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Saudi Aramco



Annual Review

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The Custodian of the Two Holy Mosques
King Fahd ibn 'Abd al-'Aziz Al Sa'ud

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The Custodian of the Two Holy Mosques
King Fahd ibn 'Abd al-'Aziz Al Sa'ud

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25 MAR 2005



The Crown Prince, First Deputy Prime Minister and Head of the National Guard
His Royal Highness Amir 'Abd Allah ibn 'Abd al-'Aziz Al Sa'ud



Sitting from left to right

H.E. Dr. Abdulaziz A. Al-Dukhayil
Rector of King Fahd University of Petroleum and Minerals

H.E. Dr. Mosaad M. Al-Aiban
Minister of State and Member of the Cabinet

H.E. Osama J. Faquih
Minister of Commerce

H.E. Ali I. Al-Naimi
Minister of Petroleum and Mineral Resources and Chairman of the Board

H.E. Dr. Ibrahim A. Al-Assaf
Minister of Finance and National Economy

Abdallah S. Jum'ah
President and Chief Executive Officer

Standing from left to right

Abd Allah S. Al-Saif

Dr. Sadad I. Al-Husseini

Rodney B. Wagner

Abdelaziz M. Al-Hokail

Harold J. Haynes

James W. Kinnear

The year 2000 was a time of measured optimism for the world's petroleum industry, as higher crude oil prices encouraged companies to think positively about new and deferred projects and begin planning for brighter futures. The prospect of developing new energy supplies points toward further economic growth for both producing and consuming nations. The Kingdom's energy policy has always been based on seeking balance in the world marketplace and assuring shared prosperity for both producers and consumers.



One of the key instruments of the Kingdom's oil policy is its production capacity. This important role carries with it serious responsibilities. Saudi Aramco has always lived up to these responsibilities, and has earned a worldwide reputation for reliability, trustworthiness and professionalism.

The year 2000 continued this tradition. It was a year in which Saudi Aramco not only lived up to its obligations to its customers inside the Kingdom and around the world, but also prepared itself for future market conditions.

The company continued the expansion of the Kingdom's Master Gas System, to meet future domestic demand for sales gas and petrochemical feedstock. That expansion

includes new exploration and drilling for deep nonassociated gas, new gas processing plants (at Hawiyah and Haradh) and new pipelines to supply fuel gas to electric power plants.

Saudi Aramco formally took over operation and maintenance of the first underground storage facility for petroleum products, located in the Riyadh area – one of five planned for various locations around the Kingdom. The Saudi Strategic Storage Project (SSSP) is designed to protect the country from petroleum product shortages in times of emergency.

Saudi Aramco's refineries also made the transition from production of leaded to unleaded gasoline by year's end, consistent with Government directives. The switch to unleaded fuel assures cleaner air for all of us, and affirms the Kingdom's ongoing commitment to a clean environment.

On a policy level, the Government moved to streamline energy decision-making by replacing the Supreme Council of the Saudi Arabian Oil Company with the Kingdom's newly created Supreme Council for Petroleum and Mineral Affairs. This development will assure that the company's actions remain in tune with the Kingdom's current policies at the very highest levels. Last August, the Supreme Council approved the Kingdom's overall oil strategy and Saudi Aramco's 2001-

2005 Business Plan. The Business Plan calls for using new technologies to boost productivity and reduce expenditures; increasing gas supplies to enhance industrial development; and maintaining an oil production capacity that allows the Kingdom to meet world demand and counter negative impacts on the market.

None of Saudi Aramco's advances in 2000 would have been possible without the wise leadership and unwavering support of the Custodian of the Two Holy Mosques King Fahd ibn 'Abd al-'Aziz and His Royal Highness Crown Prince 'Abd Allah ibn 'Abd al-'Aziz.

I would also like to extend my thanks to Saudi Aramco's Board of Directors, whose valuable counsel guided our actions throughout the year.

Finally I would like to express my deepest appreciation to the employees of Saudi Aramco, who have risen to the challenges of the new millennium with enthusiasm, dedication and just plain hard work.

Ali I. Al-Naimi

Minister of Petroleum & Mineral Resources
and Chairman of the Board of Directors

On April 24, 2000, amid a sea of enthusiastic faces, Saudi Aramco launched its new corporate identity – symbolized by a dynamic white energy burst spreading across a global field of blue and green. This energy burst represents not only our company's commitment to meet the energy needs of the world but also the human energy, mobilized through teamwork, that has propelled Saudi Aramco into the new century.



Rich human resources make up our company's work force – from the bright-eyed new hires to the canny, experienced professionals; from the security guard whose smile welcomes us to work each morning, to the rugged driller toiling out in the remote areas, to the sharp-eyed operator in the refinery control room, to the marketing specialist resolutely seeking new openings in world markets.

It takes this wide range of skills, personalities, backgrounds and interests to make up a large and complex enterprise like Saudi Aramco.

We saw this blend of talents at work in the year 2000, helping us to achieve our production and marketing targets and position ourselves for the years ahead.

This team has succeeded, as you will see in this review, in taking the company to the highest levels in the area of Information Technology. The traditional team spirit – the human networking – of our employees has produced the unique and intricate web of electronic linkages that we see in Saudi Aramco today. These connections – human and electronic, old and new – crisscross the company and help maximize the efficient flow of vital business information.

It was in 2000 that Saudi Aramco became a complete network, in the sense of sharing information through high-tech electronic interconnections. Integrated teams are using the new information and communication technologies to peer deep into the earth, pinpointing new hydrocarbon reservoirs and managing existing ones. Employees are working together through high-tech networks of all descriptions to bring new levels of cost efficiency to refineries, pipeline systems, utility operations and other facilities. The networking generated in the mega-projects area has helped us launch mammoth ventures and bring them to completion well ahead of schedule and under budget.

The synergy between electronic and human networking has produced a quantum leap in quality in all of our endeavors. Working smartly is paying handsome dividends at all levels. Thanks to networking, we can safely apply that old adage to Saudi Aramco: the whole is indeed greater than the sum of its parts.

Let me conclude by expressing our thanks to the Custodian of the Two Holy Mosques King Fahd ibn 'Abd al-'Aziz and His Royal Highness Crown Prince 'Abd Allah ibn 'Abd al-'Aziz, for the tireless support and guidance they have shown to the Saudi Arabian Oil Company throughout the year. The Chairman and Board of Directors also deserve our deepest thanks for their dedicated service and ever-valuable advice. And finally, let me extend heartfelt thanks and appreciation to my colleagues and co-workers, who in the end are the ones responsible for this year's successes.

Abdallah S. Jum'ah

President & Chief Executive Officer

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The year 2000, gateway to the new millennium, was one of steady accomplishment for the Saudi Arabian Oil Company (Saudi Aramco), buoyed by generally strong oil prices and a steady, cautious recovery of the petroleum industry worldwide.

In a Government move to streamline energy decision-making at the highest levels, the Kingdom's newly created Supreme Council for Petroleum and Mineral Affairs replaced the Supreme Council of the Saudi Arabian Oil

Company. Saudi Aramco launched a new corporate logo featuring a brilliant white energy burst across a blue-green globe. It is the cornerstone of a Corporate Identity Project designed to project a powerful new visual image for the company, reflecting its identity in the new millennium.

Committed to maintaining its position as the world's top petroleum enterprise and assuring commercial profitability, Saudi Aramco moved ahead on many fronts to meet current obligations and prepare itself for future energy demand.

The company met or exceeded all of its oil, gas and petroleum products targets for the



Core Area headquarters complex, Dhahran.



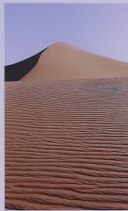
drilling rig operating in a remote part of the Kingdom.

year. It announced a series of new nonassociated gas discoveries that were especially timely in light of Saudi Aramco's commitment to meet steadily expanding domestic demand for gas as fuel and feedstock. New sweet gas fields were discovered at Manjurah and Ghazal, and additional gas discoveries were made beneath existing fields at Niban, Hawiyah and Mazalij.

The company continued to expand its existing gas processing plants and to build new ones for the future. New gas installations were completed at the 'Uthmaniyah and Berrri gas plants. Work continued on the grassroots Hawiyah and Haradh gas plant projects.

Completion of a key pipeline project linked the Master Gas System with the capital Riyadh, enabling three electric power plants that formerly burned crude oil to use gas for power generation.

Saudi Aramco switched all domestic refineries to unleaded gasoline production by the end of the year. The move was in line with national and regional initiatives and the company's longstanding commitment to a cleaner environment.





The new corporate logo extends its welcome at Saudi Aramco's main gate in Dhahran.

In international operations, subsidiary Vela International Marine Limited placed an order for the construction of four Very Large Crude Carriers (VLCCs). Vela also earned ISO 9002 accreditation for international ship management and operations. Also a new wholly owned Saudi Aramco subsidiary was created, known as Aramco Gulf Operations Company Limited (AGOC),

to take over, on behalf of the Government, the Kingdom's undivided 50 percent interest in certain assets of the Arabian Oil Company (AOC-Japan) following expiration of its Saudi concession to engage in petroleum operations within certain offshore areas of the former Saudi-Kuwait Neutral Zone. AGOC was granted the rights and obligations under the former concession agreement with AOC-Japan.



The SAP Time Management Rollout Team celebrates a successful system launch.

In the area of computers and information technology, the year 2000 began on an upbeat note with the successful Y2K rollover. All company computer systems made a smooth transition to the new millennium. In fact, 112,000 critical computer systems were immunized and fully tested prior to the December 31, 1999, rollover.

During the second half of the year, Saudi Aramco organizations began rolling out the first modules of the company's new megasized software system, SAP R/3, employing the world's most widely used resource planning software to streamline company business practices, slash costs and enhance productivity.

In addition to its usual contributions to local communities – such as building schools and providing home loans to employees – Saudi

Aramco supported the Government's efforts to deal with the outbreak and spread of Rift Valley Fever in the Jaizan area in the Kingdom's southwestern corner, providing medical and other assistance to area residents.



networking



The beginning of the new century was marked by a growing worldwide acceptance of the importance of electronic networking – particularly the Internet and its World Wide Web, as well as corporate intranets and extranets – in commerce and business operations at all levels. Saudi Aramco worked to develop these networks internally and externally to streamline and speed up hydrocarbon and other operations, facilitate decision-making, and enhance relationships with suppliers and customers.

The company's aggressive moves into state-of-the-art electronic networking were paralleled by a company-wide commitment to intensive human networking. Human networking is essentially putting into action the corporate value of Teamwork. It manifests itself in such activities as information sharing, project teams, interdisciplinary cooperation, joint ventures, partnering and supply chain management. These all operate in concert to achieve the aims of the enterprise.

The Internet and World Wide Web gave Saudi Aramco's scientists, engineers, physicians, pilots and other employees a new researching tool, providing professionals with information on new techniques, processes and products that could be used within Saudi Aramco to enhance operations and solve specific problems. Saudi Aramco's internal "web," the Intranet, offered organizations a way of sharing updated information on their activities with groups inside Saudi Aramco and its affiliates.

Saudi Aramco, recognizing the potential benefits of electronic commerce, embarked upon plans to prepare itself and others to conduct business online. E-mail became an ever more valuable communications tool throughout the company and beyond. LiveLink, a new electronic application available to company employees, gave instant access to internal reports and discussions, along with attachments and hyperlinks to associated Intranet web sites. All of these new technologies have created a new corporate "consciousness," simultaneously contributing savings through employee and organizational productivity gains.

The new electronic networking furthered development of new human networks while



facilitating old ones. Company professionals and project teams worldwide are now infusing each other's work with new ideas and perspectives.

Upstream Networking

The search for new hydrocarbon resources and the tasks of oil, gas and condensate production have uniquely benefited from electronic networking and the human cooperation that results from it.

Exploration analysts worked closely with petroleum engineers, using the synergy of new technology and computer networking to exploit new hydrocarbon fields and better manage existing ones. Relying on recently developed Saudi Aramco networks and databases, stratigraphic analysts, geologists, production engineers and drilling engineers worked on the same data at the same time. The Exploration and Producing network infrastructure was upgraded to providing stable, high-speed data access within the

Networking in Nature:

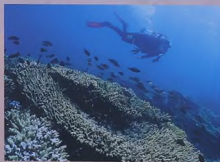
CORAL REEFS



Coral reefs form the largest living structures in the world. More than 150 species of coral are found in the Red Sea, with fewer types in the Arabian Gulf. Although coral reefs cover less than 0.2 percent of the ocean floor worldwide, they provide habitat for about 25 percent of its species. Coral reefs appear inanimate, but they are actually vast colonies of billions of individual living organisms working together for survival.

Corals are tiny marine animals that spend their adult lives in one place, as stationary polyps, feeding with the help of tentacles. The polyps secrete calcium carbonate, which creates the stony skeleton characteristic of reef structures. Corals have an interesting symbiotic relationship - or life partnership - with a form of algae known as *zooxanthellae*, which are responsible for much of the color exhibited by corals. Without these algae, living in coral tissues, most of the stony corals could not survive. The algae, through photosynthesis, provide essential carbon to the coral, while food captured by the polyps' tentacles provides nutrients for the survival of both species.

Members of almost all marine animal groups - such as fishes, sea stars, sea urchins, mollusks, crabs, shrimps, marine worms, etc. - thrive in association with coral reefs.



Exploration and Petroleum Engineering Center (EXPEC) Building in Dhahran and the remote areas.

The company implemented a remote real-time GeoSteering system for drilling operations, enabling real-time drilling, logging and survey data to be collected on the drilling site, transmitted by satellite to Dhahran headquarters, and then monitored anywhere in the company via Saudi Aramco's Intranet. Asset team members - geologists, geophysicists and engineers - can view, analyze and compare data in EXPEC's Three-Dimensional (3-D) Visualization Center while the drilling continues.

Such multidisciplinary teamwork has also been useful in studying the "Super-K" phenomenon, the extreme permeability that exists in some rock strata in the Kingdom. This condition allows for very high production rates but also causes stratigraphic breakthrough problems. Geoscientists collaborated with petroleum and production engineers to develop a model for both oil and total flow in the 'Uthmaniyyah area. Working mainly from the 3-D Visualization Center, they developed ways to identify "Super K" trends and anomalies in a reservoir, providing a useful map for development drilling.

Several multidisciplinary teams were formed to network on various onshore and offshore drilling projects that included extended-reach drilling, stretching as far as five kilometers.

A Ghawar Integrated Assessment Team, comprised of engineers, geoscientists and laboratory scientists, launched a multi-year study to continue monitoring reservoir attributes and reserves in the

Saudi Aramco embarked upon plans to prepare itself and others to conduct business online.



The 3-D Visualization Center lets geoscientists and engineers peer into the depths of oil and gas fields.

Ghawar field, the world's largest oil field.

In the Marjan field in the Arabian Gulf, the company installed a satellite communication system, establishing a reliable communications link between offshore facilities and the corporate network. Seventeen other fixed and mobile offshore sites will be equipped with similar systems.

Networking Around the Company

In other areas of company operations, the revolution in networking was just as pervasive:

- An e-commerce pilot program in the materials supply area gave employees, customers and suppliers knowledge and experience in this emerging technology. The goal: to create "virtual networks" between suppliers and internal customers. Some 70 product catalogs from 30 suppliers were available online for browsing, with two web sites available for actual online purchases. The company worked with Government



A gas-oil separation plant in the Gulf. Offshore facilities like this one are being linked to the corporate network by satellite.

agencies to develop standards and protocols to facilitate e-commerce in the Kingdom.

- Some 30,000 Livelink licenses were deployed throughout the company and extensive user seminars, classroom and video training sessions were conducted to ensure rapid utilization. Livelink – featuring company-wide document management, sophisticated visual workflow and tools that let virtual teams collaborate on projects – is expected to serve as one of the main web-based collaboration and knowledge-sharing environments in Saudi Aramco.
- Some 260 training courses were offered to employees through the Intranet in order to reinforce their computer skills and competencies.
- The company made major excursions into videostreaming to deliver high-quality multimedia information to the user via the Intranet or Internet, saving on travel costs and promoting effective knowledge sharing. Employees will be able to use the technology for training and professional growth by attending classroom courses from their desktops.
- Medical staff received excellent educational opportunities using global tele-video conferencing. This network provided



This control room at Abqaiq Plants will soon benefit from a new process data networking technology.

interactive medical education sessions with highly respected North American medical institutions such as the Mayo Clinic and the University of Toronto.

- The company introduced the CoPath System at its medical facilities, allowing clinicians to read pathology reports instantaneously, regardless of location.
- Saudi Aramco introduced a digital two-way communications system that interconnects measurement and control equipment such as sensors, actuators and controllers. It serves as a local area network within a process facility, collecting vast amounts of process and instrument diagnostic information not available with traditional signaling techniques. This system was installed on a small scale at Jiddah Refinery, and a larger project was in the design phase at Abqaiq Plants.

resources

resources



resources



The company effectively managed Saudi Arabia's precious hydrocarbon resources and enhanced the Kingdom's global reputation as a reliable energy supplier. Coordinated efforts by geoscientists, petroleum engineers, computer specialists, drillers, plant workers and others provided for the smooth operation of the company's sophisticated upstream networks of oil and gas wells, flowlines, gas-oil separation plants, gas processing plants and pipelines.

Saudi Aramco maintained its position as the world's leading producer and exporter of oil as well as the top exporter of natural gas liquids.

Crude oil and condensate production for the year totaled 2,889,004,609 barrels. Crude oil production alone was 2,847,026,609 barrels, and condensate production was 41,978,000 barrels. Gas production in 2000 totaled 2.079 trillion standard cubic feet (scf). At year's end, the company's total rig count stood at 32, up substantially from the previous year's 26.

The industry trade press continued to rank Saudi Aramco as the world leader in proven crude oil reserves and number four in gas reserves. Saudi Aramco's total remaining crude and condensate reserves at year's end stood at 259.25 billion barrels. Remaining gas reserves stood at 219 trillion scf. The company once again replaced all of the year's liquids production, mainly by locating new reserves in existing fields through reservoir and seismic studies.

Gas Expansion Program

One of Saudi Aramco's principal goals in recent years has been to expand nonassociated gas reserves and the related gas processing and distribution network. This will help satisfy the growing domestic demand for gas



Exploring the Rub' al-Khali.

as fuel and industry feedstock – an effort known as the Gas Expansion Program.

In June, a new Gas Operations business line was created, consolidating all of the company's gas-related activities. This consolidation will help focus and coordinate activity for the development and execution of Saudi Aramco's gas business strategies, including the expansion program.

Company exploration and drilling activity added 5.9 trillion scf of nonassociated gas reserves, primarily in the area south and west of the Ghawar field. This included discovery of two new gas fields at Manjurah and Ghazal, the seventh and eighth in the company's stepped-up gas exploration effort.

Networking in Nature: HONEYBEES

Saudi Arabia's honeybees, raised largely amid the hills and mountains of the western Tihamah region, produce some 100 tons of commercially marketed

honey per year. Colonies of thousands of individual bees work cooperatively to maintain the integrity of the nest and ensure the survival of the next generation. To accomplish these goals, honeybees have developed elaborate social structures and networking techniques to divide the many tasks among the worker bees. The workers are all females. The other two classes of bees are the queen – one to a hive – and the male drones, whose only job is to fertilize the queen's eggs.

The chores involved in maintaining the hive are divided up among a network of thousands of worker bees on the basis of age. The youngest bees get janitorial duty, cleaning the hive cells for about three days. Then they serve as nurses to the brood for several days more. From days 10 to 20, the bees construct new hive areas and receive and store pollen. When they reach about 20 days old, the worker bees change jobs once more, and begin standing guard at the hive entrance. A few days later, they become foragers, hunting for flower pollen and nectar. The bees will remain foragers for the rest of their lives. This pattern, however, is flexible. Young worker bees raised in the absence of older foragers will begin to forage earlier than normal.

The mechanism underlying the age-based division of labor among honeybees and their ability to respond to environmental changes still remains largely a mystery.



New supercomputers at the EXPEC Computer Center.

The discoveries brought to 87 the total number of Saudi Aramco's oil and gas fields.

The Manjurah find, about 30 km west of Haradh at the southern tip of Ghawar, produced during testing at 12 million scf per day (scfd) of sweet gas and 670 barrels per day (bpd) of condensate. Ghazal's discovery well, 150 km southeast of Riyadh and 100 km west of Haradh, eventually showed test flow rates of 20 million scfd of sweet gas and 3,200 bpd of condensate.

Saudi Aramco made three additional gas discoveries in new formations underlying existing fields in Niban, Hawiyah and Mazalij.

To meet the increased requirements of the Gas Expansion Program, the EXPEC Computer Center (ECC) used new cost-effective technologies to triple its seismic processing capacity. This resulted in sharper imaging of deep hydrocarbon targets, benefiting the Gas Expansion Program and boosting the success rate of drilling operations.

As part of the Gas Expansion Program, the company commissioned a new pipeline network supplying sales gas to three new SEC power plants in the Riyadh area.



Storage tanks being assembled at Hawiyah Gas Plant. Below, a new propane surge vessel at Ju'aymah that will serve industries in Jubail.

The ECC doubled its overall supercomputing capacity by installing new supercomputers and related software in a comprehensive upgrade to support expanded exploration and field development. Included was a new seismic processing platform with 512 processors and a data capacity of 190 terabytes. In addition, the upgraded reservoir simulation platform was developed in-house with 104 processors and nine terabytes of disk space. The upgrade provides enough online storage space to hold all the information contained in the pages of a stack of books reaching all the way to the moon and back. Saudi Aramco's ECC is now one of the most powerful geosciences supercomputing centers in the world, according to the latest industry rankings.





Ju'aymah Gas Plant facilities at night.

As part of the Gas Expansion Program, the company commissioned a new pipeline network that supplies sales gas to three new Saudi Electric Company (SEC) power plants in the Riyadh area. This was the first sales gas to be delivered to the Central area and displaces crude oil burning at the related power plants.

Other additions to the Master Gas System pipeline network progressed in 2000 in support of expansion at existing gas plants and construction of new grass-roots gas plants.

Khuff gas facilities at the Shedgum and 'Uthunyah gas plants were expanded, increasing gas processing capacity to 2.4 and

2.5 billion scfd, respectively. These expansions added gas treating, sulfur recovery and boiler capacity. At Berri Gas Plant, a new high-pressure gas treating facility and related facilities boosted that plant's gas processing capacity by nearly one-third to over 1 billion scfd.

Two major gas plant construction projects to expand the Master Gas System to meet increased in-Kingdom demand were in progress during the year:

- **Hawiyah** – Construction was 65 percent complete and four months ahead of schedule at year's end. This grass-roots facility is slated to become operational by the end of 2001 and will produce 1.4 billion

Two major gas plant construction projects to expand the Master Gas System to meet increased in-Kingdom demand were in progress during the year.



A spheroid, center, at Abqaiq Plants holds associated gas released from crude oil.

scfd of sales gas, 170,000 barrels of condensate and 1,000 metric tons of sulfur per day.

- **Haradh** – This gas plant's project study was completed in 2000 – two months ahead of schedule. The project is scheduled to go on-stream in December 2003 and will process 1.6 billion scfd of nonassociated gas from fields in the South Ghawar area. The project also provides for gas gathering manifolds, condensate handling and processing facilities and pipeline to deliver gas to customers.

The gas operations also implemented a number of advanced technologies including advanced process controls to improve plant performance, reduce cost and enhance revenue.



Processes



Behind the manufacturing and distribution of petroleum products lies an intricate network of facilities and pipelines that must all work in concert for the hydrocarbon needs of the nation and other customers around the world to be met. Crude and product storage tanks and terminals, pipelines, bulk plants and refineries are linked together and coordinated electronically by Saudi Aramco's Oil Supply Planning and Scheduling (OSPAS) center.



The OSPAS center, where the movements of Saudi Aramco's crude oil, gas and products are monitored and directed.

An Integrated Network

OSPAS is the organization that oversees and coordinates reliable production and delivery of Saudi Aramco's complex flows of hydrocarbons. The center, manned 24 hours a day, is one of the largest, most sophisticated real-time command centers in the region and the world, monitoring, controlling and directing the throughput of billions of dollars worth of crude oil, gas and petroleum products.

This integrated network produces operational efficiencies and generates savings by fine-tuning the hydrocarbon supply networks. By shifting products from one location to another to meet contingencies, the system promotes debottlenecking and avoids product double-handling.


During the pilgrimage season, from February 9 through April 22, 2000 early planning enabled the company to provide 3.5 million barrels of jet fuel for airline use, a jump of 18 percent over the previous year, and at the same time maintain a healthy regional inventory of jet fuel.

Saudi Aramco completed construction of facilities for a Disaster Recovery Site, a facility equipped with backup computers, network and voice communications that enable the critical operations of OSPAS to continue even if the main control center is disabled in a disaster situation.

In March, the Government turned over operation and maintenance of Saudi Strategic Storage (SSSP) Site 1 in Riyadh, one of five planned for the Kingdom, to Saudi Aramco. A

Networking in Nature:

HAMADRYAS BABOONS



Apart from man, the hamadryas baboon is the Kingdom's only primate. Hamadryas baboons, which reside in East Africa and the mountainous Asir region of Saudi Arabia, possess a complex hierarchical system that operates on several levels.

The basic unit is one male with accompanying females, but the units combine into larger groups called clans. These clans are made up of related groups of males that merge for a while to forage and socialize, but do not share mates. Clans sometimes merge to form troops with common sleeping sites, often on cliffides. Such a network may move as a troop to a new location, but usually during the day they split up into clans.

In baboon society, hierarchical rank is inherited from the females. Females outnumber male group members, though males tend to dominate, herding females around and determining their foraging direction. Among hamadryas baboons, it is the females that leave their birth troop. Yet males may also change troops more than once in their lives.

Baboons communicate through facial movements, gestures and postures, as well as by scent and voice. They are the only primates besides men and chimpanzees known to engage in cooperative hunting.



Pipes zigzag at Riyadh Refinery.

Management Information System data link has been set up between Site 1 and Saudi Aramco, allowing for exchange of information among the underground storage site and surface facilities, Riyadh Refinery, Dhahran's mainframe computers and the company's air quality monitoring system. The SSSP, sponsored by the Ministry of Defense and Aviation, seeks to assure the supply and distribution of refined products such as jet fuel, gasoline and diesel in the Kingdom in the event of an emergency. Saudi Aramco has played a key support role in the project since its inception in 1994, and will eventually operate and maintain all SSSP facilities, slated for completion by January 2009.

Saudi Aramco's phase-in of unleaded gasoline production led a long list of achievements in the refining and distribution area.



Ships loading at Ras Tamura Terminal.

The Refining Network

Saudi Aramco's phase-in of unleaded gasoline production led a long list of achievements in the refining and distribution area. The company's domestic refineries completed the switch to unleaded gasoline production before year's end.

Yanbu' Refinery, for example, cut its lead injection 50 percent early in 2000 and gradually reduced that quantity to zero by December. Facilities for handling the lead-replacement oxygenate MTBE as well as the

excess light straight run naphtha displaced from gasoline were completed three months ahead of schedule at Riyadh Refinery and South Riyadh Bulk Plant. Riyadh Refinery launched unleaded production in September and promptly began replacing leaded gasoline previously stored at the Riyadh product facilities of the Saudi Strategic Storage Project.



Riyadh Refinery: Its processes are now automated by digital controls.

In other developments:

- Ras Tanura** – During the year, the company's first refinery concluded its new South Plant start-up activities with performance tests. A project to automate movements of oil and products, including three on-line blenders, at Ras Tanura Tank Farm was completed successfully. Sophisticated software now allows most product movement and blending activities at this storage facility to be conducted automatically with minimal human intervention. At the Ras Tanura Terminal, new computer systems were installed to replace an older control system at the Sea Island facility, increasing flow accuracy and providing better plant controls.
- Riyadh** – The refinery received a new digital control system, replacing its pneumatic control system for improved measurement of process variables, real-time data acquisition, and better overall monitoring and control of all processes. The refinery also completed a new state-of-

A project to automate movements of oil and products, including three on-line blenders, at Ras Tanura Tank Farm was completed.



Part of Ras Tanura's storage tank farm, where the movements of crude oil and products were fully automated.

the-art laboratory to serve Saudi Aramco facilities in the Central Area.

- Jiddah** – This refinery replaced the instrumentation of its Crude Unit No. 2, Fluid Catalytic Cracker, Platformer and Merox units with state-of-the-art distributed control system (DCS) technology.
- Yanbu'** – The refinery conducted upgrades and maintenance, and also installed a state-

of-the-art online analyzer and DCS for its gasoline blender.

- Rabigh** – This crude topping refinery increased its year-round maximum sustained capacity from 400,000 to 425,000 bpd of crude oil. This capacity will increase cost efficiency and help satisfy future local demand and product export requirements.

environment



Saudi Aramco continued longstanding efforts to protect the ecosystems in which it operates and contribute to the overall environmental health of the Kingdom. Using the electronic and human networks at its disposal, the company sought to prevent damage to the complex, overlapping and sometimes fragile networks in nature – those relationships that bind all living things together and sustain life on the earth.

In a nationally significant development, Saudi Aramco phased out leaded gasoline production at all of its domestic refineries by year's end. The conversion to unleaded gasoline was undertaken to ensure cleaner air and protect the well-being of everyone in the Kingdom, particularly young children, who are most susceptible to the toxic effects of lead. The phase-out came a year in advance of the target date for all Gulf Cooperation Council (GCC) member countries to switch to unleaded gasoline.

Employing its extensive AMMNET air quality monitoring network and other resources, the company continued to closely watch and assess the impact of its industrial facilities on surrounding areas, taking steps to assure peak environmental performance. The company also carried out extensive water-quality testing in both industrial and community areas.

Saudi Aramco continued to set environmental targets and objectives for all business lines and operating plants. This effort was enhanced by an environmental benchmarking study that identified ways to improve management of corporate environmental obligations.

The company took part in an environmental workshop in Riyadh on coral reef bleaching, and sharing recent findings based on satellite imagery to help identify areas of extensive coral reef habitat along the Red Sea coastline. These areas require particular attention in light of plans to develop offshore oil and gas resources on the Kingdom's west coast. Coral reefs are one of the Kingdom's most valued habitats, and Saudi Aramco has conducted long-term monitoring of the reefs along the



President and CEO Abdullah S. Jum'ah pumps the first tankful of unleaded gasoline in Riyadh.

Saudi coastline in cooperation with the Research Institute of King Fahd University of Petroleum and Minerals (KFUPM) since the mid-1980s.

Saudi Aramco continued its involvement in developing mangrove habitats for shrimp and other creatures on the Arabian Gulf coast near the Ras Tanura Refinery. The company recently took the program a step further by helping the National Commission for Wildlife Conservation and Development to transplant an additional 1,000 new seedlings. Schoolboys from the nearby Safwa school system took part in the transplant effort – showing the growing awareness among young people in



Efforts by Saudi Aramco and others to develop coastal mangrove habitats are beginning to pay off.

the Kingdom of the importance of preserving natural habitats.

To maintain its global readiness in the event of an oil spill, the company conducted two major oil spill drills during the year: the first exercise was staged in Morgan City, Louisiana, in April; the second, held in Algeciras, Spain, in November, was conducted jointly by the company, its affiliates and Spanish authorities.

As a member of the Kingdom's delegation, the company took part in meetings related to the Kyoto Protocol of the U.N. Framework Convention on Climate Change, aimed at reducing emissions of "greenhouse gases" such as carbon dioxide.

Saudi Aramco continued to cooperate with Government agencies, including municipalities, to promote environmental awareness in the Kingdom. Coordinating with the municipality of Jiddah and the Meteorology and Environmental Protection Administration (MEPA), the company hosted

the first-ever Industrial Waste Management Workshop in that city. In the Eastern Province, the company promoted environmental awareness in the schools, and a practical waste recycling program was launched.

As part of its ongoing environmental efforts, Saudi Aramco implemented specifically tailored energy conservation programs at its many oil and gas plants. A wide range of energy efficiency improvement and emission

reduction measures have been identified, ranging from short-payback operations and maintenance items to large investments in process optimization, heat integration and cogeneration. The programs seek to reduce the company's fuel gas and electric power consumption, setting an example for other industries in the Kingdom.

Construction of expanded wastewater



An oil spill exercise in progress.

Saudi Aramco continued to cooperate with Government agencies, including municipalities, to promote environmental awareness in the Kingdom.



Recycled wastewater keeps the company's communities green.

treatment facilities for Dhahran was under way all year and neared completion. When completed in 2001, all wastewater – up to 10 million gallons per day – will be recycled, i.e., treated to the tertiary level and used as irrigation water in certain company green areas.

In Abqaiq, the newly completed regional sewage treatment plant provides tertiary irrigation water for the green areas of the company's camp as well as for the green belt at Madinat Abqaiq, conserving some 90 million gallons of ground water each month.

As part of Saudi Aramco's program to phase out the use of chlorofluorocarbons (CFC's), the company launched preliminary design work on two major capital projects to replace

a total of 92 air-conditioning chiller units that use CFC refrigerants. The new chiller units will use a non-CFC refrigerant that is safe and does not affect the ozone layer. The replacement program complies with the Montreal Protocol, of which Saudi Arabia is a signatory.

A sophisticated new pollution control vessel, the 69-meter *Midyan*, arrived at Jiddah, adding significant hardware to the company's environmental protection capabilities. The vessel is equipped with advanced oil spill and marine pollution equipment, including two systems that can each recover over 600 barrels of oil per hour. The *Midyan* is available for other duties, such as inspecting mooring buoys and supporting company dive teams.



The Midyan, a new high-tech vessel for fighting oil spills.

support

The company's industrial and other operations inside the Kingdom and around the world require a complex infrastructure of support – myriad networks of relationships and facilities designed to facilitate achievement of our corporate goals. Similar networks are used to handle commitments to those outside the company – including local and national communities. All these networks provide diverse services such as engineering, information technology, transportation, industrial security, community services, project management, materials supply, medical care, loss prevention, finance, law, training and human resources.

Human Resources

Saudi Aramco's employees totaled 54,501 at year's end, including 46,315 Saudi employees representing about 85 percent of the total work force. The company continued to attract new Saudis from different educational backgrounds for the purpose of training and developing them to become fully qualified to perform the various jobs available in the professional, industrial and administrative segments of the work force.

In line with this objective,

1,200 Saudi high school graduates joined the non-employees programs – 900 in the two-year Apprenticeship Program and 300 in the College Degree Program. The total participation levels in these two programs at year-end were 1,463 and 1,232, respectively. The company also attracted 216 fresh college graduates from various disciplines to take part in the on-the-job Professional Development Program to gain work experience over a period of three years. By the end of the year, there were 1,084 participants in the program.

A total of some 10 million man-hours were invested in training and development of the work force. At the same time, curricula of major training programs were streamlined. This resulted in significant cost savings and training cycle time reductions. A number of new initiatives were launched covering technical training, competencies, leadership



Videoconferencing is a valuable tool for training and career development.

and self-development. These efforts were benchmarked against the best practices of leading corporations in the oil and gas industry, as well as those in information technology and communications.

The company made greater use of e-learning and distance learning technologies, increasing the learning opportunities available to employees at their desktop computers and facilitating the work of the e-learning practitioners. A computerized knowledge base system was developed to document and share employee skills, best practices, case studies and useful Net links.

Training program completions during the year contributed significantly to greater Saudization and the application of newly-acquired knowledge in the workplace. A graduation ceremony was held in November for 211 university graduates sponsored by the company (Bachelors – 172, Masters – 20,

Networking in Nature:

HOUBARA BUSTARDS

The houbara bustard, traditional quarry of falconers, is a very shy desert bird with a wide but sparse breeding range from northwestern Africa to China. Small numbers of these chicken-sized game birds still breed in the Arabian Peninsula, but most migrate here from breeding grounds in Iran and Central Asia.

While the Central Asian population is estimated to top 100,000 birds, numbers have declined greatly in recent decades for many reasons, including hunting, agricultural intensification and other land use changes. These birds winter from Pakistan to Arabia, where they overlap with the local breeding populations.

Like other migratory birds, bustards network extensively during their annual travels, keeping together while in flight, and nesting and feeding together. During breeding season, the males organize into communal displaying sites of up to 15 individuals spread over as much as 45 sq. km. Females usually lay their eggs in or near these sites.

In 1986, Harrat al-Harrah Protected Area was established around the last known houbara breeding area in the Kingdom. This large reserve of sand, wadis and black basaltic rocks is located in northwestern Saudi Arabia. Hunting is forbidden and grazing livestock is restricted to camels. In 1989, a second protected area was established at Mahazat as-Said and fenced to assure complete protection against hunting and grazing.



Medical/Dental – 17 and Doctorate – 2). Also, a total of 345 completed the Professional Development Program; 950 completed the Apprenticeship Program; and more than 1,400 completed other in-house and out-of-Kingdom training programs.

Throughout the Company

A highlight of the year was the April launching of Saudi Aramco's bold new corporate identity, including a striking new company logo featuring a brilliant white burst of energy across a global field of blue and green. The new identity, unveiled at a ceremony in Dhahran, signaled a fresh and powerful visual image for the company. The new corporate identity reflects five attributes or qualities of the company most often identified in surveys: Energy, Innovation, Partnership, Performance and Reliability. The new logo was quickly applied to company vehicles, facilities, stationary and business cards. All of Saudi Aramco's publications were redesigned to reflect the company's new public image.

In the information technology area, company specialists provided some 35,000 users in over 1,000 buildings throughout the Kingdom with efficient and reliable computer and networking services and solutions. Older, congested circuits were replaced with high-speed digital ones. The international network was redesigned and its capacity expanded by leasing high-speed links.

In a key development reaching across the enterprise, the company implemented the first modules of the SAP System – the world's leading business resource planning software – to replace legacy systems, providing increased

The international network was redesigned and its capacity expanded by high-speed links.



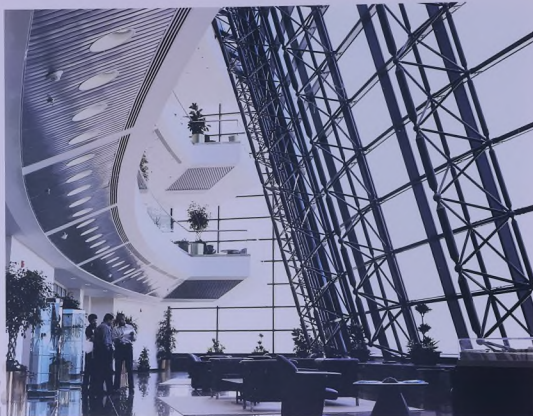
A Saudi Aramco veteran and a new hire join the president and CEO, left, in inaugurating the new corporate identity.

productivity through improved data availability, quality and reduced processing time. The first module to be activated was Human Resources, followed by Hydrocarbons Management, Training and Quality Management (Inspection). To support this activity, some 36 networked computer classrooms were established Kingdom-wide and used to train over 10,000 Saudi Aramco employees in using the new integrated and networked SAP computer system. Company decision-making will be enhanced as SAP provides a multitude of users with better access to common information using data warehouse technology.

The installation of systems such as

videoconferencing and Livelink complemented the data network structure by providing collaborative tools to improve communication between users and system designers. Web-based technology was introduced, giving users the ability to promote and share proprietary information across business lines. More than 200 Intranet web sites were in use at year's end, and the number was expected to rise to over 500 sites in the next few years.

On other support fronts: The company completed phase I of the new Lab Research & Development Center (LR&DC) in Dhahran, providing 12,000 square meters of state-of-the-art research facilities to support company



Inside the lobby of the new Lab R&D Center.

operations. The LR&DC provides ample high bay space to house large-scale simulation systems such as a catalyst pilot plant and sanding and formation damage equipment. It also provides the opportunity to expand and upgrade research equipment to support exploration, producing and refining operations. High on the list of strategic research was a project to obtain a physical simulator of the Ghawar field, requiring dedicated lab space and x-ray shielding not previously available.

Saudi Aramco scientists and researchers frequently develop additional value through

patentable discoveries as they work to meet the challenges associated with the company's complex operations.

Saudi Aramco established an Intellectual Assets Management (IAM) team to manage and protect company-developed assets and commercially exploit those developed by company technology and research. The initiative, which will centralize the processing of patents and copyrights so that intellectual properties can be licensed and developed for marketing, has great potential for increasing future revenues and generating significant cost savings. First efforts to develop a

Web-based technology was introduced, giving users the ability to promote and share proprietary information across business lines.



A Saudi Aramco jet, emblazoned with the new corporate look.

world-class IAM system will focus on the LR&DC.

On the project management front, the company completed 45 capital and non-capital projects scheduled for completion in 2000 – the most completions in a decade – including major gas plant upgrades at 'Uthmaniyah and Berri. Fifty new project proposals were initiated in 2000 – again a record for recent years.

Outreach

Saudi Aramco remained solidly committed to good citizenship and public service, supporting local and national endeavors and contributing both financially and administratively to economic and social development efforts inside the Kingdom and

beyond. By reaching out to local communities and the nation, Saudi Aramco builds economic and social networks that serve not only the company's long-term objectives but those of Saudi Arabia as well.

During the outbreak of Rift Valley Fever (RVF) in the Jaizan area of southwestern Saudi Arabia in the autumn, Saudi Aramco provided logistical support and sent preventive medicine specialists to the scene. A team of epidemiologists traveled to Jaizan to cooperate with the health authorities in assessing the risks of the disease

spreading to other parts of the Kingdom.

In a Saudization development that benefits not only the company but the Kingdom at large, 20 Saudi women – nine students graduating from the company's first-ever Practical Nursing Program and 11 nursing students from King Faisal University in Dammam – joined the company's nursing services. Saudi Aramco set up its Practical Nursing Program in 1999. The KFU nursing graduates studied under the company's College Degree Program for Non-Employees (CDPNE).

Saudi Aramco continued its policy of promoting the national economy on local and national levels by awarding most of its contracts to Saudi-owned or joint-venture companies. In 2000, 86 percent of Saudi



Local vendors and contractors come and go in the lobby of a Saudi Aramco building at North Park, Dhahran.

Aramco's purchases came from Saudi factories or Saudi importers, and Saudi factories supplied more than \$330 million of those purchases.

At year's end, more than 11,000 contractors were registered with Saudi Aramco, and up-to-date information on each is maintained in a computerized Contract Information System.

A contracting World Wide Web site was completed during 2000, enabling the company to better communicate with its existing contractors and bring in additional companies that wish to do business with Saudi Aramco.

Highlighting its long and close relationship with a Dhahran neighbor, Saudi Aramco funded a new Chair in Energy Economics at King Fahd University of Petroleum and Minerals (KFUPM). An associated program will provide for research in energy economics, particularly in the Kingdom, as well as organize seminars on the subject and set up an information center on energy economics research.

Eight new Saudi Aramco-built Government schools were completed and turned over to the Directorate of Education, bringing to 123 the total number of schools built under the program since it began in 1953.

In 2000, 86 percent of Saudi Aramco's purchases came from Saudi factories or Saudi importers, and Saudi factories supplied more than \$330 million of those purchases.



Delegates confer at the International Energy Forum in Riyadh.

A public garden was completed in Dammam as part of the Home Ownership Program, which saw the completion of 1,338 houses by eligible Saudi employees during the year.

The world-class Saudi Aramco Exhibit in Dhahran attracted more than 150,000 visitors during the year – its first full year of operation since reopening to the public in late 1999 after an extensive renovation. The new and updated displays reflect state-of-the-art technology in the audiovisual and electronics industries.

The company furnished traveling exhibits for some 40 national and international conferences and exhibitions, a number of them attracting worldwide attention, such as the 16th World Petroleum Congress in Calgary, Canada, and the International Energy Forum in Riyadh.

The Exhibit's popular Mobile Library Program provided books for elementary school children at 185 schools throughout the Kingdom, involving almost 30,000 students.

markets



Little more than a decade ago, Saudi Aramco was essentially an exploration and production company. Today it is an integrated petroleum enterprise with global reach. It not only exports crude oil, petroleum products and sulfur, it also ships crude oil worldwide and participates in joint ventures to refine petroleum and market its products in Asia, Europe, Africa and North America. Along with these new responsibilities comes heightened market awareness – a clear understanding of how the entire energy industry works, as well as a sense of where new opportunities will emerge. Saudi Aramco is now a major player far downstream, and its importance in this area is certain to grow.



Export Marketing

Saudi Aramco experienced continued success in marketing for export the company's production of crude oil, liquefied petroleum gas (LPG), refined petroleum products and sulfur. It continued to focus attention on new opportunities, as key oil-importing countries recovered from recession and petroleum demand increased. The company's market share and customer base in its major global markets were maintained, including its position as the leading foreign crude supplier to the United States, while adding customers in the Far East market.

The company launched an online Petroleum Analysis and Refinery Information System – PARIS-Web – to give all of Saudi Aramco's international sales and marketing offices access through the World Wide Web to information on customers, contracts, countries and refineries.

Shipping

Saudi Aramco's shipping affiliate, Vela International Marine Limited, provided about one-fourth of Saudi Aramco's crude export transportation. It shipped almost 2.6 million bpd of crude oil and 370,000 bpd of refined products.

Vela's fleet consisted of 21 crude carriers and two product tankers at year's end. Two large crude carriers and two product tankers were retired from the fleet and replaced temporarily with bareboat charters. In August, Vela signed a contract with a leading international shipyard to add four new Very Large Crude Carriers (VLCCs) of about 300,000 deadweight tons (dwt) each, to replace four crude carriers that have been or will be retired. This major



Contract signing ceremony for Vela's order of four new VLCCs.

shipbuilding program is the first for the company since the completion of 15 VLCCs in the early 1990s. An Aframax tanker (of about 80,000 dwt) also was approved to be built.

Vela attained full ISO 9002 accreditation for its management of safe ship operation and pollution prevention – a milestone in the company's history and another indicator of its worldwide commitment to safety at sea. Vela previously held a certificate of compliance with the code; the full accreditation certificate is recognition of excellence in its management of oil transportation and related businesses.

Vela's Emergency Response Plan was put to the test in March when a time-chartered tanker, carrying about 2.1 million barrels of crude oil destined for Rabigh Refinery, ran aground on a coral reef in the Red Sea off Rabigh Port. The Incident Management Team quickly set up an action plan to transfer crude from the grounded vessel to a lightering ship, and Saudi Aramco's Oil Spill Response Team was activated as a precaution in the event of

Networking in Nature:

ARABIAN ORYX



Arabian oryx are normally found in arid plains and deserts. They also inhabit rocky hillsides and thick brush. The oryx networks with others of its kind, using herd behavior to survive in harsh environments. The oryx eats mainly grasses, but herbs, seedpods, fruit, fresh growth of trees, tubers and roots also form part of its diet. It can go for weeks without drinking water.

The gregarious oryx lives in nomadic herds that follow the rare rains. The normal group size is eight to 20 animals, but herds of up to 100 have been spotted. A herd contains all ages and both sexes. Such groupings probably stay together for a considerable time. Oryx are very compatible with one another – aggression is rare, allowing animals to share scattered shade trees under which they may spend much of the day in the summer heat.

The Arabian oryx is an endangered species. In recent years, captive herds have been raised, and the species reintroduced to the wild in central Saudi Arabia.

Captive oryx have been kept in herds consisting of a single dominant adult male and several adult females and young. Groups of bachelors are kept separately and establish a hierarchy among themselves through fighting and chases.



an oil spill. But two hours after lightering began, the incident was over, with no oil spills or casualties.

At year's end, 18 vessels had installed an advanced ship earth station system, providing high-quality, high-security voice, telex, facsimile and data communications at a much lower cost than systems used previously.

Joint Ventures

Saudi Aramco continued to protect the value of existing joint ventures and seek potential new joint ventures as dedicated outlets for Arabian crude oil. Saudi Aramco is also partnering with others in the Kingdom in the utilities business. Following are some of the year's accomplishments:

- Motiva** – Saudi Aramco's U.S. refining and marketing joint venture with Shell and Texaco, Motiva Enterprises, purchased a 1.8-million-barrel refined products terminal in New Haven, Connecticut. The facility, which handles gasoline, diesel, jet fuel and heating oil, demonstrates Motiva's commitment to expand its products distribution presence in the fuel-short Northeast.
- In October, Chevron and Texaco announced their plan to merge. The following month, Saudi Aramco affiliate Saudi Refining Inc. and Shell signed a non-binding Memorandum of Understanding confirming their agreement to make a joint offer for the Texaco interest in Motiva, under which each would hold a 50 percent interest in the restructured joint venture.
- S-Oil** – Saudi Aramco's joint venture in the Republic of Korea changed its name from Saangyong Oil Refining Co. to S-Oil

The major shipbuilding program is the first for the company since the completion of 15 VLCCs in the early 1990s.



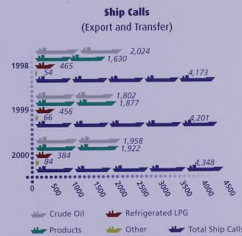
MOH's Corinth refinery provides a familiar backdrop for local Greek fishing activities.

Corporation. At the Onsan refinery, a new seasonal stocking storage facility with a capacity of 9 million barrels was completed. The nameplate capacity of the paraxylene center was increased by 20 percent to 600,000 metric tons through revamping.

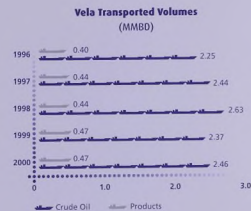
- MOH** – Motor Oil (Hellas) Corinth Refineries, Saudi Aramco's joint venture in Greece, upgraded its refinery to comply with new European gasoline specifications and to gain a competitive advantage over other companies. The upgrade, completed two months ahead of schedule and under budget, included new units to desulfurize gasoline and reduce its benzene content. A reformer was modified

by addition of a continuous catalyst regeneration facility.

- SASREF** – Saudi Aramco Shell Refinery Company (SASREF) in Jubail, a joint venture with Shell, completed construction of a thermal gas oil unit, which transformed



Note: Exports were from Ras Tanura/Ju'aymah and Yanbu'. Transfers were at Jiddah, Rabigh, Yanbu' and coastal bulk plants.



the refinery into a full conversion facility, capable of producing lighter, more valuable products. A new gas turbine also was constructed, allowing SASREF to co-generate electricity and thereby reduce its power requirements from the Saudi Electric Company.

- **Petrolube** – The Saudi Arabian Lubricating Oil Company (Petrolube) in Jiddah continued its efforts to penetrate international markets by establishing a new agreement in South Africa and by returning to the Sudanese market, which resulted in a substantial increase in the sales of lubricants.

- **Luberef** – The Saudi Aramco Lubricating Oil Refining Company (Luberef) significantly increased sales to Africa. First quarter 2000 sales to that continent were equivalent to 88 percent of total sales to Africa during 1999. Luberef's base oil sales into the United Arab Emirates market were 12 percent higher than the previous year. Luberef successfully exported asphalt from its Yanbu' Plant. These exports were loaded by temporary facilities to test the market prior to the completion of the asphalt project in March 2001.

- **SAMREF** – Yanbu'-based Saudi Aramco Mobil Refinery Co. Ltd. (SAMREF), the company's joint venture with Exxon Mobil, began supplying unleaded gasoline to meet the Kingdom's lead phase-out requirements. To accomplish this, SAMREF converted all of its gasoline blending and



Vela tanker Libra Star carries hundreds of thousands of tons of crude oil to overseas markets.

storage systems to unleaded service. During the first half, SAMREF achieved a world-class record of 32 million man-hours without a lost time injury.

- **Fujian Development** – Saudi Aramco continued to pursue a potential refining and marketing investment in Fujian, China. The proposed Fujian integrated project joint venture would acquire the existing 80,000-bpd refinery in Fujian and upgrade it into a 240,000-bpd world-class refining and petrochemical complex. The proposed partners in the Fujian project are Aramco Overseas Company B.V. (AOC), an affiliate of Saudi Aramco, Exxon Mobil and Fujian Petrochemical Co. Ltd. (FPCL), which is owned equally by Sinopec and the Fujian provincial government. It is envisioned that FPCL will own 50 percent of the joint venture while AOC and Exxon Mobil each will own 25 percent.
- **Marafiq** – In October, Royal Decree No. 29/M approved formation of the Power and Water Utility Company for Jubail and

Saudi Aramco continued to seek potential new joint ventures as dedicated markets for Arabian crude oil.



H.E. Ali I. Al-Naimi greets employees during his first official visit to AGOC in al-Khafji.

cooling, wastewater and utility infrastructure for the Jubail and Yanbu' industrial cities.

New Affiliates

Saudi Aramco created a wholly owned subsidiary named the Aramco Gulf Operations Company Limited (AGOC), headquartered in al-Khafji. This affiliate took over, on the Government's behalf, the Kingdom's undivided 50 percent interest in certain assets of the Arabian Oil Company (AOC-Japan) following the expiration of the Saudi concession to engage in petroleum operations within offshore areas of the former Saudi-Kuwaiti Neutral Zone. AGOC was granted the rights, and vested with the obligations, under the former concession agreement with AOC-Japan.

The Arabian Oil Company still retains offshore operations in the area on behalf of Kuwait: AGOC and AOC-

Japan signed a Joint Petroleum Production Operations Agreement in April, defining each party's responsibilities and obligations in conducting joint operations in the area on behalf of the governments of Saudi Arabia and Kuwait, respectively.

Yanbu' (Marafiq). The shareholders of Marafiq are the Royal Commission, the Public Investment Fund, SABIC, Saudi Aramco and other interested industrial beneficiaries. Marafiq will take over the operation, maintenance, management and expansion of power, water, seawater

In-Kingdom Manufacturing and Product Sales (Barrels)

Principal Products Manufactured at In-Kingdom Refineries

2000	Ras					Total Domestic
	Tanura	Yanbu'	Riyadh	Jiddah	Rabigh	
LPG	2,402,467	2,557,100	1,039,590	1,307,467	-	7,306,624
Naphtha	(2,579,133)*	1,293,837	-	3,146,272	28,774,658	30,635,634
Gasoline	23,959,914	12,929,107	9,710,406	4,766,495	-	51,365,922
Jet Fuel/Kerosene	4,927,871	2,454,647	4,485,489	(1,038,708)*	10,873,663	21,702,962
Diesel	42,066,389	27,868,842	14,349,723	6,212,104	46,583,922	137,080,980
Fuel Oil	38,220,733	22,846,427	67,222	3,240,457	50,443,903	114,818,742
Asphalt & Misc.	2,009,559	-	4,245,843	1,827,137	-	8,082,539
Total	111,007,800	69,949,960	33,898,273	19,461,224	136,676,146	370,993,403

Principal Products Manufactured at Joint-Venture Refineries**

2000	SAMREF		SASREF		Total JV		Grand Total Domestic and JV
	(178,000)*	-	1,341,500	12,202,500	1,163,500	12,202,500	
LPG	-	-	1,341,500	12,202,500	1,163,500	12,202,500	42,838,134
Gasoline	22,952,000	-	1,622,500	24,574,500	24,574,500	24,574,500	75,940,422
Jet Fuel/Kerosene	10,956,500	-	11,652,000	22,608,500	22,608,500	22,608,500	44,311,462
Diesel	18,018,500	-	12,529,000	30,547,500	30,547,500	30,547,500	167,628,480
Fuel Oil	11,586,000	-	12,975,000	24,561,000	24,561,000	24,561,000	139,379,742
Asphalt & Misc.	-	-	-	-	-	-	8,082,539
Total	63,335,000	52,322,500	115,657,500	-	-	-	486,650,903

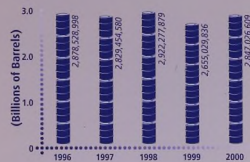
*Negative figures primarily indicate products that were reprocessed into other refined products.
**Saudi Aramco's 50 percent share of production.

Product Sales by Region

2000	Western	Central	Eastern	Total
LPG	4,752,469	1,041,230	4,339,310	10,133,009
Gasoline	36,786,113	33,760,166	16,312,841	86,859,120
Jet Fuel/Kerosene	10,748,059	6,839,908	2,857,511	20,445,478
Diesel	68,266,732	45,901,772	19,937,764	134,106,268
Fuel Oil	53,181,411	-	6,672,074	59,853,485
Asphalt & Misc.	1,814,822	4,048,615	1,991,116	7,854,553
Total	175,549,606	91,591,691	52,110,616	319,251,913

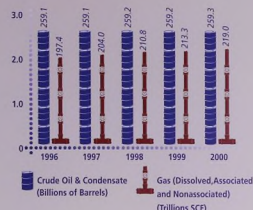
Production and Reserves Statistics

CRUDE OIL PRODUCTION*

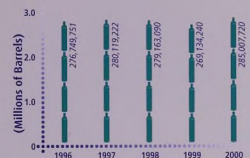


* Does not include condensate

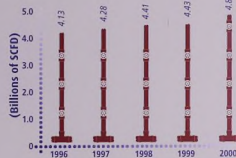
RECOVERABLE RESERVES



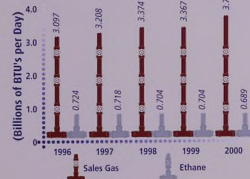
NGL FROM HYDROCARBON GASES



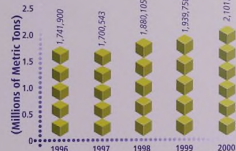
RAW GAS TO GAS PLANTS



DELIVERED SALES GAS AND ETHANE



SULFUR RECOVERY



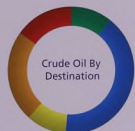
International Operations



	United States
	Republic of Korea
	The Philippines
	Greece
	Yanbu'
	Jubail
	Jiddah
	Jiddah

Saudi Aramco Headquarters	Dhahran
Saudi Petroleum International Ltd.	New York
Aramco Services Company	Houston
Saudi Refining Inc.	Houston
Saudi Petroleum Overseas Ltd.	London
Aramco Overseas Company B.V.	Leiden - Hong Kong - Seoul
Saudi Petroleum Ltd.	Beijing - Singapore - Tokyo
Vela International Marine Limited	Dhahran
Aramco Gulf Operations Company Ltd.	Al-Khafji

EXPORTS



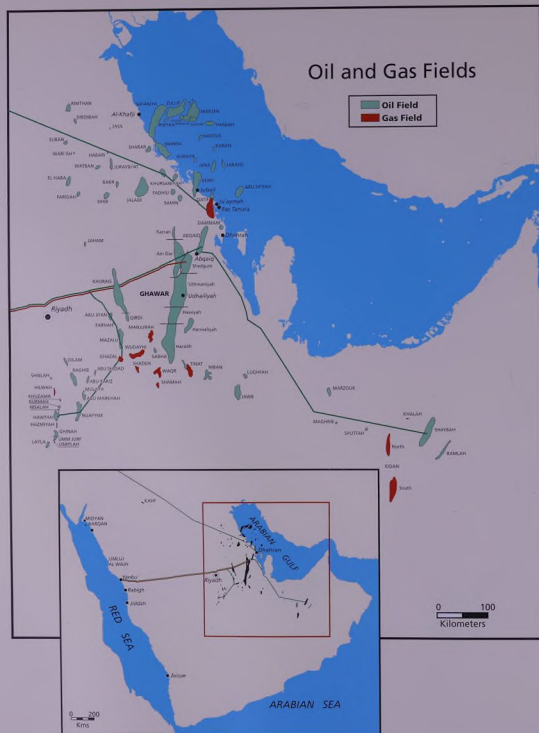
Destination	Crude Oil By Destination	Refined Products By Destination	NGL By Destination
Europe	10.7%	3.1%	-
Far East	40.7%	61.0%	62.6%
Mediterranean Area	10.3%	5.8%	4.7%
USA	23.3%	1.5%	0.4%
Other	15.0%	28.6%	32.3%

2,263,876,508 (bbls)

175,609,350 (bbls)

237,803,981 (bbls)

Domestic Operations



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