. Volvo was also losing patience. But that’s a different story, one that belongs in slightly later years.

Milk, Biscuits, Drugs and Volvos

An obvious question about IEDC is “what was Volvo, a car manufacturer, doing in oil exploration?”

In the late 1970s, the answer would have been clear: with high energy prices, everyone was in oil exploration. It was seen as the road to quick riches.

Said KUFPEC Deputy Manager Middle East and Africa, Dr Mike McMurtry: “There were stranger situations. I recall one bidding round in the 1970s with Texaco that we called the ‘Milk and Biscuits.’ We were in a group with Unigate Dairies, thus the milk, and biscuit manufacturer Allied Foods. Doctors, dentists, anyone who could get an investment fund together was into oil, before the 1980s price collapse.”

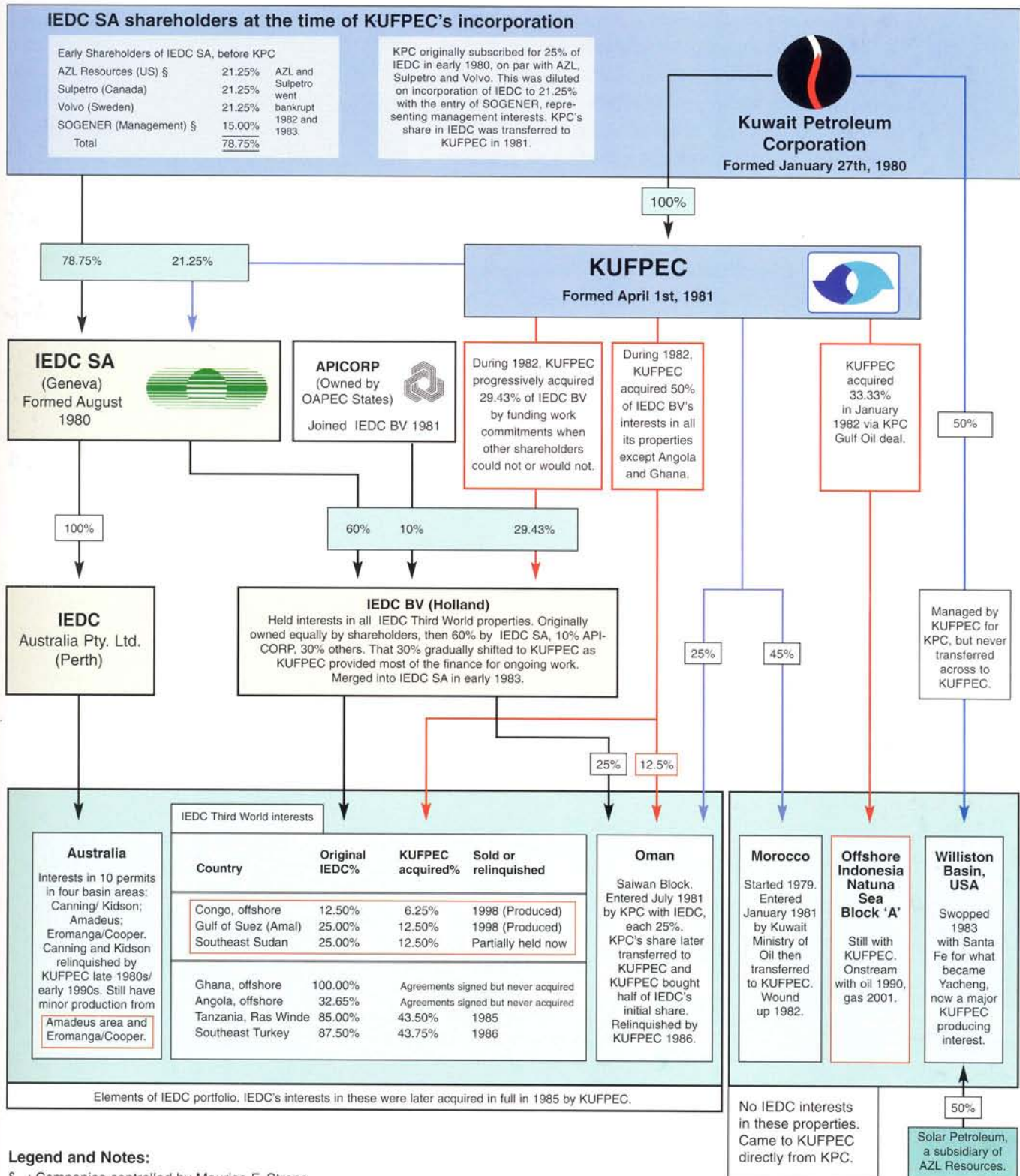
Added former IEDC and KUFPEC Exploration Manager, Dr John Small Jr: “I never really knew why Volvo was in IEDC. Maybe Sweden has great concern for

the Third World, or maybe they were trying to catch up with neighbouring Norway, in the North Sea.

“Either way, this strange combination of bedfellows gave rise to a few humorous moments. Once, at an IEDC Board meeting, we were considering an investment in Latin America. The Volvo representative was dead set against it although the geology, economics, even the politics all looked fine. Eventually he admitted that he considered the people there ‘all drug dealers and drug runners’, and he didn’t want to deal with them.

“I remember stifling a quick riposte and knew then that I was a good manager. ‘Yes,’ I nearly said, ‘and all those drug dealer friends of yours are happily driving around in brand new Volvos.’”

KUFPEC and IEDC: The Early Days – Inception through early 1983



Legend and Notes:

§ : Companies controlled by Maurice F. Strong.

- : Direct interests assumed by KUFPEC from KPC upon or within a year of incorporation.
- : Other direct interests or shareholdings at time of KUFPEC incorporation.
- : Post-incorporation acquisitions by KUFPEC through to late 1982.

100% : Percentage shareholding or interest.

□ : Exploration concessions.

□ : Part of KUFPEC's portfolio into 1990s.

Continued from page 11

Canada as Exploration Manager, and started recruiting a technical team. By late 1981, London had Haji and Art, Yousef Al-Rushaid from Kuwait as Administration Manager, and Dick Wiggin, from America, as Chief Geophysicist.”

Meanwhile, in Kuwait, Palestinian Marwan Rushdi Abdullah Aziz joined in April 1981 as the first employee and Company Secretary, with Egyptian Medhat Ali Hassan as Accountant. In July came lawyer Joseph Makhoul who took over as Company Secretary, with Rebab Bittar as his secretary. The next recruit was in February 1982 with Englishman Christopher Honeywill as Financial Controller, followed a day later by Finance Manager Khaled Mulla Hussein, who transferred from KPC itself. Rukhsana Khan from Pakistan and Indian Govind Vishwanath joined in May as Finance Manager's Secretary and Chief Accountant respectively. By late 1982, the combined strength of the London and Kuwait offices was fifty-four, mainly technical people in the UK, with a dozen in

Santa Fe's Al-Baz rig working offshore Bahrain in 1985.

Inset: KUFPEC's overseas operations allowed the transfer of technology back home to Kuwait.



Why KUFPEC? The Economic Argument

An obvious question – as valid then as it is now – is why Kuwait, with its huge domestic oil reserves and production in excess of two million bpd, needs to look for and produce oil and gas outside Kuwait?

To the 21st Century business mindset, with its focus on core business, sticking-to-the-knitting and exploiting unique competitive advantages, this is a fair question. After all, KUFPEC's total share of international production today is less than 3% of Kuwait's domestic output. Does KUFPEC really matter?

To explain, in the words of Abdul Razzak Mulla Hussein: “KPC's primary corporate objective is to earn a good return on our capital. The answer to how KUFPEC comes into this involves several elements.

“The first is capital transformation. Kuwait is a single source economy, based on oil. The one industry in which we have experience and expertise is oil; it is therefore logical for us to use the national oil company as a vehicle for the process of capital transformation. Foreign exploration, with KUFPEC as the vehicle, is one element of this.

“Secondly, investment in exploration and production is potentially profitable. We are in business, and even in low oil price regimes, there are many good prospects outside Kuwait.

“Thirdly, corporate diversification. Spreading

and balancing corporate risks protects basic profitability. Overexposure in one segment of a cyclical industry can lead to pronounced fluctuations in profitability and cash flow, and uncertainties for future development. This is particularly so for national oil companies such as KPC whose existence is founded on purely local endowments of reserves. Diversification, both horizontal and vertical, gives greater flexibility and, therefore, strengthens the ability to absorb cyclic variations. If upstream profitability is down, downstream may be up, thus smoothing overall profitability. With KUFPEC, we are in a second upstream segment, horizontal to our domestic upstream segment. This has paid off.

“And,” noted Mr Mulla Hussein, “I can think of no better example than the Iraqi invasion of Kuwait; when our domestic fields were shut in owing to UN sanctions, KPC – and thus Kuwait – was still producing oil, through KUFPEC.

“There were other elements in the equation too. KPC at that stage wanted to utilise fully its resources and to take advantage of ancillary



services that existed elsewhere in the corporation. One example is Santa Fe, with its drilling, minerals and engineering divisions, which was acquired eight months after KUFPEC was

formed. With both KUFPEC and

Santa Fe in our portfolio, we could respond more broadly to the market by servicing those customers – or countries – throughout the spectrum, from those who seek outside exploration companies to those who prefer to seek only outside technical services, or a combination of both. It's a matter of synergy.

“Furthermore, whatever service the customer wants, there is always a premium on technology, technical and managerial skills, and capital. That is what we bring to the table through KUFPEC. And we will continue to look for potentially the most profitable use of these.

“And, on top of that,” concluded Mr Mulla Hussein, “KUFPEC was and is a means to transfer technology, know-how and skills from abroad to Kuwait and its domestic operations. That is very important for long-term development.”

Kuwait. London had handled a huge workload of about 155 participation offers since incorporation.

“It was a fine team in Kuwait in the early days, and very international,” recalls Chris Honeywill. “Actually, Khaled and I were with KUFPEC until 1999, and Vishwanath until 1998 as Finance Manager of our Indonesian office. Rebab is still there, after twenty years. We had \$350 million on deposit with Kuwait Investment Office in London at 15.5%; work in Kuwait mainly involved keeping an eye on the telexes and cash requirements. At that time, we were not yet operating properties, but we were buying into them. And that’s where IEDC became very important. We had brought them into Oman’s Saiwan Block in July 1981, but another five of our early interests, some of which we held into the 1990s and even one we still hold – came through our association with IEDC.”

DEVELOPMENTS AND PROPERTIES

Before the year 1981 was through, other developments took place that would have a lasting effect on KUFPEC’s portfolio.

Firstly, KPC started to invest downstream, in Europe. Part of this involved acquiring the refining and retail assets of America’s Gulf Oil in Scandinavia and the Benelux countries, a deal finalised in 1983. Kuwait’s close relationship with Gulf went back to the 1930s, when it had been one of the two original partners in Kuwait Oil Company. Gulf also has its own upstream interests elsewhere, one of which was in the Natuna Sea offshore Indonesia. There had been discoveries in the area as early as the 1970s, before Gulf acquired the property, but no production. KUFPEC, through KPC, acquired a one-third interest in Natuna

Sea Block ‘A’ from Gulf in January 1982. Thus, the acquisition of Gulf assets became one of upstream as well as the better-known downstream. That same Natuna Sea property eventually produced oil eight years later and, in 2001, started first gas deliveries to Singapore.

Secondly, KPC went upstream by acquiring America’s Santa Fe International Corporation in December 1981. Santa Fe was primarily a contract driller, but it had a Minerals Division with upstream exploration interests, mainly in the US. And KPC had the Williston Basin property there. Unlike the IEDC interest and Oman and Morocco properties, ownership of Williston had never been transferred across from KPC to KUFPEC although the Company had managed the property on KPC’s behalf. It made sense for all US exploration properties to come under the same KPC subsidiary. Williston Basin therefore went to Santa Fe. In return, in 1983, Santa Fe transferred to KUFPEC 30% of an offshore exploration interest in the South China Sea, known as Ying Ge Hai. It would later be better known as the huge Yacheng development, coming onstream twelve years later in 1995 with gas to Hong Kong.

As for the Oman and Morocco blocks, they soon proved to be a birthright of little value and were later relinquished at a loss to KUFPEC. Morocco – originally more of a political acquisition anyway – went in 1982 after nine wells had found gas, but not in commercial quantities. Oman went four years later following extensive seismic and gravity survey work and three dry wells. The shape of KUFPEC’s life was set. There would be successes, there would be setbacks, but it was in business for the long term.



Kuwait’s entry into the global upstream oil business was a natural extension of its historic international trading links. Diversification, it was reasoned, also gave greater flexibility and strengthened its ability to absorb cyclic variations in the oil market and gave Kuwait the opportunity for production beyond its OPEC quota.

BREAD UPON THE WATERS: The Early Years 1981 – 1985



Exploration work in Oman attracted the interest of tribesmen in the country's vast interior. However, by the mid-1980s, with a declining oil market and cost pressures, Third World energy development had lost its shine.

IN RETROSPECT, THE EARLY 1980s WAS not a good time to start an upstream oil company. Few anticipated that the market would plummet as precipitously as it did, after the dizzying price rises of the 1970s. Even today, in the opening years of the 21st Century, the real price of oil is cheaper than it has been for a generation.

In early 1981, a global recession was emerging — the deepest since the Great Depression — at a time when major new non-OPEC supplies were being developed.

Saudi Arabia had ramped up production to regain market share and re-establish stability.

All this at a time when fundamental demand was weakening and inventories were being overbuilt out of fear of even higher future prices.

The first quarter of 1983 saw a drop in North Sea oil from \$33 to \$30 and the first ever OPEC price cut, from \$34 to \$29. Even with partial economic recovery later that year, the switch to alternative fuels, the effect of conservation and efficiency measures, and massive new production from Alaska, Mexico, Nigeria and the North Sea — all prompted by the recent high prices — and the liquidation of huge inventories, kept prices heading down.

BUILDING A PORTFOLIO

And what relevance was this to KUFPEC? In short, everything. Upstream exploration, particularly in the developing countries that KUFPEC and affiliate IEDC were focussing on, is inherently risky. The rewards must justify the risks, and with a collapsing oil price, the potential rewards were so much less. But in 1981 and 1982, before the price collapse, KUFPEC was in the energy business, and that meant acquiring properties and looking for oil and gas. It did so, proud of the distinction of acting for the only

country within OPEC to have moved outside its own geographical boundaries in the exploration field.

“The Minister’s attitude then,” recalled Chairman Abdul Razzak Mulla Hussein, “was a long-term, strategic perspective. There was no strong pressure then to make quick profits. He told us to take as long as we needed to build a good portfolio, simply because that was what would give us the greatest ultimate profits.”

KUFPEC built this portfolio on several different tracks. The first was farm-ins or transfers through various KPC deals. These were Ying Ge Hai in the South China Sea and Western Europe through Santa Fe, and the Natuna Sea offshore Indonesia via Gulf Oil.

On a second track, which ran only until 1982, KUFPEC acquired half of IEDC BV’s interests in most of its Third World properties (*see chart, page 15*) — four in Africa, two in Turkey and one in Oman (part of which KUFPEC already held, bequeathed to it by KPC) — thus providing IEDC with vital finance for its own exploration efforts. Less obviously, on a third track, running parallel to the second, KUFPEC increased its interest in IEDC BV, the IEDC SA subsidiary holding all these properties. Even with the entry of APICORP and its initial \$10 million cash injection, neither IEDC BV nor IEDC SA had sufficient funds to finance commitments on its properties. The other shareholders were having their own problems at the time, so KUFPEC, in the words of Christopher Honeywill, “became the swing funder.” Every payment of cash that went in increased KUFPEC’s equity share in IEDC BV.

“There was never a strategy to increase our equity in IEDC BV,” said Honeywill. “It happened more by default. In fact, the original intent of IEDC was that all major shareholders should be equal. By providing cash to meet the commitments, KUFPEC effectively diluted AZL, Sulpetro and Volvo out of IEDC BV, increasing its shareholding to 29.43% by late 1982. APICORP retained its 10% by providing cash itself, and IEDC SA its 60% share. But KUFPEC, with its 21.25% indirect interest in IEDC BV



through IEDC SA, its almost 30% direct share and as the only one paying the bills, became the dominant shareholder.”

The fourth track of KUFPEC’s early portfolio creation was more conventional, through direct acquisitions based on technical work.

SUCSESSES, SETBACKS

At first, KUFPEC’s activities were limited to that of a non-operator, or investor, in exploration and development. This changed in 1983 and 1984 with its assumption of the role of operator in not one, but two Arab countries: offshore Bahrain with a 100% interest, and onshore Eastern Tunisia in two contiguous permits. The Company’s first two Area Offices – Tunis under Dutchman Bastian t’Hart and Bahrain with David Edgerley – were opened to support these operations.

As fortune would have it, one of these operatorships did not provide a return, whilst the other was a great success. The Bahrain property was acquired with a commitment to drill two wells within the initial three-year period. Extensive seismic was

recorded and the first well spudded in September 1985, using Kuwait Oil Company’s *Al-Baz* jack-up rig, operated by Santa Fe. It went to 15,400 ft. The second was drilled the following year to half that depth. Both were unsuccessful. The area was relinquished and the office closed.

Tunisia, however, proved to be one of KUFPEC’s greatest successes (*see page 30-31*) – although it hardly looked like that for five years.

Meanwhile, in Pakistan, as early as 1983, discussions had been entered into with the government to acquire a concession for which KUFPEC would be operator. It took several years before the often-tortuous negotiations were successfully concluded – and then with another party as operator – but the path to operatorship was being built.

“I recall how some of these properties were brought to us,” said Faisal Al-Kazmawi. “Ali Khalifa would come back from some conference or meeting and tell us to look at this or that property. He had lots of political and reciprocal trade visitors and would get them involved. We even looked closely at Thailand at

Workboat services platform in the Natuna Sea property offshore Indonesia, KUFPEC’s first joint venture and a success story into the new century. (Photo: Premier Oil)



The Bahrain sun setting on Santa Fe's *Al-Baz* rig in 1985 foreshadowed the consortium's withdrawal from the concession after two dry holes. Right, the start in 1984 of seismic in Tunisia's North Kairouan which ultimately would prove a success.



one stage. There was always some broader consideration, although the decision to invest was made purely on commercial grounds. Pakistan was interesting and educational, not least because of the way business is done there. It also taught us about the cultural differences to be aware of when working with the Japanese, who were partners through Idemitsu. They would say 'Yes' to everything in a meeting, which we took as agreement. What they really meant was that they understood the point and would talk to head office about it. And Pakistan was also a strategic and close market for Kuwaiti crude."

Tunisia was not KUFPEC's only Arab world success in the 1980s. Affiliate IEDC had entered the 25 sq km Amal Concession, in Egypt's Gulf of Suez. IEDC had 25% and TOTAL, the operator, 75%. KUFPEC farmed in during 1983 by taking half of IEDC's interest and then increased its holding beyond that, eventually underwriting development costs above \$35 million to ensure that the development went ahead, earning 73.5%, and finally assuming operatorship in 1993. In the early 1980s, the Gulf of Suez was an active exploration area with over thirty producing fields. The first discovery had been made on Amal in 1968. A successful appraisal well was drilled in 1984, followed by a further three in 1985, all successful. Commerciality was declared, but with the weak oil prices at the time, economic viability was marginal. It was 1987 before development proceeded.

Apart from this interest in Amal alongside IEDC, KUFPEC joined in April 1983 the 1,216 sq km Conoco-operated Mid-Gulf Marine concession, also in the Gulf of Suez. Of thirteen exploration wells drilled up to 1986, only one was a non-commercial discovery. The property was relinquished.

There were other disappointments further afield. In late 1981 and early 1982, KUFPEC considered participation in a joint venture in the Yellow Sea, offshore China. In order to evaluate the geological aspects and qualify for the bidding, it participated alongside thirty-two other firms in funding a seismic survey. The results were poor and the fiscal terms inadequate to justify the risks. It was decided not to proceed.

THE SANTA FE CONNECTION: CHINA AND EUROPE

In the early days, Santa Fe's contribution to KUFPEC's portfolio construction was particularly significant, although with mixed success. Following KPC's acquisition of Santa Fe International Corporation in late 1981, a strategic decision was made for all North American and North Sea upstream properties to go to Santa Fe, and all others to KUFPEC. Through this, KUFPEC obtained a 30% interest in a 9,000 sq km ARCO-operated joint venture in the South China Sea. The property later became KUFPEC's major source of revenue for the latter half of the 1990s. The major discovery well – Yacheng 13-1-1 – was drilled as early as 1983 and the search for markets started soon afterwards, but it would be more than a decade before the first sales could be made (*see pages 60-61*).

This was the start of a long and fruitful association between KUFPEC and Santa Fe. Many of the accountants and materials men in KUFPEC-operated properties were seconded from Santa Fe, and other Santa Fe teams provided great assistance in evaluating Australia's Harriet property for acquisition in the late 1980s. KUFPEC's first Engineering Manager, Bob Pollock, came from Santa Fe, as did Human Resources Co-ordinator Steve



Pakistani workers adjust a flange on the Kadawari gas plant. As early as 1983, discussions had been entered into with the Pakistani government to acquire a concession for which KUFPEC hoped it would be operator. It was a number of years before the negotiations were successfully concluded, but the path to operatorship was being built.

Souza. Both have now moved on. Even today, as KPC has divested itself of Santa Fe, KUFPEC still counts former Santa Fe man, Reservoir Engineer Iqbal Gul, within its ranks.

The KPC allocation of Santa Fe properties to KUFPEC also brought it to West European waters. Offshore Sicily, it was allocated three Conoco blocks. In early 1984, KUFPEC entered three blocks in Ireland's Celtic Sea. Santa Fe Minerals managed both the Italian and the Irish interests for KUFPEC. Conoco then farmed-in to KUFPEC's Irish holdings and became operator on both these and the Italian interests. Coincidentally, IEDC – in another departure from the developing world – had also acquired a 30% interest in permits offshore Sicily and in the Italian Adriatic. Thus, KUFPEC, both through its own direct interests and through IEDC, was now an offshore European explorer, however temporarily.

The Italian properties were not successful. Two of them were dropped in 1985. The third was retained until a dry well was drilled in 1988. The IEDC Sicilian property was relinquished in 1985 after seismic surveys and a dry hole. Initial work was carried out on IEDC's Adriatic Sea block but an absence of subsurface structure led to its relinquishment in 1986.

"I recall some of the perfectly charming people we had to deal with in Sicily," recalls then IEDC and later KUFPEC Exploration Manager, Dr John Small Jr. "We had a shorebase,

and to ensure that everything ran smoothly, certain arrangements had to be made with local personalities. Of course, we provided jobs there for what is one of Italy's poorer areas. Once that was done, it was incredibly efficient, more so than almost any other place. We never had any problems at all."

Arrangements onshore Ireland were not quite as interesting but the exploration results were just as disappointing. An initial seismic commitment was met and an unsuccessful obligatory well completed in 1984. KUFPEC persisted, though. It transferred the one remaining obligation well on part of the 1/83 licence via farm-in to two new Marathon blocks offshore Waterford and Cork. They too were failures after a seismic programme and two 1986 exploratory wells. With a depressed oil market, attempts to farm out one-half of the interest in these blocks were unsuccessful. So, in 1988, KUFPEC's interests were transferred to Santa Fe Minerals and became part of their North Sea and nearby area portfolio. In the meantime, Celtic Sea 1/83 had been relinquished in 1987 after a further unsuccessful well.

A minor foray was also made into waters offshore Spain in 1988. KUFPEC participated in a well that earned an interest in the Tarragona E Block. The well was dry and the interest relinquished. Thus, KUFPEC's six-year affair with European exploration came to an end.



Congo development included the purchase of a converted tanker for use as a Floating Production, Storage and Offtake (FPSO) facility.

SUB-SAHARAN AFRICA AND TURKEY

Away from the developed world, KUFPEC – generally in association with IEDC – was active in several African countries.

Offshore Congo, KUFPEC participated from 1983 in exploring the 1,432 sq km Marine Block 1 with IEDC BV, Hydrocongo, Braspetro and operator Cities Services/ Occidental. The first exploration well – drilled in 1982 – had been non-commercial.

Then Amoco assumed the operatorship in 1984. Further seismic work was conducted, with two further exploration wells drilled in 1985. Both were unsuccessful but confirmed good reservoir and oil source rocks. Seismic data was reprocessed and more seismic acquired in 1986, along with an aeromagnetic survey. Three further exploration wells were drilled in 1987 with one – Youbi – being a discovery. A six-well programme from 1988 proved the reserves with the first – Yombo 1 – discovering what would later be confirmed as a large field. Then there was the Yongsu discovery. Development was started, including the purchase of a converted tanker for use as a Floating Production, Storage and Offtake (FPSO) facility, with first production scheduled for 1990.

In 1984, on the other side of the continent, in Tanzania, KUFPEC purchased half of operator IEDC's direct interest in the Ras Winde block, just north of Dar-Es-Salaam. IEDC also held 5% of the smaller, more southern Ruvu Valley permit. The combined area of these two permits was 85,000 sq km. Seismic surveys in 1982 and 1983 had led to an unsuccessful well in 1984. Several farmouts were conducted in 1985, bringing in Elf Aquitaine and Australia's Broken Hill Proprietary with a second well drilled at no

cost to KUFPEC as part of the terms. This well was not encouraging and the permit was let go.

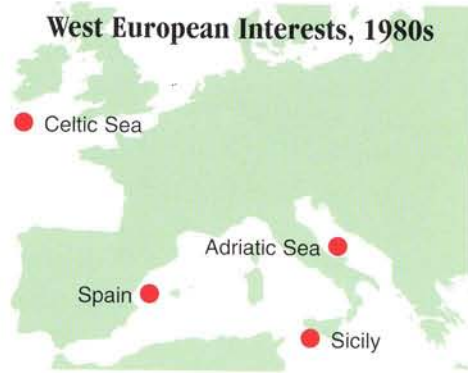
North of Tanzania, in the vast expanses of southern Sudan, KUFPEC acquired in December 1982 half of IEDC's 25% interest in a TOTAL-operated concession. The properties included three separate permits, two in South East Muglad and one in the Dongala Basin. The two sets of properties, denominated 'B' and 'C', totalled a huge 281,072 sq km – about 10% of Sudan's land area – and were initially contracted for eight and ten years respectively. In 1984, KUFPEC acquired Block 'G', further north and near the Chad-Libya-Sudan border, but relinquished it later after major difficulties in obtaining coherent seismic due to thick volcanic surface rocks. At the time, prospects in 'B' and 'C' looked most promising. There had been significant oil discoveries in adjoining concessions, and Sudan had announced plans for a 100,000 bpd pipeline between the area and the Red Sea. Extensive seismic work – with promising results – was conducted on Blocks B and C in the three years to 1986, but civil unrest in the area made it too dangerous for drilling. Moratoriums were obtained annually until the late 1990s on 'C' before it was relinquished, and continue to be obtained on 'B' into the 21st Century.

As with Egypt, KUFPEC acquired half of IEDC BV's direct interest in five licences in District X, onshore south-east Turkey, covering 2,469 sq km near the Iraqi border. At the time, IEDC was the operator with an 87.5% interest. Transturk Holdings held the remaining 12.5%. A 245 km seismic programme was carried out in 1983 and a non-commercial well drilled in 1984. With the poor oil market at the time, a search for farm-in partners to carry the cost of a further well was inconclusive, and the licences were relinquished in early 1986.

IEDC: TROUBLES, TAKEOVER AND UNREALISED POTENTIAL

As KUFPEC was building its portfolio in 1982, its affiliate IEDC was having its own problems, ones that would lead to a full takeover by KUFPEC.

"IEDC was underfunded in relation to the size of the projects it undertook, and the costs that would be required to explore and develop them," said then IEDC Chairman Maurice Strong. "AZL, Sulpetro and KUFPEC, who knew the oil business, also knew that the kind of projects we were undertaking took many years to develop. The only one of our shareholders that was both active in the oil and gas business and had the funds to give it the staying



power to see such developments through to fulfilment was KUFPEC. Volvo had the funds but not the knowledge, and indeed was amongst the most cautious shareholders and eventually became almost entirely negative. Sulpetro and AZL had very limited resources.

"We sought, unsuccessfully," continued Strong, "to obtain more funding and in its absence decided to

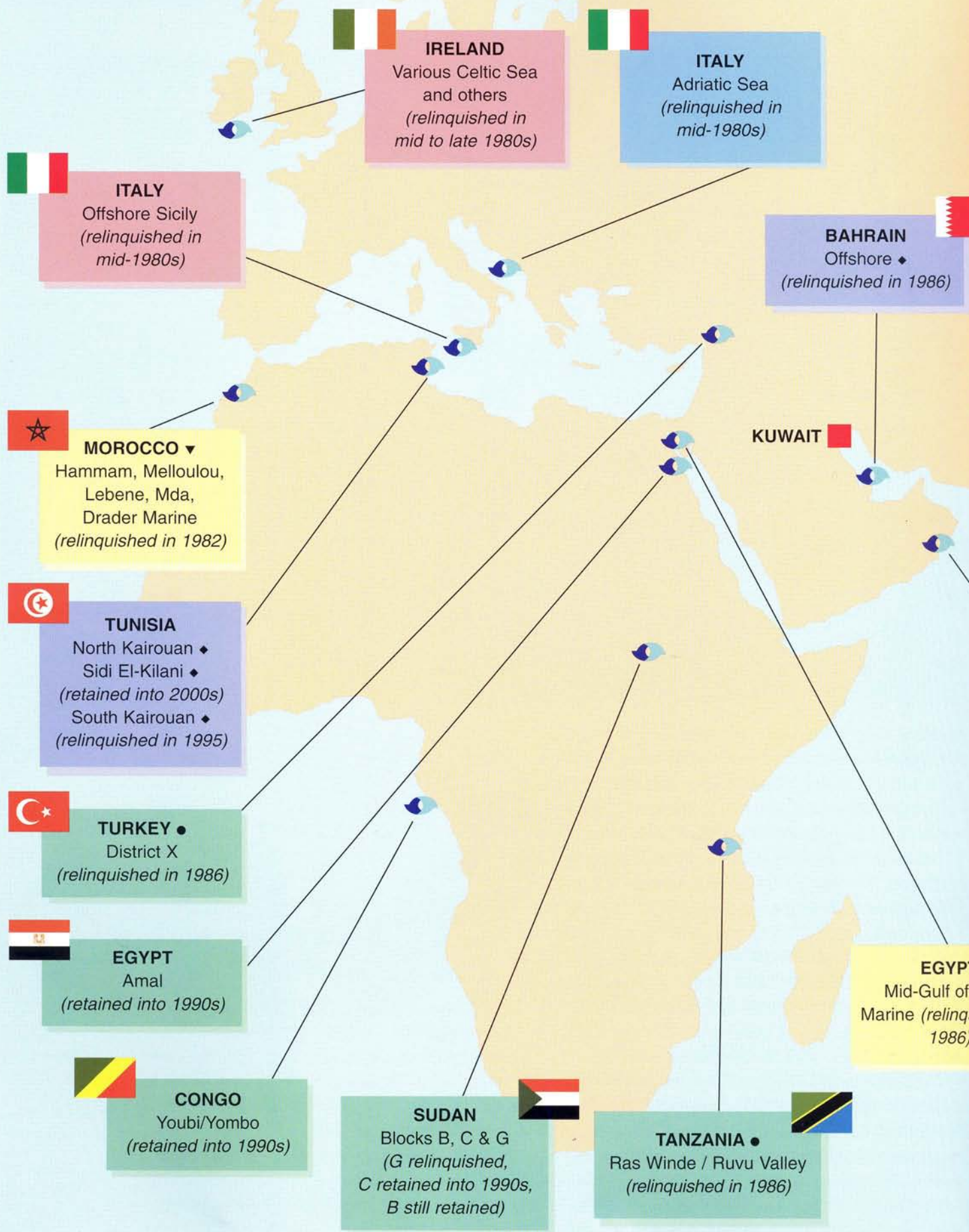
concentrate on bringing partners into individual projects, hopefully on a basis that would pay a premium and/or carried interest to IEDC shareholders. Initially in the climate of the times this seemed feasible. Indeed, on the very day we signed our agreement for the concession in the Sudan, we received an offer to take over all costs and leave us with a significant carry. The IEDC board decided not to do this, partly because of their optimism as to its prospects and partly not to appear to the Sudanese to be 'in-and-outers'. Later, conditions in the industry more generally deteriorated to the point where it was much more difficult and eventually impossible to obtain partners who would pay a premium. IEDC, with its inadequate capital, therefore paid the price of excessive leverage with commitments far greater than its capacity to fulfill them."

"It was as much a case of personalities as money," said Dr John Small Jr, former IEDC Exploration Manager and briefly KUFPEC London General Manager. "Maurice Strong was – and is – a very capable ideas and contacts man, and Nordine Ait-Laoussine's abilities complemented him very well. But there was also conflict on the Board. By 1983, Strong's Volvo friend, Per Gyllenhammar, had been succeeded by Ulf Linden, a former sea captain, and the new chemistry didn't work at all well."

Ait-Laoussine agreed: "The main reason IEDC didn't go as far as it could have was because some shareholders – Volvo in particular in my view – thought it was a 100-metre dash when it was a marathon. There are several key examples of this. Perhaps the best is Angola, with whom I had excellent relations. There was big competition, but we got Block VII, which is now one of the most prolific. The contract had been signed by the IEDC Board, ready for Angolan Cabinet approval. Then Volvo didn't want to follow through after we had spent \$2 million. I had to call the Minister in Angola and plead with him not to send it up to the Cabinet.

"We also had some very fine exploration people, particularly our first Exploration Manager, John Bobbitt," continued Ait-Laoussine. "He wanted to drill in a certain place offshore Congo,

(Continued on page 26)



▼ Inherited from KPC ♦ Operated by KUFPEC ● Operated by IEDC to 1985, then KUFPEC

Areas in which KUFPEC had interests to mid-1980s, either directly itself or indirectly, through IEDC, or through a combination of both

- Interests held by KUFPEC with no IEDC interest. Operated by others.
- Interests operated by KUFPEC. No IEDC interest.
- Interests managed for KUFPEC by Santa Fe Minerals. No IEDC.
- Interests held both directly by KUFPEC and indirectly via IEDC.
- Interests held only indirectly through IEDC prior to 1985 takeover.

CHINA
Yacheng
(retained into 2000s)

INDONESIA
Natuna Sea Block 'A'
(retained into 2000s)

INDONESIA
Seram Island ♦
(retained into 2000s)

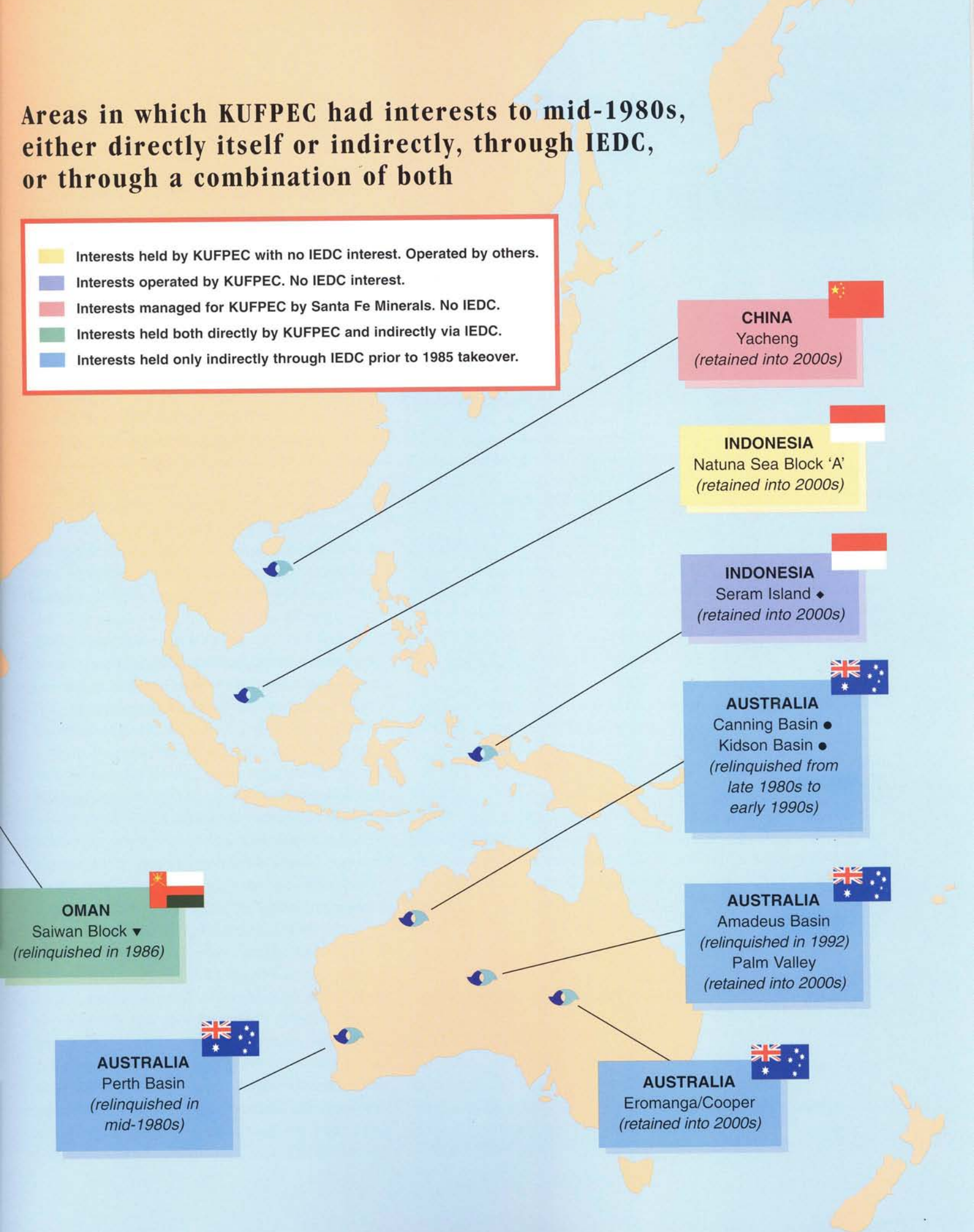
AUSTRALIA
Canning Basin ●
Kidson Basin ●
(relinquished from late 1980s to early 1990s)

AUSTRALIA
Amadeus Basin
(relinquished in 1992)
Palm Valley
(retained into 2000s)

AUSTRALIA
Perth Basin
(relinquished in mid-1980s)

AUSTRALIA
Eromanga/Cooper
(retained into 2000s)

OMAN
Saiwan Block ▼
(relinquished in 1986)





By 1983, KUFPEC's first technical office in London's New Bond Street had outgrown itself and moved to new and bigger premises at Hanover Square. However, it was recognised by 1985 that the company could be managed more efficiently with the head office and technical functions both located in Kuwait. KPC still occupies KUFPEC's original New Bond Street premises as its London office to this day.

Continued from page 23

but was over-ruled by the operator. We ended up participating in what was then the deepest dry hole in Africa, at 5,000 metres, for \$20 million. The third well, by the next operator, was a discovery, just where John said it would be."

In fact, Strong had hoped to leverage his initial \$10 million capital into \$100 million partially by farming out interests in IEDC projects as early as 1981 to recover early costs and pay for ongoing exploration and development. With the industry slump at the time, these farmouts did not materialise. And he was running up huge expenses. In 1980, senior executives' salaries averaged over \$150,000 each – a huge sum in those days.

Then there was the search for new shareholders. Strong wanted to emphasise IEDC's public policy purposes by having national oil companies – such as KPC – as shareholders, hoping that this unique character would generate special treatment by both governments and international agencies. Abu Dhabi, Venezuela, Mexico and Norway were considered, as was Brazil, a major Third World importer, and OMV, neutral Austria's oldest oil company. No one shareholder was to be dominant. In the end, only APICORP, owned by the OPEC states, had joined.

"To compound matters," added Small, "most of the early IEDC people were brilliant in their own right, with vast experience, but there were too many different types of business. Exploration, gas, consulting, 'Third World' development.

"IEDC went into consulting," explained Strong, "not because it wanted to move into a new business, but rather to use our high level expertise to earn some fees which would help contribute to our costs. And we did have some revenue from that. But the real problem with IEDC was it never having reached even my initial objective of \$100 million dollars. It therefore did not have the staying power to maintain the exploration and development of its properties through to validation. All of this, was of course due

to assumptions we made which proved to be over optimistic. I certainly have to accept a high degree of responsibility for this. But it was also due to the weakness of our shareholder structure and the fact that some of them retreated at the first sign of trouble. Sulpetro and AZL simply did not have the resources to continue. Thus the takeover by KUFPEC made sense, and ultimately proved to be a good deal for KUFPEC."

Indeed, only KUFPEC had the resources or the inclination to maintain the expenditure needed to find oil. By early 1983, Sulpetro had gone broke and Strong's AZL Resources was headed the same way. AZL was taken over by Tosco, a US refiner, which wasn't interested in Third World exploration and soon ran into its own problems.

Said Christopher Honeywill: "KUFPEC kept IEDC going mainly because of the importance it attached to being seen in the industry to meet all its commitments. If KUFPEC stopped funding IEDC, then it would have gone into liquidation and failed to complete its exploration commitments. Such a scenario was unacceptable to KUFPEC. And it should be remembered that with the state of the market at the time and the overall quality of the IEDC portfolio, there was not a long queue waiting to pick up the properties. IEDC had effectively stopped acquiring properties by 1982. In KUFPEC management terms, it was little more than a funding problem."

By then, the IEDC corporate structure was hugely complex, which, in the words of Abdul Razzak Mulla Hussein, "was very confusing, and made little sense as they didn't yet have any production income." KUFPEC insisted on a streamlining. IEDC BV was therefore merged into IEDC SA and ceased to exist.

Concurrent with this reorganisation, Maurice Strong stood down as IEDC Chairman and departed in mid-1983. Abdul Razzak Mulla Hussein took over, giving both KUFPEC and IEDC a common Chairman. Volvo's Ulf Linden became Deputy Chairman; Nordine Ait-Laoussine retained his role as Group Managing Director. Sulpetro and Strong's AZL withdrew in exchange for a net retained reserves interest, a complicated arrangement allowing KUFPEC to acquire their shares for no payment in return for their sharing in any future profits of properties they had invested in, after recovery by KUFPEC of its investment. This left only KUFPEC, Volvo, APICORP and SOGENER as shareholders, with KUFPEC dominant. Then, in April 1985, KUFPEC acquired all these parties' shares, again for a share of net retained reserves interest.

Significantly, this brought a new country, Australia, into KUFPEC's portfolio. It had previously held an indirect interest in this through IEDC, and then a more direct but still partial interest after the first 1983 restructuring. Now it owned the Australian interests 100%. None of these would be successes, but IEDC's

Perth Office had done some excellent geological work (see page 28) in Indonesia, on Seram Island. KUFPEC would inherit this work, and be the beneficiary almost twenty years later.

“The IEDC takeover was actually a good deal for KUFPEC,” said then Deputy Managing Director for Administration and Finance Khaled Mulla Hussein, “simply because the other shareholders weren’t prepared to or couldn’t carry on. We spent \$40 million on IEDC, and with the arrangement, for which we paid nothing, we got the benefit of the other partners’ \$60 million expenses. But it was more of a forced marriage than a great romance.”

Added Mahmoud Al-Rahmani, who later became KUFPEC Chairman: “Most importantly, the takeover allowed us to maintain faith with host governments and our co-venturers by keeping our commitments. That was vital. We also acquired some very good people. This was crucial as we had severe manpower problems at the time. Although we lost some, it forced us to recruit quality personnel. That’s the only road for success in this business.”

LONDON: MERGER AND MOVE, TO KUWAIT

The takeover of IEDC had major implications in London. At the time, both KUFPEC and IEDC ran their technical operations out of separate offices in the British capital. The challenge was to bring them together. John Godfrey and Art Menzies had left IEDC, and General Manager Haji Mohammed Ali had requested to be returned to Kuwait after four years in London. Nordine Ait-Laoussine was appointed Chief Operating Officer from July 1st, 1985, commuting to London from Geneva several days a week to manage affairs there.

By the time of the takeover, KUFPEC’s payroll had grown to ninety-six, still mostly in London, but including Bahrain and Tunis. London had outgrown itself and moved in 1983 to new premises at Hanover Square. “We had realised quite early on that you couldn’t run the Company properly from London with the Board decisions made in Kuwait,” said Khaled Mulla Hussein, “but Sheikh Ali Khalifa saw that it was vital to have a presence in London.”

Exploration Manager Dr John Small Jr, who joined KUFPEC from IEDC upon the merger, added: “Haji had recruited an eclectic mix of people from the West, Africa, the Arab World and even the Soviet bloc. One of the very best went on to run BHP Exploration in Australia, but many did not have the experience we needed. Some of the deals being considered also tended to be excessive. In Pakistan, for example, the Company was discussing huge commitments, about \$80 million, on three areas. One was in a top secret area with the uranium oxide mine for Pakistan’s nuclear weapons; another had a ballistic missile range in it. We couldn’t have done any exploration. Eventually, in 1987, we took the Tajjal

The Marathon-Running Minister

Nordine Ait-Laoussine, IEDC/KUFPEC, 1980-86



For an upstream man, Algerian Nordine Ait-Laoussine chose an appropriate sport. He’s a marathon runner, or was in his younger days. He also played soccer professionally, demonstrating not only the stamina but also the fancy footwork necessary for success in a tough industry. Now in his sixties, he looks ten years younger, a product, say friends, “of regular exercise, a balanced diet, and incredible good fortune in dangerous circumstances.”

Ait-Laoussine has had, to say the least, an interesting life. This includes several brushes with death that would have shaken lesser men to the core. He was part of the Algerian OPEC delegation in December 1976 when the notorious ‘Carlos the Jackal’ kidnapped the Ministers and their delegations – including Kuwait’s Minister Al-Kazemi and his then aide, Sheikh Ali Khalifa. Later, whilst Algerian Minister himself, he was beside President Boudaif when he was assassinated in June 1992.

“I remember that tragedy vividly,” says Ait-Laoussine, “even nine years later. The assassins threw a grenade first and I was slightly wounded in the left hand with shrapnel. Then they opened fire. I remember being covered in blood and wondering how so much of it had come from the hand wound. Then I realised that it was my President’s blood. He never had a chance. God rest his soul.”

Best known internationally as Algerian Energy Minister in 1991 and 1992, Ait-Laoussine is the epitome of a self-made man. Born in Algiers to a poor Berber family as the youngest of fourteen children, his main start in life was to be the only one of his siblings to

go beyond primary school. He completed university in Algeria, then graduate studies in Morocco before gaining his Masters Degree in Petroleum Geology (and meeting his future wife) from the University of Michigan in 1963.

In December that year, while preparing his doctoral thesis, he was recalled to recently independent Algeria to serve in the joint Franco-Algerian administrative body created under the 1961 Evian Agreements. His talents for negotiations and networking were soon recognised and he was appointed Manager of Exploration and Production for Sonatrach while still in his late twenties. Within a year he was Technical Advisor to the Minister of Industry and Energy, a post he held until 1979. For most of that time, he was instrumental at the most senior levels in Algeria’s dealings with foreign oil companies, in formulation of its crucial energy policy and its long-term development, and OPEC. He is remembered by industry professionals for bringing in top-notch consultants to model complex arrangements being negotiated with the French for Algerian gas, staying one step ahead of them in the talks and obtaining unheard of terms for his country. As one of Algeria’s most trusted and respected oil professionals, he has held numerous key executive roles within the national industry.

In 1979, Ait-Laoussine established himself as an international consultant, first in Vienna where he was Advisor to the OPEC Secretariat and later in Geneva. There he established his own consulting firm, NALCOSA. His involvement with IEDC and KUFPEC from late 1979 through to 1986 is fondly remembered, as are the friends he made. Incredibly well-connected in the international oil industry, he has run NALCOSA full-time since leaving KUFPEC – apart from his service as Algerian Minister. He continues to jog regularly, if not run any more marathons.

A Fortunate Inheritance

Seram Island: Oil Over Three Centuries

KUFPEC's first discovery on Seram Island was made at Oseil 1 (right) in 1993. Further discoveries were made at Oseil 2 (pictured below during site clean-up) and at Oseil 3 and 4.

When KUFPEC took over IEDC in 1985, and with it the staff of the Australian Office, it never expected that this would bring with it some inspired geological work from the 1970s on one of Asia's first oil producing areas.

For at the time of the merger, IEDC Australia was responsible for the Eastern Hemisphere, including Indonesia. Exploration Manager Brian Luecke, an American, had first studied Indonesia's Seram Island and the surrounding marine area in 1970, when he worked for Phillips Petroleum Singapore. He concluded that producing fields offshore were pumping two to three times more oil than the reservoir rocks should hold. The logical conclusion – confirmed by geochemistry – was that the oil must be migrating from somewhere else. But from where?

The same applied to the Bula field, onshore Seram, which had been producing since 1898. Dutch geologists had mapped Seram from 1914 to 1920, and Shell had gathered data in the area from the 1920s to the 1960s. Luecke recast this data in the light of the then new and controversial plate tectonic theory and convinced Phillips to drill offshore. Unfortunately for them, they did not go deep enough for a discovery.

In 1984, when Luecke was with IEDC in Perth, he became interested in the area again. Little had been done either onshore or offshore since his time with Phillips. Fortuitously, Seram Island outside of the Bula field had not been acquired for exploration, and the company operating Bula seemed uninterested. He spoke to them and reprocessed their 1974 seismic. His earlier theories seemed to be valid for the non-Bula area of Seram, so a Board recommendation was made. By the time of the decision, KUFPEC was in charge, and took the concession.

In its sole 1985 acquisition, KUFPEC farmed in as operator with a group of Australian, British and Canadian companies to the 7,620 sq km onshore Seram concession, with the right to earn up to 40%. An office was opened in Jakarta in 1986 to manage the permit. Following a 225 km seismic survey in 1986 and 1987, drilling to complete the interest-earning stages was



undertaken on the East Nief and Bolifar Utara prospects. The former found non-commercial oil and the latter was plugged and abandoned without testing in January 1989. Then an airborne gravity and magnetic survey was conducted over the entire concession, highlighting three prospects in the Bula area which were followed up with a major 800 km two-stage seismic programme in 1990 and 1991. It would be late 1993 before a discovery was made, at Oseil. Development was delayed by extended negotiations in obtaining suitable fiscal terms, but first production will be onstream in 2002.

Oseil oil will be the latest chapter in the story of Seram, one that started 103 years ago with exploration and first production in the dusk of the 19th Century and is now being written in the dawn of the 21st. From the work of Dutch geologists four generations ago, to the clever geochemistry and deductions of the 1970s, it is indeed a very long-term business.

And KUFPEC, with modern Indonesia, a country not even thought of when the first Bula oil was produced, will profit from it.



Permit in the Sind Province, but the other areas might have killed us.”

In fact, problems had emerged with Haji Mohammed Ali shortly after April 1984 when Mahmoud Al-Rahmani joined the Company as Deputy Managing Director for Planning and Development, and Khaled Mulla Hussein was promoted to Deputy Managing Director Administration and Finance, both executive Board positions. Haji was given the title of Executive Assistant Managing Director for Technical Affairs but not appointed to the Board. Until then, he had been in effect KUFPEC chief executive. As an engineer, Al-Rahmani brought with him a more organised, structured way of working, and Mulla Hussein could now, with authority, implement the controls and procedures he saw as so necessary. With this new management structure, Haji had requested to be returned to Kuwait to be closer to the centre of things and the Board. He was due to make the move in 1985, around the time of the merger.

Nordine Ait-Laoussine, now the man in London, set to work. “It was a real challenge,” he recalls. “We had two heads of all the technical departments, a range of people with widely varying abilities, and two very different compensation packages to be unified. IEDC’s was very competitive. KUFPEC’s was not. It also went beyond money. There were all the challenges that go with any merger, including cultures. As an Arab who had worked with the West, I had an advantage, but there were times when I couldn’t bring them together. It was not an enjoyable experience. Some people had to go, but we also lost some very good people at a time when the industry was down. Then there was the traumatic decision of whether to stay in the very pleasant house that IEDC worked from in Ewell, or move to KUFPEC’s city premises. In the end, there was no choice. KUFPEC had acquired IEDC, so it was to Hanover Square. IEDC’s legal and financial people resisted the move. They were let go.”

It soon became clear to Ait-Laoussine that split management between London and Kuwait was a poor way of doing things. “I therefore went to Abdul Razzak,” said Ait-Laoussine, “and pushed for London to move to Kuwait. I knew that it would upset most of our senior employees but it was in the best interests of KUFPEC. At first, Abdul Razzak doubted that our technical people would come. After all, the Iran-Iraq War was nearby and Kuwait seemed a dangerous place. And an Arab exploration



Abdulla Baroun



Nawal Al-Rushaid



Fawzia Al-Houti



Saud Al-Nashmi



Mustafa Al-Adsani

company had never done that before. The mindset was that you had to work out of a world oil capital. The recommendation was kept under strictest secrecy, but the Minister eventually agreed.”

Shortly after this, pressure came from Parliament to accelerate the transfer of the London Office to Kuwait, but matters were in progress. The remaining people in London were given the option of moving to Kuwait during 1986. There was some resentment from those who had joined the Company in the past year, on the promise of being able to continue working in the UK, only to discover that this would not be possible. Others, several of whom are still with the Company, accepted. The move worked, better than anyone expected. Ait-Laoussine chose not to go, and left at the end of 1986, with his efforts greatly appreciated.

Then Tunisia Office President Dr W Cameron Davies recalled: “When Nordine joined in 1985, it was a breath of fresh air. He was dynamic; there was great communication, and suddenly we had leadership in London. Before that, from the field, we were two levels removed from the decision-makers in Kuwait. Then, when we reported direct to Kuwait from 1986, to Mahmoud Al-Rahmani, it was even better. Things got done much quicker. There were inevitable administrative frustrations, but overall it was so much better than either London arrangement.”

“And,” added Al-Rahmani, “by late 1986, we now had most of our people in Kuwait, and could develop young Kuwaitis more. Apart from taking over some excellent IEDC people, such as Dr Mike McMurtry – still with us today – we also recruited several very good people for the move: Dr Gerald Long as Chief Geologist, who later became our Exploration Manager and is now Manager New Ventures; and Engineering Manager Bob Pollock, who was with us until 1992. And I cannot speak highly enough of Dan Kirisits, who had worked with us on Bahrain as a consultant and even with IEDC in Australia in its early days. He later took over from Bob and is now Manager Southeast Asia Region.”

By April 1986, as KUFPEC marked the fifth anniversary of its founding, its workforce had more than doubled to 192 (seventeen of whom were Kuwaitis) in the previous year with the absorption of IEDC personnel and the addition of the IEDC Australia, Turkey and Tanzania offices. With Kuwait preparing to receive the London technical team, it moved to larger premises. And, amazingly from the perspective of the 21st Century, KUFPEC was computerising. Things have come a long way since then.

“A great deal of credit for what was achieved in the first five or six years must be given to the Kuwaiti Board,” said inaugural Deputy Chairman Faisal Al-Kazmawi. “They were very active, with fortnightly meetings. Each director had responsibility for a certain area. Nawal Al-Rushaid, for example, covered Egypt. Today’s Deputy Chairman, Abdulla Baroun, covered Sudan, Morocco and later, Yemen. Saud Al-Nashmi was also our man for Morocco, and Mustafa Al-Adsani was Pakistan. It gave a Kuwaiti face to the Company, and served to educate the Board in the business.”

Sidi El Kilani: The Wonderful Well That Almost Never Was

KUFPEC's Eighth Birthday Present, and Tunisia's Election Day Bounty

KUFPEC's Sidi El Kilani discovery onshore Tunisia in 1989 is a fascinating story about a well that was almost never drilled, and how it became a great bounty for both Kuwait and Tunisia.

"When I first arrived in Tunisia in August 1984," recalled then KUFPEC Tunisia Area General Manager Dr W Cameron Davies, "we had two contiguous exploration permits, North and South Kairouan. KUFPEC operated both permits with ETAP, the Tunisian state oil company, as partner in both the north and south. Elf Aquitaine held one-third of North Kairouan. The contractual commitment was for a total of eight wells – four on each concession – and 1,500 km of seismic, within the initial four-year period. The combined monetary obligation was \$45 million.

"Both ETAP and Elf," continued Davies, "had a great advantage as partners, given the close Franco-Tunisian links. Elf had held most of the Kairouan area since the 1930s and drilled many unsuccessful exploration wells. They had had to relinquish the area as the term of their exploration permit had expired. KUFPEC acquired it through early work of our London office and Elf decided to participate for a one-third interest in North Kairouan.

"In order to reduce the Company's exposure to the Tunisian exploration play, we negotiated a reduction in the contracted work programme from the eight wells to seven. Ironically, it was the last of the seven that became the Sidi El Kilani oilfield."

"When we acquired the concessions," explained Davies, "we conducted in-house integration of 800 km of available seismic and well data, then shot our own. In 1984, we acquired 1,000 km



in the north and 700 km in the south. We then drilled the first well in the south in late 1985, and the second in the north and the third in the south the following year. We also shot another 325 km of seismic in the south and, in 1987, 275 km in the north."

By the time the sixth dry hole was drilled in 1988, prospects were not looking good. Extensions to the permits were negotiated but with low oil prices and the gloomy exploration outlook, worldwide farmout attempts had failed. The permits were now expiring in mid-1989, and there was talk of relinquishment.

KUFPEC and Elf had together spent \$53 million, well above the monetary obligation, but the seven-well work commitment had not been satisfied. Elf wanted out and argued, with strong representation from Paris, that meeting the monetary obligation satisfied the contract. They refused to participate further. KUFPEC was faced with defaulting on its obligations or going it alone. In the event, Elf assigned its interest in the North Kairouan permit to KUFPEC just after the SLK-1 well was spudded.

"We pushed very hard to drill that well, and to the credit of management in Kuwait," recalled Davies, "they backed us and met their commitment to the Tunisian government. I believe that they were coming under incredible pressure to walk away also, but were just too stubborn to do so. Less than one month after Elf had signed off, the well came in, much to their embarrassment.

"I remember the day it tested, a Friday, April 1st, 1989," continued Davies. "In retrospect, it was quite auspicious. Not only was it the eighth anniversary of KUFPEC's formation, but election day in Tunisia.

"Being the weekend, I was on the beach with my family in the morning with one of those old mobile phones as heavy as a briefcase. A call came through from the Sidi El Kilani drilling

Success at Sidi El Kilani came with the seventh and last well, which tested on April 1st, 1989. It was an auspicious day. Not only was it the eighth anniversary of KUFPEC's formation, but election day in Tunisia.



superintendent, Ian Moyle, saying, ‘We’ve got a barn burner here!’ – meaning a large oil flow rate and an enormous flare. We had been keeping our fingers crossed but as the previous results in Kairouan had been disappointing, we did not expect success. It was April Fool’s Day and I wouldn’t have put it past Ian to play a joke on me.

“Anyhow, Ian called later to confirm. It was no joke. So I called the Tunisian Minister for Energy, Habib Lazreg. He said he was in his home town, voting in the Presidential election. We had planned during the week that if SLK-1 was a discovery that I would phone and say, ‘We’ve been elected!’. He knew exactly what I meant and was ecstatic, with very good reason. Kilani proved to be the most significant discovery in Tunisia for twenty years and is still the country’s third largest producing oilfield.”

“Elf, of course, was incensed,” added then Deputy Managing Director Administration and Finance Khaled Mulla Hussein. “They had pulled out just before the discovery, after contributing tens of millions of dollars in exploration, and now had nothing. They sent in the lawyers and tried all sorts of tactics to try to regain something, but it was too late. KUFPEC had the entire discovery. ETAP was entitled to come in, and they did, but KUFPEC still had 45%, when it could have been only two-thirds of that. It was more than a stroke of luck. KUFPEC saw it as a matter of keeping your word, and we got the just rewards for that.”

There are several other stories about how the well almost never was. One says that a Senior Geologist dismissed the logs as ‘computer-generated oil’, and went on leave, thinking it would not be drilled, only to return and find the discovery. Another is more clear.

“Ian Moyle had called me to say that the initial well test had failed, so it looked bad,” said then Drilling Engineer Dan Kirisits. “I suggested that we acidize it, to help break open the formation, as this was our last well, and we had bought the acid and



couldn’t return it. With that, the oil flowed. Had it not been for that last bit of acid, it could have been lost.”

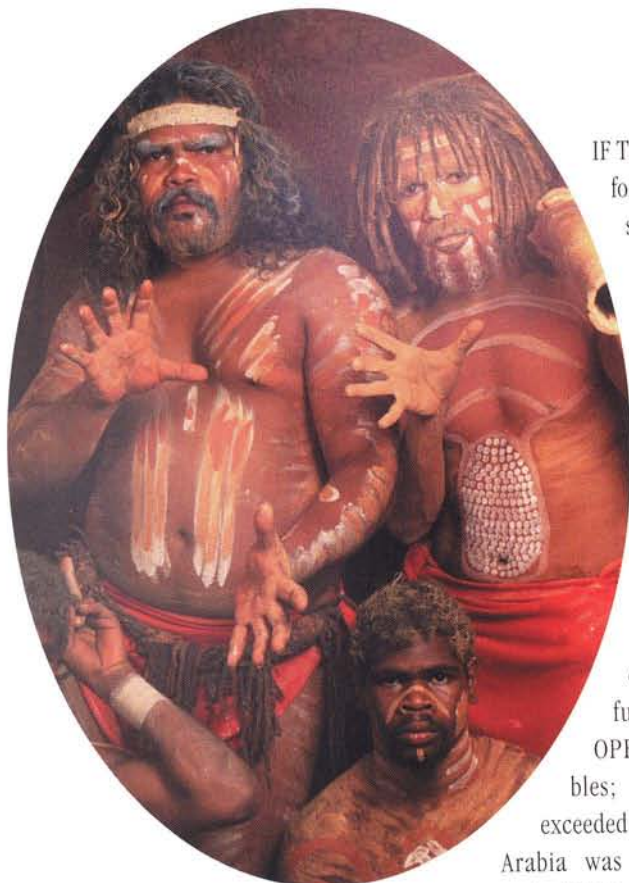
Concluded Davies: “I left KUFPEC shortly after that to pursue other interests, having completed my five-year contract and achieved what I had set out to do. But what our team achieved with Sidi El Kilani and the economic benefits it has brought to both the local area and Tunisia always gives me great satisfaction. Sidi El Kilani is near Souassi, very arid and one of the most deprived areas of the Governorate of Mahdia. The local people are wonderful country folk eking out a living from agriculture, sheep and olive groves. They needed something else to give them hope of economic growth and Sidi El Kilani has helped to bring that. It’s been a real success story for both Kuwait and Tunisia which has become like a second home for my family now.”



Sidi El Kilani gave the people of Souassi, the poorest area of Mahdia Governorate, an economic boost.



CREATING A PORTFOLIO: Difficult Times 1985 – 1990



Aboriginals in Australia: Australia's Harriet field was one of KUFPEC's first producing properties to put black ink on the balance sheet.

IF THE EARLY 1980s WERE TOUGH for the upstream oil market, the second half of the decade was worse. Prices had become finely balanced by 1985, capable of going either way. They went down, more than halving over 1986 and causing a huge shakeout in the upstream industry.

By early 1985, even with economic recovery, oil was still in a buyer's market. Non-OPEC production, conservation and alternate fuels had continued to grow; OPEC's quota system was in shambles; production capacity far exceeded demand. At the time, Saudi Arabia was playing swing producer to

support the OPEC price. By that summer, the cost of this had become too high even for Riyadh; it opened the taps to regain market share. Prices collapsed. In one month, the benchmark West Texas Intermediate went from \$31.75 to less than \$10. With the netback pricing method adopted by Saudi Arabia, there was not even an official OPEC price. Quotas were eventually reinstated in 1986 at \$18 and co-operation started with non-OPEC producers. Prices then generally held up into mid-1990 in the \$15 to \$18 range.

NEW POLICY, DIRECTION, LEADERSHIP

KUFPEC, of course, had to adapt to the changing realities. It was still in the business of oil but now had the advantage of a good team, well-led and concentrated in Kuwait. The Company had been a slow and cautious investor in its first five years with much of its portfolio inherited from KPC or acquired almost by default

from IEDC. From 1986, it became a very active investor, rebalancing the portfolio and shedding non-performing high-risk properties. It struck a more conservative balance between risk and reward, refocusing on acquiring minor non-operator exploration interests to replace relinquishments or those passed to development. Thus, while it acquired only one new venture in 1985 (Seram Island in Indonesia), it took two in 1986 (relinquishing nine, mainly inherited IEDC properties, but also Oman, which had come through KPC, Bahrain and Egypt's Mid-Gulf of Suez) and three in 1987 (Yemen's East Shabwa, Pakistan's Tajjal, and Magawish offshore Egypt). Yet this was only part of the story. Unsuccessful offers were made in 1986 for properties as far afield as Gabon, Angola, Egypt and Australia, all part of the process of bidding for and winning business.

Despite low prices (always a good time to buy), this became a period of portfolio creation and refinement. The overall prospectivity was enhanced through selective farm-ins and farm-outs. In a significant change, KUFPEC started purchasing proven reserves to enhance early payout, firstly with Harriet in Australia. Having become an exploration operator in 1984, it now moved to development with lower cost projects adapted to market conditions. In 1988, for the first time, the most welcome asset of producing properties appeared in the balance sheet. This was offshore oil from the Gulf of Suez's Amal and Australia's Harriet. By 1989, several important exploration successes – particularly Tunisia and Pakistan – were evident.

Early 1987 also saw a changing of the guard at the top. Founding Chairman and Managing Director Abdul Razzak Mulla Hussein relinquished his position to concentrate on increasingly heavy responsibilities at KPC. Significantly, he continued to be KPC's main link to KUFPEC, thus ensuring continuity. Deputy Chairman Faisal Jassim Al-Kazmawi took over the reins at KUFPEC, with Deputy Managing Director for Planning and Development Mahmoud Abdullah Al-Rahmani assuming the role of Deputy Chairman.

ABSORBING IEDC

With the April 1985 takeover of IEDC and the later decision to consolidate technical operations in Kuwait came the challenge of fully integrating the IEDC and KUFPEC portfolios. The deal had made KUFPEC an operator in three more locations – Australia, Tanzania and Turkey – with offices in each. It was now operator in five of the thirteen countries it had interests in, and for seven of its thirty ventures. Its average net interest was 27%, over 409,000 sq km of acreage – an area bigger than Germany or Italy. By any measure, it was a major operation.

However, IEDC had developed a high-risk portfolio, and not a particularly successful one either. With oil prices in freefall, rationalisation was needed. The two properties offshore Sicily went in 1985, followed by Tanzania and Turkey in 1986, and the last two Italian and Irish interests between 1986 and 1988.

But further savings were possible. Besides IEDC's Turkey and Tanzania offices, premises in London, Bermuda and Houston went. Over time, most IEDC titles were liquidated or merged into KUFPEC. The Amal and Congo properties became producers, remaining with KUFPEC until 1998; part of Sudan, still dormant, is retained even now. IEDC, though, still lives on in the form of several subsidiaries, including the holding company for KUFPEC's Australian assets.

"But the real benefits," said today's Deputy Manager Middle East and Africa, Dr Mike McMurtry, "was in the organisation. For the first time, most people were under one roof, with the technical people right next to the decision-makers and Board. We were in two separate buildings, but it was only five minutes' walk between them. And we had some real leadership. There was a real drive in the Company.

"The first big deal KUFPEC was involved in after moving to Kuwait," continued McMurtry, "was a production purchase in Angola, from Texaco. This involved multi-disciplinary teams working in Portugal, London and the US. It was the first time many of the people had conducted this exercise and the first project to go to Recommendation for Board Approval (RBA) stage following the reorganisation. The size and scale were such that it took enormous teamwork and co-ordination. At that time, Mahmoud Al-Rahmani was head of Planning and Development. The weekend before the RBA was due, the office was a hive of activity as people rushed to get everything done. Mahmoud was there, determined to offer assistance to everyone he could. He ended up photocopying the document and fetching paper clips for my wife. You couldn't help but have great affection and work hard for a boss like that."

"And things got even better when Faisal Al-Kazmawi took over as Chairman," added Mike's boss at the time, Exploration

The Thirty Billion Barrel Man

Faisal Jassim Al-Kazmawi

KUFPEC Chairman, April 1987 to December 1994



If KUFPEC wanted a dyed-in-the-wool exploration man at the top, there was none better than Faisal Al-Kazmawi. For this was the man who had presided over the discovery of thirty billion barrels of reserves in Kuwait before the age of forty.

"I was never going to be able to do that with KUFPEC, and KOC was very much a team effort and a lot easier given Kuwait's geology," he said with characteristic modesty, "but we could always dream."

Faisal came into this world, somewhat auspiciously some might say, only months before the first Kuwaiti oil exports. By age twenty-three, he had returned to his homeland from the University of Texas at Austin with a BSc in Petroleum Engineering. He cut his professional teeth as a KOC petroleum engineer, learning the business from the ground up – and down – in, as he puts it, "the only way to learn how to find oil, in the field."

By 1977, Faisal was KOC General Superintendent responsible for all reservoirs in Kuwait. It was an incredible achievement for a man barely in his thirties; he was in charge of effectively 10% of the world's reserves. By April 1980, still not yet thirty-five, he was KOC Deputy Chairman and MD (Operations), responsible for the entire upstream operations of the State.

"During that time," he said with obvious pride, "we drilled the deepest well in Kuwait and later the deepest well drilled in the world then outside the US. This added substantially to light crude reserves, a far more valuable product.

And we introduced modern workover practices, all this within a few years of taking over our domestic oil operations from the majors. It gave us tremendous confidence."

Concurrent with this new KOC appointment, Faisal was made inaugural Deputy Chairman of KUFPEC. He served as this until relinquishing his KOC role to become the Company's first full-time executive Chairman in 1987.

"We were young in those days, and full of energy," he recalls. "It was a truly exciting time in the 1980s. And we had wonderful support from the Minister. He would ring up, or come back from a trip, or send some eminent visitor to us, and say, 'Go here and have a look at this,' and we would. He opened doors all over for us. We'd go to the strangest places, stay in hotels you'd never want to see again, fly in planes held together with prayer, and we found oil. That was the business."

Added a colleague: "Faisal was always more than a technical man. He was a leader, and a team player. He had this incredible ability, much like his predecessor, of summing up a discussion and getting right to the salient points. And for a big man, physically, he was very fast on his feet. He used to thrash much younger men on the squash courts, and showed the same hard-hitting, direct agility in his work. He was a good guy to work for, but not to play against."

In January 1990, while still at KUFPEC, Faisal was appointed Chairman of newly-formed KP North Sea Holdings, which held KPC's North Sea assets. Even after retiring from KUFPEC in December 1994, he retained this responsibility until KP North Sea was divested two years later. With his wealth of experience, he served as Advisor to the Oil Minister and senior KPC management until his retirement in 1998. Now living contentedly in a slower, less intense world, he still trounces younger, fitter men on the squash courts.

Manager Dr John Small Jr. "Abdul Razzak was great, but was spread so thin with KPC and all his other responsibilities. For the first time, we had a full-time Chairman. There were difficulties, but on balance, it was a great time to work for the Company. Incidentally, the Board approved Angola, but the offer was unsuccessful. The other partners in the concession exercised rights to match the winning bid and increased their interests in the block."

With IEDC fully absorbed, KUFPEC was now in a better position to pursue its future. Shareholder KPC confirmed this by authorising a 100% increase in the Company's capital to KD200 million. The first drawing was not made until 1989, but it was a tangible vote of confidence in the Company by its parent.

THE LAND DOWN UNDER

With IEDC, KUFPEC acquired for the first time properties in Australia. Uniquely, whereas KUFPEC in the early 1980s generally held its interests directly (often with a further indirect interest through IEDC), it was not until the 1985 IEDC takeover that it had any direct interests in Australia.

The smallest continent was always an anomaly for IEDC. It was hardly 'Developing World' but had some of the best fiscal terms anywhere. And IEDC Australia had always been very autonomous. Significantly, though, it provided KUFPEC's first consolidated revenues from operations, in 1985, only four years after incorporation. Although minor, it held tremendous symbolism at the time.

IEDC Australia was headed first by Jere Graham — an American who had joined IEDC in 1980 from Santa Fe (later acquired by KPC). It was then taken over by the late

and much-respected Gordon Allen when Graham transferred in 1987 to Indonesia to establish the new KUFPEC office in Jakarta. Perth is still operating today under David Osborne, and a greatly expanded Jakarta under David Lamb.

The name-change to KUFPEC (Australia), however, hit a slight hitch. Upon hearing of the KUFPEC takeover, an opportunistic Antipodean quickly registered the business name. KUFPEC had to buy it from him at a price to work under its own name in Australia.

By 1983, IEDC Australia's interests averaged 33% in ten exploration permits covering 122,000 sq km. These were in four provinces: four permits in the remote Canning Basin in northern Western Australia, with IEDC as operator; two covering 31,069 sq km in the nearby Kidson Basin; one in the smaller 6,365 sq km WA-162-P permit offshore in the Perth Basin; and two in the Northern Territory's Amadeus Basin with a 1.248% interest in the producing Palm Valley gas field — the Company's first source of revenues. The tenth interest was a minor 2% share in Queensland's Eromanga/Cooper Basin.

Of these properties, Canning was initially the most attractive. The four interests were acquired in May 1980 — before IEDC was even properly incorporated — by farm-ins over an area totalling 37,798 sq km. IEDC had, or was entitled to earn, an average of 51%. However, after extensive seismic, farm-outs, litigation with partners and a dozen dry wells, KUFPEC started withdrawing in 1988. It was completely out by 1991. Kidson and the Perth Basin properties were similarly unsuccessful and were let go in the mid to late 1980s.

First Revenues, 1985: Watching Amadeus, Eromanga

KUFPEC's first production revenues appeared in 1986 in the restated 1985 financial statements after the IEDC merger, showing IEDC's results consolidated with KUFPEC's.

The sources were a tiny 2% interest in Queensland's Cooper Basin Eromanga Permit, and 1.248% in the Palm Valley production lease, in the Northern Territory's Amadeus Basin.

But where did this revenue come from and why were the interests so small?

Explained KUFPEC Australia President David Osborne: "In the early years of IEDC when exuberance was the order of the day and everyone thought that money would flow in from new shareholders, Jere Graham in Australia had

committed to about 40% of the Eromanga and Cooper Basin properties.

"However, when it came to paying, the money wasn't there and he had to offload them. There was what is called a 'seller's commission' in the form of a small interest. Fortunately, Jere retained that, and that's how the tiny percentage holdings came about."

In Amadeus, IEDC had earned interests of 9% and 11% in two exploration permits through a 1981 farm-in, plus a 1.248% interest in Palm Valley. The area was remote — 1100 km south of Darwin — but in the time since IEDC first entered Amadeus and the KUFPEC takeover, the Palm Valley field had commenced gas production via a 164-km pipeline to Alice

Springs. A 12 3/4 inch gas pipeline to Darwin was completed in 1986, increasing the initial low level of production five-fold. By 1987, Palm Valley was producing 27 mmcf/d. The Amadeus exploration permits were later relinquished, but Palm Valley is still retained. And, perhaps appropriately for a company with 40% of its reserves in gas, that is exactly what Palm Valley produces.

Further east, Eromanga's ATP 269 permit has had a number of commercial discoveries since 1984, and proved to be a good investment over the years.

Both properties, fondly remembered as KUFPEC first sources of production revenue, are still part the portfolio.



In 1988, KUFPEC changed direction in line with much of the rest of the Australian exploration industry from primarily onshore exploration to offshore on Western Australia's North-West Shelf. (Photo: Apache)

OFFSHORE WITH HARRIET

With the first Canning and Kidson relinquishments in 1988, KUFPEC changed direction in line with much of the rest of the Australian exploration industry from primarily onshore exploration to offshore on Western Australia's North-West Shelf. This was part of its new strategy of acquiring proven reserves. Furthermore, it had plenty of IEDC tax losses from the Canning, Kidson and Perth Basin operations and needed some Australian revenue to take advantage of them. It acquired an interest in the Barrow Sub-Basin, with the producing Harriet oil field and the nearby undeveloped Bamba, Campbell and Rosette gas fields. Harriet, a 1983 discovery and producer since 1986, was pumping 10,000 bpd when KUFPEC bought in, rising to 11,920 bpd in 1990. Plans were already in place to develop the gas under a separate project. An additional interest in nearby acreage was acquired in January 1989.

Interests were also taken in 1989 in permit WA-217-P in the Bonaparte Basin – with KUFPEC as operator – and in the Browse Basin permit WA-212-P, both offshore North-West Australia. Work on Browse was eventually limited to seismic processing, and the permit relinquished in 1992. However, at the time, KUFPEC's move into operatorship of offshore permits was in itself seen as a significant first for the Company.

THE ARAB WORLD AND AFRICA

Closer to home, in 1987, KUFPEC markedly increased its interests in Egypt both through the existing Gulf of Suez Amal offshore field, acquiring an interest in the nearby Magawish offshore permit with its 1985 discovery, and the 396 sq km onshore Ras Kanayes block in the Western Desert. Three wells were drilled on Magawish in 1988 but the discoveries proved to be non-commercial and the permit was relinquished.

In Amal itself, development moved ahead through the Al-Amal Petroleum Company (AMAPETCO), set up with the other partners and with significant involvement from KUFPEC's newly-created Engineering Department. First production came onstream in December 1988 from a total of five wells with delivery to the Ras Gharib storage and loading terminal. Production over 1989 averaged 4,750 bpd, somewhat less than the expected 6,000 bpd, dropping back to 4,085 bpd in 1990.

Involvement with the onshore Ras Kanayes property was difficult more because of extended negotiations with the Egyptian authorities than technical challenges. This was a remote area, several hundred kilometres west of Alexandria. Its one saving grace was its proximity to Matruh, a Mediterranean beach resort since Roman times. Extensive negotiations finally led to acceptable concession terms and, in 1989, the acquisition

Dinner with the Viet Cong... Fishing with Hun Sen... and the Minister's Last Day

If there is one thing about the upstream oil industry, it is its global nature, the fascinating people one meets and the unusual situations one encounters in unfamiliar cultures. On a PetroCanada concession signature trip to Hanoi for the three Vietnamese blocks in which KUFPEC invested in 1990, Chairman Faisal Al-Kazmawi and Exploration Manager Dr John Small Jr – an American – found themselves sitting at dinner across from a very old, small and happy-looking Vietnamese dressed in traditional Ho Chi Minh style. He was introduced as the Honorary Minister for Industry.

In conversation, it transpired that His Excellency had been educated in the north by French priests and at the time of the Indochina War, was in the army as Diep's Chief-of-Staff at the battle of Dien Bien Phu, where the North Vietnamese defeated the French. When the US became involved in the conflict, he was asked by Ho to command a new 'Peoples' Army' of the north, which later became the Viet Cong. He had since retired to his collective farm and was, in his words, "just a country boy."

On the same trip, the KUFPEC delegation was accommodated in a government guesthouse (not the Hanoi Hilton, to the relief of Small) which was surrounded by a lake.

Early each morning, Small and a PetroCanada Canadian would jog around the lakeshore perimeter. Each day, they saw a solitary fisherman in native dress, complete with conical hat, near their residence, with an armed guard present at a considerable distance. They could fathom no reason for a common fisherman to be there, but it was none of their business...

They later learned that their fisherman was Hun Sen, visiting the Vietnamese government in the period just before he became their puppet prime minister in Cambodia. And they hadn't even introduced themselves or

asked how the fish were biting.

Small also recalls another business trip with Mahmoud Al-Rahmani in 1986, a negotiating trip to Islamabad. They picked up on the then long and rather fruitless negotiations, meeting the then Minister of Petroleum whose claim to political fame was his prowess at cricket. The visit was suddenly extremely successful, or so they thought, when the Minister agreed to all the requests, in spite of his aides' verbal objections. The KUFPEC men were congratulating themselves afterwards on the ground floor of the Ministry office when a Pakistani employee they knew came in and said it was the Minister's last day in office, before he became Minister of Agriculture. Another year or so of negotiation took place before final granting of the Tajjal license, where gas was discovered at Kadanwari.

of new seismic data and reprocessing of earlier data. The first of three obligation wells – Ja-27-1 – drilled in 1990 proved the existence of good potential reservoirs, but commercial quantities were not found until later drilling in 1992.

Farther west, KUFPEC participated in Production Sharing Contracts in Algeria's even more remote El-Agreb and El-Harcha East blocks adjacent to the country's largest field, Hassi Messaoud. Seismic surveys were completed in 1989, followed by roads and infrastructure in 1990, and then a delayed drilling programme in 1991. The results were disappointing and the property was eventually relinquished in 1992.

Still in Africa, but much further south, on Congo's Marine 1 permit with its 1987 and 1988 Youbi, Yombo and Yongou discoveries, three appraisal wells were drilled in 1989. Two encountered commercial flow rates, and a successful 3D seismic survey was shot. The group also obtained additional acreage south of Marine 1 in the 900 sq km Marine V. With the assumption of operatorship by Amoco, KUFPEC was obliged to halve its interest to 6.25%.

But KUFPEC's main acquisitions of the second half of the 1980s and early 1990 were in a country much closer to home, on the southern edge of the Arabian Peninsula, in Yemen.

The first acquisition was in South Yemen's East Shabwa Block in 1987. A major seismic programme was conducted in 1988, together with a gravity survey and geological field studies. Several prospects were identified for drilling in 1989, and exploration rights applied for over the small adjacent South Shabwa block. It would be 1993 before a commercial discovery was made. In the meantime, the prospective 2,700 sq km Jannah Block was acquired, 300 km from East Shabwa. Within ten years, Jannah would become the Company's biggest source of revenue and a source of badly-needed foreign exchange for the rapidly developing country. But the real story of Yemen is one of relationships, not oil (see pages 38-39).



TO RUSSIA, WITH LOVE, MONEY, AND TECHNOLOGY

The early years of involvement in Yemen led KUFPEC in another direction, one that never actually went very far, but proved fascinating while it lasted. It was away from the deserts, to the cooler climes of Russia.

"Russia was another Ali Khalifa initiative, starting in about 1989," said then Chairman Faisal Al-Kazmawi, "and we had the connections to the Russian companies we knew from Yemen. You must also remember the times. There were still two superpowers, and Kuwait always wanted to retain a little balance to the Americans. Just like US companies can't now go to Libya or Iran as we can, they couldn't go to the USSR then. We had an advantage. So the Minister said: 'Let's get in there with the technology and the money before the West, on the ground floor.' The Soviets, as they were then, wanted us to be a source of Western technology for them, as well as to bring the investment. It was a two-way street, to mutual benefit."

At least that's what it was in theory. The Soviets did not seem to realise at first that they needed to offer KUFPEC something attractive. There was talk of fields in Siberia, which enchanted no one, and they even sent technical data for analysis on some other less than stellar properties.

"I recall reviewing some of this technical information," said Reservoir Engineer Iqbal Gul. "But first of all we had to have it translated from Russian to English. Fortunately, we had a Kuwaiti geologist, Ahmad Al-Awadi, who had been trained in Russia and he did a good job with it. And the Russians certainly did things differently to us. Most of the work was there, but you could see a different mindset at work. And I don't know how they worked the economics. The production from some of their wells was so low that we would have abandoned them long ago. They were at least a generation behind in technology, if not more, but there were good minds at work and a solid structure to the data."

On being briefed on the poor prospects on offer, KPC's top people went back to the Soviets. 'Give us something reasonable,' they are reported to have said, 'and we'll have a look'. So they did.

"The Russian project was done on a government-to-government basis," recalls then Exploration Manager Dr John Small Jr. "Faisal Al-Kazmawi led the Kuwaiti delegation first to Moscow in spring of 1990 for five days, and then to Ashgabad in Turkmenia, now Turkmenistan, near the Caspian Sea. The Soviet Minister at the time was a geologist, so we got on famously with him. He was a good man. We did sign an initial protocol in February 1990 and looked seriously at four areas. We chose two, one on the Khazakhstan border and one next to Uzbekistan. Each was larger than Kuwait, seriously under-explored, and lay between existing provinces, including the



giant Tengiz field. They were later picked up by the industry in the late 1990s, by Mobil in particular, after the collapse of the USSR. It does give me some small satisfaction that we were in there eight or nine years before.

"In Turkmenia," continued Small, "we were chaperoned by a most pleasant KGB man and a Russian-English translator who did not have a clue about technical data or the local language. We settled for Arabic as the common language as some of the Turkmeni staff had worked in Yemen. I recall that Said Saafan, a Soviet-trained Egyptian geophysicist on KUFPEC's staff, translated for us.

"The president of Turkmenia, then a Soviet Republic, held a State dinner for the delegation. This was before Glasnost and all mosques had been closed in 1922, but the President went out of his way to show respect. He found an old man who read a recitation in Arabic from the Holy Koran for the occasion. Then, much to the great discomfort of the Muslim members of our delegation, the recitation was closed with his proposing a toast, with vodka."

"That was the last big meeting we had before the Iraqi invasion of Kuwait," said Al-Kazmawi. "Ali Khalifa was replaced the month after we went back to the Soviets to talk business, and that took a lot of the push out of things. Then the invasion interrupted things and the USSR fell apart. Some of our technical people tried to pick up on the work after Liberation but it wasn't the

(Continued on page 40)

A Kuwaiti delegation went to Moscow in the spring of 1990 for five days, and then to Turkmenistan, to discuss the possibilities of taking acreage in the Soviet Union. With the interruptions of the Iraqi invasion of Kuwait later that year, the initiative came to nothing.

Opposite page: Drilling at Kadanwari on Pakistan's Tajjal concession.

Friends, Not Enemies: Hands Across the Table in Yemen's 'Jannah' Paradise

With the USSR and US not talking to each other in the 1980s, KUFPEC was party to a remarkable episode of détente in the closing days of the Cold War, not to mention peacemaking between the Americans and French.

"Yemen was – and is – a fascinating episode," said KUFPEC Deputy Chairman Abdulla Baroun. "Today it is united, but we were first there ten years before that. You recall that in the 1980s there were two Yemens, North and South. The South was strongly Socialist; the North the opposite. This in turn led to civil war."

"It was the Minister, Sheikh Ali Khalifa, who got us in there," said then Chairman Faisal Al-Kazmawi. Kuwait as an Arab State had relationships with both countries, and one day the Minister told us to go and talk to South Yemen about East Shabwa. They had TOTAL, which was always very active in the Arab World but were very keen to have a little balance in the relationship. An Arab company such as ourselves made a lot of sense. So we took an interest in the block, which today produces more than 30,000 bpd, and KUFPEC has 14.29% of that."

According to Deputy Manager Middle East, Dr Mike McMurtry, KUFPEC actually lost East Shabwa, then got it back the next week. "I recall that TOTAL had picked up 100% of the PSC and was looking for partners through competitive bidding," said Mike. "We had made a recommendation to the Board. The decision was made the Thursday before the 1987 Easter weekend, so we called TOTAL and said, 'We're in.' They said, 'No, you're not. You're too late. Someone else has it.' Well, we all



went home for the Friday and Saturday weekend in Kuwait disappointed and depressed. We returned to work on Sunday and Monday, which were Easter holidays in Europe, still depressed. Then we got a call from Paris on Tuesday saying, 'You still want in on East Shabwa?' Of course, we

jumped at the chance and all the depression evaporated. We later found out that Nordine Ait-Laoussine, who had left us three months earlier, had been most upset at us losing out and had made some calls to people he knew well in TOTAL. He rescued it for us without us even knowing at the time. And we believe that the party who missed out was a European major. That's how important relationships are."

"Jannah came later, in 1990, although we were talking with both Yemens several years before that," added Abdulla Baroun. "Politically, it was extremely significant. Negotiations were very difficult because it was in the neutral zone border area between the two Yemens. A main driver behind the project was to ease tension between the two countries. Both Parliaments had to pass laws approving it, and Faisal Al-Kazmawi was shuttling between the two capitals like Henry Kissinger trying to tie up the deal. The Minister had instructed us to get as much as we could, but South Yemen had the French and the Soviets, Zarubezgeologia and Machinoexport. The North had Hunt and Exxon from the US. It had to go five ways. In the end, we did better than the others, and took 25%. This later went down for other reasons, but we were in with a good share, better than we could expect."

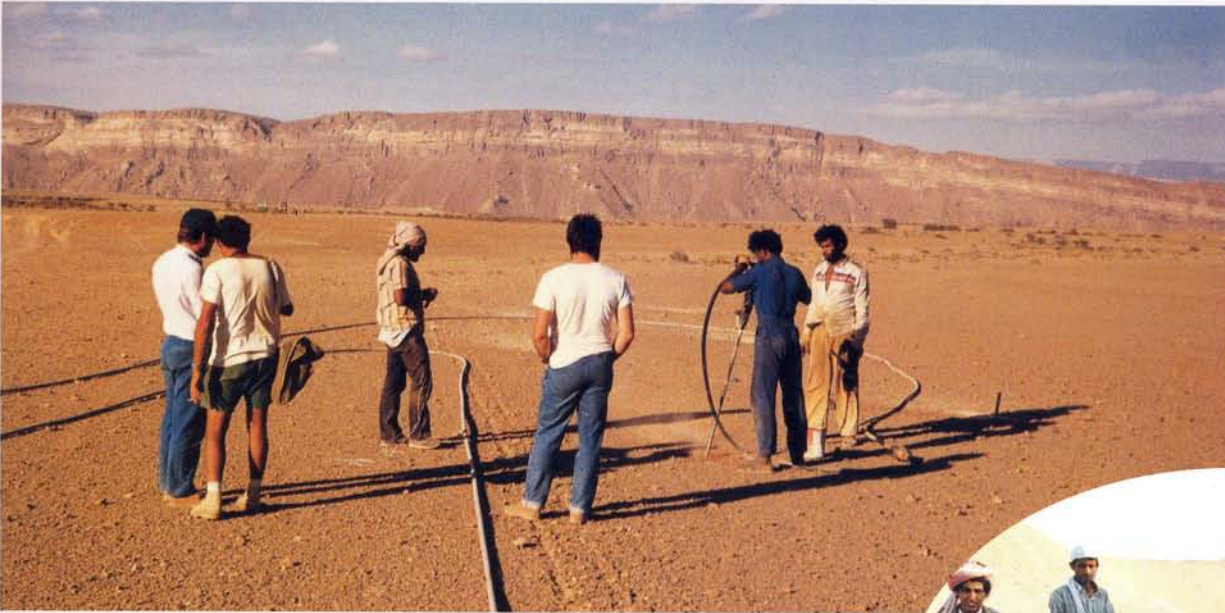
"Despite these challenges," continued Baroun, "it was always an attractive area and did even better than East Shabwa. There were quicker discoveries and it now produces more than 65,000 bpd, of which we have 20%. It provided a quarter of our 2000 income and is now KUFPEC's number one source of revenue. In fact, the name in Arabic means 'Paradise'. It was hardly that with the terrain and civil war and all the heavy negotiating, but it looks that way now being our new cash cow."

"When we first went in, the Russians' money was running out and they had to withdraw. But before that, a Greek company took part of the Russians' interests. It was a fascinating experience. On the world scene, the then USSR and the US were not talking to each other, but here we had Soviets and Americans at the table speaking quite civilly as professionals. The French and ourselves were sitting there, quietly amused at the irony of the whole affair. It just goes to prove that the oil industry can transcend politics."

Added Al-Kazmawi: "Even with Yemeni approval, it wasn't as easy to get into Jannah with our partners as it was with East

The University of Texas provided a vital link between Kuwait and Yemen – through its football team – that helped smooth negotiations over an interest in the Jannah Block concession.





The start of seismic surveys in East Shabwa concession in 1989. Several sites were identified for drilling.

Shabwa. For one thing, the Americans, particularly Hunt who had a big say in things, didn't seem to take us all that seriously. It was hard to talk to them at first. Then we discovered that their President was an alumnus of my old *alma mater*, the University of Texas at Austin, and he was an American college football fan. So we had great common ground. In our meetings, we talked more about football and the University than we ever did about the property, but that greased the wheels. It is that type of personal relationship, of shared common interests and history, which made the business relationship work. I've never been more grateful for being sent to America for my education."

Added then Deputy Chairman and Deputy Managing Director for Planning and Development Mahmoud Al-Rahmani: "Relationships were everything, and the support from KPC was very important. It would be a lesson well-learned today. In situations like that, you are fighting with giants. You need to use whatever strength and advantage you have. Then, Yemen was very attractive and everyone wanted in. We got the best deal mainly because of the push from Ali Khalifa and his relationship with the Yemeni Minister.

"In fact," continued Al-Rahmani, "our presence later served the project very well. We were the honest broker. On Jannah, everyone was initially fighting to be operator but we made a smart move and gave up any claim to operatorship in return for a higher interest. Eventually the agreement was for TOTAL to be the exploration operator, and then for Hunt to take over for the development phase, with the production operator to be decided by vote. When the first transfer point was reached, the Americans and French could not see eye-to-eye at all. TOTAL would come to us and complain about the Americans,

and Hunt would come to us and complain about the French. Here were these two Western companies, supposedly allies globally, not being able to get on, and yet they trusted us Arabs more than each other. We took a simpler view of things and served as mediator between them. Without that, they told us later, the project could have failed."

"The lesson of Yemen," concluded Co-ordinator of Middle East Projects Abdullah Al-Nibari, "is not just that you need to bring all the influence of your Shareholder and even your country to bear to get the best deal, but at the most basic level, it all turns on relationships and having an impeccable reputation for trust. And that's what we have in Yemen."





Right and below:
launch of a barge
and tanker for
the Anoa block in
1989. (Photos:
Premier Oil)



(Continued from page 37)

right time for KPEC or for us. Besides, the USSR as we knew it had disappeared. Still, it was interesting. It would not have been easy, but other non-Russian companies are in there now, and are doing very well. We wish them luck with the Caspian Sea property we almost had."

ASIA

During the latter half of the 1980s, especially after the consolidation of KUFPEC in Kuwait, most of the Company's new acquisitions were directed to the east, firmly establishing its new direction to the Orient.

Offshore Indonesia, a declaration of commerciality was made

in 1985 on the Natuna Sea 1983 Anoa discovery, and 500 sq km of the block was retained under a thirty-year production license, with further exploration possible outside Anoa. A 3D seismic survey was conducted over Anoa and 2D on other prospects in the block in 1986. Development of Anoa oil – initially delayed because of market conditions – commenced in 1986 and continued through 1989, with first production in late 1990.

Elsewhere in Indonesia, the Seram Island exploration permit had been acquired in 1986 (*see pages 28-29*). Then, in 1988, an interest was acquired in Indonesia's Bawean block in the South Java Sea, where development of the Camar field was under way. Camar would eventually come onstream in July 1991 but soon encountered production problems and became uneconomic. It was sold in 1994.

Also in 1988, KUFPEC acquired a working interest in the SB-3 block, offshore Sabah in Eastern Malaysia, north-east of nearby oil-rich Brunei. An extensive seismic survey was conducted in 1989 and 1990 followed by two unsuccessful wells in 1991, seismic reprocessing in 1992 and the purchase of additional acreage. After two more dry holes in 1993, the property was relinquished.

Offshore China, in the South China Sea, with the Yacheng gas discovery, half of the exploration block was relinquished under the terms of the agreement in late 1985, leaving 4,500 sq km. Seismic interpretation and in-house geological and geophysical studies were undertaken in the search for additional satellite gas fields. Technical and engineering studies were also carried out for

development, but the main challenge was finding markets for such a remote offshore gas site. It would be 1995 before the first gas – and revenues – flowed.

Meanwhile, in Pakistan, four years of negotiations finally bore fruit in 1987 with the creation of a joint-venture between KUFPEC, LASMO and Japan’s Idemitsu to explore the Tajjal Permit. KUFPEC had originally taken 100% of the permit with the intention of being operator, but LASMO was better suited to the work, and better able to handle the unique requirements of doing business in the country. Seismic surveys identified a number of prospects that were drilled in 1989 with the very first well – Kadanwari – discovering substantial gas reserves.

In early 1990, the Company acquired a share in Blocks 3, 12 and 20 covering 11,200 sq km offshore Vietnam. They would ultimately be fruitless, and were relinquished several years later.

THE NORTH SEA CONNECTION

If KUFPEC had left Western Europe by the late 1980s, KPC had not. It still had upstream assets in the North Sea, Irish Sea, Celtic Sea, and even the Atlantic Ocean offshore Ireland. And, in a way, these assets almost became part of KUFPEC.

KPC’s North Sea assets had originally come to it through Santa Fe, which it had purchased in 1981. Although primarily a contract driller, Santa Fe also had an upstream subsidiary, Santa Fe Minerals. A strategic decision had been made at the time for Santa Fe to take all of the KPC Group’s North American upstream assets – including the Williston Basin property that KUFPEC had managed for KPC – and to retain the North Sea assets it had. At the time, Santa Fe was one of the pioneers in the North Sea, with its leading edge offshore rigs, and its main North Sea asset the mature Thistle field. Other properties, comprising interests offshore China, Ireland and Sicily, had been transferred to KUFPEC. With the exception of China, these had either been relinquished or transferred back to Santa Fe Minerals over the years.

Now, in late 1989, with oil prices down, KPC had decided that Santa Fe would return to its core business of contract drilling, and its upstream assets would go. But they had to be disposed of properly. The North American assets went one way, and the North Sea assets were spun off into a separate UK-based subsidiary which became KP North Sea Holdings (KPNSH), better known as Santa Fe Exploration, or SFX, the company that actually ran the properties.

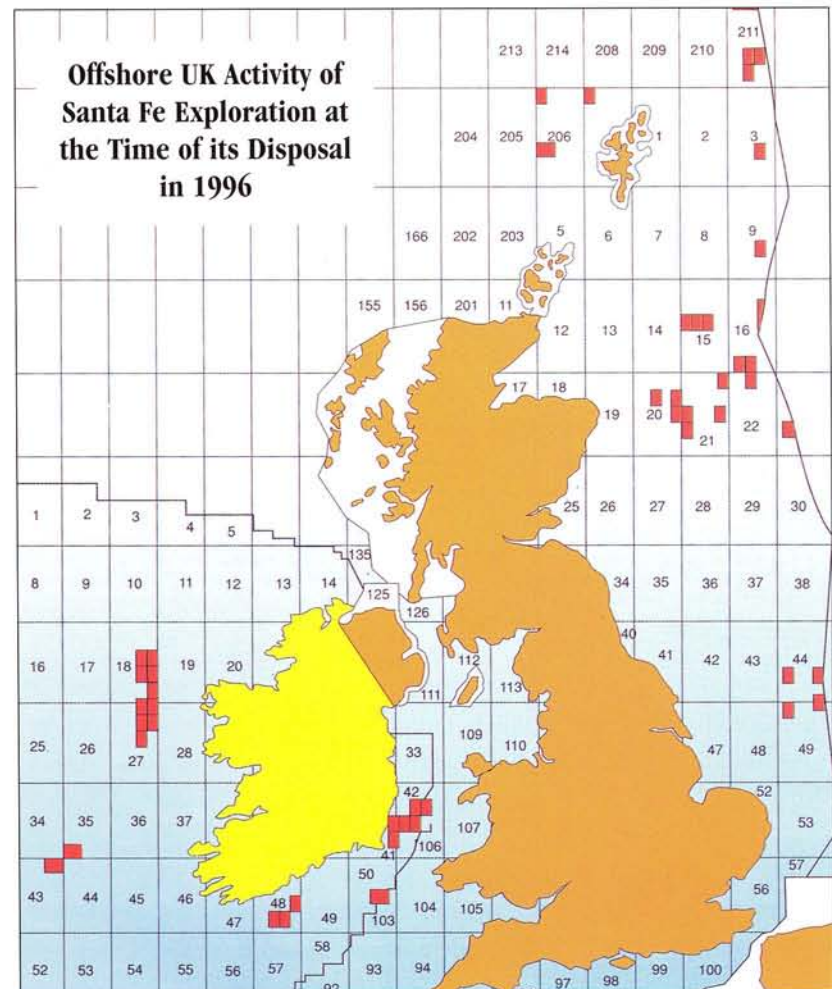
“Ali Khalifa’s vision, at the time,” said then KUFPEC Chairman Faisal Al-Kazmawi, “was to eventually combine KUFPEC and SFX under KUFPEC. There wasn’t any formal strategy or KPC Board decision on it, more talk in the corridors, but that’s the way things worked then. Ideas floated around and were then put to the KPC Board when the Minister had decided.

The North Sea properties were not put into KUFPEC directly at that time because there were tax implications that could have cost us a lot of money, but the vision was there. As such, my Deputy Chairman, Mahmoud Al-Rahmani, was appointed Deputy Chairman of KPNSH and I became Chairman. Thus, KUFPEC and KPNSH had the same two people at the top.”

“In 1990, KPNSH production was 10,000 boe/d,” said Al-Rahmani. “Over the next six years it grew to 63,000, with a peak of 67,000 boe/d. By then, it had four main producing interests: the Miller, Alba, Gryphon and Thistle fields, and a number of exploration interests, including the Durward and Dauntless fields. It also had development interests, including Britannia. Remaining proven reserves had grown from 87 million boe in 1990 to 156 million boe by 1996, with 80 million boe produced in that time. And most of that growth in reserves had come almost exclusively from exploration and development, not new purchases. In 1996, it was sold to SAGA of Norway.”

“Consider the numbers in the light of current plans,” added Al-Kazmawi, “and the possible combination of KUFPEC and KPNSH. Today, in 2001, KUFPEC produces 30,000 boe/d with a target of 100,000 boe/d by 2010. Thus, if KPNSH’s 60,000-plus boe/d

Santa Fe was one of the pioneers in the North Sea, with its leading edge offshore rigs. Its North Sea assets were spun off by KPC into KP North Sea Holdings (KPNSH), better known as Santa Fe Exploration, or SFX, the company that actually ran the properties. KUFPEC and KPNSH had a chairman and deputy chairman in common.



An Interview with the Chairman

On May 9th, 1990, Dr Mary Ann Tétreault interviewed KUFPEC Chairman Faisal Al-Kazmawi in his Kuwait City office. Here are some of his comments about Kuwait's unique position as a developing country investing in oil properties overseas, and about some of KUFPEC's experiences.

Dr Tétreault: Why did Kuwait decide to get involved in foreign exploration?

Al-Kazmawi: Very few Kuwaitis can visualise why we are in this business. I ask them, does Kuwait have fifty years' experience running hotels? Yet Kuwaitis are buying hotels all over the world and hiring foreigners to run them. Kuwait has invested \$70 billion globally and KUFPEC represents only \$1 billion of that. We are well experienced in the oil business. We have been at it for fifty years.

Another reason is that Kuwait has been trying to aid friendly Third World countries. We build schools and send money for other projects. But sometimes that money goes to the wrong pockets. And sending money only helps once.

Look at Tunisia. We gave aid for a long time. Now we have found oil. It is good for another Arab country and for Kuwait's reputation. It makes money for them and for us. We had been helping Yemen for years but no one knew it. Now Kuwaitis work there and everybody in Yemen knows that Kuwait is ready to help. That's why the Kuwaiti government decided to establish KUFPEC. As a strategy it's good to help these countries reduce spending cash outside to buy energy.

Does KUFPEC have any special advantages over other oil companies?

KUFPEC has one advantage over other companies. Because Kuwait is known as being so generous and friendly to the Third World, governments invite us to explore there. Other companies have advantages too, for other reasons. Shell has properties all over. We are a small company, but so many areas have been offered to us. However, we don't have to go there if we don't see good prospects for finding oil. The government can give aid through the Kuwait Fund or some other means.

Are there special disadvantages?

Some areas that are used to Kuwaitis being generous look at us as an aid organisation. They just want a gift. Where this happens, we tell them to go to the Kuwait Fund. We are like BP or Exxon.

Does having commercial partners change this kind of attitude?

Because we usually go in with partners, this is happening less and less. There are some areas where we personally would like to be there 100% because we have good relations with that government. Provided that the technical risk is good. The one area we now own 100% is in Tunisia. Everywhere else we have partners. We have French, Japanese, Australian, Canadian, and US partners.

Do you have any preferences when it comes to taking partners?

There are few reservations. For example, I would not go to Viet Nam with a US company. It depends on the area. Sometimes companies come to us. Sometimes when we farm into an area, we find partners we might not like so well. But it's a Catholic marriage. No divorce.

How do other companies see KUFPEC?

As a commercial actor. But I don't think other companies would come to us to go to Iran.

Tell me about your activities in the Soviet Union.

Our relations with the Russians are very interesting. When Gorbachev took over five years ago they made overtures to us. We already had operations in China so thought, why not Russia, and we started talking. Now we are looking at three ways of working with Russia: bringing Russians to work in Kuwait; Kuwaiti companies working in Russia; and joint Kuwait-Russia ventures around the world. This is also partly political. Kuwait is showing the world we are a neutral, non-aligned country.

I went to Russia myself two months ago (in March 1990). Before, they were only offering us problem areas — like Siberia — or old fields, but we wanted something better. I said, "If you want us in the USSR you have to give us a virgin area with good geological prospects." Now they have a new minister, a geologist. We travelled together to Turkmenia (now Turkmenistan), near the Iran border. We chose a block there and are starting to work something out.

In Russia, there is so much confusion. Everybody wants change but no one is doing anything about it. There is no law to protect foreign investment. No rules. How will we pay for the oil, in cash or in kind? If cash, which currency and at which rouble rate? They have two official rates and many other unofficial rates.

The third aspect is that we both go to an area together — like South Yemen, where Russians have been working for a long time. We've just started talking about this. It is even more complicated because a third party is involved, South Yemen, and we don't know how they will be. Also with the Russians it's hard to predict. We are at an early stage. It will take time.

How did you get into China?

China was a part of the acquisition of Santa Fe International, who held the concession. The Chinese had already signed with ARCO for an area south of Hainan Island. When Santa Fe was added to KPC, it was given North America as its area for exploration activity and KUFPEC got the rest of the world. When we first started talking with the Chinese, they were very grateful that Kuwait was there. And we have a major gas discovery.

Right now we also have a gas discovery in Pakistan. Then discoveries in Tunisia, two in Indonesia, one in Australia, and in the Congo too, with Amoco. All oil. We have already produced in two fields, one in Australia and one in Egypt. So we are not doing so badly. It takes time. Two more fields will start producing next year, so we'll have four producing. But we have also failed, in Morocco, Bahrain, Oman, Turkey, Italy.

Since we started, we own reserves around the world of about 120 million boe in seven countries. Those resources are net to this country. It's true we've spent a lot of money, but finding oil takes a lot of time. And we're not always successful. There are so many risks, political risks, there is geology, drilling conditions, many more. You have to spend money before you can make it.

(Mary Ann Tétreault is the Una Chapman Cox Distinguished Professor of International Affairs at Trinity University in San Antonio Texas. She is the author of two books on Kuwait: *The Kuwait Petroleum Corporation and the Economics of the New World Order* (Quorum Books, 1995); and *Stories of*

Democracy: Politics and Society in Contemporary Kuwait (Columbia University Press, 2000). This interview was conducted during her fieldwork for the 1995 book about KPC.)

production were part of KUFPEC's, then KUFPEC would now be producing the target set for a decade away. And KUFPEC has another 20,000 boe/d coming onstream by 2005 from current developments. So, the combined KUFPEC/KPNSH production would be above that 100,000 boe/d. Then consider that Sheikh Ali Khalifa originally saw Kuwait having production abroad of 500,000 boe/d, add in Santa Fe's North American production, and half a million boe/d of foreign production is not fanciful at all."

"What might have been has not been," said Al-Rahmani, "but it is instructive to consider what could have been. KPC made a handsome profit from the sale of KPNSH to SAGA. They are to be congratulated on that. But for a few years there, KUFPEC and KPNSH were a pair of very close upstream twins, not quite one company, but close, with the same two men at the top. I wonder how much more profit we could have made for KPC if the twins had been made one."

BY THE NUMBERS

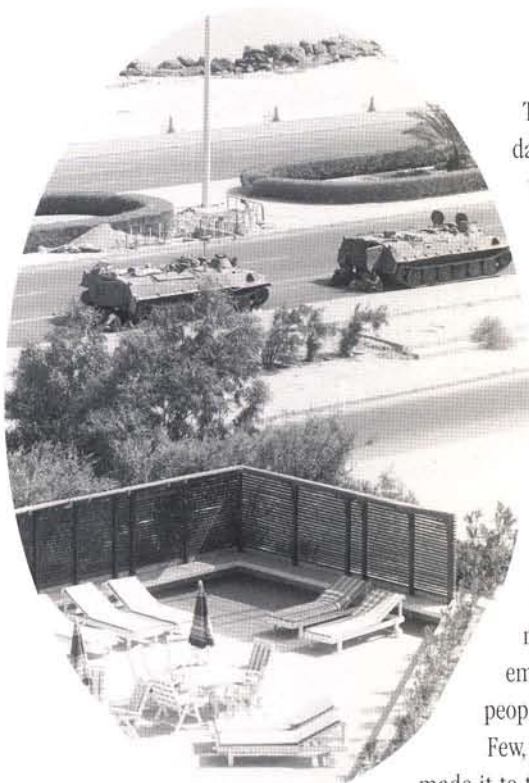
By 1989, revenues from operations had risen from nothing five years earlier to more than KD7 million. In fact, they had grown almost tenfold from 1987-1988 with the addition of Australia's bought-in Harriet production, combined with that from Amal offshore Egypt. The Company was not yet profitable, but developments due to come onstream in the 1990s from Yacheng in the South China Sea, Pakistan, Egypt, and further Harriet area production, Anoa in the Natuna Sea and offshore Congo promised to place the Company's results firmly in the realms of profit. The upstream business has a payback period measured in decades, not years, and KUFPEC was about to deliver the goods.

By 1990, total staff strength had been rationalised from a peak of 192 in the immediate aftermath of the IEDC takeover to 131, of whom eighty-five were located in the Kuwait corporate headquarters. Of these twenty-five were Kuwaiti nationals. Most of the staff of the three area offices — in Tunis, Jakarta and Perth — were host country nationals. Although many of the mid-level technical people were relatively new, the Company had a tight, skilled and experienced team with a balance of exploration, development, engineering and production activities. It was selling oil and a little gas in ever-increasing volumes. The Iran-Iraq War was over and while oil prices were still low, the gap between world production capacity and demand had narrowed considerably. Its shareholder, KPC, was right behind it. The future was looking good.

But the future held surprises of a kind that no one could expect. KUFPEC's Kuwait Office staff went home on Wednesday afternoon, August 1st, 1990, unaware of the momentous events unfolding to their north, less than 100 km away, events that would change not only their Company, but their lives, forever.

The Kuwait
Petroleum Corporation
and the Economics of the
New World Order
Mary Ann Tétreault

INVASION, OCCUPATION, EXILE: August 1990 to mid-1992



Iraqi armoured personnel carriers on the Gulf Road. Opposite: Iraqi invaders drive past Seif Palace on August 2, 1990. (Photos: Jorge Ferrari)

THURSDAY IS NORMALLY A WORKING day for KUFPEC Head Office, the last day of the business week in Kuwait. Not so on that fateful Thursday, August 2nd, 1990. Most of KUFPEC's employees in Kuwait were roused at dawn by the roaring scream of Iraqi *Sukhoi* fighter-bombers zooming low overhead after bombing Kuwait's air bases, or the sound of tank and machine gun fire. Some said later they thought they were living in a dream, so incredulous were they that war should visit their peaceful land. But it was more the start of a long nightmare not just for KUFPEC and its employees, but for the nation of Kuwait, its people, and many others.

Few, if any, KUFPEC employees in Kuwait made it to the office that day, although Jakarta and Perth offices were already well into their working days.

Fortunately for most of those in Kuwait, they learned of the invasion whilst still at home and had not ventured into harm's way. But it would be almost two years before the Company's staff, much reduced and the worse for wear, would fully occupy their Kuwait head office again. Fortunately, none lost their lives in the crisis – although about three hundred Kuwaiti servicemen and civilians did – in addition to several dozen Allied civilians and hundreds of Coalition troops. And a

further six hundred-plus Kuwaitis and other nationals are still missing, hostages unaccounted for by Iraq.

At the time of the invasion, it was the peak summer and school holiday season. The only executive Board member in Kuwait was Deputy Chairman and Deputy Managing Director for Planning and Development, Mahmoud Al-Rahmani. Chairman Faisal Al-Kazmawi and Deputy Managing Director Administration and Finance Khaled Mulla Hussein were vacationing in Europe. The rest of the staff, from the telex operators (it was 1990!) to secretaries and senior managers, were split roughly two-thirds in town, and one-third on leave.

Significantly, several technical personnel were on business trips abroad, with their wives and children stuck in Kuwait. It was a particularly trying time for these people. International telephone connections and mail services into and out of Kuwait were cut. There was no way that those outside could speak to those in Kuwait short of via satellite telephone or long-range radio, and KUFPEC didn't have any of those.

RISK

Clearly, in the midst of a war, people were at risk. But the danger came not so much from military action. That was over fairly quickly as spirited resistance by hastily mobilised Kuwaiti armoured and air force units was squashed by the invading behemoth. The two sources of danger were the general breakdown in law-and-order and the actions of the occupation authorities themselves, especially against Kuwaitis and Westerners.

In More Than a Legal Crossfire

When KUFPEC lawyer Flynn Jennings started driving to work on the hot summer's morning of Thursday, August 2nd, 1990, he certainly did not expect to run into a gun battle at 6:45am. But that is

precisely what happened.

He and scores of other early morning commuters were ordered from their cars by Kalashnikov-waving troops in red berets and shepherded to a safe roadside

location as a fierce firefight raged between invading Iraqi forces and greatly outnumbered Kuwaiti troops.

Only after he was released several hours later did Jennings

realise that the soldiers who had stopped him were the elite Iraqi Republican Guard, and that Kuwait had been invaded in a daring and treacherous surprise attack.

For the most part, KUFPEC's Kuwaiti, other Arab and Asian employees were left alone, shocked as they were at the almost unbelievable turn of events. The Kuwaiti staff in particular suffered persecution and harassment at military checkpoints when moving around Kuwait, but none was seriously hurt. Their greatest problems – shared by everyone – were securing the safety of their often large families, and then finding food and other supplies.

The Western staff – of which KUFPEC had about two dozen – and their families were in an entirely different situation. Within days of the invasion, Iraqi troops and *Mukhabarat* started arresting them for internment in Baghdad – 800 km north. They were to serve as 'Human Shields' on Iraq's strategic military and industrial installations to forestall an expected US counter-attack. A number of the more intrepid amongst them avoided capture and made daring escapes across the south-east Kuwait desert into Saudi Arabia. Others went into hiding. One KUFPEC Westerner, Senior Reservoir Engineer Paul McDade and his wife Frances were caught by the Iraqis on one of these escape attempts and became part of Saddam's Hussein's 'Human Shield'.

LONDON OFFICE

Ironically, after having closed its Hanover Square London office in early 1987, KUFPEC found itself back in the British capital again. KPC had offices in London and established temporary headquarters there. KUFPEC lodged with old friends, KP North

The Great Escape

As KUFPEC Western employees were being hunted down by Iraqi troops for use as "Human Shields" on Saddam's strategic sites, one KUFPEC American, Jimmy Hawkins, decided that he'd get out. By then, several weeks after August 2nd, cross-desert escapes had become impossible. Hawkins would go the other way, via Baghdad, into the teeth of the enemy.

The plan was for Hawkins – who spoke no Arabic – to disguise himself as a deaf mute Palestinian, obtain false papers identifying himself as such, and with the help of a Palestinian friend, drive to the Jordanian border via Baghdad, and cross to freedom. The main problem was that Hawkins - in his early 30s - stood over six feet tall and looked very much like an American engineer. His friend was also at great risk; if found assisting an American, the Iraqis could have shot him.

The plan worked reasonably well, except for losing the car in Baghdad. They finally got to the Jordanian border, only to be turned back on the Iraqi side

because of Hawkins' false papers. Not to be deterred, they struck out into the desert out of sight of the road before turning west to the border fence, and climbing over it. They were free.

This daring escapade was soon picked up by CNN and beamed back into Kuwait where several KUFPEC people saw a delighted Jimmy in Jordan, with his friend.

To his credit, Jimmy took his brave friend to the US and didn't return to work until he had arranged residence there for him. His story is still told in KUFPEC, with the rider that Jimmy, a Senior Evaluation Engineer responsible for project risk assessment, was a fine example of high risk/ high reward. No other KUFPEC Westerner thought that going into the face of the enemy was the wisest move to make, but Jimmy's risk paid off.

...and the Dual-National Asians, Back to Origins

Several other KUFPEC employees held Western passports but were of South Asian extraction. They were able to revert to their original nationalities and thus avoid internment. Among them were Reservoir Engineer Iqbal Gul and Budget Controller Arjan Sachdev who reverted to Pakistani and Indian respectively.

The world had been turned upside down. In the Middle East, Westerners are held in high regard. Now, any Westerner would have given anything to pass for an Arab, African, East European or Asian. The one exception was Japanese. They too were being used as 'Human Shields'.

Significantly, the Iraqis soon allowed the Asian nationals to leave Kuwait. Many of them and their families would suffer terrible deprivations on the long overland trek out of Kuwait, through Iraq to Jordan, and several trying days in crowded desert refugee camps. Thankfully, none of them lost their lives.



September. Some, such as Khaled Mulla Hussein's secretary, Rukshana Khan, and her husband stayed behind to help those in hiding and to protect their own property. People on holidays were assigned to the Perth and Jakarta area offices where possible, and these offices took over much of the technical work. Others were asked to stand by and provided with partial salaries. Said today's Chief Financial officer Musaad Al-Saeed: "The London Office did a tremendous job keeping in touch with everyone. Even when the Company established itself again temporarily in Dubai in 1991, they found people wherever they were. I was in the middle of nowhere, but they still found me. No one was left out."

In London, one of the first orders of business was to install a television, which was tuned throughout the day on BBC World, CNN, and ITN. Any breaking news was immediately flashed around the office.

Next came the problem of business. The Company still had properties throughout the world and needed to pay the bills to run them. To their lasting credit, all except one of KUFPEC's co-venturers in properties where KUFPEC was not operator funded cash calls for August and September. KPNSH provided some cash and the Company had some revenues from sales. KPC was able to help in the early days, but it was very tight until mid-September. Most of KUFPEC's bank balances were held in US dollars in New York but the UN embargo imposed on Iraq had included Kuwait assets abroad to protect them from Iraqi misappropriation. It took time to go through a web of procedures. However, once Commercial Manager Chris Honeywill put his skills to work and through piggy-backing on KPC's own efforts in the same area, the first lot of cash was released in

Sea Holdings (which had taken over all of Santa Fe's North Sea interests), where General Manager Mike Lynch gave KUFPEC an entire floor of his Victoria Station office.

Within a fortnight, Chairman Faisal Al-Kazmawi (who was also KPNSH Chairman) and Khaled Mulla Hussein had set up shop. They were soon joined by Exploration Manager John Small Jr, Engineering Manager Bob Pollock, Administration General Superintendent Ahmed Zayed (all of whom who had been out of Kuwait on leave), escapes from Kuwait (Chris Honeywill and Arjan Sachdev and several others. The British government was extremely accommodating and is remembered fondly for its kindness. They not only gave the Kuwaitis refugee status for the duration of the crisis, but tax relief for those business operations that had normally been run from Kuwait.

There was a great deal of work to be done but everyone's mind was on Kuwait and those trapped there. The greatest priority was accounting for all the staff and ensuring that they and their families were taken care of, and had enough cash to live on. This took time as people trickled out of Kuwait or turned up in other corners of the world. All non-Kuwaiti Arab and Asian staff who wanted to leave Kuwait were able to do so by early



KUFPEC employee Mrs Dalal Al-Mulla depicted the fight to liberate Kuwait in this widely-distributed image, titled "The Struggle".

The Prisoner of War

At the time of the invasion, KUFPEC's present Human Resources Manager, Waleed Al-Awadhi (then working for KUFPEC sister company Petrochemical Industries Company), was doing his National Service as a young second lieutenant in Kuwait's 15th Armoured Brigade.

"We all mustered at our base south of Kuwait City," recalls Al-Awadhi. "Our brigade commander, Colonel Al-Haramy, had taken most of the tanks to defend the headquarters in the city. Two days later, the Iraqis surrounded us. We had no chance. To prevent needless loss of life, our senior officer surrendered."

"That," continued Al-Awadhi, obviously remembering the times with pain, "was the start of an eight-month ordeal. They took us to a camp near Baghdad, then to Mosul. Many times they came to us, especially the officers, trying to get us

as Kuwaitis. I am proud of what we achieved in that camp, of the community we built. "Eventually," concluded the former lieutenant, "after the war, we were repatriated to Kuwait through the Red Cross by the end of March. I have never been so happy. All my military colleagues were returned by Iraq, but hundreds of other civilians and some military are still missing, held hostage by Iraq. I pray for their quick return."

But some scars remain. "I have found it very difficult to talk about this over the past ten years," said Al-Awadhi. "When I was captured, my son was only three. He is traumatised by me going away one day, and not coming back for such a long time. We lost those precious months when a son bonds to a father. Me, as a man, I can manage, but the child did not deserve that from Saddam."

to join the Iraqi Army, but we always refused. They then considered Kuwait to be part of Iraq, so they treated us as internal Iraqi detainees, not the Kuwait military POWs we were, and denied us communication with family and visits from the Red Cross under the terms of the Geneva Conventions. "At times, we were very scared," continued Al-Awadhi. "Once we feared they were going to kill us because we wouldn't join them, but we kept our faith and organised ourselves in a structured way, maintaining morale."

"We had very little news, but two men out of the hundreds there had secret small shortwave radios, through which they could get the real news. The Iraqis were telling us either lies or nothing. We passed the news through our structure, and found ways of keeping up the spirits of those who became despondent. We really came together as brothers,

Profiting From Tragedy, Unwillingly

Perversely, in one way, KUFPEC was a beneficiary of the invasion. About four million barrels per day were taken off the market – the same level as at the beginning of the Iran-Iraq War ten years earlier – with the UN embargo of Kuwaiti and Iraqi oil.

However, the gap between world production capacity and demand had narrowed considerably over the decade, and it would take time to bring what spare capacity there was into play. Oil prices shot up, and continued to rise as war loomed ever closer. So too rose the value of KUFPEC's

production from Harriet and Amal, its only two producers at the time. Then the first shipment of Anoa crude was made in November 1990, worth approximately \$10 million, substantially more than it would have been pre-invasion.

Thus, with the price effect and higher production, the Company's revenues almost doubled in 1990 over 1989 to KD13.8 million, even with lower oil prices for the first seven months of the year.

However, with the depletion of cash balances

from pre-invasion exploration and development, the Company suffered from reduced interest income. Then it had higher ongoing operations expenses, and depreciation, depletion and amortization from increased production, as well as a higher level of exploration expense and a KD1.8 million historical cost loss from the invasion.

In the final accounting, KUFPEC still made a loss for 1990, but it would have been much larger had it not been for the invasion-driven price increase.

September. Further calls were paid simply by submitting a weekly list of cash requirements.

In Australia, the late Gordon Allen, then General Manager, moved quickly in early August 1990 to avoid having KUFPEC's assets in Australia frozen. The cash flow from the producing properties there allowed KUFPEC Australia to continue to operate more or less normally. During this early period, the Perth office also acted as a temporary office for the international interests until the temporary Head Office could be established in London.

Within weeks of being up and running, the London team – limited to no more than ten people – put together an emergency plan to enable it to protect its rights and to fulfil its obligations to third parties. Fortunately, the Iraqis never tried to exercise control over KUFPEC's foreign assets.

"Decision-making was seldom a problem," recalled Exploration Manager Dr John Small Jr, "with so many senior people in one place, but the Kuwaitis in particular were gravely distracted by the events in their homeland and the seemingly interminable diplomacy in the build up to war. It was, indeed, a very trying time. But the 'London Ten' always made sure to join the marches to Trafalgar Square, with other exiled Kuwaitis and expatriates, calling for Iraq to get out of Kuwait. I remember Abdul Razzak Mulla Hussein, our most dignified former Chairman, who was then running KPC from London, on these street marches. There was such a feeling of solidarity."

PROPERTIES AND PRICES

In general, with one major exception – Tunisia – KUFPEC's properties were relatively unaffected during the occupation months of 1990 and early 1991. The Company had acquired several new interests just before the invasion – in Vietnam, the 2,700 sq km Jannah block in Yemen, further Australian offshore properties in Harriet, the 900 sq km offshore Congo Marine V block, and an increased interest in Indonesia's Seram Island. But all new acquisitions were put on hold, a situation that would persist unexpectedly for further reasons until the late 1990s.

Nevertheless, the 1989 Kadanwari Pakistan gas discovery was proved; Anoa oil development in the Natuna Sea was completed in November and came onstream; wells were successfully drilled in South Yemen's Shabwa; Yombo development offshore Congo moved ahead; and production increased in Harriet.

KUFPEC's partners rallied behind the Company. For Ras Kanayes, where a well was being drilled, operator Norsk-Hydro gave KUFPEC geophysicist Said Saafan an office. TOTAL had provided Exploration Manager Dr John Small Jr – in France at the time of the invasion – with an office and a secretary in Paris before KUFPEC senior management regrouped in London. Most partners allowed extra time for cash calls. ARCO even covered KUFPEC's costs for seismic work on Indonesia's Seram Island, even though KUFPEC was the operator. It seemed that they had more faith that Kuwait would be liberated than most of the world. There were problems with Indonesia's producing Camar field in the offshore Bawaen Block. Operator Enterprise Oil acted to protect its interests, putting KUFPEC in default. Fortunately, the timetable allowed a grace period and KUFPEC was eventually able to meet its obligations and proved its reliability.

Recalled then Chairman Faisal Al-Kazmawi: "We maintained our good name and Kuwait's reputation by meeting our commit-

From temporary offices near London's Victoria Station, a reduced KUFPEC team was able to carry on business during the occupation.



Members of the Kuwait oilwell fire fighting team – including KUFPEC’s present Deputy Chairman Abdulla Baroun (back, second from right), Manager Corporate Planning, Mrs Sara Akbar (front, third from left), and former Directors Saud Al-Nashmi and Aisa Bou Yabes – with visiting dignitaries.



Legendary Texas oilwell firefighter Red Adair was part of the international effort to douse the fires and cap the wells. (Both photos: Charles Crowell)

ments, as we had always done. Our reputation was priceless, and it was almost all we had at the time.”

Added then Jakarta Area General Manager Jere Graham: “Relationships were everything then. Take ARCO, for example, and Seram. They paid the seismic contractor on our behalf for two reasons. Firstly, they did not want the difficult jungle seismic shut down. Secondly, and more importantly, they did not want to take over the operatorship from us, even though they held about 60% and we 40%, and ARCO has never had a majority interest in any permit where it is not the operator. This support was due to the long and good, solid relationships between the management of both companies, and the ventures we had been in together.”

Said a former executive of another KUFPEC co-venturer: “It was a real surprise to us when KUFPEC met their calls in full six weeks after the invasion. You don’t expect a company that has just lost its country to be able to do that. That earned KUFPEC a great deal of respect in the industry. I’m sure some partners were waiting around for them to default so that they could have picked up their share, but KUFPEC has always had a name for meeting its commitments, and they did not disappoint me then.”

TUNISIA

In Tunisia, the situation was entirely different. KUFPEC was operator there and had no partners to cover the funding in the early days of the occupation. At the time of the invasion, Sidi El Kilani was the main focus of KUFPEC’s Tunisian operations. They were in the midst of drilling the second exploration well on August 2nd.

KUFPEC Senior Geologist Dr Abdulsamee Al-Bahbahani had been sent to Tunisia just days before August 2nd to monitor the

reservoir evaluation. His Kuwait-based colleagues Mark Tolley and John Augustine, Australian and American respectively, were also there on business. At first they thought that someone was playing a joke on them when told of the invasion. However, when reality set in, these three men were perhaps some of the few people in the world trying to get into Kuwait, rather than out. All had their families trapped there: Al-Bahbahani’s wife and four children under eleven; Tolley’s wife and her brood of three; and Augustine’s wife and dog. It was September before the Tolleys and Augustines were reunited, and December before Abdulsamee saw his family again in Saudi Arabia.

With the invasion, KUFPEC Tunisia Area General Manager Bob Banks was obliged to declare *force majeure* and the well was suspended. KUFPEC didn’t then have access to the cash to continue and the drilling contractor had to be paid. The well was about to reach total depth, but operations were shut down and staff consolidated at the Tunis office.

The situation in Tunisia was further complicated by the fact that it was then the seat not only of the Arab League (and in the Arab camp opposing military action to reverse the invasion, however unrealistic that was), but the headquarters of the PLO and its propaganda machine. It also had a large pro-Iraqi Palestinian population. Added to that was characteristic Tunisian Arab nationalism and a view that the US troops then flooding into Saudi Arabia represented a new Western imperialism. Extra precautions were taken and a low profile maintained.

Some of KUFPEC’s Tunisian employees were particularly courageous, standing up to their own people in defence of Kuwait. One man in particular, Engineer Khalifa Ben Ali, was most helpful. But despite the difficult politics, the Tunisian people were generally supportive, as was KUFPEC’s partner,

ETAP. Although exploration operations were suspended, at cost to ETAP, the partner allowed KUFPEC people to continue technical work in ETAP's own offices, free of charge, without any confidentiality agreements. Co-operation was superb. In fact, on one occasion, ETAP President Abdulwahad Kasrawi called Al-Bahbahani to his office, expressed his sympathy and assured him of his full support. He then asked Al-Bahbahani to pass that along to Chairman Faisal Al-Kazmawi in London, and was quite prepared to express the same sentiments publicly. "At the time," said Al-Bahbahani later, "I really needed that support, that feeling that we were not alone. I will never forget those words."

"It should be recalled," said today's Deputy Manager Middle East and Africa, Dr Mike McMurtry, "that this was just a year after the Sidi El Kilani discovery, when Elf had walked away from its commitment. We had assumed the obligation and found oil. That type of commitment is much appreciated by host countries."

With war imminent in January 1991 and the increased danger of personal attacks, KUFPEC and other international oil companies operating in Tunisia decided that it was best to leave the country temporarily. Area General Manager Bob Banks and the entire KUFPEC company staff save the Tunisian employees were evacuated to London, then dispersed throughout the world. They would not return for three months. Al-Bahbahani's delayed well was re-entered in June of the following year. In all, the invasion had put development of the Tunisian property behind by sixteen months.

IN KUWAIT

Meanwhile, in the Kuwait of late August 1990, the situation was deteriorating for everyone, but there was a glimmer of hope for some of the Westerners. Saddam announced that Western women and children could go. By that time, it had become apparent that Saddam only wanted US, British, French, German

and Japanese men as 'Human Shields', and that other Western men could move around Kuwait freely. They could go to Iraq (as Iraq then considered that Kuwait was part of it) but not beyond. Nevertheless, this relative freedom was a great relief to the Australian KUFPEC people, and the one Canadian, Brit Mockridge. The Australians soon relocated to Baghdad to be under the protection of their embassy there, but Mockridge stayed in Kuwait. He didn't want to be caught in Baghdad when the Allies attacked. More significantly, he joined with several other individuals in supporting those still in hiding with food deliveries and other services, and was instrumental with a number of other men in assisting in the organisation of the evacuation of Western women and children.

Two of the people in particular need of this assistance were British Geologist Dr Mike McMurtry (whose wife, Catherine, and infant son had stayed after the women had been allowed to go) and American Engineer Dan Kirisits. All were in hiding. Dan had some Filipino friends move into his house to provide cover. He made an ingenious hiding place for himself in an air-conditioning duct so that when the Iraqis came calling looking for any Americans, he would crawl in there and hide. It worked several times.

Mike, in the meantime, had been taken under the wing of Drilling Engineer Adel Al-Khayat, Engineering Trainee Jassem Al-Dosari, and Evaluation Engineer Khaled Al-Qaoud. These three young Kuwaitis were part of the loosely organised Kuwait Resistance. Jassem in particular had obtained materials to prepare false identification papers, providing government stamps and small plastic laminating sleeves to Dan, who with a photocopying machine, an Exacto knife, and clothes iron to seal the plastic, made over 100 false ID cards. These were used mainly by Kuwaiti military men still in Kuwait, whose real ID photos showed them in uniform, but also to change the identity

Adnan's Boat, the War Criminal, and Jassem's Dad

Despite the horrors of the invasion, some of the more memorable moments arose from the times when daily life clashed with the realities of the occupation.

One example was KUFPEC's current Deputy Manager Finance, Adnan Ashkanani, who had a boat moored at a marina. He wanted to take it out of the water, but the Iraqi troops guarding the marina told him he had to get permission from the Iraqi Governor of Kuwait. Undeterred, Adnan went looking for Governor Ali Hassan Majeed (venturing as far afield as Basra), unaware at first that Majeed was infamous for gassing the Kurds of Halabja, in addition to many other

crimes against humanity. He would kill as easily as other men breathe.

Adnan spent several fruitless days looking for Majeed before learning of his reputation and deciding that it was perhaps best to leave the boat where it was.

In another situation, Adnan's colleague Jassem Al-Dosari, was driving to a Western friend's place with false IDs, and was turned away on a nearby street by Iraqi troops. They had cordoned off the area and were searching it for Westerners. Jassem went home, got his elderly father, and drove back to another entrance to the area, telling the Iraqis that his father lived there. Out of traditional Arab

respect for the aged, the Iraqis let him through. They arrived at the friend's house and climbed the stairs – the old man with great difficulty – and flopped down exhausted on Mike's sofa. When the friend learned that Jassem had false IDs with him, he was horrified.

"You'd better get out of here," he said. "If the Iraqis catch you with those and recognise them as false, we're OK, but you and your Dad are dead men." Jassem realised the danger, and got up to go, saying, "Let's go, Dad!" His father, though barely recovered from his climb up the stairs, would not go anywhere until he had recovered his breath, death threat or no death threat.

of “at-risk” nationals into safe ones. Mike was soon identified as an Irishman, and Dan as a Canadian. No one was going to move around on these IDs, but they were an insurance policy in case the Iraqis found them.

The three young Kuwaitis also provided Dan and Mike and his family with food, money and other supplies when they could not go out and get these themselves. These activities were not without danger. If caught aiding Westerners, the Kuwaitis would be summarily executed. Once, Jassem was arrested by Iraqi troops and put up against a wall with a Kalashnikov pointed at his heart. He was asked if he was in the Resistance and denied it as convincingly as he could. It seemed, however, that he was not believed, and his end was near. Then, suddenly, the officer told him he could go. “You are alive because this man believed you,” he said, indicating the soldier with the cocked Kalashnikov. Jassem was so shaken that he didn’t venture outside for a week.

“You must remember,” said a KUFPEC employee who was in Kuwait at the time of the invasion, “that the Kuwaiti government-in-exile had declared all employment and other contracts void. These people in hiding no longer worked for KUFPEC, although we were helping their families outside as a humanitarian matter. But our Kuwaiti employees were putting their necks on the line to help their friends, under threat of death. It was very brave, and exemplifies the spirit in which people came together. I know that the Westerners appreciated it very much, and returned the favour by campaigning for the liberation of Kuwait upon their release.”

Other KUFPEC Kuwaitis had their own heavy trials. Many

had big families and property to protect. Some were so incensed at the invasion that they resolved to stay in their own country, no matter what. However, in late September, the Iraqis allowed Kuwaitis to leave through the Saudi Arabian border, hoping to depopulate the country and remove cover from the Resistance. Deputy Chairman Mahmoud Al-Rahmani faced a dilemma. All members of his family were females, and at obvious risk, so there was a great temptation to get them out. Nevertheless, he stayed, explaining his stance to one of his Western colleagues, “This is my country, not the Iraqis’. I have nowhere else to go. I’m not leaving.”

Throughout this, the KUFPEC people trapped in Kuwait – of all nationalities – had very little communication with the outside world, although some were able to smuggle letters in and out through Brit Mockridge and the underground network he and other people of similar mind had built through the Western embassies in Baghdad. There was one lifeline, though, which proved very useful. The BBC World Service had started a service called *Gulf Link*, whereby family and friends of those trapped in Kuwait and Iraq could send messages on the BBC’s shortwave service. Through this, those in Kuwait learned that KUFPEC was still going, operating from London, and who was working there. In this way, they learned who had escaped safely. This came as a great relief. For all they knew, those who had tried to escape could have been shot on the way across the desert or died of dehydration in the scorching summer heat. They also learned that the Company was helping to support their families and pay other financial commitments, something that few other employers were doing at the time.

Fires raged out of control at the oil wells that the Iraqi invaders set alight in an orgy of destruction as they withdrew from Kuwait. (Photo: KOC)



RELEASE, AND KUFPEC'S OFFICES

The ordeal for the Kuwaitis in Kuwait would continue until Liberation in late February, but in early December, Saddam allowed the hostages – including the ‘Human Shields’ – to leave. After this, it was several days before flights could be arranged from Kuwait. Mike McMurtry and Brit Mockridge decided to visit the KUFPEC offices. It just happened to be Dan Kirisits’s birthday that week, and they had the ulterior motive of getting him a present of one of his treasured rig pictures, if it was left.

Curiously, they had little trouble getting in. The central city area was a ghost town, with the shops picked clean by looters. However, it seemed that the Iraqi authorities, knowing that the KPC offices were in the premises and the value of the information held therein, had kept the looters out. To their amazement, Mike and Brit found most personal possessions in the office untouched, although the computers and other electronics had gone. On further investigation, they discovered that the thieves who had been in were obviously oilmen by profession. The entire technical library had been systematically removed – there were even still numbered boxes on the floor, ready for packing and addressed to various oil and research establishments in Iraq. An entire forty-year collection of AAPG periodicals was gone. It had been a highly organised operation.

Then, with departure arrangements in place, it was a flight to Baghdad and then on to Western capitals. Those returning to London were met off the evacuation plane by Exploration Manager Dr John Small Jr, and then at the Victoria Station office by Chairman Faisal Al-Kazmawi. He welcomed them warmly, asking them for any information on Kuwaiti employees left behind in Kuwait, and then told them all to take a month’s compassionate leave before returning to work in the New Year.

WAR, LIBERATION

In Kuwait, war came in mid-January 1991, with the massive air war. “The bombing was terrible,” said Al-Rahmani. “When the Allies were hitting the airport or Iraqi positions out in the desert, it was so loud. You could feel your bones rattling, and that was fifteen or twenty kilometres away. But then they moved a mobile SCUD launcher into the Mishref Fairgrounds, no more than five kilometres from our home, and the Allies hit that. We thought that they were bombing in the next street. It was terrifying. I thought ‘Curse Saddam for what he’s done, but God have mercy on the poor fellows on the receiving end of that.’”

This continued for almost six weeks, under the wettest winter Kuwait had seen for years. With the rain, cold and clouds, the atmosphere was immensely oppressive. Then the power, water and internal telephones went. No one ventured outside unless they absolutely had to for fear of being detained by the Iraqis or hit by



stray shrapnel. And the city was wreathed in smoke and lit on its southern fringe by huge flames as the Iraqis torched more than half of Kuwait’s 1500 oil wells.

Then came the ground war, and Liberation within three days of this starting. “One of the most bizarre parts of the whole crisis wasn’t the invasion or any part of the occupation or bombing,” said Al-Rahmani. “It was when we came out of our houses on the morning of February 26th and found the Iraqis gone. It was so deathly quiet. So still and silent. They had just disappeared overnight, melted away like ghosts, and the Allied Arab troops who would actually liberate the city had not made it in yet. The Iraqis had left their weapons, boots, helmets, ammunition, all sorts of military equipment behind, even tanks and artillery, right in the suburbs. We almost expected the world to just collapse.”

DUBAI DAYS

With Liberation, KPC instructed all Group companies to re-establish themselves in Kuwait. Some had pressing reasons to do so. KOC had more than 700 oil wells on fire; KNPC needed to rehabilitate her refineries. KUFPEC, however, with most of its operations abroad, needed access to international communications. No one knew when the Kuwait phone and telex system would be functioning again. Furthermore, many of KUFPEC’s technical people were expatriates. With the foreign curricula schools not yet functioning, it was impossible to relocate them back to Kuwait with their families.

KUFPEC therefore moved to Dubai in March 1991, with the intent of returning to Kuwait within a year. Although London was perhaps even more convenient for those then working there, Dubai was in the region, thus establishing that KUFPEC was in

Nobody knew how long it would take to restore Kuwait’s infrastructure, so KUFPEC set up an office in Dubai in what was then the Zubair Building.

Jubilant scenes at Liberation as Kuwaitis take to the streets in celebration.
(Photo: KOC)



the process of moving back. It also had excellent air links. Furthermore, Kuwait was devastated, covered in smoke from the oil fires, and a dangerous place to be. There were uncleared minefields and unexploded ordnance all over. Few of the Company's staff were prepared to return to those conditions. Deputy Chairman Mahmoud Al-Rahmani, however, insisted on staying in Kuwait and established a small functioning office to prove the point that KUFPEC was, indeed, back in Kuwait.

"Actually, Dubai was a plan as early as November 1990, when it was by no means certain that Kuwait would be liberated promptly," said Deputy Managing Director Administration and Finance Khaled Mulla Hussein. "London was too expensive and we had issues with work visas. And in Dubai, there was an established branch of sister KPC company, Kuwait Oil Tanker Company. They could help us. But one problem before Liberation was that all the offices in Dubai were full."

"In fact," recalls then Chairman Faisal Al-Kazmawi, "there was a debate about whether Bahrain might be better. It was closer to Kuwait and it had the communications. However, it was within SCUD missile range of Iraq, and had been bombarded during the war. Dubai was safely out of range. There was discussion about whether it was best to go straight back to Kuwait as Dubai would mean yet another move and more disruption. However, at the time, Dubai was the best option. None of us knew that Kuwait would get services up and running as quickly as it did. And if there is one person who deserves credit for setting up its Dubai operation, it's General Services Co-ordinator Hamed Al-Refae, and he wasn't even working for KUFPEC at the time."

"Actually," recalled Al-Refae, "I was the Training Manager for Kuwait Airways (KAC) at the time of the invasion. I was in Kuwait, but left with my family in October, and went to Dubai. As it happened, I know Khaled Mulla Hussein. During a phone call

Worldly Goods, and Life

There were also some bizarre moments during the Dubai days.

When word came down from Kuwait that some apartments had been untouched and that the phones were working again, Senior Reservoir Engineer Iqbal Gul (now an American again), tried calling his own house. Someone working for the United Nations answered and told him that all his furniture was still there. He was delighted. The only problem was, when he got back to Kuwait, he found the Government had cancelled all rental and other contracts prevailing at the time of the invasion, and the

landlord had re-let his house to the UN, furnished with his possessions.

Less happily, Exploration Manager Dr John Small Jr returned to find that an Iraqi nurse by the name of Umm Waleed had used their apartment as a house of ill-repute to entertain Iraqi officers. Fortunately, Umm Waleed had left Small's collection of 33 1/3 rpm Jazz records and his wife's treasured photo album.

Most employees were not so fortunate. Dan Kirisits travelled to Kuwait in April 1991 and visited the still intact apartment of Senior Drilling Engineer Ian Moyle – now in KUFPEC's

Jakarta office. He retrieved a number of Ian's possessions, but by the time Ian returned, many others were looted, and this was after Liberation. Several others like him of all nationalities returned in May from Dubai and found everything gone, their homes picked clean even of the light bulbs.

But against all the loss of physical property, every KUFPEC employee was grateful for one thing. None of their colleagues had lost their lives, and all those – Kuwaiti, Westerner and Asian alike – who had been detained or interned by the Iraqis, returned safely.

in November, he asked me if Dubai was safe. I told him it was.”

Added Khaled Mulla Hussein: “So I sent Administration General Superintendent Ahmed Zayed to Dubai to see for himself. He and Hamed did a reconnaissance of Dubai, checking out apartments, schools, hire cars, furniture, everything.”

“It wasn’t easy then, with the situation,” explained Al-Refae, “to establish an office of a Kuwaiti company in Dubai. Kuwait was still under Iraqi occupation. We had to obtain permission from Defence Minister Sheikh Mohammed Bin Rashid Al-Maktoum. Everyone told me that was almost impossible, but he was most helpful.

“After that, we rented a new building in January 1991, and set up everything. We had to see the Ministry of Social Affairs, the immigration people for work visas, get health cards for the employees, install partitions, carpets, computers, as if we were starting a new office, which we were. I hired a few messengers and the Lebanese Company Secretary joined me, as he knew the KUFPEC people. By the time Kuwait was liberated, we were ready, and our people moved in the following month, in March. They were in hotels first, but most soon took the residences we found. Tareq Burisly, who used to be our Administration Manager until he left in 1999, and today’s Deputy Manager Finance, Adnan Ashkanani, were some of the first on board.”

In a way, the time in Dubai became more difficult than London had been. There was no longer a unifying sense of crisis, and many people were traumatised by the invasion experience. Senior management was geographically split almost more than it had been in London. Faisal Al-Kazmawi was based in Dubai but commuted regularly to Kuwait, where KPC and Al-Rahmani were. Compounding these problems – and entirely out of KUFPEC’s control – was an unspoken and broad-sweeping edict from the Kuwaiti authorities for government entities to not rehire personnel from countries that had acted against or not supported Kuwait. Thus, Palestinian or *bedoun* employees were unable to rejoin the Company in Dubai or on its return to Kuwait.

RETURN

With the restoration of services in Kuwait in mid-1991 and the extinguishing of the last oil fire in November of that year, came pressure for the Dubai office to close and for everyone to return to Kuwait. However, with Kuwait not quite rebuilt, Saddam still acting in a threatening manner, and after the disruption of the recent past, many of the Kuwaiti and expatriate employees had put their children into school in Dubai. They did not want to uproot them again before they absolutely had to. The move back to Kuwait was deferred until the summer of 1992.

With the uncertainty before Liberation, KUFPEC had lost a few people in London, but this was mostly those with fewer than



two years’ service. And Dubai was an undeniably pleasant place in which to live and work. The Company went quite some way to deal with these issues, but in the end some of its more senior expatriates, several of whom were now more attuned to the Dubai lifestyle, resigned. Losses included Engineering Manager Bob Pollock and Senior Geologist Bob Melton. Exploration Manager Dr John Small Jr, nearing retirement age and having lost much of his possessions in the invasion, decided that the return to Kuwait would be too emotional and opted to retire to the UK.

As things happened, KUFPEC’s old offices were habitable, after a major clean up. KUFPEC, at much reduced strength, moved back in during mid-1992.

“In some ways,” said today’s Manager Middle East and Africa Mohammed Al-Howqal, then a Petroleum Engineer, “sitting two years later in the same office I had on August 1st, 1990, it was almost as if the invasion, occupation and exile had been a bad dream, and I had woken up. But it was real.

“And there was a one big difference... In August 1990, Kuwait had been a sparkling clean city. In August 1992, even after the rains from the previous winter, you would look out the window and see huge, dirty black streaks of oil residue down all the buildings, left over from the smoke from hundreds of Kuwait’s burning oil wells and the dirty rain. And you could still smell it, ten months after the last oil fire was put out. I’ll never forget that.

“We were also grateful. KUFPEC did its very best to look after its people at a very difficult time, more than it was required to do legally or contractually. And although we lost some, we also kept more. They formed the nucleus of the KUFPEC of the 1990s. The Company looked after us, and we looked after it too.

“But,” concluded Al-Howqal, “despite all the destruction and disruption, all the losses of good friends and colleagues, the deep wound inflicted by Saddam on the Arab nation, there was one supremely important point. Kuwait, my country, was free.”

HH The Amir Sheikh Jaber Al-Ahmad Al-Jaber Al-Sabah pushes a button to symbolically extinguish the last oil well fire in the Al-Ahmadi field, November 6th, 1991. With him (at left) are then Minister of Oil, HE Dr Homoud Al-Rqobah, and (in cap) KUFPEC founding Board Member, Saud Al-Nashmi, then in charge of oil well control operations for KOC. (Photo: KOC)

DARK DAYS, FIRST PROFITS: To the mid-1990s



Colourful Pakistani trucks were a common sight at the Kadanwari plant construction site.

Opposite page: Drilling rig in operation off Australia's northwest coast. (Photo: Apache)

WITH KUFPEC RE-ESTABLISHED in Kuwait City in the summer of 1992, attention focussed on completing development of earlier discoveries. This applied especially to Sidi El Kilani in Tunisia where it was operator. There was also a real need to find new exploration properties to replace those relinquished or under development. But that would not come to pass. From 1993, KUFPEC began facing some of its darkest days. Ironically, these difficult years would also see the Company's first profits as the investments of the 1980s bore fruit.

During the occupation and its immediate aftermath, cash limitations and uncertainty had precluded any new acquisitions. KUFPEC itself froze fresh exploration work. Then, unexpectedly, the word came from the Shareholder: no new foreign acquisitions.

CHANGES

The post-Liberation period marked a decline in KUFPEC's fortunes with its most important source of support, Shareholder KPC. From April 1991, Mr Homoud Al-Rqobah assumed the role of Oil Minister, succeeding Dr Rasheed Al-Amiri who had in turn succeeded Sheikh Ali Khalifa in June 1990. Founding KUFPEC Chairman Abdul Razzak Mulla Hussein was still KPC Deputy Chairman, but his orders came from the Minister and there simply wasn't the same level of interest in KUFPEC at the top as there had been in the 1980s. Secondly, and more tragically, improprieties had been uncovered in the management of some of Kuwait's foreign investments and even in a sister KPC company with inter-

national operations. In Kuwait, anything associated with investing abroad was tainted. 'Foreign' became a dirty word when associated with finances. KUFPEC, although innocent of any wrongdoing, almost became the orphan child of KPC by association.

Then, in October 1992, a few months after KUFPEC had returned to Kuwait, lawyer and MP Ali Al-Baghli was appointed Oil Minister. He served for only eighteen months but during his time, a number of those who had been in KPC in the 1980s at a senior level left the Corporation. The highly-respected Abdul Razzak Mulla Hussein Al-Turkait, KUFPEC's main link within KPC, retired in October 1993.

STRATEGY AND REVIEW

Although Minister Al-Rqobah had to deal with the difficult period of the oil fires and post-war rehabilitation of the oil sector, he is given credit for initiating the first major strategic review of KPC and its subsidiaries. His main predecessor, Sheikh Ali Khalifa, had always carried his strategy in his head. It was time for a more corporate approach. The review was led by former KOC Chairman Abdulmalik Al-Gharabally, greatly assisted by Nader Sultan, who succeeded Abdul Razzak Mulla Hussein as KPC Deputy Chairman. This review was finalised in late 1995, by which time Dr Abdulmohsen Al-Medej was in the Minister's chair. It concentrated, naturally enough, on KPC's major domestic producing and refining subsidiaries and its overseas refining and distribution business. KUFPEC and other lesser KPC subsidiaries came at the end, with the decision – shocking to the Company – that it no longer represented a strategic investment for KPC.

Accompanying this was the edict that KUFPEC focus on current operational areas and not expand into any new exploration projects. A KPC study was to look at disposing of the Company's assets and to determine the most appropriate timing to achieve the highest return for KPC. Coincidentally, the World Bank had conducted a separate study on Kuwait's

economy which, among other recommendations, suggested privatisation of certain concerns. KUFPEC was an easy target. This was somewhat ironic given KUFPEC's contribution to Developing World energy self-sufficiency, but it had an effect. Within a year of the KPC review, KUFPEC's London-based sister company and KPC's only other foreign upstream asset, KP North Sea Holdings, was sold. It seemed as if KUFPEC's days as a member of the KPC family were numbered.

REVENUES, PRODUCTION

In an even greater irony, the 1995 KPC Board decision that seemed to herald KUFPEC's departure from the KPC Group coincided with the Company's second year of profits. In fact, production almost quadrupled between 1990 and 1995 as devel-

Relinquishment Without Replacement

For most of the 1990's, KUFPEC was relinquishing properties at such a rate without replacing them that, according to one executive, "I thought we should drop the word 'Exploration' from our name."

In 1991, KUFPEC had acquired as operator permit WA-225-P offshore Western Australia in the Beagle Basin. Then, apart from the 1995 acquisition of Egypt's Ras El-Hekma Block, adjacent to the 1987 Ras Kanayes property, there would be no further exploration acquisitions for the rest of the decade.

Western Australia's Canning Basin –

slated for disposal even before the invasion – went in 1991, followed by the Algerian blocks. The two Amadeus blocks in Australia's Northern Territory followed in 1992, although the small interest in the Palm Valley gas field, KUFPEC's first ever source of operational revenues, was retained. Pakistan's Tadjal permit, in which the Kadanwari discovery had been made, went too, as did Australia's Browse Basin WA-212-P. In 1993, the offshore Vietnamese blocks were let go, followed in 1994 by Congo's Marine V, and Indonesia's Bawean Block with its Camar oil field. 1995 saw the last of Block SB-3 offshore Malaysia, the South Kairouan permit in Tunisia, and Australia's Bonaparte Basin WA-217-P.

"Even with those relinquished, we had done considerable work," said then Exploration Manager, Dr Gerald Long. "In Vietnam, the partners had acquired 5,000 km of seismic and reprocessed 8,000 km more before unsuccessful obligatory drilling. In Amadeus, we had drilled a successful appraisal on a gas discovery before a further appraisal well proved disappointing. And in the Bonaparte Basin, which we operated, we had acquired almost 5,000 km of seismic in 1990 and 1991, and drilled all four obligation wells. Mobil had farmed in to replace us as operator in November 1994 and had made a non-commercial discovery before we relinquished.

"It wasn't so much the relinquishing of exploration properties," continued Long. "That's the business. You look for oil or gas, and if you don't find it, you go on to something else. And you only expect a commercial find in perhaps one in ten wells and one in three properties. Those that do pay off cover the costs of the others. But we weren't replacing the failures, or those that had passed to development. And our exploration was more conservative. By 1995, almost all exploration work was concentrated in areas adjacent to existing or planned production facilities. It was a great short-term profit strategy, but long-term suicide."



The Lawyer's View, Honeymoons and Praise for a Colleague

"All of the joint ventures and relationships in the international oil business are founded on agreements," said Brit Mockridge, Chief Legal Officer, as he then was, in the early 1990s, "and understanding and being able to make them work for you can provide opportunities and competitive advantage.

"The beginning of a joint venture is often referred to as the honeymoon, with good reason. Throughout the twenty-year relationships usually contemplated in the agreements, the commercial interests of the co-venturers may diverge, so the agreement must in part provide the glue after the romance goes out of the friendship. Often when

joint ventures experience trouble it is because one party or the other attempts to rewrite the intent of the agreements through interpretation. To bring all parties back to the common intent requires a thorough understanding of how the system of agreements work and the persuasive capabilities to negotiate the confirmation of the common purpose. Oil industry people are really solution finders and the overwhelming drive is to make things work. KUFPEC has accumulated a great deal of expertise over the years in drafting, negotiating and operating its volumes of agreements.

"This applied particularly with our senior people," continued Mockridge. "For example,

Khaled Mulla Hussein in 1990 assumed responsibility for commercial matters in addition to finance and administration before becoming Deputy Chairman in 1995. Over time he developed a knowledge and an understanding of the agreements which are the foundation of the international oil and gas business. He frequently surprised me with his level of understanding when I had to brief him on many of the agreements implementing gas sales, voting trusts and other commercial transactions which required a great deal more work for me to prepare myself to brief him, but more importantly, it meant that our people at the top really understood the commercial role in the business."

operations were completed and new production came onstream.

In the early 1990s, KUFPEC's principal revenue sources were from offshore oil from Australia's Harriet and Egypt's Amal. These two, apart from tiny, faithful Palm Valley gas and Eromanga in Australia, were the only producing fields at the time of the Iraqi invasion in August 1990. Then Indonesia's Anoa came onstream in November 1990. With a one-third interest in 3.6 million barrels of oil per annum, it was a big earner for several years. Congo's Yombo sales started in June 1991 at 5,500 bpd, but that was heavy, low value crude with a small one-fifteenth interest. Peak production was reached in November 1992 at 23,015 bpd but with natural decline – despite pressure maintenance – production decreased to 12,010 bpd in 1995.

Indonesia's offshore Camar made a contribution from July 1991 but declined rapidly and was sold. As the decade progressed, further Harriet oil – and gas – came onstream, and KUFPEC-operated Sidi El Kilani in Tunisia in January 1993. Pakistan's Kadanwari started gas sales in mid-1995. But the crowning jewel of KUFPEC would come in October of that year, when China's huge Yacheng gas field (*see pages 60-61*)

commenced sales. Where KUFPEC had two main producing properties in January 1990, by December 1995 there were seven, with one having come and gone in that time.

EXISTING PRODUCERS, 1990

Of the two producing fields in early 1990, Egypt's Amal was left much to its own devices, although KUFPEC became operator through AMAPETCO (Amal Petroleum Company) in 1993 and opened a Cairo office – its third area office – to support that function. Production, however, declined quicker than expected.

Harriet in Australia's offshore Barrow Sub-basin was more of a success. Production was not only generally maintained but also increased as new satellite oil fields were found and gas development completed in July 1992. The gas project utilised Harriet associated gas, along with Rosette, Sinbad and Campbell gas, to meet contractual deliveries rising to 50 mmscf/d over the next three years as the customer base expanded to the regional mining industry. By the mid-1990s, Harriet gas was providing power to homes and industry in the state capital of Perth, more than 1,000 km to the south.

Harriet oil was not neglected. Natural decline was reduced with gas lift and upgraded produced water handling facilities. During this time, much of the further drilling was successful. The 1994 Alkimos oil well on nearby permit WA-192-P resulted in a discovery. In 1995, the Wonnich 1 well found oil and gas.

Elsewhere on Australia's North-West Shelf, in the KUFPEC-operated Permit WA-225-P, the 1993 Nebo-1 well was an oil discovery with regional significance, the first in the frontier Beagle Sub-Basin. Had it not been for the unfortunate waxy nature of the oil, it would probably have been developed.

Wells participated in, 1990-1995	1990	1991	1992	1993	1994	1995
Development wells	19	11	3	-	11	19
Appraisal wells	4	6	8	6	1	4
Exploration wells	9	18	22	17	8	13
Total	32	35	33	23	20	36
KUFPEC-operated wells, 1990 - 1995						
Development wells	-	-	1	-	1	1
Appraisal wells	1	1	3	-	-	-
Exploration wells	2	2	4	4	3	3
Total	3	3	8	4	4	4
Exploration expenditure, US\$'000	27,933	38,259	26,777	45,093	18,242	23,093



NEW FIELDS ONSTREAM

But the big increase in production in the first half of the nineties came from fields where exploration dated back to the earliest days of KUFPEC.

In Indonesia's Natuna Sea Block 'A' Anoa field, KUFPEC's first acquisition in its own right, production had commenced in November 1990 at a rate of 10,800 bpd, later peaking briefly at 18,000 bpd. Despite this initial excellent performance, reservoir pressure declined quickly. By 1995, even with gas injection and further development drilling, production was down to 7,601 bpd.

Meanwhile, in Pakistan's Tajjal permit, 330 km northeast of Karachi and a mere 20 km from the Indian border, development proceeded on what would be KUFPEC's first dedicated gas producing interest at Kadanwari. Drilling in 1990 and 1991 had proved the gas accumulation and further boosted estimates of proved original gas in place. In 1992, the field development plan was approved and exploration rights over the rest of the Tajjal Permit relinquished. Gas pricing and gas sales agreements were finalised with Sui Southern Gas, and the state-owned Oil and Gas Development Corporation of Pakistan (OGDC) exercised their option to increase their participation from 5% to 50%. This allowed KUFPEC to recover part of its earlier written-off explo-

ration costs. Over 1993 and 1994, an airstrip was built, access roads laid, a permanent drilling camp constructed, gas processing facilities installed, wells worked over, and new development wells drilled. First sales were made on May 31st, 1995.

"In a way," said Commercial Manager Christopher Honeywill, "this was truly a period of consolidation during which KUFPEC was making huge investments in development. Despite the obvious frustrations that our exploration people must have felt in not being able to go and look for oil, there was both a logic and a lesson in the strategy imposed on us by KPC. The logic is that with massive expenditure commitments on development, it is prudent for management to focus on the big money areas, at the time China, Indonesia, Tunisia and Yemen, rather than new exploration ventures. If you look at the figures on reserves and exploration expenditure for that period, there will be no material reduction in expenditure, but there is an increase in reserves. All of that was from areas we were already in. The lesson is thus that it is possible to generate a steady growth in reserves by really working existing acreage. By stopping us from exploring, KPC helped to focus us on the task at hand."

But the main focus of the Company's attentions during this period was its Sidi El Kilani interest in Tunisia, where KUFPEC was the operator.

Production facilities are installed in the Anoa field in the Indonesian Natuna Sea holding. (Photo: Premier Oil)

Oil from the 1989 Sidi El Kilani discovery was trucked 65 km to the Sidi El Itayem CFTP pipeline terminal prior to the opening of a new dedicated pipeline to La Skhirra export terminal.



TUNISIA

At the time of the Iraqi invasion of Kuwait, a two-stage development plan for the 1989 Sidi El Kilani discovery had been initiated with oil to be trucked 65 km to the Sidi El Itayem CFTP pipeline terminal. From there, it would be piped a further 60 km to the TRAPSA La Skhirra export terminal and sold in Europe as Zarzaitane blend.

Both exploration blocks, North Kairouan – where Sidi El Kilani had been found – and South Kairouan were renewed in 1989 for a further three years. In July of 1989, American Bob Banks had taken over from Dr Cameron Davies as General Manager and would bring the property to production.

Following the resumption of operations in May 1991, the SLK 1 well was placed on long-term production test. Four further appraisal and production wells were completed in 1992,

and the well that had been suspended in August 1990 upon the Iraqi invasion re-entered. ETAP, the Tunisian state oil company, exercised its option to participate up to 55% in the field. Significantly, as for OGDC's entry into Kadanwari in Pakistan, this led to a recovery of previously written-off exploration costs.

In 1993 Sidi El Kilani pumped 5,622 bpd for the year, rising to 15,900 bpd in 1995. It was Tunisia's second largest source of oil, providing one in every six barrels of the country's production. By late 1994, the field could provide 18,000 bpd with production constrained only by the trucking capacity. Additional development wells proved further reserves, improving the viability of a dedicated pipeline to La Skhirra.

Relations with ETAP were further consolidated with the formation of the Kairouan Petroleum Company, jointly owned by KUFPEC and ETAP. This entity took over the operations of the Sidi El Kilani field effective July 1995.

In the area of exploration, no work was undertaken on either the North or South Kairouan permits in 1990 or 1991, but 1992 saw new seismic acquired and one unsuccessful exploration well drilled on each. In 1993, further seismic surveys were shot on both permits, after which one well was drilled on each – Trab El Faid in the south and M'saken-1 in the north. Both proved unsuccessful. Following this, the South Kairouan permit was relinquished in 1995 with the exception of a small part of the northern area, contiguous to North Kairouan and close to Sidi El Kilani. North Kairouan, now covering 3,172 sq km excluding Sidi El Kilani, was extended.

DISCOVERIES

In parallel with work in the early 1990s to bring new production onstream, exploration was bearing fruit in three other countries: Egypt's Western Desert at Ras Kanayes, in two Yemen blocks, and on Indonesia's Seram Island.

In Ras Kanayes, seismic acquisition had been completed in 1990. The first of three obligation wells had found good potential reservoirs but no commercial hydrocarbons. Then

Production by property, 1990 – 1995

♦ KUFPEC operated (Amal from 1993)

Oil Production, bpd, gross	KUFPEC %	Onstream	1990	1991	1992	1993	1994	1995
Harriet, Australia	19.28%	1/86	11,920	14,220	13,915	10,900	11,040	11,747
Amal, Egypt♦	73.50%	12/88	4,085	3,970	3,250	2,900	2,720	2,540
Anoa, Indonesia	33.33%	11/90	834	16,080	10,097	10,620	10,810	7,601
Yombo, Congo	6.25%	6/91	-	3,403	14,181	15,650	13,500	11,996
Camar, Indonesia	25.00%	7/91	-	2,995	7,645	3,871	1,626	Sold April 1994
Sidi El Kilani♦	45.00%	1/93	-	-	-	5,622	11,000	15,900
Gas Production, mmsc/d, gross								
Harriet, Australia	19.28%	7/92	-	-	10.6	27.4	38.0	45.0
Kadanwari, Pakistan	15.79%	5/95	-	-	-	-	-	46.1
Yacheng, China	14.70%	10/95	-	-	-	-	-	2.7
KUFPEC net share, boe/d			4,856	13,117	11,312	12,548	13,980	15,992

Above excludes minor Australian interests, Palm Valley gas and Eromanga/Cooper oil

three successful wildcats in 1992 tested gas and condensate. A development license was obtained and the Company's working interest increased from 30% to 36.36% with the default of another co-venturer. After that, the main problem, as in any gas development, was selling the production and getting it to market. With the closest customers in Alexandria, 200 km distant, a feasibility study was carried out on a common processing plant for various fields in the area and a shared pipeline – Westgas – to link up with the national grid.

And in an entirely different part of the world, in the jungles of remote eastern Indonesia, work proceeded with KUFPEC as operator on Seram Island. A major seismic survey was performed in areas where previous drilling had already indicated hydrocarbons. In 1991, a 10,000 sq km airborne Synthetic Aperture Radar survey better defined surface structural features. The results were integrated with earlier seismic surveys to identify drilling prospects. Then, in October 1993, the Oseil-1 well struck oil. With the potential of this find, negotiations were opened with the authorities to secure favourable frontier area fiscal terms before more drilling was carried out. Geological and geophysical studies continued, but it would be several years before the negotiations bore fruit.

Continued on page 62



The rugged landscape and village agriculture of Yemen's interior.

Yemen: Bounty on the Way, on a Bumpy Road

Along with discoveries in Egypt and eastern Indonesia, further important finds were being made closer to home, in Yemen's East Shabwa and Jannah blocks, acquired respectively in 1987 and 1990. These discoveries would lead to Yemen becoming the Company's premier source of revenue for the first decade of the 21st Century.

By late 1995, both East Shabwa and Jannah had discoveries in three fields. The first was on Jannah in late 1991. Following a 1,200 km seismic survey, the first well discovered gas and condensate in the same reservoir as the adjacent Marib Block's Al-Raja field. A further discovery of oil was made at Halewah in 1992, and then Dhahab in 1993.

In early 1994, commerciality was declared in Jannah, leading to very challenging commercial negotiations to establish the rights and obligations to the use of third party facilities for the transport of the crude to a point of export. The matter was deadlocked for a year and saved, in the words of the Senior Petroleum Engineer Peter Fellows, "by some very fine statesmanship by our Commercial Manager, Chris Honeywill."

With the issue resolved, first production, from Halewah, was shipped 420 km to Ras Isa on the Red Sea in late 1996. By then, a third oil discovery had been made in 1995, on Al-Nasr, northwest of Dhahab.

"The Jannah Block negotiations," said Manager Legal Affairs Brit Mockridge, "underline the point that within KUFPEC, there is a cadre of very talented and experienced oilmen, capable of resolving the most intractable of problems. Very often it is KUFPEC, coming from a small country itself, that recognises the aspirations and thus the interests of the Developing World governments more than the larger Western-based companies. We are closer to both sides of the business. In fact, later in the Jannah story, when further problems arose, two of the American partners asked us to be the spokesman for the entire group with the Yemeni government."

If commercial matters were less complicated on East Shabwa, there were still technical challenges. One well in 1989 and two in 1990 tested non-commercial oil. They were, however, sufficiently encouraging to enter the second exploration period, with a partial farm-out to an operator who had discoveries immediately to the block's east. New seismic was shot, concentrating on areas close to these. Four 1992 wells resulted in an oil discovery at Kharir. In 1993, a further discovery was made at Atuf North West, close to Kharir. With these two finds, exploration rights were extended.

"There were interesting lessons in drilling learned by the operator in East Shabwa," recalls Deputy Manager Middle East and Africa, Dr Mike McMurtry. "They had selected an area for drilling with a desert plateau. They looked at it and thought: 'Why put the rig on the plateau when we can put it in the wadi below, still hit the same target, and save drilling through another 200 metres of limestone?' Sounded sensible. Well, they did that, and a flash flood came through the wadi and washed the rig away. So it was moved back up onto the plateau. No one had thought that the wadi was there for a good reason, despite the seemingly bone-dry area."

Despite natural interruptions and those of the man-made variety from the Yemen civil war, further seismic was acquired in 1994 over Kharir and several other prospects, leading to discovery of the Wadi Taribah field in 1995. Agreement was then reached with the authorities and CanOxy, the operator of the facilities on the adjacent Massila block, to transport Kharir and Atuf NW oil 54 km to its crude oil transfer facility, and then 160 km to the Al-Mukhalla export terminal on the Gulf of Aden.

"First East Shabwa production," recalled McMurtry, "came ten years and six months from the time we almost lost and then obtained the Block in our Easter surprise in 1987 (see page 38). And that's about par for the course in this business."

Yacheng: The Jewel in KUFPEC's Crown

Two Decades to Success



Former US president George Bush with Kuwait Ambassador to China Abdulmohsen Al-Jeaan (right) and then KUFPEC Chairman Mahmoud Al-Rahmani at the opening of the Yacheng project.

Observers watch the installation of the production platform at Yacheng 13-1, above right. Below, launching the eight-leg jacket for the process platform.

"As a veteran of the energy industry, I salute all who made this dream a reality." These were the words of former US President George Bush at the Yacheng opening ceremony, January 1996.

KUFPEC's greatest achievement of the 1990s was completion of the huge Yacheng gas development — China's largest — in the South China Sea. The project would drastically alter the Company's production profile away from oil to gas, and eclipse both Sidi El Kilani and Harriet as its main source of revenue from 1997.

First production from this \$1.125 billion project flowed on October 24th, 1995, two months ahead of schedule. With reserves of about three trillion cubic feet over an area of 54 sq km, Yacheng was contracted to supply clean-burning gas to Hong Kong for at least twenty years using a 770-km 28 inch undersea pipeline — then the second longest in the world — and a 90-km 14 inch pipeline to the nearest landfall, China's Hainan Island.

At a gala official opening the following January, eminent guests including Chinese Premier Li Peng, President Jiang Zemin and Vice-Premier Zou Jiahua and George Bush joined then Chairman Mahmoud Al-Rahmani and executives from KUFPEC and its project partners — Atlantic Richfield Corporation (ARCO) of the US and China National Offshore Oil Corporation — in a series of celebrations stretching from Beijing to Hong Kong. Bush had been US Ambassador to China at the time of the early negotiations, thus establishing his link with the project years before his role in liberating Kuwait.

"The Yacheng story goes back to the late 1970s, when modern



China first started opening up," said Al-Rahmani. "ARCO entered into what would be five years of negotiations with Beijing before being awarded a 9,000 sq km offshore exploration concession in the Ying Ge Hai basin. A consortium grouped ARCO as operator with 70% and Santa Fe Minerals 30%. With the 1981 acquisition of Santa Fe by KPC, Santa Fe's interest was transferred to KUFPEC.

Added Manager Legal Affairs Brit Mockridge: "Actually, the Chinese were very happy to have us take over the Santa Fe interest as it introduced a bit of balance into the relationship. CNOOC and KUFPEC were both non-operators and had similar interests when dealing with the operator, and they were now dealing with one US and one Kuwait company, instead of two American firms."

Then, in July 1983, ARCO discovered gas. "This posed considerable problems," explained today's Deputy Chairman, Abdulla Baroun. "A gas field needs to be near a consumer or to a pipeline, and there just weren't any of either nearby. And we had to negotiate an amendment with the Chinese to allow for economical development terms."

"It was very difficult to put the gas and a buyer together. In fact, it took far longer to sell the gas than it did to find or develop it," said then Commercial Manager Christopher Honeywill. "At first we looked at Hainan Island — in the news in April 2001 as the location of the US Navy spyplane drama — and the southern Chinese province of Guangdong, but the agricultural economies there didn't have the demand. Then there was the Chinese





Output from the Yacheng field is piped to the Nanshan shore base (left) on Hainan Island. The field also supplies the Castle Peak Power Stations (below) in Hong Kong via a 770 km pipeline. (Photos: ARCO)



requirement that major joint ventures generate enough foreign hard currency to be self-sustaining, so the gas had to be exported. We explored liquefying it by supercooling, and shipping it to Japan but in the end wasn't economically viable. Even three trillion cubic feet is small for an LNG development."

Then came the prospect of supplying power stations in Hong Kong, and a local gas distribution plant. Both options would require a massive pipeline, something the consortium had never imagined. ARCO negotiated with two potential buyers in Hong Kong, ultimately selecting Castle Peak Power Company (CAPCO), which was 60% owned by Exxon Energy, and 40% by China Light and Power. A twenty-year gas sales agreement with an option to extend was finally reached in March 1992 – almost nine years after the discovery – to supply CAPCO's new 6,000 megawatt combined cycle gas turbine power station at Black Point in Hong Kong's New Territories, and a 4,100 megawatt station at Castle Peak itself. Daily deliveries would be 280 million standard cubic feet, commencing January 1st, 1996.

With pollution issues gaining importance, the gas was so important that the design of the Black Point power station was changed from burning coal to the cleaner gas. Further agreements were reached to supply 50 million standard cubic feet of gas for a power station and fertiliser factory on Hainan Island, plus 350 tonnes of condensate per day for tanker distribution throughout China.

"Once sales had been secured, the partners then had to build the development," said then KUFPEC Engineering Manager, Dan Kirisits. "The engineering effort that went into the project defies imagination. Over four million man-hours were spent by Chinese contractors with the two pipelines, 860 km in total, accounting for half of the entire project cost. And half of the pipeline cost was in the complexity of bringing it into Hong Kong harbour. That line was laid in a record 23 weeks and covers the distance between Kuwait and Abu Dhabi. To protect it from accidental damage



from ships in one of the world's busiest shipping routes, it had to be buried and covered with several metres of rocks.

"Then the platforms had to be designed to withstand 75 ft waves and 105 knot winds from typhoons, stronger even than the North Sea, and stand in 90 metres of water. The project includes a well-head platform with the drilling rig and well control equipment, a larger process platform with compression plant, generators and living quarters for thirty-six men. The wellhead platform has six wells, and a second, future platform is planned nearby in 2004 or 2005 with six more wells. Land facilities comprise the Nanshan Shorebase on Hainan Island for gas and condensate processing, condensate storage, a dock, living quarters, helipad and offices. At Hong Kong, there is a gas receiving station which provides gas heating and metering."

"In fact," added Reservoir Engineer Iqbal Gul, who worked on the project from his earliest days at KUFPEC, "the pipelines have the capacity to serve not only Yacheng. With a design life of 40 years, they may ensure the viability of further smaller projects in the region. Once a pipeline is in, the economics change. What was impossible before can become feasible. The Hong Kong pipeline can be used to send gas from other nearby discoveries to the entire coastal region of southern China. It can potentially be the catalyst to open up the entire economy of the region."



Laying the pipeline from Yacheng to the Castle Peak power stations in Hong Kong was a huge technical challenge completed in just 23 weeks.

(Photo: ARCO)

Continued from page 59

FIRST PROFITS

Financially, the most notable aspect of the first half of the 1990s was what KUFPEC had gone into business for: profits.

"In 1994, KUFPEC made its first operating profit, almost KD2 million," said current Chief Financial Officer Musaad Al-Saeed, "and with only two months of Yacheng sales. In 1996 we more than doubled that to nearly KD5 million; then it almost tripled to a new plateau level for the rest of the 1990s.

"It was a period of paradox," continued Al-Saeed. "On the one hand, we were profitable. On the other hand, we were almost up for sale or dismemberment. Nevertheless, our Shareholder was honouring its commitment from the 1980s to subscribe capital up to a total of KD200 million. Most of the

increment above our original KD100 million share capital was drawn between 1989 and 1993 with the last tranche in 1994, our first profit year. In fact, with the Yacheng development, we needed more cash than that in 1995 and it wasn't forthcoming. We had to scrimp and save elsewhere, but we did it, proving we really could do it ourselves."

"In one way," said today's Finance Manager, Alan Jones, "the initial freeze we put on new exploration during the invasion had done us a short-term favour by helping us make a profit sooner than we might have otherwise. This cut exploration write-off at the price of longer-term future profit."

In fact, the 1994 profit was all the more surprising given the industry situation in the first half of the 1990s. During early 1991, the market was still in Gulf Crisis turmoil with prices at \$26 to \$30. They had fallen back to between \$18 and \$20 by year-end. Thereafter they continued to weaken until mid-decade. The windfall revenues from war-fearing price spikes would be no more. KUFPEC's net share of production volumes in 1993 and 1994 was actually higher than that of 1992, but the lower prices dragged total revenues down year on year. It was not until 1995 that the combined effect of higher prices and higher production would restore revenues to near the 1991 level.

CHANGES

1995 brought another important change with the retirement of the Company's second Chairman, Faisal Al-Kazmawi, after almost fourteen years' service, on December 31st, 1994. Deputy Chairman Mahmoud Al-Rahmani took over the top job, and Khaled Mulla Hussein moved up to be his Deputy.

"It was fitting that Faisal should have presided over KUFPEC's first year of profits in his last year in office," observed Al-Rahmani. "He had seen the Company through some of its toughest times, from the oil prices collapse and the IEDC episode in the early 1980s, through the invasion and exile, and then the dark days where the very future and

Turning on the Gas

As KUFPEC shifted from losses to profit, there was another significant change. KUFPEC's production profile was shifting from oil to gas.

In 1992, only 2% of revenues came from gas sales. By 1994, it was 6.4%; in 1995, more than double that. It would increase significantly in future years with Yacheng, and later Natuna Sea gas. Furthermore, gas, although having a lower barrel of oil equivalent price than oil, tends to be more stable in price.

"There is a certain irony in this shift to gas," observed Chief Financial Officer Musaad Al-Saeed. "It goes back twenty years to founding Chairman Abdul Razzak Mulla Hussein's view of profit and security through diversification, perhaps in a way he could never have imagined.

"For all its huge oil output, Kuwait's domestic production is gas poor; it has relatively little associated gas and virtually no unassociated gas, at least onshore. Thus, the potential for profit

and for revenue security from this upstream segment is constrained. But KUFPEC has gas production. In a way, we provide an element of income security through diversification via an upstream segment that KPC cannot provide from its domestic business. Also, whereas KPC's domestic production is almost exclusively onshore, most of KUFPEC's is offshore. We are present in the upstream segments that KPC cannot fill domestically."

The Engineer's Engineer

Mahmoud Al-Rahmani:

Chairman, January 1st 1995-April 30th 1999

Walk past Mahmoud Abdullah Al-Rahmani on the street, and one would never suspect he was once one of the Kuwait's senior oil executives. With the top button of his dishdasha habitually undone, a twinkle in his eye and a spring in his step, Mahmoud is the very antithesis of the image of the cool, reserved Chairman.

"Mahmoud's trademark has always been a complete lack of airs and graces," said a former KUFPEC colleague, "and that's his most endearing quality. You always knew where you stood with him."

"But don't be fooled by his often jocular nature," said another. "He has a fiery streak of determination, tremendous energy, a sharp mind and is fiercely loyal to his people, sometimes even too loyal for his own good. But he expects performance. Where business is concerned, he's all business. And if there's a fight involved, it's better to have him on your side. Mahmoud has always had great personal courage and patriotism, with modesty, as perhaps best demonstrated by his refusal to leave Kuwait during the Iraqi occupation, even when he could. He may not have been the consummate corporate diplomat his predecessors were, but he was a well-loved boss who served KUFPEC with distinction for fifteen years and the Kuwait oil sector for twenty-two."

Al-Rahmani was certainly an unusual figure for KUFPEC. He was, after all, an Electrical Engineer with an academic, public works, military engineering and refinery background, not an upstream man. He had earned his

Bachelor's and Master's Degrees in Electrical Engineering from New York's prestigious Columbia University in the 1960s and then a Professional Degree in Electrical Engineering in 1970. During his second two degrees he was also Resident Lecturer at Kuwait University, continuing there until 1972. He then served with the Ministry of Electricity and Water and later the Ministry of Defence Military Engineers Department before joining Kuwait National Petroleum Company in 1977 where he rose to General Superintendent for Career Development.

By September 1980, Al-Rahmani had been plucked from KNPC to be the first Administration Manager and later Manager for Investment Co-ordination in the Planning Group of the recently-formed KPC. During 1982, he was heavily involved in the early phases of what was called 'the digestion of the Santa Fe acquisition.' Three-and-a-half years later he was KUFPEC's inaugural Deputy Managing Director for Planning and Development. By April 1987 he was also Deputy Chairman, a role he filled for almost eight years before being appointed Chairman.

During that time, he also served as Board member of Kuwait Oil Company from September 1985 and then non-executive Deputy Chairman from April 1992 through to December 1994; Deputy Chairman of KP



North Sea Holdings from April 1990 until the end of 1994; and on the Board of Kuwait Santa Fe Braun from March 1985 until December 1994.

"Even though an engineer at heart, Mahmoud grew to love the upstream business, and KUFPEC in particular," said a former geologist colleague, "and his skills were very useful. He

always brought a rigorous, analytical approach to the table. But electrical engineering was in his blood. I recall one instance in Pakistan on a negotiating trip to Islamabad. We had some spare time and Mahmoud went to his favourite tourist spot, the giant mosque that Saudi Arabia was building as a gift to the Pakistani people, to inspect not only the wonderful architecture but also the electrical switch boxes and other installations.

"As an individual," continued his friend, "two of his greatest interests were computers – he's a dedicated Apple Macintosh man – and Western classical music, both of which he shared generously with his colleagues in KUFPEC. Remember that this was the time most people were buying their first home PCs, and he provided most valuable advice on procurement to many of us.

"He was a fine colleague, a good man, a great friend, and always an engineer."

raison d'être of the Company was in question. Life ahead for his successors wouldn't be easy, but he had brought us to profits, and you can't argue with that. We wished him all the best.

"And I can't say enough in praise of Khaled Mulla Hussein. From his earliest days with the Company, he had brought in the systems, the financial controls and disciplines we needed with far flung geographical operations and co-venturers. He was my right hand. It takes two hands to clap and I couldn't have worked without him."

There was another important addition to the ranks of KUFPEC's executive team. Abdulla Baroun, who had been a Board member since the Company's earliest days but who had always had a full-time role at Kuwait Oil Company, joined

KUFPEC as Deputy Managing Director for Planning and Development, filling the post vacated by Al-Rahmani as he moved up to Chairman. Baroun brought with him a wealth of experience in the Company.

There was one other more obvious change in KUFPEC in 1995: the move to new and expanded offices. The business was growing. Worldwide manpower in 1995 had reached 191. Ever since the technical function had relocated from London in 1986, the Company had been split across two nearby buildings. It was workable, but not ideal. The move wasn't far, to a four-storey building on Kuwait City's main street, five minutes walk from KPC, where the Company is based today.

For the first time in KUFPEC's history, every Kuwait-based staff member was under the same roof.

REAPING THE HARVEST: To mid-1990s through 2001



The 1995 Wonnich gas discovery offshore Australia was brought onstream in 1999 as part of the Harriet complex. (Photo: Apache)

WHEN KUFPEC MARKED THE fifteenth anniversary of its founding in April 1996, it was a promising but troubled teenager. True, it had just recorded its second year of profits and would double revenues (and triple profits, despite low prices) that year, but a cloud still hung over the Company. The KPC freeze on new exploration acquisitions was still in force, providing a drag on confidence and uncertainty about the years ahead. Then, in late 1998, things changed. A new Minister, Sheikh Saud Nasir Al-Sabah had taken office earlier that year. The moratorium was lifted, with conditions.

With the ban off, KUFPEC went shopping again. But, as with any teenager with battered confidence, this took time, and the first two new ventures were kept very close to home, growing out of existing relationships. The first came in 1999, with participation in a Geological Studies Agreement in the South China Sea, near Yacheng. This was an ARCO prospect and the Yacheng pipeline provided the only transportation option for any gas that might be found. It was offered to KUFPEC on almost identical terms as the nearby producing development and included an option to obtain a 30% interest in the property – which had a deep gas prospect potentially as large as Yacheng – upon completion of the study. The second was a farm-in with a 12.79% interest to permit EP363, on the eastern edge of Australia's Harriet.

Over the following two years, the Company spread its wings with a new-found if still uncertain confidence. A further

Australian interest – 20% in WA-246-P, 60 km north-east of Harriet, was acquired in 2000 and two successful discovery wells drilled. By November that year, KUFPEC returned to Malaysia after a five-year absence, with interests in two blocks. The first was 25% of a 10,260 sq km permit offshore the eastern Malay Peninsula, barely 120km west of the existing Natuna Sea property; the second was 30% of a permit covering 4,513 sq km offshore north Sarawak. Both blocks were operated by Amerada Hess and lay in basins with existing producing fields. Other acquisitions were considered in Algeria, Libya, Iran, offshore Indonesia's Kalimantan, Thailand, Myanmar, offshore Yemen (in a property acquired in 2001), even as far afield as New Zealand, for gas.

LETTING GO

If KUFPEC was back into exploration acquisitions by 1999, there were also relinquishments, in part to allow focus on core areas. Australia's exploration permit WA-225-P, near Harriet, went in 1996. Amal's producing field was divested in 1998 under different circumstances. By 1996, production was disappointingly low. Then, in 1997, several wells had to be shut in because of an Egyptian government edict on wells with high gas-to-oil ratios, making the field uneconomical. KUFPEC withdrew, closing its Cairo office. Congo's Yombo field also went in 1998. KUFPEC's interest was a small 6.25%. With natural decline and the cost of monitoring the interest similar to that of a big one, the economics no longer justified retaining it.

"One thing must be noted about those disposals," said then Commercial Manager Christopher Honeywill. "The proceeds were well above the net discounted future cash flow values shown in our five-year plan. So we had added value to these properties, more than we were recognising ourselves. That same value exists, as yet unrealised, in the rest of our portfolio."

Added then Chairman Mahmoud Al-Rahmani: "Great credit must go to our then Deputy Chairman, Khaled Mulla Hussein, for his very effective negotiating on Amal and Congo. He was the

A View From the Top

The Minister, the Chief Executive and the Managing Director International Operations Share Their Views

By the time Sheikh Saud Nasir Al-Sabah became Kuwait's Oil Minister in March 1998, an exploration acquisition freeze for KUFPEC didn't make sense any more.

The approved KPC strategy in 1995 for KUFPEC had recognised it as no longer representing a strategic investment for the Corporation. Sheikh Saud reaffirmed that direction in late 1998, but the time was not then right, given the low oil market, to dispose of KUFPEC. Also, it was making a real financial contribution to KPC, and providing meaningful jobs for Kuwaitis. The Minister and his Board decided to keep the situation under review over the next two years to determine the best time for disposal. This, however, meant maintaining reserves, something that could not necessarily be achieved in existing properties.

Accordingly, KPC authorised KUFPEC to continue focussing on its three core areas and to enter new, low-risk projects only in those areas, with priority to countries it was already in. Preference was to go to proven properties that were under development or already producing.

Retaining KUFPEC, of course, made sense in other areas. Disposal would have meant the loss of a key window into the global upstream industry, and all the technology transfer benefits that it confers, plus an invaluable pool of skills and jobs. In a way, KPC had more to gain by keeping KUFPEC than by disposing of it completely. It was also an excellent ambassador for Kuwait abroad. And, more importantly, it was providing a good return, better than KPC could get in the bank. In 1997, the year



Former Kuwait Oil Minister Sheikh Saud Nasir Al-Sabah



Nader Sultan, KPC Deputy Chairman and Chief Executive Officer



Khaled Al-Haroon, KPC Managing Director for International Operations

preceding Sheikh Saud's appointment, it had made a 12% return on average capital employed. By 2000, it was 16%. It still had a long way to go to provide a real return, but it is a long-term business.

Added KPC Deputy Chairman and Chief Executive Officer, Nader Sultan: "The change in KPC's perception of KUFPEC was more because of a change of circumstances, in market fundamentals, than anything else. In the early 1990s, we were seeking clarity on KPC's role. The questions were asked: 'What is the vision of the parent? Why are we in business?' The answer was: 'To develop Kuwait's hydrocarbons.' And, of course, the only place you can do that upstream is in Kuwait. There was both a lack of a long-term strategy for KUFPEC and a lack of a long-term vision in KPC for what it wanted out of KUFPEC. And there was the sense that KUFPEC was competing against OPEC crude.

"This changed in the late 1990s and early 2000," continued Mr Sultan. "The fundamental question became: 'What is it that we want to achieve?' The answer was 'Growth'. That means growth in revenues, profits, and capital. And the question leading on from that is: 'Where are the opportunities for such growth?' Clearly, not inside Kuwait, as we are constrained by OPEC quotas. Furthermore, the way the KPC Group is structured, we cannot capture

the margin of what is the most profitable part of the industry, upstream, from domestic production. We can only do that from foreign production.

"So KUFPEC provided us with opportunities for both growth and upstream margin. Now if a Shareholder wants a company to grow," concluded Mr Sultan, "there must be firm commitment at the top corporate level. That is now what we are

providing KUFPEC with. We are not just standing behind it in its existing commitments as we have always done, but bringing all our power, influence and reputation to bear in committing it to growth."

Commented KPC Managing Director for International Operations, Khaled Al-Haroon: "The question has been asked: 'Why was KUFPEC not sold when KP North Sea was in 1996, and we started the process of disposing of Santa Fe through an IPO, although it was classified similarly as non-core?' In a way, KUFPEC was saved by its relatively small size, the fact that it provided jobs for Kuwaitis, and the unique pool of skills it offered at the time.

"Firstly, the size. Because it was so much smaller than KP North Sea and Santa Fe, the limited resources of KPC were initially focussed on them in executing the disposal of non-core assets. KUFPEC was simply left until later. It was also more difficult to dispose of as a whole because of its diverse portfolio. KP North Sea, for example, had a clear, narrow, North Sea focus. Secondly, it is always more difficult to lose Kuwaiti jobs in Kuwait. Neither Santa Fe nor KP North Sea provided much in the way of Kuwaiti jobs. And finally, there were the skills in KUFPEC that we had nowhere else in the KPC Group. These were particularly useful at the time we first started looking at what is known as the North Kuwait Project, with foreign oil majors, as long ago as 1996. KUFPEC is used to dealing with the type of arrangements these involve, both legally and commercially, so they made an extremely useful contribution and saved us from reinventing the wheel.

"If you look at the history," continued Mr. Al-Haroon, "KUFPEC was established under a certain set of circumstances, at a time when the then Minister, Sheikh Ali Khalifa, envisaged a large, global, consolidated, integrated business. It was a broad vision, looking for advantages of exposure to overseas ways of doing things and technology. There were ideas and dreams, but they clashed with the reality of implementing them. We have to walk before we can run. Now that KUFPEC has learned how to walk, we're ready to see it run."

Agreement was reached in 1996 with the East Spar Joint Venture, 60 km west of Harriet, to share facilities on Varanus Island (opposite page). This allowed KUFPEC and its co-venturers to realise processing economies of scale. (Photo: Apache)

key to realising as much as we could on the properties. We had a respected firm of international consultants saying Amal was worth \$600,000 and Congo, \$3 to 4 million. We ended up getting about \$4 million and \$12 million for them respectively, thanks largely to Khaled."

Changes also happened elsewhere. In 1996, KUFPEC relinquished Southern Sudan's huge Block C, where work had been suspended owing to civil unrest since December 1985, but retained its 27.78% in the 118,348 sq km Block B. The disposals of these interests, all dating from the early 1980s, left Sudan's Block B as the only property in KUFPEC's portfolio from the IEDC days, although the work that had led to Indonesia's Seram Island had been IEDC's.

Interestingly, potential was still seen in Sudan. Acting on its own initiative, KUFPEC reprocessed old seismic data in 1997, using advanced techniques, prompting operator TOTAL to do the same. Two years later, more settled conditions to the north led to the development of fields there and construction of a pipeline via Khartoum to the Red Sea. This greatly improved the economics for Block B. When a 1999 well on a property close to Block B encountered oil, the Sudanese started pressing for a resumption of activities. Both KUFPEC and TOTAL still felt that it was too dangerous. One seismic field crew member had already lost his life in 1984, and the situation had changed little since then. By late 2000, the third co-venturer, Marathon, had been obliged to withdraw because of US sanctions on Sudan, but KUFPEC and TOTAL still hold high expectations for the area.

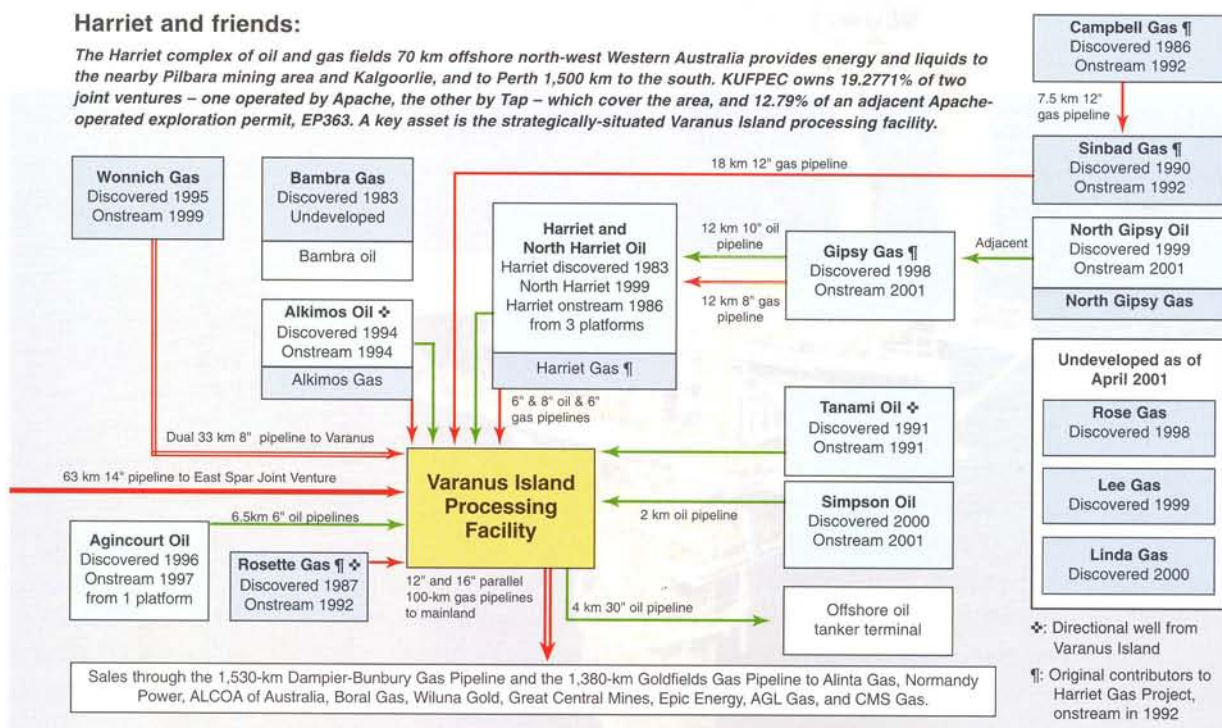
PUMPING GAS

In the meantime, production and revenues grew strongly, with the latter aided initially by the strong mid-1990s market before the 1998 collapse. Annual net oil sales from 1996 to 2000 fluctuated between 5.3 and 6.2 million barrels but most production growth came from gas. Sales more than tripled in 1996 with the first full year of both Yacheng and Kadanwari, and increased Harriet development. From 1996 through 1998, the top four revenue sources, contributing at least 80% of all sales, were Sidi El Kilani, Anoa, Yacheng and Harriet. Yacheng knocked Sidi El Kilani from first spot in 1997, and Anoa dropped to fourth place behind Harriet. By 1999, new oil from Yemen's Jannah area had displaced Anoa entirely from the top four and eclipsed Yacheng the following year as the top revenue earner.

Over the second half of the 1990s, the focus in the producing properties was to drive operating costs down and develop existing reserves. In Yacheng, consideration was given as early as 1996 to a second platform and more wells from 2002. But advances in directional drilling later suggested that a second platform might not be needed after all. In 1998, the date was moved forward to 2000, and 3D seismic was reprocessed with post-production reservoir data to establish drilling targets. Four to five high-angle deviated development wells and one exploration well – the first on the property in six years – were drilled from the existing platform in 2000. Later development will involve a second platform south of the existing facility, and more new wells. Advances in technology had indeed allowed greater

Harriet and friends:

The Harriet complex of oil and gas fields 70 km offshore north-west Western Australia provides energy and liquids to the nearby Pilbara mining area and Kalgoorlie, and to Perth 1,500 km to the south. KUFPEC owns 19.2771% of two joint ventures – one operated by Apache, the other by Tap – which cover the area, and 12.79% of an adjacent Apache-operated exploration permit, EP363. A key asset is the strategically-situated Varanus Island processing facility.





use of the existing platform, but a second platform allows even further reach. Final development calls for wet gas facilities in 2007 or 2008, by which time the field will be two-thirds through its productive life.

In Pakistan's Kadanwari, workovers, development wells, and wellhead gas compression helped to slow the decline in gas production. Nevertheless, the drilling proved up additional reserves, and provided encouragement for a 3D seismic survey of the southern area of the field. Meanwhile, extended on-again/off-again negotiations with the OMV Joint Venture on the adjacent Miano field eventually led to an agreement for Miano to use the Kadanwari excess processing capacity. The agreement will extend Kadanwari's life by reducing the minimum economic production rate.

AUSTRALIA

Development and exploration also proceeded apace in Australia's Harriet with the 1996 discovery of the Agincourt oil field. Its first production in 1997 compensated for natural decline in other fields. Several extensive seismic surveys led to

What's in a Name? More Than You Might Think...

Ever considered how permits and fields and their wells are named? Mostly, it's by reference to the nearest geographic place name, such as Sidi El Kilani or some cryptic notation, like Ja-27-1 in Egypt.

However, imagination and humour often come into play, particularly for lonesome oilmen working far from home. Take Egypt's Amal for example. Is she an Egyptian engineer's sweetheart, or simply the 'hope', as it means in Arabic, that oil would be found there?

But the prize for sheer cheek, even initiative, should perhaps go to those who named Australia's Harriet and her friends. The real Harriet was in fact a coastal ship in the region, while Shelley and Denise were Apache office staff

who gave their names to 3D surveys. But Gipsy? It sounded innocent enough at first, until Rose and Lee appeared. Then outsiders realised that the fields and wells were being named after famous early 20th Century music hall burlesque showgirls. Just what a lonely oilman on Australia's remote Northwest Shelf needed to keep his spirits up. Then there were Josephine and Baker, and Mistinguett, all ladies of the same fame.

But naming fields can be an equal opportunity game. Another Harriet well was Monty, after the hit movie, *The Full Monty*. Unlike the film, it was ultimately unsuccessful. Perhaps those who name fields, surveys, wells and structures should stick to the ladies, or to geography.



In Tunisia, a pipeline to La Skhirra was commissioned in 1999. This not only cut the cost-to-market but greatly improved local road safety by eliminating trucking.

the Gipsy oil field and Rose gas and condensate reservoirs. The 1995 Wönnich oil and gas discovery was brought onstream in 1999 and three more discoveries were made that year with Lee gas and condensate, North Gipsy oil, and a Harriet northern extension, through 10,000 ft of directional drilling. In 2000, the Linda gas and condensate field was discovered, as was Simpson oil. The Gipsys and Simpson came onstream in 2001.

Significantly, agreement was reached in 1996 with the East Spar Joint Venture, 60 km west of Harriet, to share facilities on Varanus Island. This allowed KUFPEC and its co-venturers to



earn tariff revenue and realise processing economies of scale. A second 16 inch gas pipeline to the main-land, parallel to the existing 12 inch line, was completed in 1999, allowing for increased sales.

TUNISIA

Work also went ahead in Tunisia, but with less success than on Harriet. Major facilities enhancements were made at Sidi El Kilani. Most significantly, a 123-km 8 inch dedicated pipeline to La Skhirra – powered by a new 2 megawatt power plant – was commissioned in 1999. This not only cut the cost-

Production by property, 1996 – 2001

◆ : KUFPEC operated ¶ : Forecast

Oil Production, bpd, gross	KUFPEC %	Onstream	1996	1997	1998	1999	2000	2001¶	
Harriet, Australia	19.28%	1/86	8,780	12,246	9,826	6,868	5,898	12,223	
Amal, Egypt ◆	73.50%	12/88	2,300	1,517	594	Divested mid 1998			
Anoa, Indonesia	33.33%	11/90	9,510	8,032	5,093	6,244	3,798	4,039	
Yombo, Congo	6.25%	6/91	12,157	13,000	Divested early 1998				
Sidi El Kilani, Tunisia ◆	45.00%	1/93	18,076	15,017	14,702	13,668	12,274	10,515	
Yacheng, China	14.70%	10/95	896	1,500	1,405	1,596	1,503	1,418	
Jannah, Yemen	20.00%	9/96	3,394	20,287	18,538	47,811	65,390	67,200	
East Shabwa, Yemen	14.29%	12/97	Under development		16,340	16,969	28,333	28,795	
New Acquisition, 2001		2001	-	-	-	-	-	5,934	
Oil, KUFPEC net share, barrels per day			15,662	16,958	14,993	16,561	17,095	20,666	
Gas Production, mmact/d, gross									
Harriet, Australia	19.28%	7/92	58.9	64.6	57.8	77.5	89.4	85.0	
Kadanwari, Pakistan	15.79%	5/95	80.0	70.5	70.7	64.7	55.8	54.9	
Yacheng, China	14.70%	10/95	202.0	329.0	313.0	337.0	315.0	315.0	
Natuna A, Indonesia	33.33%	1/01	Under exploration and development to late 2000						55.1
New Acquisition, 2001		2001	-	-	-	-	-	103.6	
Gas, KUFPEC net share, thousand cubic feet per day			53,693	83,674	79,494	75,180	71,552	112,571	

Above excludes minor Australian interests, Palm Valley gas and Eromanga/Cooper oil

to-market by about \$1 per barrel, but greatly improved local road safety with the elimination of trucking.

Sidi El Kilani field peaked at 18,076 bpd in 1996 but declined thereafter. Of the six producing wells in 2001, three had been shut in because of high water cut. Ongoing development drilling – including in 2000 the first horizontal sidetrack drilled by KUFPEC as an operator – arrested this slightly. That year, the Kairouan Petroleum Company – operator of the field and owned jointly by KUFPEC and ETAP – changed its name to Compagnie Tuniso-Koweitienne de Pétrole (CTKP) in part to allow recognition of the substantial Kuwaiti investment in the area. Said Co-ordinator of Middle East Projects, Abdullah Al-Nibari, “We had made major contributions to building roads and subsidising schools and clinics, but few people recognised that this money came from Kuwait. The new company name will help in that, and give us the credit we are due.”

On the North Kairouan exploration permit, a discovery was made in late 1996 at Chorbane East, 12 km south-east of Sidi El Kilani. A 3D survey was shot in 1999, and an appraisal well was drilled in 2000 but proved a disappointment. Another exploration well was drilled as a re-entry and sidetrack of the 1988 Alouan-1 well, which had produced oil shows. In the meantime, with the permit extended to 2003, a search was commenced for a farm-in partner to help fund accelerated work.

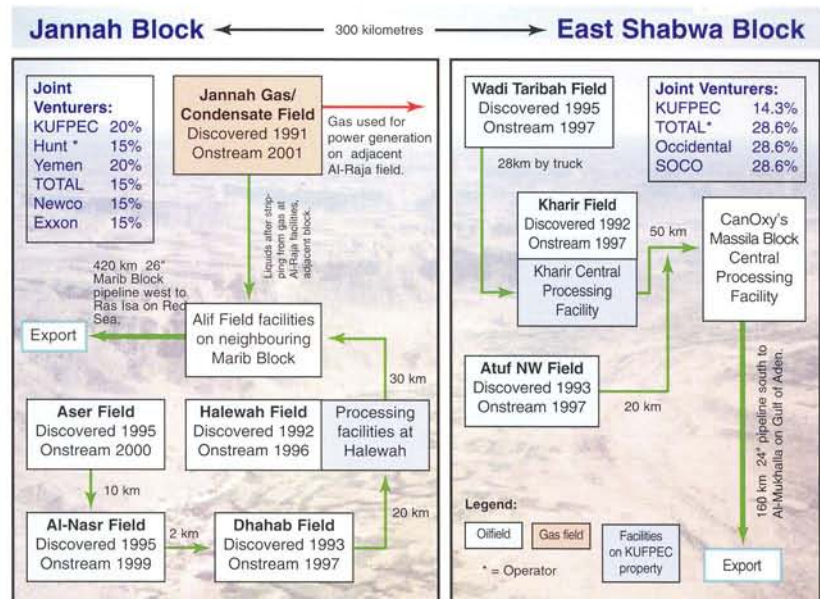
EGYPT

If fortunes were mixed in Tunisia, they were even less happy on Ras Kanayes, further east on the North African coast. The approved original development plan for the 1992 gas discoveries on the license was contingent on proving up sufficient reserves to participate in a gas-gathering system with other groups in the area. This didn't happen. Operator Norsk-Hydro withdrew and further work under new operator Repsol in 1998 also failed to find sufficient reserves to allow the project to commence. A revised development plan, taking into account the downgraded reserves, was submitted. If approved by the Egyptian authorities, first production is not expected before 2002 with gas exported through facilities on the nearby Tarek field.

With the difficulties on Ras Kanayes, the company withdrew from the adjacent Ras El-Hekma Block in early 1999, after holding it for barely five years, with little exploration work.

YEMEN

Elsewhere in the Arab World, more productive work was proceeding on Yemen's Jannah and East Shabwa blocks – in both cases with excellent operators as partners – at a pace that would lead to their combined production firmly establishing the



country as KUFPEC's principal source of revenue for the first few years of the 21st Century. In early 1996, KUFPEC was partner in four discoveries on the Jannah Block – gas and condensate in the Jannah field itself, and oil at Halewah, Dhahab and Al-Nasr. A small oil discovery was later made at Aser, a satellite of Al-Nasr, bringing the number of fields to five, after which further exploration rights expired and were not renewed.

During 1996, development on Halewah was completed, bringing it onstream in September at 15,000 bpd. Dhahab was producing by 1997, giving a combined average for the two fields of 20,287 bpd. Al-Nasr came online in February 1999, boosting production to 47,811 bpd and, with little Aser onstream by June 2000, raising production to 64,770 bpd for that year. This remarkable performance was achieved with extensive development drilling and pressure maintenance through gas injection on Halewah and Dhahab, and water injection on Al-Nasr. Long term production facilities were installed at Halewah to handle production from all five fields, with a capacity of 70,000 bpd.

Unfortunately, the concession only conferred rights to exploit oil and NGLs, not the gas. That situation presented its own challenges for Jannah – and associated gas from the other four

Drilling at Oseil 4 on Indonesia's Seram Island concession. To bring Oseil's difficult highly-fractured reservoirs onstream, cutting edge underbalanced drilling technology was used for the first time in the area.



fields. An arrangement was made with the operators of the Al-Raja field on the adjoining Marib block to strip the liquids from the production for export, and use the gas for power generation at expanded Al-Raja facilities.

On East Shabwa, things did not move quite so quickly, or on the same scale. The first of the three fields, Kharir – discovered in 1992 – was producing by late December 1997 from three wells at 9,862 bpd. The second, Atuf Northwest, came onstream in 1998. Production for 2000 was 28,227 bpd, with a target plateau level of 30,000. 3D seismic is being acquired and interpreted in 2001 on Kharir and Atuf Northwest, with further development drilling in 2002.

SERAM

If matters moved quickly in Indonesia's Natuna Sea (*see pages 72-73*), the same was not so on the other side of this vast country, with the KUFPEC-operated Seram Island and its 1993 Oseil discovery. It took until 1998 to first conclude agreements with the authorities on Frontier Incentive Terms – to allow exploitation of the deeper reservoirs containing the Oseil crude – and then to extend the PSC to 2019 to allow investment recovery.

"The extension of the PSC was unique," said Manager Legal Affairs Britt Mockridge, "It was an exploration concession and these are seldom extended. This was only achieved because of the relationships fostered to a large extent by the Area General Manager up to 1997, Jere Graham, and maintained by his successor, David Lamb."

Geological studies had continued since the discovery, but no drilling. Co-venturer ARCO had also withdrawn because they lost their interest in the main reservoir through a sole risk well

that came in for KUFPEC, leaving KUFPEC with an unusually high 92.5% and looking for a 40% farm-in partner. Once the terms were settled, two more appraisal wells were drilled with the first use of cutting edge underbalanced drilling technology suited to Oseil's difficult highly-fractured carbonate reservoirs. Further exploration work was to be conducted, including a regional gravity survey and seismic. Significantly, KUFPEC built an advanced production facility on site to upgrade the crude before export, its first integration of upstream to downstream outside of pipelines. First Oseil production is scheduled for 2002.

CHANGES

The late 1990s were also a time of change at the top, and throughout the Company. Deputy Chairman Khaled Mulla Hussein was succeeded on the Board in 1998 by then Deputy Managing Director for Planning and Development, Abdulla Baroun, the Company's longest-serving Board member. Mulla Hussein retained his long-standing role as Deputy Managing Director Administration and Finance until retirement in 1999. But before that, on May 1st, 1999, Ahmed Al-Arbeed, who joined from Kuwait Oil Company, succeeded Chairman Mahmoud Al-Rahmani. At KOC, one of Al-Arbeed's key responsibilities had been dealing with the international oil majors and the successful introduction of their Technical Service Agreements. Now he too joined KUFPEC, which lived even more on its relationships with its international partners. Musaad Al-Saeed later took over as Executive Assistant Managing Director and Chief Financial Officer, but was not on the Board.

Like Al-Rahmani, Al-Arbeed inherited a difficult job. He was appointed only four months after the December KPC 1998

The Studious, Speaking Man of Strategy

Ahmed Rashed Al-Arbeed

KUFPEC Chairman, May 1, 1999 to present



"It's hard not to have a firm respect for Ahmed Al-Arbeed," said a colleague, "and you'd better make sure you deliver, on time, with quality work. He expects no less of that from himself, and no less from others."

So goes the reputation of KUFPEC's most recent Chairman: that of a hard taskmaster, but fair, and demanding of performance. He is also known for being extremely well-read, a strategic thinker *par excellence*, and greatly in demand as an entertaining and incisive speaker at industry forums. He also firmly believes that one can only achieve things through others, and has introduced a new spirit of team-building into KUFPEC. "He's not a one-man show," said a Board member. "He wants people to have credit for their work, not have it passed up the line to someone else."

Educated at Pennsylvania State University with a BSc in Petroleum Engineering and Natural Gas, Al-Arbeed joined Kuwait Oil Company as a Petroleum Engineer, rising to become its first Manager Planning in 1991 in the immediate aftermath of Kuwait's Liberation.

"That was a crucial time for Kuwait," said a former KOC Chairman. "The oil industry was devastated. We had 700 well fires and had to

rebuild almost from the ground up. It was not only the time for the immediate crisis, but for planning for the future. Ahmed, with his forward thinking, was the man for the job."

Like his predecessor, Al-Arbeed remained in Kuwait throughout the Iraqi occupation, taking an active part in the effort by a core group of KOC executives to protect what they could of the nation's oil industry, and to maintain production for essential services.

"But Al-Arbeed had a far more dangerous time," recounts a colleague. "He was taken prisoner and transported to Iraq with many other Kuwaitis before being repatriated after the cessation of hostilities through the International Red Cross. With his typical modesty, it's something he talks about very little, but it was a very trying experience. I understand he was once under threat of execution. And he was lucky to return alive. Hundreds of those taken away in similar circumstances are still unaccounted for."

Still only thirty-six, Al-Arbeed was appointed to the KOC Board in 1992 and later Deputy Managing Director Planning and Financial Affairs. In that role, he led the successful re-introduction of international oil company (IOC) technology back into KOC through Technical Service and Joint Studies Agreements. He was appointed Chairman of KOC's Strategic Plan Steering Committee, with responsibility for the Company's first strategic plan. He later headed the KOC committee charged with formulating policy for IOC involvement in Kuwait's challenging northern fields through Operating Services Agreements. Known in some circles as 'Mr North Kuwait' for

his key role in this and all other KPC committees dealing with this highly-charged political issue matter, Al-Arbeed is widely-respected by all parties as a consensus builder and a technical man with the political touch.

Said Al-Arbeed: "You must remember that the oil industry is truly global, and that technology is the key to success. It has been advancing in leaps and bounds, and no company or country has a monopoly on it. We in Kuwait had been producing oil then for fifty years, but had been doing so on our own, without international oil company involvement, since 1975. Things had moved on, and we were – and are – in danger of being left behind."

Among his many memberships, Al-Arbeed includes the Kuwait Engineers Society, the US Society of Petroleum Engineers, and the Association of International Petroleum Negotiators.



Ahmed Al-Arbeed pictured top left with Tunisian Industry Minister Al-Munsif Bin Abdalla at the inauguration of the Tunisian pipeline, and above, receiving a traditional Indonesian greeting on Seram Island.

Board resolution reaffirming the 1995 position that KUFPEC was to be sold or privatised wholly or partially as soon as oil prices made this attractive for KPC. And prices would recover substantially by year-end. He had to convince KPC that KUFPEC could make a valued contribution to its coffers. Fortunately, Al-Arbeed had one advantage that had been unavailable to Al-Rahmani. That same KPC Board resolution that had lifted the ban on acquiring new exploration properties had allowed new exploration. True, it had limited KUFPEC's freedom of action by proscribing certain regional and risk conditions for

new acquisitions, but it was a start.

There were several reasons Ahmed Al-Arbeed was appointed Chairman, besides his technical ability and leadership skill. The main reason was reportedly to have an upstream man with a KOC background. It had to be someone who understood the exploration and production business and would be able to bring in the technology so crucial to success. One important role of KUFPEC where it has not yet made as significant contribution as it might have is technology transfer, and Al-Arbeed understands

(Continued on page 74)

Natuna Gas, from Indonesia to Singapore: As Big as Yacheng

South East Asian and Corporate Rivalry to Match Any Thriller, with a \$1.5 Billion Price Tag

During the early 1990s, Indonesia's Natuna Sea Block 'A' – the first property acquired by KUFPEC in its own right – continued to bear fruit with Anoa oil. But productivity was decreasing. Three development drilling programmes between 1994 and 1996 and gas injection in 1998 had slowed the decline, but Anoa oil was no longer the major source of KUFPEC revenue it once was.

The real Natuna Sea developments were in gas, not oil. In 1992, the Gaja Abu well had discovered gas and oil, prompting a seismic survey and reprocessing by then operator AMOSEAS. After Premier Oil bought out AMOSEAS's interest in 1996, another 3D survey was shot over Block 'A' and the neighbouring Kakap. This indicated potential for additional gas, in addition to the known reserves in the Anoa field.

"Actually," said Manager Southeast Asia Dan Kirisits, "everyone knew that the gas was there, but not to what extent, and finding a market was difficult. We had produced the oil from around the gas rims for many years, flaring off plenty of gas."

In the early 1990s, the big regional gas importers were Singapore and Thailand. Malaysia was the main exporter. Exxon had a massive North Natuna Sea field slated to be the next major Indonesian gas development, supplying Thailand. A number of smaller non-commercial gas fields were dotted around the Natuna Sea, including Block 'A'. These were expected to wait in line behind Exxon's. And there was gas in Sumatra.

Said then Commercial Manager Chris Honeywill: "The solution to marketing the gas lay in regional rivalries as much as anything. When Premier took over Block 'A', nearby Malaysia was the most obvious market but could not offer an economic price. But Singapore, with its usual testy relationship with Malaysia, wanted an alternative gas supplier. It was keen to develop its relationship with regional giant Indonesia, as a counterbalance to Malaysia. It also wanted more energy for its Jurong Industrial Island and was reviewing the overall structure of its energy industry, then dominated by Singapore Power. Fortunately, Indonesia was then questioning the priority given to the massive Exxon project because of its huge initial capital cost, and looking at alternative gas projects. Premier, most fortuitously for us, was very entrepreneurial. It found the Singapore market, but needed more gas to make the development economical."

The Block 'A' partners thus joined in 1997 with Gulf Canada's nearby Kakap and Conoco's Block 'B' to form the West Natuna Sea Gas Consortium. It would be a huge project, almost as big as Yacheng, with the three blocks providing 2.5 trillion cubic feet over twenty-two years, plateauing at 325 mmscf/d. Block 'A' would be 36.9% of the consortium, and KUFPEC had a third of that.

"The key buyer, Sembawang," explained Honeywill, "was a diversified conglomerate new to this type of business activity. The Singapore government had invited them to construct a power station and a gas distribution network, and Tuas Power, a subsidiary of Tamasek Holdings, to construct a second power station. It was established that a supply contract of 300 mmscf/d would be sufficient to support a development of the Natuna Blocks 'A' and 'B' and Kakap fields with a pipeline to Singapore. However, the two power stations were looking for something less than 250 mmscf/d.

"So, one of the first hurdles we faced in getting the project off the ground included finding gas markets to add up to more than 300 mmscf/d. To add to the challenges, Sembawang was going through a period of capital reconstruction and was relatively inexperienced in the gas market. There were additional complications arising from the introduction of a new gas importer into Singapore. Premier had first approached Singapore Power who were at the time the sole gas importers into Singapore, but had been unable to reach an agreement. Now it was necessary to ensure that the new gas importers were going to be able to work effectively alongside Singapore Power."

There were other problems, foremost among them Premier's weak balance sheet and consequent inability to fund its share. Then international law came into play with the construction of a pipeline

Exploration programmes had identified gas in the Natuna Sea concession, but it took time to piece together a multi-joint venture consortium to exploit it, and to find markets. (Photo: Premier Oil)



through two sovereign territories (Indonesia and Singapore), together with bringing the pipeline across one of the world's busiest shipping lanes.

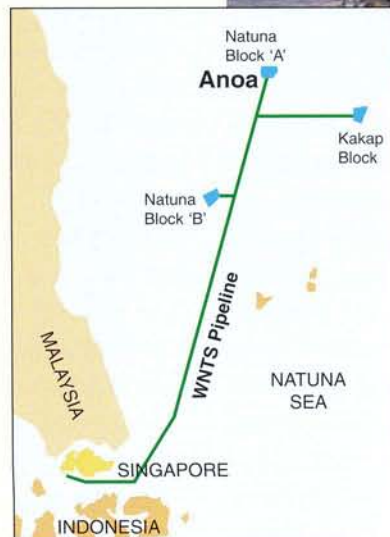
"Pertamina had introduced the Trans Java Pipeline Company as being a possible owner and operator of the pipeline," added Honeywill. "This company was controlled by Bimentara, one of Bambang Suharto's companies. However it was unclear what form its participation could take and key decisions were being held up pending resolution of this. Plus we had to contend with fierce external competition from Gulf Canada's Sumatra gas. The reconciliation of Conoco's commercial interests as the project manager and the largest oil company in the project on the one hand, and Premier's interests as the largest percentage holder in the project through its share in both the Anoa and Kakap joint ventures on the other, was not always an easy task."

"There were other complexities," said KUFPEC Lawyer, Gavin Daniel. "Normally, in a gas sale, the seller deals directly with the buyer or an aggregator. In this case, the gas was being supplied to Pertamina, the Indonesian state oil company, and they were selling it on to Singapore. Pertamina wanted only one party to deal with. So we had three Joint Ventures – Block 'A', Block 'B' and Kakap – who in turn had to form another Joint Venture to get the deal through. The arrangements were one of the most complex gas deals I have seen in a very long time."

In January 1999, the consortium agreed with Pertamina to supply Singapore's Sembawang via the West Natuna Sea Transportation System. This comprised a 28 inch trunkline, and 14, 16 and 22 inch laterals to the three blocks, totalling 640 km. By November 2000, the pipeline was ready. Early sales were made in January 2001, the first-ever gas exported by Indonesia through a pipeline. In Block 'A', a gas processing platform was installed adjacent to the existing Anoa wellhead platform and hooked up in April 2001. The capital cost of Block 'A' alone was slightly over half a billion US dollars, with a total project cost exceeding that of Yacheng.

Said Dan Kirisits: "Even as we were putting the deal together, we were making more discoveries. In October 1997, the Gaja Puteri-2 well found more gas, followed two months later by the Pelikan-1. More recently, in 2000, three additional Block 'A' gas fields were discovered – Iguana, Naga and Baru. These may prove sufficient to allow for a second gas sales agreement to Malaysia."

"Natuna gas," added Manager Legal Affairs Brit Mockridge, "is a great success now, but several times it could have faltered; on most



of those occasions, KUFPEC's involvement was key to it moving forward. The sale represented a truly historic agreement between Singapore and Malaysia."

The solutions to the project's challenges included some very good marketing, a lot of relationship building, and a good measure of luck. "The project could have tripped up on any of those points," added Honeywill. "Premier was at the time arranging a critical refinancing to cover its substantial developments in Thailand and Indonesia. KUFPEC

was able to support Premier's position within the Natuna pipeline project, which was also helpful to its refinancing negotiations, by making a formal commitment to stay with the project at least until first gas. KUFPEC also liaised with another substantial member of the project, to encourage and develop cooperation between Conoco and Premier."

"In fact," said Mockridge, "we brought a lot more to the table than that. Natuna is often compared with Yacheng, and there are similarities. But it goes beyond that. Our experience in China and in arbitration which involved gas quality and the operating requirements for combined cycle generators was very, very useful. When providing gas for power generation, quality specifications are extremely important. You cannot have 'wet gas' in turbines. And we had the unique experience in that to support operator Premier, and the broader joint venture. We might have been a small part of the overall consortium, but we were crucial to its success. That's the type of difference, the competitive advantage, that KUFPEC can contribute."

KUFPEC's experience with processing and selling gas from the Yacheng field was invaluable in development of the Natuna Sea assets. (Photo: Premier Oil)

Wells participated in, 1996-2001	1996	1997	1998	1999	2000	2001
Development wells	59	18	8	8	34	18
Appraisal wells	4	3	5	4	2	-
Exploration wells	8	2	7	8	19	22
Total	71	11	20	20	55	40
KUFPEC-operated wells, 1996-2001						
Development wells	1	-	-	2	2	3
Appraisal wells	-	-	2	-	1	-
Exploration wells	2	-	-	-	1	2
Total	3	-	2	2	4	5
Exploration expenditure, US\$'000	20,513	22,170	31,650	17,906	35,856	84,000

(Continued from page 71)

that, having worked closely with the IOCs in KOC. KPC also needed someone young and with the energy to grow KUFPEC, and someone with a clean sheet of paper. Al-Arbeed came to KUFPEC with no baggage, with no preconceived notions, and was able to take a cold, objective look at the Company.

Al-Arbeed and his team set to work. Within two months, KPC had been presented with, and approved, an interim strategy to achieve net production of 50,000 boe/d day by 2004. The theme was growth and expansion. That was the only way KUFPEC could survive.

Then, an extensive organisational review was undertaken. KUFPEC's structure had changed little since the 1980s. For fourteen years, it had had an Exploration Department, headed in 1999 by Dr Gerald Long, Engineering with Dan Kirisits at the helm, a Commercial Department, with one of the Company's longest-serving executives, Chris Honeywill as manager, and centralised Finance and Legal functions.

"The former organisation had its advantages," explained current Deputy Chairman and Chief Operations Officer Abdulla Baroun. "It was functionally driven with centralized specialists, allowing for economies of scale, effective use of limited technical resources and consistency of processes. It fostered pockets of undeniable technical excellence, and flexibility and speed in decision-making on critical issues when compared with larger companies. And we are, after all, a small exploration company.

"The functional model, however," continued Baroun, "also resulted in a lack of focus and teamwork, poor communication,

and a non-supportive corporate culture. We therefore restructured into an asset-based organisation, retaining the centralised Administration, Finance and Legal functions, but introducing departments for each of the three core areas: Middle East and Africa, Southeast Asia, which included Australia, and the Far East. These focus exclusively on their regions, whether acquisition of new interests, exploration, development or production. Several of these new departments were headed for the first time by Kuwaitis – Mohammed Al-Howqal for Middle East and Africa and Dr Abdulsamee Al-Bahbahani for the Far East. Dan Kirisits with his vast pool of experience headed up South East Asia. And, given the supreme importance of people in our business and the importance of developing Kuwaiti nationals, we established a separate Human Resources department."

"The new organisation," added Chairman Ahmed Al-Arbeed, "will facilitate dynamic growth through new ventures and asset acquisition. It retained the strengths of the old organisation whilst addressing its weaknesses. We kept the skills and experience of the good people we already had, but empowered them to make a better contribution. For example, the New Ventures Department under Dr Gerald Long looks for opportunities beyond countries where we are already working, and then hands them over to the Region Managers once acquired. We also added Corporate Planning, essential in an organisation such as ours, headed by Mrs Sara Akbar. With better-defined communication, responsibilities and authorities, the new organisation is well equipped to successfully pursue a growth strategy."

STRATEGY

With the new organisation in place, work started on a new strategy. The Company's Board passed this in March 2000, on the eve of KUFPEC's twentieth year. The strategy was later approved in March 2001, after extensive study by KPC, under new Oil Minister Dr Adel Al-Subeeh. It built on the earlier target of 50,000 bpd by 2004, but went further. The aim was now 100,000 boe/d by 2010, with a 410 million boe reserve base. Most importantly, KUFPEC was re-recognised as a strategic asset by KPC. The years of the troubled teenager were past. KUFPEC was about to grow up.

Setting an Example: Going Private

One little-discussed aspect of the 1995 and 1998 strategic direction for KUFPEC was the prospect of full or partial privatisation. Would the Kuwait oil sector really allow one of its locally-based companies to be sold in part to the private sector, and if in part, how would the needs of the private shareholders be reconciled to those of the state?

Said KPC CEO Nader Sultan when questioned on whether KUFPEC is a good candidate for privatisation: "KPC had not seriously considered privatisation, and it is unlikely to happen, but speaking personally, if any entity can be cut off the KPC body corporate, have a ring-fence put around it and sold, it's KUFPEC.

"More importantly," he continued, "the

strategy produced by KUFPEC is a very good story for the private sector to invest in, and may even lead to direct benefit for the private sector. Over the next one to two years, as KUFPEC is considering what tools in the market it needs to successfully implement its strategy, it may very well transpire that privatisation can help to do this."



“The 100,000 boe/d target was, at the time it was set, equivalent to 5% of Kuwait’s domestic production, which is about one-fortieth of the world’s,” said Chairman Ahmed Al-Arbeed. “In effect, we aimed to produce the equivalent of one in every 800 barrels consumed in the world. That may not sound much, but it is. And giving Kuwait 5% production beyond that allowed under OPEC is no small advantage. Beyond 2010, depending on achieving 100,000 boe/d, we will go further.”

“In the world upstream industry, we are generally in the same league as today’s Seagull, CMS and Snyder. Respectable, yes. A major player, no. By 2004, we want to be on par with Premier. In short, we will be a respected medium-sized player. That’s the only way we can be of real value to KPC.”

“Our mission,” continued Al-Arbeed, “is very clear. It is to increase the value of the Company to the state of Kuwait by profitably exploring for and producing hydrocarbons internationally. It’s as simple as that. To achieve that mission, we have four main strategic objectives. The first, of course, is production and reserves growth. The second is ‘the rule of 10’, that is to achieve 10% average profit growth per year, and a ten-year average of 10% return on average capital employed. This doesn’t mean that we’ll grow profit by 10% every year, but we will do so on average. We are a long-term, cyclical business, so must take the bad years with the good. Thirdly, we aim to create an organisation that is both effective and efficient. We need both elements. And finally, we will access technology and transfer knowledge relevant to our sister KPC subsidiaries, as we have always done.”

TWENTY YEARS

As KUFPEC marked twenty years since its founding, on April 1st, 2001, it was different in so many ways, yet similar in many others, to what its founding fathers might have expected. For a

company that had started out looking for oil, it now had a portfolio that was principally gas. The environmental revolution of the past twenty years had made a place for cleaner fuels, and KUFPEC had risen to the challenge. But it has a sensible balance between oil and gas, to guard against fluctuations in either market, and will continue to do so.

The changes in geopolitics since KUFPEC was founded are massive. With the demise of the USSR, the Third World no longer exists, but developing countries from Tunisia to Yemen in the Arab world, from Pakistan to Malaysia and Indonesia in the broader Islamic world, even Egypt, China and hopefully one day, Sudan, all point with appreciation to KUFPEC’s investments. “KUFPEC never existed to provide charity or aid to these nations,” said Commercial Manager Christopher Honeywill. “We always went in on a business basis. But they benefited from the investment in a way no aid could have helped. We are proud of our contribution.”

And KUFPEC is providing an acceptable return to its Shareholder. It is profitable. On sales of \$225 million in 2000, it had made profits of \$105 million. It had cash reserves of a third of a billion dollars and consolidated historical cost net assets of three-quarters of a billion. Said Chief Financial Office Musaad Al-Saeed: “If you factor in the value of our reserves in the ground, something that conventional accounting fails to do, we are much more than a billion-dollar company.”

Human Resources Manager Waleed Al-Awadhi added: “Another most important class of asset also does not appear on any balance sheet: KUFPEC’s 180 personnel, about 110 of them in Kuwait. Almost half of those in Kuwait are Kuwaiti nationals; most of those abroad are host country nationals.”

For a company that had been near the brink of extinction, KUFPEC hadn’t done so badly, against all odds.

KUFPEC headquarters staff with the Chairman, Ahmed Rashed Al-Arbeed, photographed on the occasion of the staff millennium celebration in 2000.

TOWARD 2010: A vision for growth



The Chairman (right) chats with colleagues during a break at a seminar.

TWENTY YEARS AGO, WHEN KUFPEC'S Founding Fathers first laid the groundwork for the Company, they could have had little inkling of how their child would turn out. They could not tell the future any more than we can today. Few foresaw the precipitous drop in the oil market in the 1980s or even the 1990s, or today's preference for gas over oil for power generation. They probably never imagined the technological revolution that has made upstream oil the world's greatest user of information technology, eclipsing even aerospace, and how this has brought ever more marginal reserves to economic viability. And certainly they never expected Iraq to invade Kuwait.

But they too had a vision and an agenda. They knew what they wanted to achieve, and why. They set objectives, put finance in place, hired the best staff they could, and implemented their strategies. And they got on with the job. So it is with today's custodians of KUFPEC. They too have a mission, vision and objectives, and are guided by a clear, concise, and thoroughly focused strategy plan. Their eye is firmly set on a horizon a decade away. They are working towards 2010.

MISSION, OBJECTIVES, STRATEGIES

"Our mission is well established," said Chief Financial Officer Musaad Al-Saeed, "but does bear repeating. We are to increase the value of the Company to the state by profitably exploring for and producing hydrocarbons internationally. And our key strategic objectives are production of 100,000 boe/d on a 410 million-boe reserves base; 10% average annual profit growth; and a ten-year average return of 10%. We will deliver total returns to our shareholder at least as good as those achievable from a

'growth company', and be a material contributor to the KPC Group by 2010. Everything we do in KUFPEC must contribute to those strategic objectives."

"Missions and strategies," noted KPC Chief Executive Officer Nader Sultan, "are all very well, if only to provide ambition and a direction, but we need a reality check. This is why we at KPC took a year to approve the KUFPEC strategy. We needed to test the assumptions, look at it from different angles. What we found was that the strategic objectives justifying our investment in KUFPEC were to diversify income sources for KPC, access the latest technology and management practices in the international upstream business, and expand Kuwait's upstream business internationally to ease the growth constraint imposed by OPEC quotas. The question is, can KUFPEC meet those objectives, or should it simply sell off the properties and give the cash back to KPC?"

Added KPC Managing Director for International Operations, Khaled Al-Haroon: "You must remember that KPC is a big business, and we need to spend our scarce corporate resources on investments that make a significant difference to our bottom line. Presently, KUFPEC is not large enough to be a material contributor to KPC, but there is a potential platform for building a business to such a scale. The challenge for KUFPEC is thus to grow to a meaningful size. To do this, we must ask whether it can develop the right resources, whether it can do so cost-effectively,



Chief Financial Officer Musaad Al-Saeed: "Our mission is well established"

Strategies To Success:

The Deputy Chairman's Nine Commandments

"To achieve any mission," said KUFPEC Deputy Chairman Abdulla Baroun, "one needs practical balances and workable strategies. We have nine, all complementary, all addressing our mission:

- First, we start with what we have and manage our existing assets to deliver strong returns.
- Second, we will expand only in our core areas of the Middle East, Africa, Asia and Australia. We are familiar with these and will use that to our advantage.
- Third, we will build strategic relationships with selected countries and companies to widen access not only to opportunities, but also technology and expertise.
- Fourth, in properties we acquire, we will seek working interests of between 30% to 50%, depending on whether we are operator. Less than 30% generally makes the monitoring cost too high for the potential return. Any more than 50% carries too much project risk. We need a balance.
- Fifth, we will expand through acquisitions only where we have competitive advantages that enable us to add value. Without that, we shouldn't be in the property.
- Sixth, operatorship of selected properties. We

seek this to improve our cost competitiveness and experience where this makes business sense. We have been operators as far afield as Tunisia, onshore and offshore Australia, and offshore Bahrain and Egypt. Valuable lessons were learned in all of these. We will continue this.

- Seventh, balance of risk. We will build a balanced portfolio with moderate to average risk, with some higher risk/ higher reward projects. That's the only way to make money. One has to invest to reap a reward and, of course, high risk must be matched by high potential returns.
- Eighth, we will maintain a portfolio balance between gas and oil. Gas, being clean and efficient is, without doubt, the preferred fuel for power generation and fleet transport. And demand is growing, whereas alternatives and conservation are all acting against oil. In fact, gas is an oil alternative, so we want to be in that market. Gas sales are also typically on long-term contracts. So a successful gas development locks us into a revenue stream, often for decades. However, gas projects are inherently capital intensive, especially when distant from markets, and take longer to



complete than oil fields. We will therefore concentrate on gas near markets.

- Ninth, we will manage our exposure to oil price risk by phasing projects so that production comes onstream evenly. This is just as likely to happen when prices are weak as when they are rising. Thus, we will stagger projects and enforce development timetables to smooth out the peaks and troughs.

"In fact," concluded Baroun, "we have already been implementing many of these strategies for a number of years, but one prime advantage of our new plan is that these are now formalised and clear. It is a sure strategy to success."

and therefore can it make enough of a financial contribution to be a worthwhile investment? The main driver for KUFPEC's very existence, technology transfer and job opportunities aside, is to allow KPC to have growth outside Kuwait in the most profitable segment of the oil industry, upstream."

"This," added Mr Sultan, "is why KUFPEC's strategy must emphasise growth in areas where it has long-term strategic competitive advantage. It must work on its strengths, especially strengths others may not possess, such as relationships with certain countries and partners and its Arab origins. And it must exploit synergies."

A STARTING POINT

"If the first part of our strategy is to start with what we have," said KUFPEC Manager Middle East and Africa Mohammed Al-Howqal, "we must first look at our existing portfolio, how that fits into our external environment, and how to capitalise on that.

"A typical medium-sized upstream company," continued Al-Howqal, "explores in six to eight countries and produces from three to four. KUFPEC, which is smaller than most of these, will

soon have production in seven countries. Looking at our current portfolio, we have thirteen projects in nine countries. There is frontier exploration, with nothing found yet, in Sudan and China's Ledong. Then we have exploration in Tunisia; development with exploration upside in Egypt and Indonesia's Seram; production with exploration upside in Australia's Harriet, China's Yacheng, Indonesia's Natuna Sea, and Yemen's East Shabwa; and finally, production with little exploration upside in Pakistan's Kadanwari, Tunisia's Sidi El Kilani and Yemen's Jannah Block.

"In fact," added Deputy Manager Middle East and Africa, Dr Mike McMurtry, "the moratorium on acquiring new exploration properties has left us 'production heavy/exploration light', so there is a great deal of rebalancing and catching up to be done. This is happening as new ventures are acquired. Also, we need to maintain focus and not work in too many countries.

"If you analyse that portfolio, although it has a reasonable balance between gas and oil, it has limited growth potential around most of the current producing assets. That potential is largely tie-ins of small satellite discoveries. Reserves that have been identified are either under development or already in pro-

The Planner's Perspective

The Immutable External Forces and KUFPEC's Place Assessed

"No business, KUFPEC included, exists in a vacuum," explained KUFPEC Manager Planning, Mrs Sara Akbar.

"This is why, as part of its strategy review, KUFPEC looked at the external environment we have to deal with in the future, then its existing portfolio, and then at the various options for meeting the objectives. No one has a crystal ball, but together with KPC, we identified the likely trends in its external environment over the next one and a half decades.

"Foremost," continued Mrs Akbar, "was the supply, demand and price. Oil price volatility will persist in the medium term and growth in oil demand may be low. However, growth in gas is likely to be higher, which fits well with KUFPEC's gas-rich portfolio.

"Five key supply/demand trends are evident worldwide. Firstly, there is significant potential for boosting production from existing fields through improved recovery. There is also great potential for large deep water discoveries, a province yet to be exploited seriously. Then there is the technological innovation and more effective cost management that will continue to bring previously marginal resources into production. Thirdly, Asian economic recovery and growth in other parts of the world will increase energy demand, partly offset by greater efficiency. Growing environmental concerns in many countries where this was previously not on the public agenda may have a significant effect on energy demand and, to KUFPEC's benefit, create a preference for gas. Fourthly, for oil, better quality crudes will continue to attract significant premiums, suggesting that investment in upstream crude treatment facilities may provide a good return, as we have on Seram. And finally, gas pricing will vary in response to local market

conditions. In developed markets, they will come under pressure from deregulation and consequent competition, but this is likely to be offset by higher demand growth.

"Then there is the area of licence terms, fiscal terms, or petroleum agreement terms, as they are variously known. These concern KUFPEC more than they do any other KPC subsidiary. Some are getting more sophisticated, for example with abandonment and the environment, but fiscal terms have eased as governments attempt to stimulate exploration or other strategic goals.

"Finally, we have already witnessed a great deal of consolidation in the industry and the emergence of 'super-majors' such as BP-Amoco-ARCO, Exxon-Mobil, TotalFinaElf, and Chevron-Texaco. This will continue with the demands of the increased scale and cost of future exploration and development, particularly in deep water. These super-majors will take larger working interests, and thus be more powerful partners, because they will be large enough to diversify their risks within their own portfolios. On the other hand, they may divest non-strategic assets such as mature or declining fields, or exploration in politically difficult areas, leaving these to the next tier down in the industry, including KUFPEC. Thus, the shape of the industry in the next decade will be a few super-majors focusing on large projects that no one else can handle; small to medium-sized companies who seek moderate-sized projects and will make money because they lack the overheads of the super-majors; and, at the bottom of the food chain, 'lean and mean' operators who extract value on thin margins from the low cost operation of marginal or declining fields.

"In KUFPEC," concluded Mrs Akbar, "we see our place in the middle."

duction. Harriet is a prime example of this. The portfolio is also largely medium to low risk, which means medium to low return. Being underweight in exploration acreage means that it has little upside potential.

"Furthermore," concluded McMurtry, "although we have activities in more countries than many companies larger than us, most of the value generated currently – about 80% of net present value – is from three of those: China, Indonesia and Yemen. But this represents as much of an opportunity as it does a challenge. The broad spread of countries in which KUFPEC is represented is a potential platform for expansion."

OPTIONS

"So," said Deputy Manager Southeast Asia, Peter Fellows, "what options did we have for building on our current situation to develop the Company into a strong medium-sized player?"

"We looked at three broad strategic approaches and modelled all three under assumptions such as a constant conservative real oil price, with gas maintaining its price relative to oil, and realistic acquisition costs for production purchases. Then we worked in factors for inflation, discount, cost of capital, rate of return, tax and premiums.

"The first broad option was production purchase, directed primarily at acquisitions of existing developed or undeveloped resources, as we did with Harriet and Amal. The second was exploration driven, focusing primarily on grass roots exploration, as we had done in most of our other properties over the years. The production purchase options would have some exploration, but be biased towards acquiring proven reserves, and vice versa for the exploration driven option. Neither would be exclusive.

"Then the third option was a balance between the two, with a more equal mix. And that's what we went for. Companies that pursue this approach are typically more successful than exploration driven companies; they have a better understanding of the available acreage so, on average, are more likely to pitch their



Options Considered, and Dismissed: A Bias for Balance

“When considering our options for expansion,” said Manager Middle East and Africa, Mohammed Al-Howqal, “we considered three options: production purchase, exploration acquisition, and a balance between the two.

“We soon dismissed the solely production purchase option. Many of the opportunities available are mature or declining fields where only a ‘lean and mean’ operator can add value. That’s not for us. We also have to satisfy technology transfer objectives as well as commercial ones, and that has a cost. Furthermore, such a strategy is inconsistent with the image Kuwait wishes to portray internationally. Production purchase often requires operating at minimum acceptable

standards to achieve low costs and may involve accepting higher risks on health, safety and the environment. There may indeed be opportunities to buy producing assets with exploration upside at reasonable prices, but there is unlikely to be enough of them available in the market for KUFPEC to be able to achieve its growth targets.

“The exploration driven strategy was also dismissed. We had seen when cost pressures intensified in the 1980s with lower prices – and there is no guarantee that this will not recur – portfolio reviews by international oil companies showed that such an approach yielded discoveries that were only a small proportion of the risked expectation. Furthermore, this approach would mean less revenues from



ongoing operations, and thus a greater financing burden. KPC wasn’t going to buy that.

“So, at the end of the day, the vote was for balance, a bit of each.”

bids at appropriate levels. They also tend to have lower after-tax exploration, drilling and development costs from economies of scale, or tax benefits for offsetting exploration costs against production tax liabilities. In fact, one of the reasons we bought into producing reserves in Harriet was because it allowed us to realise the income tax benefit from earlier exploration losses.”

IMPLEMENTATION, NEW HORIZONS

KUFPEC’s strategic approach is thus to make long-term commitments to areas with a relatively attractive balance between prospectivity and fiscal terms. This means more than just applying the exploration driven strategy to a smaller number of countries. Synergies will be captured by developing a balanced portfolio to include developing and producing assets – some of which would be operated – and an exploration portfolio complementary to the producing interests, with a mix of low risk/ low return and higher risk/higher return business.

“KUFPEC already has the nucleus of a balanced portfolio in some countries in which it has interests,” said Manager New Ventures, Dr Gerald Long. “China, Australia, Tunisia and Indonesia are all examples. We will build on this. In Yemen and Pakistan, where we have existing production but little exploration upside, we will expand provided this is economically justified. In focus countries not represented in the existing portfolio, we will seek opportunities through production purchase and complementary acquisition.”

“There is another major potential source of expansion,” said Deputy Manager New Ventures Guy Jobidon. “We may acquire small exploration and production companies on-market or off-market. This is not such an alien idea. KPC built much of its foreign downstream capacity in this way, and we ourselves ac-

quired IEDC in 1985. Given the scale of expansion contemplated, this may be the most effective means of making quantum changes in the scale of KUFPEC’s business. It also provides potential for acquiring skilled personnel and other assets, such as established offices and contacts in focus countries.”

“With such a significant expansion in the size and scope of KUFPEC,” explained Manager Southeast Asia, Dan Kirisits, “we are developing our business on several fronts, concurrently. The first horizon is to maintain the focus on our existing business so as to continuously improve returns. Fairly obvious. The second horizon is to use that existing business and the capabilities associated with it as a platform for building new business opportunities. Finally, our third horizon is to seek new business within the scope of our vision. And that vision, which we can’t repeat often enough, is to become a material contributor to the income of Kuwait with – in the foreseeable future – net production of 100,000 boe/d, and a rate of return greater than that offered by other KPC investment opportunities.”

“For each of these three horizons,” said Manager Corporate Planning Sara Akbar, “the first priority is to do the necessary business development work to enhance the opportunities inventory, and mature and rank those opportunities to the point where the Board can decide on them. Since maybe only one in ten of these will come to fruition, the emphasis is therefore on generating a large inventory of low cost options. We are presently developing the capabilities to enable us to evaluate a large number of opportunities and to implement those selected. And we are establishing a portfolio management function to chart a course to the third horizon, mentioned by Dan, with a mandate to seek opportunities through proactive contact with international oil companies and government bodies.”

Above:
Mohammed Al-Howqal, Manager Middle East and Africa, and Deputy Manager Middle East and Africa Dr Mike McMurtry.



Guy Jobidon,
Deputy Manager of New Ventures.

Opposite page:
Dan Kirisits,
Manager Southeast Asia.

Finance Manager
Alan Jones and
Deputy Manager
Finance Adnan
Ashkanani.



"In essence," said Deputy Manager Australia Abdulnasser Al-Fulaij, "the balanced portfolio model assumes ten production purchases and eighteen successful exploration opportunities over nine years. Significantly, it is robust to lower oil prices, a situation we may very well be faced with again. It is forecasted to return better than its cost of capital down to a break-even oil price of about \$10 per barrel.

"The alternatives had the potential to add value, but did not fit as well. Under the assumptions used in our models, the production purchase strategy, for instance, would have needed about thirty-two production purchases and eight successful exploration over eleven years to achieve the growth required. The exploration driven approach would have required eight production purchases and twenty-eight successful explorations over ten years. Both represent a very large number of interests to monitor. That's risky when you consider that it can cost about the same to monitor a small interest as it does a large one.

"The balanced option, with less than a total of thirty interests, enables us to be more selective in the production purchases and exploration opportunities we pursue. For the financially-minded — and this is what it all comes down to — it yields a higher net present value and internal rate of return, with more efficient use

"Any strategy, of course, requires finance," noted KUFPEC Chief Financial Officer Musaad Al-Saeed. "We have a two-phase plan, each phase covering five years for the ten-year strategy.

"We believe we should be able to finance the first phase of the planned expansion, up to 2005, using internally generated funds and existing cash holdings for modest production purchases and exploration, unless our business development people identify an attractive opportunity for a major corporate or asset acquisition. "The second phase," continued Al-Saeed, "from 2006 to 2010, would involve a peak funding requirement of \$339 million in 2007. This could be funded internally or externally while remaining well below a 1:1 debt to equity ratio, consistent with the average of our peers. The growth in cash flow would be sufficient to clear the debt by 2011, even with us declaring dividends of 80%, as generally required by our Articles of Association. The strategy should deliver around \$1.78 billion in dividends to KPC over the period 2008 to 2015, whilst doubling the Shareholder's equity in that time.

Dividend policy is an important part of the strategy. Explained Controller Treasury Tanweer Khalafay: "Our Articles, like those of most other KPC subsidiaries, generally require us to pay 80% of our profits to KPC (the other 20% goes to mandatory reserves) unless we have accumulated losses to recoup. However, since our own cash funds would be committed to projects, this would involve borrowing to pay dividends to KPC. This makes no sense and is merely an extra cost to the KPC Group as a whole. We will be paying money to KPC which will not be available for reinvestment, and we aim to reinvest that for a greater return than KPC

FINANCE

successfully implemented."

Indonesia



Indonesia



Australia



Kuwait



Kuwait

Expand or Die: A Planner's View

"KUFPEC is not currently large enough to be a material contributor to KPC's portfolio," said KUFPEC's Corporate Planning Specialist Khaled Al-Qaoud, "but there is a potential platform for building a business to such a scale.

"If KUFPEC is not permitted to grow, then it will wither as new development activities cease,

thereby diminishing its potential value, even in a sell-off. If we were to only complete existing projects and not reinvest, our production would peak at about 50,000 boe/d in 2004 or 2005. Our net present value of future cash flows would be barely 17.5% above the KD200 million invested by KPC. And about half of that KD200 has been

invested for twenty years. Our shareholder would be perfectly justified in saying to us that they would have been better off putting the money in a low yield savings account.

"So, KUFPEC has one real option, grow, or go. It's as simple as that. The next question: 'How?' And that's the real challenge."

can obtain elsewhere. We therefore believe that we should not pay dividends to KPC during the Phase 1 period, and that we should review the situation in 2005 to determine whether the Company's business opportunities and funding requirements justify a further deferral to 2008.

"And," continued Khalfay, "we are presently performing the background work with KPC to agree this year the basis upon which KUFPEC would seek external financing and to develop relationships with lending institutions. Although KUFPEC is likely to take some time to identify and develop acquisition opportunities to a point where it would need to make a decision, the funding issue needs to be resolved well in advance of this. If external funding is needed, there is a considerable lead time involved in negotiating such a facility with banks, so we have to act now, before we have even decided on acquisitions."

"At present," said Deputy Manager Finance Adnan Ashkanani, "we are setting up the infrastructure necessary to obtain and manage the external loans required to achieve our growth targets. This entails a centralised Treasury function to plan and execute all funding requirements, being organisationally capable of evaluating new projects and ranking them for investment, determining annually the internal hurdle rates of return for selecting projects, and evaluating the financial performance of all existing projects from inception to completion. The evaluation process and criteria to be applied are being clearly defined. Of course, we already have much of this in place, but need to fill in the gaps."

"And then there's the tax," added Finance Manager Alan Jones. "KUFPEC operates in a range of host countries and expansion of the business is likely to involve it in others. Taxation systems vary significantly between countries and even within countries. In our highly competitive business, it can be a significant source of competitive advantage or disadvantage to companies such as ours. We will add value to our assets by ongoing evaluation of the tax efficiency of ownership structures and mechanisms for repatriating profits. In fact, KUFPEC's operations have already been the driving force behind double taxation treaties concluded between Kuwait and some other countries. We will also optimise tax-effective project financing, for instance, borrowing where we can obtain the greatest tax deduction on the interest, where host country fiscal or contractual terms permit value to be created by this means."

OPERATIONAL MATTERS, OPERATORSHIP

KUFPEC's current focus in the Middle East, Africa, Asia and Australia will remain appropriate. These regions contain a large proportion of the world's oil reserves and include several countries where KUFPEC's competitive advantages may be exploitable. With the quality of KUFPEC's relationships, it provides cross-training to host countries, such as seconding Yemenis and Tunisians to its operations, and sends its own staff for training and experience with international majors, such as TotalFinaElf.

With KUFPEC a relatively small player in countries where it



The Nine Dimensions: The HR Man's View

"We have nine dimensions through which we are building desired behaviour in our people," explained KUFPEC Human Resources Co-ordinator Brian Beavis.

"The first two are empowerment and accountability, two sides to the same coin. We are aligning employees' personal goals with corporate goals by delegating authority, encouraging initiative, creating clear responsibility for achieving outcomes, and linking rewards accordingly. The new organisation structure and new HR policies address this. It minimises layers of management, so things can get done through empowered employees. The management team is small to simplify decision-making and to involve staff where possible without burdening systems. It also encourages creativity, including questioning procedures that impede performance. Managers coach and mentor staff to accept greater responsibility at all levels.

"Thirdly, the decision-making style must be inclusive and efficient. No waffling, and the decision is to be communicated clearly to those it affects.

"Fourthly, open communication is vital. We need free flow of information and knowledge at all levels.

"The fifth dimension, teamwork, is so obvious, but is often paid only lip service. This means a co-operative effort within and between all groups and all locations.

"Our sixth dimension is a clear business focus on delivering the goals outlined in the Company's strategy. Every person and every function must strive toward the goals. Next we have perhaps my favourite, people

orientation. This means treating all employees, from the man who does the photocopies to the Chairman, of whatever skill or nationality, as a valuable resource.

"Our penultimate dimension is creation of an international working environment. To achieve our objectives, it is insufficient for KUFPEC to simply acquire more assets abroad. We also need a truly international operating culture. It must be commercially driven, maintaining strong relationships with other companies and governments, having internationally-g geared policies and procedures, and treating staff as other international petroleum companies treat theirs. We will become more 'international' in style, while respecting Kuwaiti laws and culture, and KPC's regulations. Concrete steps to foster this include promoting 'international' behaviours through appropriate business processes, training, reinforcement, and compensation. We will encourage employees, whether Kuwaitis, host country nationals, or expatriates, to grasp the career opportunities of secondment and rotation that come with an international culture.

"And finally, there is training and career development. KUFPEC will ensure that all of its employees, without exception, have the opportunity to participate in training and career development not only to acquire or maintain skills and knowledge necessary to discharge their current responsibilities, but also to prepare them to accept the challenges of new assignments."



has existing business, some of these would be an initial base for developing new business. Depending on opportunities available, KUFPEC will either invest further, or withdraw. Additional countries with potential have been identified, including Libya, Algeria, Oman and Iran in the Middle East, and Malaysia, Thailand and Myanmar in the Far East. And, from time to time, it will rebalance its portfolio to retain a focus on a limited number of countries and respond to changing prospectivity, fiscal terms, and politics.

"It is important to have an efficient operating capability, such as we have here in Indonesia," said David Lamb, President of KUFPEC Indonesia. "Any aspirant to being a significant upstream player needs that. Operatorship enables one to build and maintain a greater breadth and depth of technical and organisational capabilities and to talk more intelligently to operators of our other properties. We can understand their views, and, if necessary, know when they are spinning us a tale.

"In our own operated properties, of course, there are benefits. Operatorship confers influence over the direction and optimisation of the venture, and greater assurance that the investment is both controlled and protected. It can also lead to reduced unit overheads since non-operators usually incur substantial additional costs in monitoring their investments. And with the greater control that it affords, the operator has more opportunity to maximise profitability through improved operational efficiency."

"We are also working towards strategic relationships with selected companies," added David Osborne, President of KUFPEC Australia. "As a small player, we need this to assist growth. Benefits accruing from this might include preferential access to knowledge or technology transfer, or development and operating capabilities. For example, some of our partners have deepwater technology, or specialist staff we can utilise, as KUFPEC has done with Santa Fe staff over the years. Here in Australia, our friends on Harriet, Apache, are renowned as a low cost, efficient operator, with high standards. We can learn from that. Then there are opportunities where we can pick up divestments from our part-



Tunisia



Yemen

Laying Pipe

KUFPEC is not generally known as a pipeline company, but joint ventures in which it participates operate in excess of a thousand miles of oil and gas pipelines, mostly complex undersea lines, connecting in turn to many thousands of miles of pipe to bring sales to market.

The longest single pipeline is, of course,

Yacheng to Hong Kong at 770km, followed by the West Natuna Transportation System from the Natuna Sea to Singapore. KUFPEC's very first pipeline was the 100km subsea Harriet in 1992. All three of these carry gas. The longest land-line is in Tunisia, 123 km from Sidi El Kilani to La Skhirra.

Pipelines, of course, can carry third party product as well as KUFPEC's. They are thus a useful marginal source of tariff revenue and help return investments quicker. They can also be much safer and more environmentally friendly than alternative transport, such as road or ship. Keep on piping!

ners should their circumstances change. We did this once for Egypt, in Ras Kanayes, and may do it in Sudan”

“Of course,” said Manager Legal Affairs Brit Mockridge, “the key to growing through acquisition is ensuring that purchases add value rather than destroy it. In other words, how to avoid paying too much? Although we have a good record of adding value from past acquisitions, competitive bidding often results in high prices. Successful acquisitions are more likely if the buyer has a privileged position *vis a vis* the target asset. Such advantages can come from a better understanding of the true potential gained through existing operations in the region, studies or other experience, or through cost and finance advantages with rationalisation, or tax shelters where the buyer can access value that others cannot.

“Realistically, there are few situations where KUFPEC would be advantaged in bidding against entrenched parties. As such, other avenues we could pursue are off-market opportunities or investing at the bottom of the cycle. Strategic relationships with particular companies, for example as a result of IOC involvement in North Kuwait, might create opportunities for purchases of assets they may divest.”

THE PEOPLE, CULTURE FACTOR

“One crucial factor in KUFPEC is, without doubt, its people and how they contribute to achieving the objectives,” said Human Resources Manager Waleed Al-Awadhi. “Our 1999 reorganisation

is already showing results, but real success in achieving our mission depends on radical improvement in mental modes and behaviours and on clearly defining roles, objectives, expectations and processes. We must establish a set of desired behaviours and core values and ensure that management and staff actions are consistent with them. We already have a fine team, well led, but we need to allow them to be the very best they can be.

“I cannot stress enough that this applies to all employees regardless of nationality. There is a long-standing perception in the Kuwait oil sector, largely justified, that development is almost exclusively for Kuwaitis. The expatriates come with a certain set of skills, the line goes, and we use those up. We don't subscribe to that thinking. If an employee is worth hiring, we have a responsibility to develop him or her for our mutual benefit. Many of our senior expatriate employees are more skilled and experienced than our Kuwaiti personnel. That's why we have them, and so that they can help develop their Kuwaiti colleagues. There is a view that by training Kuwaitis and not training expatriates, we will close the gap between them. That is short-sighted. You don't win a race fairly by hobbling your running mate. If our expatriates come here skilled, we want them to become more skilled here and move ahead, so that they may in turn contribute even more to the development of our Kuwaitis. We don't necessarily want the gap closed. In the end, we want the Kuwaitis to be as much as they can be, as far ahead as possible, and we can't do that by fixing the race.”

Added Co-ordinator for Training and Development, Abdul



Manager Legal Affairs Brit Mockridge

Opposite page: Waleed Al-Awadhi (left), Human Resources Manager; Brian Beavis, Human Resources Co-ordinator; Abdul Rahman Al-Bedaiwi, Training and Career Development Co-ordinator.



Tunisia

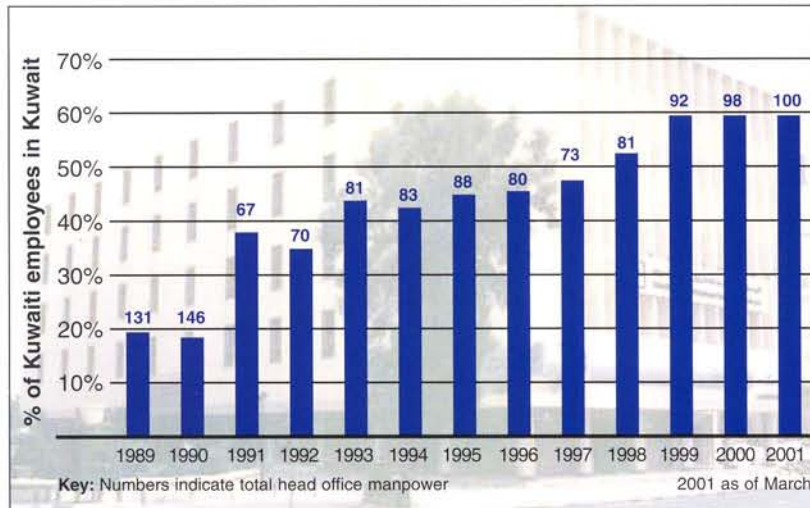


Indonesia



Yemen

Kuwaitisation – Kuwait Head Office, 1989-2001



Rahman Al-Bedaiwi: “Other expatriates are hired to do lower-skilled jobs because it is very hard – even impossible – to recruit Kuwaitis in these areas. There has been a sense that these people don’t require training. Again, not so. They too have value to contribute. Often, without them, the Company would grind to a halt. So there is a moral obligation on us to develop them, so they can realise their full potential. Having said that, though, emphasis will be given to developing Kuwaiti staff in the Head Office, and nationals of the host country in regional offices. Within this, training will be linked to performance and potential, and will be based on need and merit.”

“In addition,” added Waleed Al-Awadhi, “the nine behavioural dimensions described by my colleague, Brian Beavis (*sidebar, page 82*), are underpinned by a set of shared values that reflect our responsibility to operate to the highest professional and ethical standards with all stakeholders, whether the state itself, KPC, employees, employees, host governments, or co-venturers. Perhaps the first value we require is integrity. This means more than mere honesty. It encompasses fairness, trust

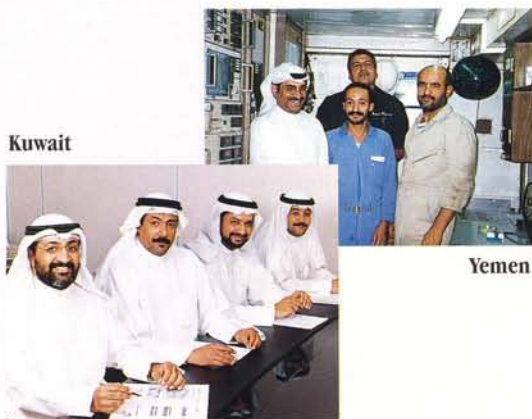
and respect, the cornerstones of sustaining long term relationships. Then there is quality, doing things right the first time to achieve superior results and progress. This must be combined with a sense of urgency, to do what really matters, and do it now. We also have teamwork. Obviously teams are always more powerful than individuals working alone.

“Two of the less obvious values we expect of all employees,” said Deputy Chairman and Chief Operations Officer Abdulla Baroun, “are strategic thinking, and entrepreneurship. These are not just the province of senior management. They are required of all employees, and involve finding ways to contribute to long term company goals as well as initiative, innovation, boldness and accountability. Finally, we have pride – a real, deep pride in the professionalism of our Company and each employee’s role in that, at whatever level.”

NATIONALISATION

Another key element of KUFPEC’s strategy is nationalisation, both in its Head Office functions, and in operations abroad. Already, a substantial proportion of people in Head Office are Kuwaitis, and an overwhelming majority of regional office staff are host country nationals, some at the top level. In fact, KUFPEC is often obligated by its agreements with host governments to hire, train, develop and promote their nationals.

“In our foreign operations, we already have a high degree of nationalisation,” said Kuwait Indonesia President David Lamb, “except perhaps at the senior technical levels where the skills we seek are only available from a small Arab or Western expatriate pool. Nevertheless, we hope one day to have an Indonesian or a Tunisian heading our respective offices in those countries. We have a Kuwaiti heading up Tunisia today. But at Head Office, we need to balance Kuwaitisation with technology transfer. The best way to transfer technology is to work alongside people with that in their heads, to learn from them. That means a certain percentage of expatriates, from West and East.”



IMAGE

“Finally,” said Manager Far East Dr Abdulsamee Al-Bahbahani, “there is image. And in today’s world, it is often seen as everything. Whatever the rights and wrongs in that, it is undeniably the first thing people see.

“The importance of KUFPEC’s image goes beyond the Company itself. In many countries, KUFPEC is the only KPC or Kuwaiti presence, so people see KPC through us and Kuwait through that. We have a national responsibility to get it right. Despite our small size relative to the KPC Group as a whole, we play an integral and high level role in developing and expanding KPC’s presence in the worldwide petroleum industry, particularly through joint ventures with international oil companies and foreign governments.

“We already have a proactive community relations programme, with contributions to road building, schools, religious institutions, clinics and so on, but we need to let the recipients and their governments know what we are doing so that we may gain the just recognition for our work. We can’t hide our light under a bushel, we have to advertise our good works. That’s one reason we changed the name of the operating company in Tunisia, so that Kuwait was more apparent.

“But to successfully implement our strategy, we must further expand our corporate image both inside and outside Kuwait. We must target our efforts so that other international oil companies and governments are aware of our growth aspirations, and that we are actively seeking new business opportunities. They must be led to viewing us as an efficient and effective company and understand the particular strengths that would make us a preferred participant and/or operator in certain kinds of projects. There is also an important human resources element to this. With a good image, we will be able to attract high quality staff from within the Kuwait market, from within the countries in which we operate, and from the international market. Image, at the end of the day, sells, and that’s why you are reading this book.”



**Manager Far East
Dr Abdulsamee
Al-Bahbahani**

FORWARD, MARCH

“KUFPEC,” said retired Commercial Manager Christopher Honeywill, “is, without doubt, a success. For a Kuwaiti company to be set up in competition with the international oil industry, to survive for twenty years, and at the end of that time to show a profitable, cash rich balance sheet, all this without government subsidy, this is truly a Kuwaiti success story.”

“If I might just have a quick word just before the end,” said Founding Chairman Abdul Razzak Mulla Hussein. “I often have younger people ask me what I think of KUFPEC now, and its future. I am most gratified that twenty years after its formation, it is now firmly marching forward towards 2010, even beyond. Only God knows what we will encounter on that road, but with His blessing and our strategy firmly in place, I’m sure its leaders of today will get there. KUFPEC’s Founding Fathers are very proud of their child.”

Said Chairman Ahmed Al-Arbeed: “We have had a fascinating and at times very difficult first twenty years. But the fights fought and the lessons learned by those who have gone before us – some of whom are still with us – have made us stronger, more mature, more determined, even more focused. Those first twenty years have given us a foundation and with that, a fine team of people and an asset base from which we can build. One hundred thousand barrels of oil equivalent per day, with the rule of ten, by 2010, here we come.”

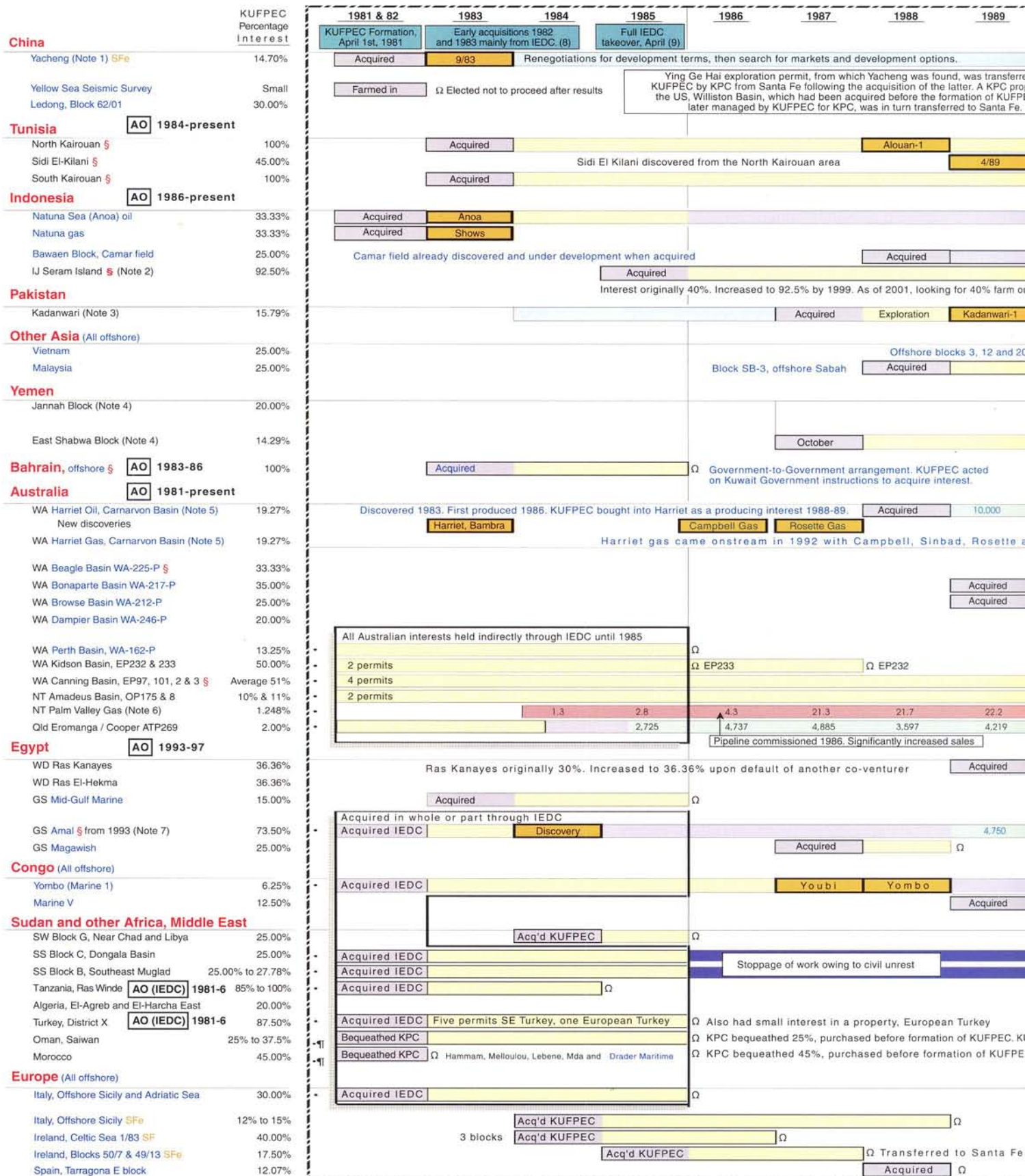


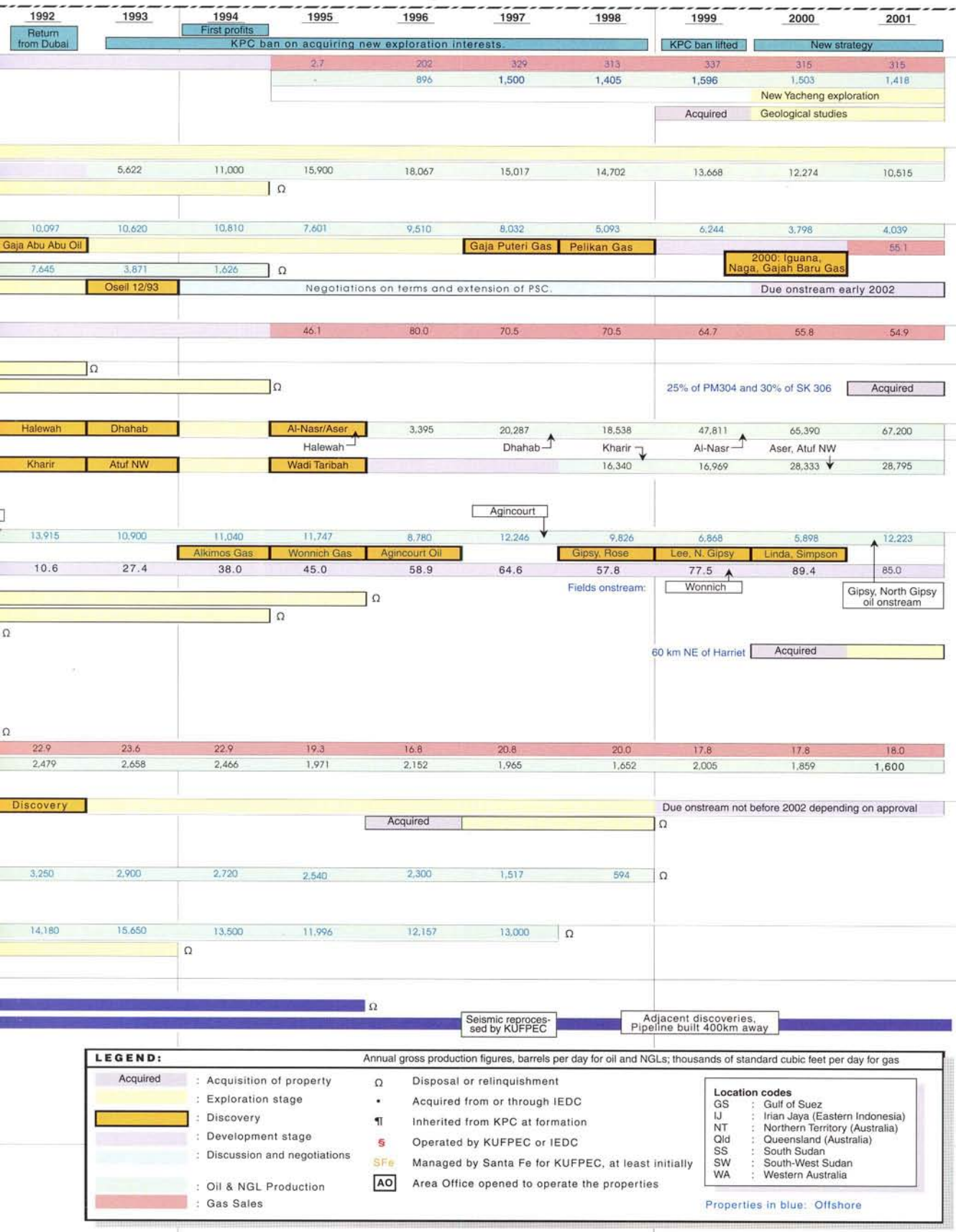
Kuwait

Indonesia

Indonesia

Appendix I: Property Timelines and Gross Production





- Notes:**
- (1) Yacheng discovered from Ying Ge Hai Exploration Permit, which was relinquished 50% in 1986, remainder in early 1990s.
 - (2) Seram Island acquisition by KUFPEC, based on earlier work by IEDC.
 - (3) Kadanwari discovered from Tajjal Exploration Permit which was relinquished 1995.
 - (4) Jannah Exploration Permit relinquished 1995; East Shabwa 1996. Jannah field a gas/condensate discovery. Other Yemen fields all oil.
 - (5) WA-192-P, in Harriet area, acquired 1988-89. 19,277% in two steps.
 - (6) Palm Valley Gas is in Amadeus Basin.
 - (7) Amal originally acquired with indirect interest through IEDC, then direct 12.5% purchased from IEDC. Later increased to 73.5% by the time of disposal in 1998.
 - (8) Many early acquisitions (before 1985) were made by acquiring half of IEDC's interests in its non-Australian properties.
 - (9) First operational revenues arose on the restatement of the 1985 financial statements in 1986 for consolidation (instead of equity accounting, as had been done up to 1985) of IEDC with KUFPEC.

Appendix II: Twenty Year Financial and Operational Summary

Chairman : Ahmed Rashed Al-Arbeed
 Period of office : May 1st, 1999 to present

Mahmoud Abdulla Al-Rahmani
 January 1st, 1995 to April 30th, 1999

Thousands of US Dollars (except prices and volumes)

CONSOLIDATED STATEMENT OF PROFIT AND LOSS

	Twenty years	2000	1999	1998	1997	1996
Revenues						
Operations (From 1998, Sales. See Note 1)	1,383,803	223,479	176,718	145,127	178,120	166,150
Interest	274,955	20,175	14,444	13,787	8,094	2,236
Amount recoverable, and Gain on sale (Notes 2 and 3)	30,109	-	-	11,792	-	-
Foreign currency gain (loss)	9,284	(1,338)	(1,579)	1,085	(1,830)	(283)
Other	5,331	561	799	648	646	403
Total revenues	1,703,483	242,877	190,382	172,438	185,030	168,506
Expenses						
Operations (From 1998, Cost of Sales. See Note 1)	327,295	36,630	38,171	36,584	33,441	45,615
Exploration	543,164	34,923	14,078	11,591	16,151	15,664
General and administrative	160,922	11,407	10,454	8,107	8,958	6,755
Provision on equity investments (IEDC, to 1985) and restoration (from 1988)	42,958	778	277	663	1,038	1,575
Depreciation, depletion and amortization ¶]	514,359	39,433	36,695	53,800	57,657	39,679
Total expenses	1,588,697	123,171	99,675	110,745	117,245	109,288
Net profit (loss) before taxation and extraordinary items	114,786	119,706	90,707	61,694	67,785	59,218
Taxation and Extraordinary item (1990 and 1994 only. See Note 4)	(76,839)	(15,255)	(18,855)	(10,082)	(10,367)	(11,778)
Net profit (loss)	37,947	104,451	71,852	51,612	57,418	47,440

CONSOLIDATED NET CASH FLOW FROM OPERATING ACTIVITIES

	811,723	168,102	104,336	104,308	146,324	84,009
Exploration expenditure	777,569	35,856	17,906	31,650	22,170	20,513
Development expenditure	771,276	106,776	42,597	52,360	31,108	39,678

SELECTED CONSOLIDATED BALANCE SHEET, DECEMBER 31

Net current assets and due from joint venture participants (Note 2)		334,106	292,670	223,323	186,697	116,614
Producing properties, net of accumulated DDA ∞		252,140	259,140	260,226	290,150	299,375
Work-in-progress		163,771	86,033	72,858	43,717	36,625
Equity investments in and advances to associated companies (IEDC)		49	49	49	59	59
Fixed assets, net of accumulated depreciation		1,901	1,325	1,224	1,384	1,568
Paid-up share capital		654,493	654,493	654,493	654,493	654,493
Shareholder's equity		692,439	587,988	516,136	464,524	407,106

TWENTY YEAR OPERATIONAL SUMMARY

Net production, KUFPEC share						
Oil, barrels per day, net	10,186	17,030	16,758	14,609	16,958	15,662
Gas, million cubic feet per day, net	43,500	71,492	73,573	78,056	83,674	53,693
Total for the year/ period, millions of barrels of oil equivalent, KUFPEC share	80.435	10.745	10.746	10.244	11.455	9.096
Net proven and probable reserves, KUFPEC share						
Oil, millions of barrels		70.79	68.61	31.09	35.85	37.36
Gas, billions of cubic feet		605.51	636.76	664.03	429.80	433.45
Total at year/ period end, million barrels of oil equivalent		175.30	178.39	145.56	109.94	112.09
Reserves replacement factor		71%	406%	448%	81%	85%
Oil price: Nominal US\$ per bbl (Note 5)	\$18.58	\$27.84	\$17.27	\$12.14	\$18.62	\$20.58
Realised US\$ per bbl	\$19.32	\$28.07	\$18.12	\$13.31	\$19.46	\$21.19
Gas price: Realised US\$ per mmscft. (Note 5)	\$2.29	\$2.48	\$2.26	\$2.38	\$2.43	\$2.05

Profits

Increase in paid-up capital

KUFPEC's reporting currency is the Kuwaiti Dinar.
 US\$ shown for illustrative purposes only.
 Twenty-year period above excludes first quarter 2001.
 Period shown above is thus for 19 years and 9 months.

OPERATIONAL HIGHLIGHTS

<ul style="list-style-type: none"> Oil prices continue recovery from 1999. New strategy for 100,000 boe/d. Natuna Sea gas onstream, January 2001. 	<ul style="list-style-type: none"> New exploration, offshore China. Lee and North Gipsy discoveries, Australia. Al-Nasr oil and Wonrich gas onstream, Yemen and Australia. Gas Sales Agreement, Natuna Sea. 	<ul style="list-style-type: none"> KPC ban on new exploration acquisitions partially lifted, with conditions. Further gas discovery, Natuna S. Gipsy and Rose discoveries, Aus. Amal and Yombo properties, two of the earliest, disposed of. 	<ul style="list-style-type: none"> West Natuna Consortium formed. First production East Shabwa Block, Yemen. Dhabab and Agincourt oil onstream, Yemen and Australia. Seismic processing Sudan Block B. 	<ul style="list-style-type: none"> Agincourt oil discovery, Australia. First full year of Yacheng and Kadanwari sales. Halewah field, Yemen, comes onstream. First production from Jannah Block. Wor onstream, Australia. 	<ul style="list-style-type: none"> Yacheng onstream and P. respon. Asar and W. discov. Yemen. Wor discov. Australia.
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Note 1. Owing to a change in accounting principles applied from 1999, two major income statement items were reclassified, resulting in a change in description of what had previously been described as 'Operations Revenue' to 'Sales', and 'Operations Cost' to 'Cost of Sales'. There is no net difference to profit, but because of slightly differing definitions of the terms, under the new regime, both the income and expenditure side figures are slightly larger by an equal amount.

Note 2. In 1992, Amount recoverable from joint venture participant in the 1992 income statement represents balances due from subsidiaries in Tunisia and Pakistan when they elected, as they were entitled to under the contracts, to increase their respective interests in those countries. To do so, they had to pay part of the cost of the discovery and development over an agreed time period. The corresponding amount is shown in the 1992 through 1996 balance sheets, ranging from \$30.3 million in 1992 down to \$9.5 million in 1996. This amount is combined with the net current assets figure. In the Income Statement, Gain on sale of subsidiary and concession applies only for 1992. See Note 3.

Appendix III: KUFPEC Board Over The Years

Executive Board Members

Chairmen and Managing Directors

Abdul Razzak Mulla Hussein Al-Turkait

1 April 1981 to 1 April 1987
Refer page 11

Faisal Jassim Al-Kazmawi

2 April 1987 to 31 December 1994
Deputy Chairman:
1 April 1981 to 1 April 1987
Refer page 33

Mahmoud Abdulla Al-Rahmani

1 January 1995 to 30 April 1999
Deputy Chairman:
2 April 1987 to 31 December 1994
Deputy Managing Director for
Planning and Development:
2 April 1984 to 31 December 1994
Refer page 63

Ahmed Rashed Al-Arbeed

1 May 1999 to present
Refer page 71



Abdulla Mahmoud Baroun

- KUFPEC Deputy Chairman
1 January 1999 to present
- Chief Operations Officer
1 May 1999 to present
- Deputy Managing Director (later EAMD)
Planning and Development
1 January 1995 to 30 April 1999
- KUFPEC Board Member
6 January 1981 to present. (Non-executive to
31 December 1994)

Before joining KUFPEC in an executive capacity, Abdulla served at Kuwait Oil Company, most recently as Manager Planning (1992-94), Oil Well Fire Fighting Coordinator (1991-92), General Superintendent Exploration (1980-91), Superintendent Geological Department (1979-80), and as a Development Geologist, Well Site Geologist and Log Analyst (1971-79). He holds a BA in Geology and Math from Western State University, Colorado, USA.



Khaled Abdulla Mulla Hussein

- KUFPEC Deputy Chairman
1 January 1995 to 16 December 1998
- Deputy Managing Director Administration and
Finance
2 April 1984 to 31 August 1998
- EAMD Administration and Finance
1 September 1998 to 30 June 1999

Khaled joined KUFPEC as Financial Manager in March 1982. Prior to this, he served in Kuwait National Petroleum Company, mainly in financial roles in international marketing, from late 1976 before transferring to KPC in 1981.

Khaled has also served as a Director and alternating Chairman of Kairouan Petroleum Company, and Director of Al-Amal Petroleum Company and Arab Energy Development Company, a subsidiary of Japan's Arabian Oil Company. He holds a Bachelor of Business Administration degree from the University of Louisville, Kentucky.

Founding Non-Executive Board Members



Fawzia N. Al-Houti

6 January 1981 to 1 April 1984

A geology graduate from the American University of Beirut, Fawzia, at the time she joined KUFPEC's Board, was Director of Reservoir Engineering at Kuwait's Ministry of Oil. With the reorganisation of the Kuwait oil sector after the formation of KPC, she transferred in 1982 to Kuwait Oil Company as Superintendent Production Operations. Fawzia held that position until 1995 before moving to the Systems Development Group, where she serves today.

During her time as a geologist and geophysicist with the Ministry, from 1970, Fawzia was responsible for all reservoir simulation studies for Kuwait fields and was instrumental in drawing up and implementing the Conservation Board Rules and Regulations. She is an active member of the Kuwait Graduates Society.



Saud J. Al-Nashmi

6 January 1981 to 1 April 1984

At the time of his KUFPEC Board service, Saud was Kuwait Oil Company's General Superintendent for Development Drilling, later Manager Drilling Operations.

A BSc in Petroleum and Natural Gas Engineering from Pennsylvania State University, he has had a distinguished career in KOC over three decades, including on the Board 1984-92. He is best remembered for his crucial role in charge of all oil well control fire-fighting operations after Kuwait's Liberation in 1991.

Saud was also a Director of Kuwait Oil Tanker Company 1976-78, its Deputy Chairman 1978-80, and on the Board of Arab Drilling and Workover Co. 1990-92. Since 1992, he has been Managing Director of Ultra Horizon Co. and President of International Petroleum Consultancy Office.



Nawal A. Al-Rushaid

6 January 1981 to 31 December 1994

Nawal was Exploration and Production Manager at the Ministry of Oil when she first joined the KUFPEC Board, rising to Assistant Undersecretary for General Petroleum Affairs in 1992.

She has also served as a Director of Kuwait National Petroleum Company, Kuwait Oil Company, and Al-Amal Petroleum Company, and as a Member of the Board of Trustees of the Kuwait Institute for Scientific Research.

Following Liberation, Nawal served on the KPC committee for the assessment of damages in the petroleum sector, and has been a member of the higher committee for tenders for the KPC Group.

Nawal holds a degree in Chemistry and Geology from Egypt's Ain Shams University and is an active member of the AAPG.



Mustafa Y. Al-Adsani

6 January 1981 to 31 December 1994

Mustafa made his career in KOC, starting in 1965 as a gathering centre operator with a University of Texas Diploma in Petroleum and Natural Gas.

At the time of his appointment to the KUFPEC Board, he was KOC Manager Production Operations for all of Kuwait, later Manager Production and Export, and then Manager Loss Prevention. From 1977-92, he served as the Ministry of Oil's representative on the Board of Arab Petroleum Services Co., based in Tripoli, Libya. He was actively involved in planning oil well fire-fighting, and rehabilitation operations post-liberation. He retired from the oil sector in 1996.

Mustafa is presently General Manager of his own company, Rawdatain One, and a respected local consultant in the oil and gas industries.

Other Non-Executive Board Members



Mansour O. Al-Furaih
2 April 1987
to 31 December 1994

KPC's Executive Assistant Managing Director (EAMD) - Supply during his service on the KUFPEC Board, Mansour is now KPC EAMD International Operations (External Operations).

The holder of a Masters in Accounting from the UK's Birmingham University, Mansour was a member of the KPC team for the acquisition of Gulf Oil's European refining and marketing assets in 1983.



Hussein S. Al-Shamma
1 January 1995
to 13 September 1998

At the time of his service as a KUFPEC Director, Hussein was KPC's Executive Assistant Managing Director - Global Marketing. Now retired from KPC, he is presently Managing Director of Bakri Energy Marketing Systems Company.

The holder of a Bachelor's degree in Business from Kuwait University, Hussein was instrumental in building Kuwait's markets abroad. He has served on several OPEC committees.



Aisa A. Bou Yabes
1 January 1995
to 13 September 1998

Aisa was Kuwait Oil Company's Manager Joint Operations in the Partitioned Neutral Zone at the time of his service on KUFPEC's Board, and holds a BSc in Petroleum and Natural Gas from Pennsylvania State University.

He headed the Kuwait Oil Wells Fire Fighting Team, and was Coordinator Post Capping Operations after Liberation. Aisa is active in the Society of Petroleum Engineers.



Dr Nabeel Al-Manna'
1 January 1995
to 13 September 1998

Presently Deputy Governor of Kuwait's Central Bank from 1998, Dr Nabeel was the Bank's Executive Director for Monetary Policy during his service as a KUFPEC Director.

The holder of a PhD in Economics from the University of Miami in Florida, Dr Nabeel has made his career in the Bank, starting as a senior economist of the Economic Research Department in August 1987.



Dr Abbas A. Alikhan
1 January 1995
to 13 September 1998

A PhD in Petroleum and Natural Gas from Pennsylvania State University, Dr Abbas has been an Assistant Professor at Kuwait University's College of Engineering and Petroleum since 1989. He has also been Director of Symposia and Cultural Affairs at the Kuwait Foundation for the Advancement of Sciences since 1985, and is a member of the Kuwait National Committee for the World Petroleum Congresses.



Maha A. Razuqi
14 September 1998
to 30 June 1999

Now KPC's EAMD for International Business Development, Maha was Manager Projects Support in KPC's Overseas Project Development Group at the time of her service as a KUFPEC Director. She is a Director of Santa Fe International Corporation and on KPC's North Kuwait Committee.

Maha is a BSc from Syracuse University, and an MBA from George Washington University.



Riyadh I. Al-Saleh
14 September 1998
to 30 June 1999

Now Managing Director of contractors Al-Bahar Jacarossi, Riyadh was Executive Assistant Managing Director (Support Services) for Kuwait National Petroleum Company at the time of his service on the Board.

A BSc in Mechanical Engineering, he was Manager of Shuaiba Refinery from August 1987 through January 1995. Prior to that, he held various KNPC posts in engineering, maintenance and loss prevention.



Bader N. Al-Khashti
14 September 1998
to present

Presently Kuwait Oil Company's Executive Assistant Managing Director (Operations), Bader graduated from California State University before making his KOC career in power generation, fire and safety, loss prevention, production and exports.

He established the well control fire fighting team after Liberation in 1991, and participated in the reconstruction. He is active in KOC and KPC committees dealing with the North Kuwait Project.



Wael M. Al-Mudaf
14 September 1998
to present

Wael is presently Director of Energy Economics and International Relations at the Kuwait Ministry of Oil.

The holder of a Bachelor of Economics Degree from Cairo University, he joined the Ministry in 1981 - the same year KUFPEC was founded - rising through the ranks to his present position.

Wael has served as Kuwait's National Representative for the OPEC Economic Commission Board.



Nayef S. Al-Dhafiri
14 September 1998
to present

A qualified Marine Engineer, Nayef has served as Manager Fleet Services Group of KPC's oil transportation subsidiary, Kuwait Oil Tanker Company (KOTC), since late 1981.

He started his career in the oil sector as a Marine Engineer with Kuwait Oil Company before transferring to KOTC in 1981, where he worked first in Fleet Engineering. From 1984-88, he was General Manager of Kuwait Shipbuilding and Repairyard Company.



Osama H. Al-Issa
1 July 1999
to present

A Chemical Engineer by training, Osama is Information Services Manager for Kuwait National Petroleum Company, a position he has held since 1979.

He commenced his career with KNPC as a Chemical Engineer in the early 1970s, before becoming a Data Processing Engineer at Shuaiba Refinery.

He holds a Chemical Engineering Degree from Tufts University in the US.



Abdulla B. Al-Kalooti
1 July 1999
to present

A BSc in Mechanical Engineering from the University of Wisconsin, Abdulla is KPC Manager Strategic Planning. He has served in KPC Planning since first joining the Corporation in February 1990.

Abdulla established and ran as General Manager Kuwait's International Paper Products Manufacturing Company.

He is a member of the KPC Committee dealing with the North Kuwait Project.

Appendix IV: The Staff Over Two Decades

The KUFPEC Group (and the IEDC Group when it existed) has been fortunate to have had the services of a great many talented individuals over the years in our various offices. Below are the names of all who have worked for KUFPEC or IEDC, with apologies to any who may have been inadvertently omitted or misspelled.



ABDALLAH, Rahmani	Al-FAUDARI, Khaled	Al-TURKAIT, Abdulrazzak Mulla	BEHBEHANI, Baqer	CHOKRI, Kefi	FATEN, Ben Sedrine
ABDELLATIF, Chakroun	Al-FAUDARI, Ruqaia	Hussein	BEHBEHANI, Wesam	CHOYEKH, Hanene	FEATHERSTONEHAUGH, Derek
ABDENNABI, Radhia	Al-FULAJI, Abdulnaser	Al-TURKAIT, Khaled A M H	BELGACEM, Rezgui	CLARK, Russell	FELLOWS, Peter
ABDERRAOUF, Chemlali	Al-GHANIM, Yousef	Al-WASMI, Waleed	BELHADJ SALEM, Hatem	CLARK, Sharon	FEREIRA, Romeo
ABDERRAZAK, B Brahim	Al-HAJ, Hania	Al-YAHYA, Bader	BELHASSEN, Ezzeddine	CLARK, Wendy	FERNANDES, Clara
ABDINE, Shawky	Al-HAWALI, Suad	ALDAREESS, Jamal	BELHASSEN, Hela	CLARKE, Eric	FERNANDES, Maria
ABDUL HADI, Nada	Al-HAZZA, Hazza	ALI, Amor	BELLAZI, Nouredine	CLIFFORD, Andy	FERNANDES, Simplicio
ABDULAZIZ, Marwan	Al-HOWQAL, Mohammed	ALI, Dalal	BELLAZOUG, Ammar	COLLEY, Gerald	FERWORN, Al
ABDULLA, Meysoon	Al-HUBAIL, Mohammad	ALI, Haji Mohammad	BEN ALI, Amor	COLLOMB, Marie-Paule	FIRDJANSJA, M
ABDULLA, Mohammed	Al-HUNAIIDI, Abdulla	ALI, Khalifa	BEN ALI, Khelifa	CONSTANTINE, Soheir	FLOCKTON, Keiran
ABDULLAH, Nasser	Al-JASSAR, Hadeil	ALI, Sayed	BEN BRAHIM, Abdel Razzak	COOK, David	FONTANA, Colette
ABDULRAHMAN, Ahmad	Al-KANDARI, Mashaal	ALI, Shoukat	BEN JEMIA, Ghazi	COWELL, Simon	FORBES, Don
ABRAHAM, T Chacko	Al-KASAR, Yemen Saleem	ALLEN, Gordon	BENDLE, Fred	CRABTREE, John	FORBES, Jacqueline
ADISASMITA, Sadhu	Al-KAZMAWI, Faisal J.	ALOUNI, Kaouther	BENI, Oktantio	CRETIER, Michel	FOSTER, William
ADLER-ADAM, Svjetlana	Al-KHASHEM, Maryam	ALSEN, Jan	BERRY, Gail		FOX, Dave
AGCA KHAN, Rukhsana	Al-KHAYAT, Adel	ALVARES, Brenda	BESMA, Sellami	D'SOUZA, Marlinda	FREEZE, Don
AGREBI, Mohamed	Al-KURDY, Sami	AMEL, Berbeche	BEYA, Kekli	D'SOUZA, Osborne	
AHLEM, Kooli	Al-MOSALLEM, Khaled	AMEUR, Asma	BIGNELL, Roger	D'SOUZA, Sabrina	GACEM, Gacem
AHMED, Abdul Nabi	Al-MUDAHKA, Manal	AMIN, Shayma	BISHOPP, Dave	DAE, Yasinta	GAINDHAR, Madan
AHMED, Shayma	Al-MULLA, Dalal	AMIRA, Dahmane	BITTAR, Rabab	DAHMANE, Zeineb	GARDNER, Mark
AICHA, Ben Houcine	Al-MURAIKHI, Nasser	AMIRI GARROUSSI, Dr Kourosh	BOBBITT, John	DALENDIA, R	GAULT, Dr John
AIT-LAOUSSINE, Nordine	Al-MUSAED, Fatima	AMIRSYAH, Eddy	BOCTOR, Dr Joseph	DALLAS, James	GEORGE, Teena
AJMIA, Majdoub	Al-MUSALLAM, Fawaz	AMMARI, Kaies	BOTTEN, Peter	DANIEL, Gavin	GEORGIU, John
AKBAR, Sarah	Al-MUSALLAM, Khaled	ANABTAWI, Lina	BOUGHRARA, Hassen	DARGIE, Adrian	GERMOND, Elsa
	Al-MUTAWA, Hana	ANDREW, Christine	BOURISLY, Tariq	DAVENPORT, Allen	GHANMI, Zeineb
Al-BISHER, Salem	Al-NAKEEB, Hanan	ANDY, Arly	BRADBURY, Ian	DAVIES, Ian	GHEHIOUECHE, Mustapha
Al-ABDUL JALEEL, Dawood	Al-NASSER, Fahad	ANOUN, Raouf	BRAMWELL, Mark	DAVIES, Dr W Cameron	GHOUALMIA, Tahar
Al-ABDULLA, Amani	Al-NIBARI, Abdullah	ANTON	BRATASURYA, Lukman	DAVIS, Julia	GOCHENOUR, Dr Thomas
Al-ADWANI, Faisal	Al-OBaid, Cathy	ARMAN	BRENNER, P	De BARR, Tony	GODFREY, John
Al-AHMAD, Fawaz	Al-OMRAN, Jassem	ARNOLD, Ralph	BRIEDE, Julian	de FREITAS, Gillian	GOLDSTEIN, Barry
Al-AJEEL, Mohammed	Al-OTAIBI, Nasser	ARTHUR, Andrew	BROCK, Nigel	de la GRANDVILLE, Baudoin	GORDON, James
Al-AJMI, Damtha	Al-OUMI, Farooq	ASHAB, Foud	BRODBECK, Louis	de LAPEYROUSE, Robert	GOVER, John
Al-AJMI, Firas	Al-QANAI, Sundus	ASHKANANI, Adnan	BROMLEY, Jenny	de TERRA, Niels	GRACE, Mark
Al-AJMI, Sharaf	Al-QAOUUD, Khaled	ASTUTY, Tri Budi	BRUCE, Michael	DELASTIC, Robert	GRACE, Robert
Al-ALAMI, Sima	Al-QARAWI, Ahmad Zayed	ATARI, Majid	BRUCE, Richard	DELAUNE, Greg	GRAHAM, C Jere
Al-ALAMI, Sonah	Al-QASSAR, Mezyed	AUGUSTINE, John Jr	BRYDON, James	DENTON, Ken	GRAHAM, Mavis
Al-ALAWI, Najeeb	Al-QOUTAMI, Muneira	AYARI, Insaf	BuHAMRA, Khalid	DILLON, John	GRIFFIN, Grif
Al-AMIRI, Firas	Al-RAHMANI, Mahmoud A.		BURNS, Terry	DINGWALL, Keith	GROSJEAN-HANNA, Susan
Al-ANSARI, Ebrahim	Al-RAMADAN, Naseema	BABOUCHE, Ahmed	BUSTAMENTO, T J	DODSON, Mandy	GUETAT, Morhced
Al-ARBEED, Adari	Al-RASHEED, Yousef	BADI, Hanan Ghali		DOERNBERG, Amnon	GUINN, Roger
Al-ARBEED, Ahmed R.	Al-REFAE, Hamed	BALLY, Robert	CAPELLE, Mike	DORRAN, Sandra	GUL, Iqbal
Al-ATEEQI, Eiman	Al-REKHIS, Mishaal	BANKS, Robert	CARAMEROS, George Jr	DOUGALL, Michelle	GUNARIO, Virginia
Al-AWADHI, Ahmed	Al-RUSHEED, Yousef	BARABIL, Abdulazez	CARVALHO, Hazel	DOWNEY, Alison	
Al-AWADHI, Raja'a	Al-SABBUBI, Jamal	BARKER, Brian	CATCHPOLE, Paul	DRAGOMIRESCU, Rodica	HABIB, Mbarki
Al-AWADHI, Waleed	Al-SABIH, Wael	BAROUN, Abdulla	CATHERWOOD, Trevor	DWI, K D	HALIMA, Fatma
Al-AYOBI, Faisal	Al-SAEED, MUSAAD	BARRACLOUGH, Robert	CHAAMBI, Mondher		HALTER, Heidi
Al-BADAWI, Abdulrahman	Al-SAMAKAH, Nabeel	BARRETT, Graham	CHACKO, Susil	EASY, Ian	HAMDANI, Anwar
Al-BADAWI, Khadeja	Al-SHAHOMI, Fawzia	BARRO, Lino	CHAKROUN, Med	EDGERLEY, David	HAMED, Dimassi
Al-BADER, Sundus	Al-SHAMMARI, Abdulateef	BASILE, Paul	CHALMERS, Carol	EDWARDS, Alan	HAMOUDA, Boubaker
Al-BAGHLI, Jassim	Al-SHAMMARI, Talal	BASMA, Refai	CHANCE, Louise	EDWARDS, Michael	HANCOCK, Shaun
Al-BAHBAHANI, Dr Abdulsamee	Al-SHAMMARI, Majed	BAXTER, Leslie	CHARMAN, Denise	El-JECHI, Mohammed	HARDY, Graham
Al-BALOUL, Humoud	Al-SHARAD, Adari	BEACH, Mark	CHAVANNES, Raphael	ELIANA, Etyk	HARI, Robert
Al-BEDAWI, Abdul Rahman	Al-SHARAF, Reyadh	BÉAT, Jenny	CHEDLYA, B Rejeb	ELLYARD, Ted	HART, C
Al-BEHBEHANI, Wesam	Al-SHATTI, Meysloon	BEATON, Richard	CHEHAIDER, Nabila	EMILIA, Anastasia	HARTOG, Don
Al-BUSTAN, Ala'a	Al-SHEMMERI, Dr Iman	BEAVIS, Brian	CHEIKH, Khaled	EVERETT, Jay	HASHEM, Lubna
Al-DOSARI, Jassem	Al-SUMALI, Aisha	BECK, Dr Byron	CHEN, Hsiu- Kuo	EZZEDDINI, Belhassen	HASNA, Zbiss
Al-EBRAHIM, Ammer	Al-TAMIMI, Saad	BEDROCK, Dr Martin	CHERIKI, Ahd	FAHMI, Ganim	HASNILA, Netty
Al-FADELY, Adel	Al-THUFARI, Awad		CHIRAZ, Mejri	FAIZA, Cherif	HASSAN, Ezzat

ASSAN, Medhat	KHAN, Lubna	McMURTRY, Dr Michael	PANE, Pondang	SAIMIN	T'HART, Bastian
ASSEN, Boughrara	KHAOUTHER, Alouini	MEJDOUN, Hassiba	PARAMBIL, Abdul Aziz	SAIN, Sanusi	TAFOOR
ATEM, Belhadj	KHENISSI, Nadia	MELAMED, Anita	PARENT, John	SALDANA, Hazel	TAHA, Ali
ATEM, Ben Khelil	KHIAI, Chahnez	MELTON, Robert	PARKER, Roy	SALEH, Maher	TAHA, Rima
ATEM, Chaouech	KIELMAS, Maria	MENDOCA, Janet	PARRA, Francisco	SALEM, Hatem	TAHAR, Ghoulalmia
AUSER, Emery	KIRISITS, Daniel	MENEZES, Eldred	PASCOE, Angela	SAMIA, Abdennabi	TAN, Hendra
AWKINS, Jimmy	KISHAWI, Enas	MENON, T Haridas	PEARSON, Andrew	SAMIRON, Ichsan	TAOUFIK, Bouebdelli
AYET, Ouergui	KNEALE, Robert	MENZIES, Arthur	PEDEN, Cheryl	SANZA, Gregory	TARIGAN, Effendy
AZEM, Ahmed	KNOLL, Darren	METOUI, Merry	PEREIRA, Cecilia	SAQER, Alia	TARJANAH, Tantri
ELA, Belhassen	KOOLI, Ahlem	MIDDLETON, Andrew	PEREIRA, Elaine	SARUMPAET, Victor	TARSCH, Debbie
ERAWATY, G	KOZMA, George	MILLER, Charles	PEREIRA, Mary	SAYED, Mohammed	TATTI, Vanna
ERD, Henry	KURDY, Sami	MILLER, David	PERREIRA, Romeo	SCHIELEY, Dennis	TAYLOR, Paul
EWETSON, Harvey		M'KAOUAR, Nouredine	PERRIN, Guy-Roland	SCHOENING, Ian	TEMPEST, Kerry
ICKING, Stephen	LACEY, Margaret	MOCKRIDGE, Dr Britton	PFEIL, Staphen	SCHWEIDER, Charles	TEMPLIN, Marie
IDA, Najet	LAMB, David	MOGG, Wayne	PIERRE, Sublet	SCOTT, Rick	TEPERSKI, Eddie
IJAWI, Manar	LAMBERT, Jack	MOHAMED, A	POEHALLOS, Frances	SEADER, Richard	THABET, Feiza
OBBS, Leana	LARG, Wendy	MOHAMED, Djemai	POLLOCK, Robert	SELLAMI, Besma	THAMPAN, Mani
HOLMEFJORD, Tord	LAVER, Rod	MOHAMED, Kabthani	POULIN, Dominique	SELLER, Robin	THOMAS, David
HOLT, William	LAWLESS, Catherine	MOHAMMAD, Zaineb	POUND, Graham	SEQUEIRA, Sancia	THOMAS, Philip
HONEYWILL, Christopher	LEDBETTER, James	MOHAMMED, Abdullatif	PRABHAKAR, Shakuntala	SHAER, Rose	THOMPSON, Andrew
HONSE, John	LEWIS, Sharon	MOHAMMED, Gibref	PRESCOTT, Ann	SHALABI, Suzan	THOMPSON, Neil
HORGER, Mary	LITTLEDALE, Sandy	MOHAMMED, Yousef	PURWOWIYANTO	SHAW, Janelle	THOURAYA, Trad
HUDDLE, William	LOCKYER, Michelle	MOHSEN, Lesbai		SHAW, Simon	TIMMINS, Barry
HUFF, Keith	LONG, Dr Gerald	MONIA, Ben Slimane	QASSEM, Ahmad	SHEHAB, Labibah	TMAR, Saif
HUKIN, Sonia	LOPEZ, Yolanda	MONTEMAYOR, Arthur		SHOUKATHALI, Mohammed	TOLLEY, Mark
HUSSAIN, Kholood	LOTFI, Kammassi	MONTGOMERY, Dave	RAHAL, Leena	SIAHAAN, Oloan	TOMLIN, Gordon
HYDE, Maria	LOTFI, Mongi	MOORE, John	RAHAYU, Pangastuti	SIDIHIDA, Najet	TOUMI, Ezzedine
	LUBIS, Muslina	MORAN, Derek	RAHMANI, Hamid	SIMATUPANG, Yanti	TREECE, David
IBRAHIM, Mohammed	LUCAS, Mick	MORELL, Mark	RAINEY, Jim	SIMPSON, Anne	TRIATMOKO, Agus
DAWATI, Risma	LUECKE, Brian	MORISON, Tim	RAJAB, Dalal	SINCLAIRE, Ernest	TRIWIBOWO
IMEN, Taktak	LUNN, Maria	MORONEY, David	RAJPUT, Vinod	SIRAIT, Barita	TRUBSHAW, Rodrick
INGELS, Sarah		MORSI, Salah	RAMACHANDRAN, K V	SIREGAR, Bertus	TUHULELAY, Anwar
ISKANDAR, Amri	MABROOK, Sultan	MORTON, Alastair	RAOUF, Anoun	SKREINER, Andy	
ISMEDI, Ellyandini	MacDONALD, Brian	MORTON, Janine	RATNAVALE, Myron	SLOCUM, R C	UL-RAHMAN, Habib
ISSA, Rabab	MACKAY, Fred	MOURAD, Mashael	REES, Alan	SMALL, Dr John Jr	UNDERWOOD, Bill
IACQUEMIER, Marie-Madeleine	MacKENZIE, Jenny	MOYLE, Ian	REFAI, Besma	SMAOUI, Hassiba	Van DERCK, Rick
EBARA, Chahnez	MacPHERSON, Ken	MUELLER, Donald	REINA, Winston	SMART, Erica	VISHWANATH, Govind
EMAI, Mohammed	MAGATEF, Ragheb	MUSMAN, Octoria	REYNOLDS, Hugh	SMITH, David	VREE, Arnold
ENDOUBI, Sabeh	MAHAMMAD, Mohammad	MUSTAPHA, Ghehioeuche	REYNOLDS, Michael	SMITH, Fred	
JENNINGS, Flynn	MAHBOOB		REZA ALI, Syed	SMITH, Phillip	WAANI, Catharina
JENNINGS, Maureen	MAJED, Arbouni	NAINGGOLAN, Rury	REZQUI, Belgacem	SOEDHANA, Dana	WAJONG, Albert
JOBIDON, Guy	MAKHOUL, Joseph	NAIR, Harikumar	RHEINA, W R	SOEDJKOKO, Mas	WALTER, Mary-Ann
JOHANNES, Taddeset	MALAYU, Leswati	NAJET, Helali	RHIDHA, Goutel	SOLAIMAN, Youhana	WARDHANY, Susy Retno
JOHNSON, Deidre	MAMANGKEI, Baruna	NASH, Theresa	RHODEN, Charles	SOMRANI, Fethi	WAROKKA, John
JOHNSON, Elisabeth	MANSOUR, Dua'a	NAZERETH, Russel	RIAL, Robert	SONIA, Cheikhrouhou	WASSEM, Adnan
JOHNSON, Nola	MANU, S Mintje	NEDIA, B Taoues	RICHARDSON, Michael	SOUZA, Stephen	WATHAN, Risnul
JOHNSON, Peter	MAQATEF, Ragheb	NEJIA, Gasmi	RIDHA, Ferchichi	SPACKMAN, Robert	WURAN, Karel
JOHNSTON, Greig	MARLIZA, Gita	NEJIBA, Hajjem	ROBINSON, Nicholas	SPENCER, Nicholas	WEAVER, Peter
JONES, Alan	MARSHALL, David	NEJMA, B K	RODHEN, Charles	SRNECZ, Christine	WELLS, Christine
JORDAN, Paula	MARTIN, Asvil	NEWBOULD, Dave	RODRIGUES, Ilfrida	SPINKS, Ralph	WHITFIELD, Steve
JOSEPH, Gladwyn	MARTOMO	NEWCOMB, Rob	RODRIGUES, Judy	STECK, Didi	WIGGIN, Richard
JOUIN, Françoise	MATHIAS, Jemima	NEZIHA, Boussak	ROHYADI, Yadi	STEILE, Geile	WIJNHORST, Alice
JUMA, Huda	MATONDANG, Roy	NGATIMAN	ROMAN, Constantin	STEWART, Ian	WILDON, Sheryle
	MAULANA, Claudia	NILANDAROE, Nara	ROMLAH, I Sadiyah	STEWART, James	WILKINS, Stanley
	MAULANA, Emmi	NOUREDDINE, Sassi	RONA, G	STRINGER, William	WILSON, Brian
KACEM, Wahid	MAULANA, Ullie	NYEIN, Glenn	ROSS, George	STRONG, Maurice F	WONGSO, Marwan
KAKKOTT, Mustafa	MAYER, Alexander		ROSSER, Jack	SUDARMA, Gede	WORTHINGTON, Paul
KANSIL, John	McCANTS, C Y	O'MEAGHER, Roland	ROUROU, Adel	SULAIMAN, Youhana	
KAOUTHER, Zarrouk	McCULLAGH, Bruce	O'NEILL, Paul	RUSSEL, Charlie	SULTAN, Soumaya	YAHYAOU, H
KARAJAS, John	McDADE, Paul	OGIER, Mark		SULTAN, Souncafa	YEOWARD, Mark
KARBASSIOUN, Bahma	McDONALD, Myles	OKTAVIANTY, Fanny	SAAFAN, Dr M Said	SUNGKONO	YUNI
KARST, Gerald	McDONALD, Sherryl	OLIVER, Denis	SAAVEDRA, Carlos	SUPRIATNA, Ade	
KEBAIER, Nedja	McGLASHON, Kenneth	OSBORNE, David	SABAH, Jendoubi	SURANTO	ZAINEB, Ghanmi
KEEFFE, Jayne	McILROY, James	OSMAN, Slah	SABUBI, Jamal	SUSILO, Dwi	ZAOU, Leila
KEKLI, Beya	McINTOSH, Russell	OUALHA, Celine	SACHDEV, Arjan	SUTINO	ZENRUFFINEN, Bernard
KEMP, Gregory	McKAY, Fred	OUEGHI, Hayet	SADAKA, Micheline	SUTISNA, Atang	ZUBERI, Farhana
KENNEDY, Bruce	McKENZIE, Michael	OZAKMAN, Nezet	SADEQ, Ahmad	SWANELL, Alan	ZULKARNAEN
KHALFAY, Tanweer	McMAHON, Ian	OZLINS, Marie	SADRI, Ben Smida	SYAIRWAN	

Selected Bibliography

ANNUAL REPORTS

Arab Petroleum Investments Corporation
1980 through 1985

International Energy Development Corporation SA
1982 and 1983

Kuwait Foreign Petroleum Exploration Company (KSC)
1981-82 through 2000

Kuwait Petroleum Corporation
1980 through 2000

KP North Sea Holdings (Internal) 1995

Sulpetro Limited 1981

BOOKS

Levins, John M: *Days of Fear: The Inside Story of the Iraqi Invasion and Occupation of Kuwait*. London: Motivate, 1997

McMurtry, Michael J: *Diary of a Kuwait Hostage, August-December 1990*. Unpublished

McNaull, Michael E and Kelsey, Thomas: *A Survey of the Kuwait Oil Industry, 1997*. US Embassy Kuwait

Sheriff, Robert E: *Encyclopaedic Dictionary of Exploration Geophysics*, 3rd Edition. Tulsa, Oklahoma: Society of Exploration Geophysicists, 1999

Strong, Maurice F: *Where On Earth Are We Going?* Toronto, Canada: Knopf, 2000

Tétreault, Mary Ann: *The Kuwait Petroleum Corporation and the Economics of the New World Order*. Westport, Connecticut: Quorum, 1995

Yergin, Daniel: *The Prize: The Epic Quest for Oil, Money and Power*. New York: Simon and Schuster, 1991.

Glossary

2D

In relation to a seismic survey, relates to two dimensional representations of a plane through the earth's crust, by which inferences are drawn on the nature of the sub-surface structure.

3D

In relation to a seismic survey, relates to three dimensional representations of a part of the earth's crust, by which inferences are drawn on the nature of the sub-surface structure.

AAPG

American Association of Petroleum Geologists.

Appraisal

The process of confirming the nature and extent of the reserves suggested by a petroleum discovery, generally through drilling further wells in the vicinity of the discovery. An appraisal well may also serve the purpose of a delineation well.

associated (gas)

Gas produced in association with oil production, and not independently of oil.

Bedoun

Arabic, meaning, literally, "without", in reference to individuals who do not have a nationality.

bpd

barrels per day. Generally oil, but may also refer to water.

boe

barrels of oil equivalent. Used to place both major types of hydrocarbon resources, oil and gas, on a common basis. One thousand cubic feet of natural gas is divided by a factor of 5.8 to get the barrel of oil equivalent. One barrel of oil is, of course, one boe.

Compression

Plant used to increase the pressure and thus rate of flow and productivity of a gas reservoir.

Commerciality

Generally, a condition declared by an operator of a petroleum property under the terms of the contract with the national authorities, whereby the operator asserts that the property is commercially viable, thus allowing it to be developed for eventual commercial production.

Development

The process of converting an appraised petroleum discovery into a commercial operation, whereby the production may be delivered to market. This may involve everything from drilling further wells (development wells) to enable extraction of the reserves, to building infrastructure to process it, and to transport it to market. Generally, before development may commence, a declaration of commerciality has to be made and accepted by the national authorities, and a development plan prepared by the joint venture partners and approved by the authorities.

Delineation

The process of defining or delineating ("drawing the line") the limits of a discovered petroleum reservoir, generally through drilling further wells at what is thought to be the extreme limits of the field, or several points between the discovery or other wells, and those limits.

DMD

Deputy Managing Director. Generally, the second level of management, but usually also a Board Member (Director), of a company in the KPC Group. The title has now been generally superseded by EAMD. See below.

Downstream

That part of the petroleum industry generally associated with processing, refining and transporting crude oil or gas after it is extracted from the ground and then distributing it to market.

EAMD

Executive Assistant Managing Director. Generally, the second level of management, and may also be a Board Member, of a company in the KPC Group. May or may not be a Board Member (Director).

ETAP

Entreprise Tunisienne d'Activités Pétrolières, the Tunisia State petroleum company.

Equity accounting

A form of accounting for direct shareholdings in investee companies, where the investor has significant influence by virtue of the size of their interest, but not control. Generally applied where the shareholding is between 20% and 50%.

Exploration

The process of finding petroleum reserves.

Farm-in

The process of acquiring an interest in a petroleum property either by payment, or the carrying out of specified work on the property, as agreed with the existing co-venturers.

Farm-out

The process of disposing of an interest in a petroleum property, either for payment, or by transferring a work or other obligation to another party, who generally acquires the interest being disposed of.

FPSO

Floating Production Storage and Offtake System. Generally, a converted oil tanker used to store oil production from an offshore field, until it is transported to market. The FPSO generally remains on station at the field, and a shuttle tanker offloads the oil.

Gulf Link

A BBC World Service shortwave radio programme transmitted during the Gulf Crisis to pass messages of information and support to British and other Western nationals trapped in Kuwait or Iraq.

IBRD

The International Bank for Reconstruction and Development, established 1945, an arm of the World Bank, that provides loans and development assistance to middle-income countries and creditworthy poorer countries.

IDA

The International Development Association, established 1960, the World Bank's concessional lending arm. Provides key support for the Bank's poverty reduction mission, focused on the poorest countries, to which it provides interest-free loans and other services.

IFC

The International Finance Corporation, established 1956, an institution closely affiliated with the World Bank that promotes growth in the developing world by financing private sector investments and providing technical assistance and advice to governments and businesses. In partnership with private investors, IFC provides both loan and equity finance for business ventures in developing countries.

interpretation (seismic)

The act of processing seismic data and then assessing the results in order to draw conclusions from those results about the nature of the sub-surface surveyed.

IPO

Initial Public Offering. The process of 'floating' a company on a public stock exchange.

mmscf/d

Million standard cubic feet of gas per day, the measure generally used for the flow rate of a gas field.

Mukhabarat

An Iraqi security intelligence service closely affiliated with the ruling *Ba'ath* party. Essentially, the Iraqi secret police.

non-commercial

A petroleum discovery that, by virtue of its nature, size or other factors, is uneconomical to exploit commercially.

OAPEC

Organisation of Arab Petroleum Exporting Countries, founded 1968, and headquartered in Kuwait. Not a subset of or to be confused with OPEC, although there is some overlap of membership. By 1982, membership was Algeria, Bahrain, Egypt, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, Syria, Tunisia and United Arab Emirates. Tunisia withdrew in 1986.

OPEC

Organisation of Petroleum Exporting Countries, established 1960, now based in Vienna, grouping most of the world's major petroleum exporters.

Reprocessing (seismic)

The act of reprocessing seismic data in a manner or according to an algorithm or methodology different to that in which it was originally processed or interpreted in order to extract further or different information. New and improved techniques for seismic data reprocessing are being developed continuously which, when combined with greatly increased computing power, allow greater value to be extracted from data acquired even decades ago.

Reservoir

The subsurface structure containing oil or gas reserves.

SAR

Synthetic Aperture Radar. An aerial oil and gas exploration survey technique, using radar to map topography.

Seismic

A survey, or the data obtained from such a survey, whereby small "earthquakes" or waves are transmitted into the earth's crust, and the reflection against sub-surface strata is recorded in order to build up an image of the strata, and thus identify the possible location of oil or gas reserves.

stb/d

Stock tank barrels per day. A measure of flow of production from an oilfield, generally similar to bpd.

TRAPSA

Compagnie des Transports par Pipe-Lines au Sahara, the company that operates the La Skhirra oil export terminal in Tunisia.

World Bank

The world's largest development institution, whose mission is to fight poverty and improve living standards for people in the developing world. It provides loans, policy advice, technical assistance, and knowledge-sharing services. The Bank is comprised primarily of the IBRD and IDA (see above) which are in turn each owned by about 180 and 160 member countries of the world respectively. Other components are the International Finance Corporation, the Multilateral Investment Guarantee Agency, and the International Centre for Settlement of Investment Disputes.

SOGENER

Société Générale pour l'Énergie et Ressources. A private Swiss company, controlled by Maurice Strong, through which he held his personal interest in both AZL Resources and IEDC SA.

UNCTAD

United Nations Conference on Trade and Development.

Upstream

That part of the petroleum industry involved with the exploration for, and development and production of petroleum reserves, generally to the point of their extraction from the ground, and making them available in a marketable form.

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