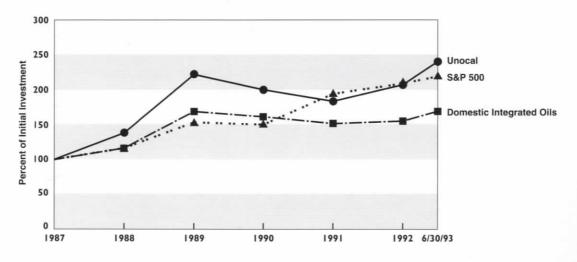
## Seventy SPRING/SUMMER 1993 SVX



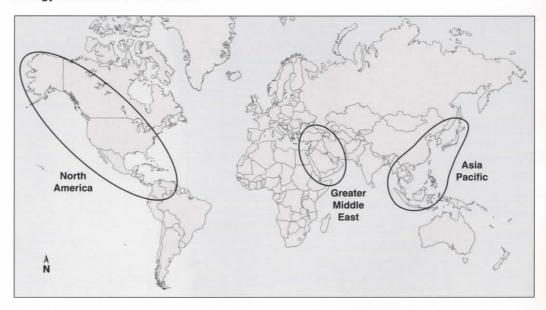
### At a Glance: Unocal 1993

nocal, with its aggressive restructuring program largely completed, is now a highly focused global energy resources company with refining, marketing, transportation, and chemicals businesses keyed to regions where the company can build on established market strengths. The company is now leaner and more efficient, and earnings in the first and second quarters of 1993 demonstrate increased financial strength. Unocal has changed a lot since 1985, when the company defeated a hostile takeover attempt and began restructuring. The charts and maps on these pages are designed to present a brief overview of what the new Unocal looks like.

### **Cumulative Return to Stockholders**



### **Energy Resources Focus Areas**



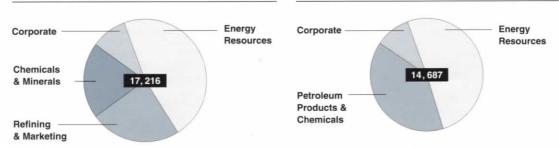
Unocal has developed three general areas of interest for its Energy Resources activities worldwide: North America, the Greater Middle East, and the Asia-Pacific region.

### **Total Employees Worldwide**

By division

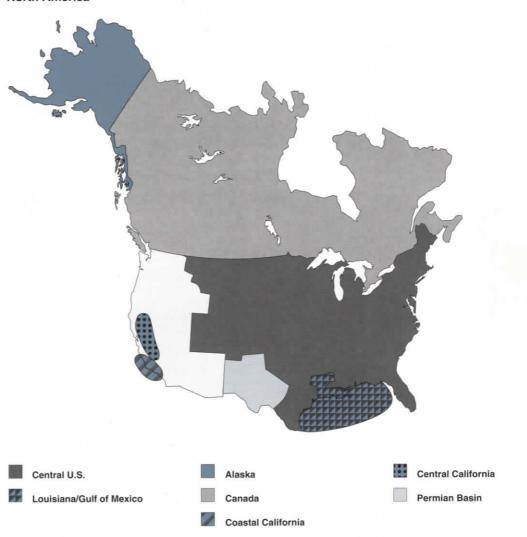






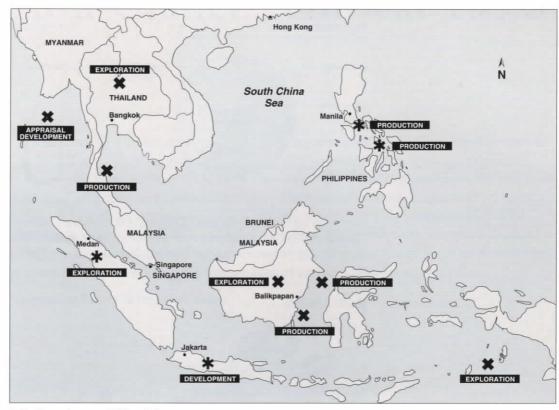
More than 1,100 employees took advantage of the voluntary retirement and severance programs of 1992. These programs, combined with asset sales, office consolidations, and attrition, reduced the size of the work force by 15 percent between year-end 1991 and January 1993.

### **North America**



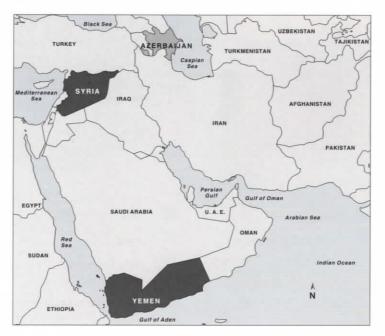
In North America, Unocal is emphasizing cost-efficient development to maximize oil, gas and geothermal production in mature provinces. Louisiana and the Gulf of Mexico areas, though well developed, continue to offer high-growth opportunities for new oil and gas discoveries as well as for continued development.

### Southeast Asia: Energy Resources Operations and Prospects



Within the Asia-Pacific region, Unocal has strong oil and gas producing operations in Indonesia and Thailand, and geothermal operations in the Philippines. The region continues to offer burgeoning new markets and new exploration opportunities. The company, with its excellent track record for energy development in the region, has high expectations for two geothermal projects now under way in Indonesia to serve growing markets for electricity.

### **Greater Middle East**



The company's Greater Middle East focus area encompasses the Arabian peninsula on the south and the Caspian Sea on the north. This historic oil-producing region remains underdeveloped. Unocal has interests in high-potential projects in Syria and Yemen, and is a member of an international consortium of companies that is negotiating to develop Caspian Sea oil fields.

Exploration
Prospective Appraisal and Development

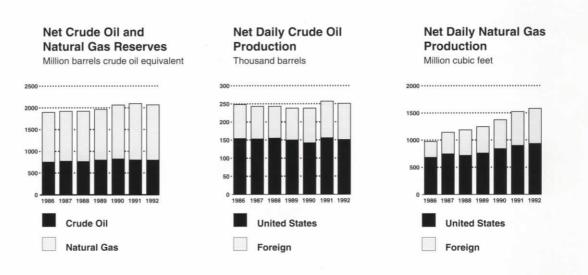
### Petroleum Products & Chemicals Division



The western United States is the focus area for most of Unocal's Petroleum Products & Chemicals activities. During 1992, the Carson (California) refinery acquired in late 1991 was fully integrated into Unocal's system, increasing capacity to process low-cost, heavy crude oils. The refineries serve Unocal's marketing activities, to both retail and commercial customers throughout the western states, Hawaii and Alaska.

Among the division's West Coast carbon and minerals facilities is the Molycorp Mountain Pass (California) plant, where "rare earths" known as lanthanides are mined and processed. On the carbon side, petroleum coke is produced at company facilities in Contra Costa, Santa Maria and Carson, California.

Unocal's chemicals business transforms natural gas feedstocks into nitrogen fertilizers at its main manufacturing complex in Kenai, Alaska. From Kenai, Unocal is a major supplier of basic nitrogen fertilizers to expanding markets in the Pacific Rim. The company also ships products to plants in Kennewick, Washington, and West Sacramento, California, for upgrading and distribution throughout the western United States. The acquisition of the Kennewick plant in 1992 has greatly improved the system's productivity and distribution network. ®





Commitment To

### COOK INLET





A t the 1993 annual meeting of stockholders, Unocal President and Chief Operating Officer Roger C. Beach was unmistakably clear in his description of the company's near-term business plans. All operating groups, making the most cost-efficient use of the human and technological resources at their disposal, are being called upon to increase productivity and deliver the cash flow needed to fuel Unocal's future growth, he said.

"Our goal is to improve the performance of our business units so that they'll all be the best of their class,"

Beach told a near-capacity audience that

gathered at the Unocal Center auditorium for the April meeting. "In particular, we want each of them to generate the maximum possible cash flow over the long term."

Cash flow, broadly defined as revenue less cash expenses, is

a key indicator of business performance. It reflects a company's financial strength. It influences a company's stock price. Cash flow is also a source of capital for reinvestment in additional growth opportunities.

For Unocal's Energy Resources
Division, which encompasses all of the
company's upstream business units,
maximum potential cash flow is being
pursued through three basic strategies.
First, the overall performance of every
operating unit is being measured and
improved on a continuous basis.
Second, development drilling is being
accelerated — particularly in the United
States — to increase revenues. And
finally, the division is focusing its exploration and development on high-impact

opportunities in regions of the globe where the company maintains a clearcut competitive advantage.

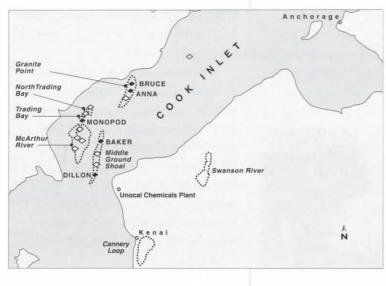
One such region lies in the icy waters of southern Alaska's Cook Inlet. Though each of Energy Resources' business units is currently following the same general plan, Cook Inlet operations stand as a good example of how front-line personnel are implementing company strategy to turn in improved results.

At Platform Baker, located in Cook Inlet approximately 50 miles from the Anchorage headquarters of Unocal's Alaska Business Unit, a crew is working through a springtime drizzle to prepare the offshore facility for upcoming drilling operations. The crew has already spent weeks reinforcing Baker's steel structure to enable the platform to bear the added weight of a new, custombuilt drilling rig. On this wet May afternoon, electricians, welders and other craftsmen are busy adding an additional deck to the platform's existing living quarters.

Art Graveley, senior production foreman, supervises the construction activity to ensure that the work crews meet a tight deadline. By the time the first new well spuds in September, Platform Baker's drilling and production crews will have increased from 12 people to 70. Development plans call for two wells to be drilled from this facility before year's end.

Baker and its nearby offshore twin, Platform Dillon, are situated atop Cook Inlet's Middle Ground Shoal oil field. Collectively with platforms Anna and Bruce, which produce oil and natural gas from the nearby Granite Point field, these offshore facilities comprise Unocal's Chakachatna properties.

Acquired by Unocal in 1990, the Chakachatna fields and associated platforms represent a consolidation of company holdings in the Central Cook Inlet region. As the operator of eight platforms — more than half of all offshore



Left:
Platform
Baker, where
development
drilling is
slated to
begin this
autumn.







Senior Production Foreman Art Graveley (top right) checks Platform Baker construction plans as workers prepare the structure for drilling operations. facilities in the area — Unocal is now the inlet's largest oil and gas producer by a significant margin.

Originally developed for onshore oil production in the 1950s, Cook Inlet today is a well-explored region. Even so, latest-generation geologic and geophysical studies indicate that the inlet still contains sizable resources of untapped oil and gas. Also, compared to exploration of frontier areas, Cook Inlet has the potential to yield steady additional revenue with relatively less risk.

"We know that there's still a lot more oil remaining in the Cook Inlet fields," says Ed O'Donnell, asset manager of Unocal's Central Cook Inlet holdings. "Our greatest challenge will be to produce those reserves as cost effectively as possible."

It's been some time, O'Donnell recounts, since the company last undertook an aggressive effort to develop the inlet's known crude reserves. "Most of the offshore platforms were set in place almost 30 years ago," he says, "and Unocal, like most of the other major oil companies, hadn't really focused a lot of additional evaluation on the region since then — that is, until recently."

everal positive indicators prompted Unocal to thoroughly reconsider Cook Inlet's development potential, says Wylie R. Barrow Jr., general manager of the Alaska Business Unit. Among these indicators were two new extended-reach wells, drilled by Unocal last year in the Granite Point field, that each produced crude at a daily rate of more than 1,000 barrels. Also impressive was the 1,400 barrels-per-day produced from a new horizontal well at nearby Platform Dolly Varden. The well, which produces crude from the McArthur River field, was drilled as part of a joint venture between Unocal and another company.

"All three of those wells demonstrated the development potential of Cook Inlet," Barrow says, "and, maybe



STAND AS A GOOD EXAMPLE

OF HOW FRONT-LINE PERSONNEL

ARE IMPLEMENTING

COMPANY STRATEGY TO TURN

IN IMPROVED RESULTS.

COOK INLET OPERATIONS

more than anything else, they convinced senior management that we have a great opportunity up here."

Encouraged by those results, Unocal in January committed \$119 million to more fully develop offshore oil reserves from the company's four Chakachatna platforms. The initial three-year phase of the development program includes funding for 20 new wells. Once completed, these are expected to boost crude production at the four platforms to 11,000 barrels daily — an increase of 275 percent. Subsequent phases of the Chakachatna drilling program could increase production to as much as 17,000 barrels per day.

It takes more than just investment capital, however, to make a development drilling project profitable. It also takes technological expertise, cost efficiency and, perhaps most important of all, a team effort.

Because Unocal owns a 100 percent interest in all four Chakachatna platforms, the company's Alaska Business Unit will enjoy maximum flexibility when it comes to deciding the character and pace of development. From reservoir engineers to roustabouts, Alaska personnel are setting their sights high.

"Management has given us quite a bit of autonomy as to how we develop the Chakachatna properties," says Bob Shepherd, a senior petroleum engineer based at the company's Anchorage office. "And by employing techniques that weren't available in Cook Inlet 25 years ago, such as improved directional drilling, we may be able to produce additional oil equal to the amount of reserves we've produced to date — and that's almost 120 million barrels of oil."

Extended-reach, or horizontal, drilling will play a critical role in the Chakachatna development project. Rather than drilling a well vertically, the extended reach technique allows the well to reach away from the platform to develop areas of the reservoir that were previously inaccessible. Unocal has

already proven its expertise in extended reach drilling at company locations in the Netherlands and offshore California, and has licensed the technique through the company's Technology Sales group.

The subsurface geology of Cook Inlet — which is characterized by thick, steeply dipping oil-bearing zones — is particularly well suited to this type of development drilling. Indeed, the directionally drilled wells in the Granite Point field and at Platform Dolly Varden were four to five times more productive than conventional wells.

"Only recently have we tried to apply horizontal drilling technology here," O'Donnell explains. "The technique lets us drill our wells so that they traverse the length of these steeply dipping pay zones, exposing more of the reservoir to production than would be possible by simply drilling vertically through the zone.

"And, as last year's wells demonstrated, that can substantially boost a well's rate of production."

But drilling expertise is just one strength that Unocal is relying on to ensure that the Chakachatna development project meets, or exceeds, expectations. During its decades-long tenure in the region, the company has built considerable infrastructure to support its production and development activities. Consequently, most of the additional capital allocated for the Chakachatna project can be earmarked specifically for drilling, rather than for additional support facilities, Shepherd says.

"The size of the company's financial commitment to this project is allowing us to go out and solicit large-scale bids," he explains. "Our economies of scale should result in substantial cost reductions for needed equipment and contract personnel."

In addition, the long-term nature of the Chakachatna project will give Unocal's Alaska team the opportunity to learn, through first-hand experience, which development techniques are the





Above, right and facing page: daily operations proceed at the Monopod, where personnel have greatly reduced costs, improved efficiency and substantially lengthened the economic life span of the platform.

most productive and cost-efficient. Then, as the project moves into later phases, company personnel will be able to maximize those practices that have previously proven successful while avoiding any past mistakes.

"The long duration of the project should definitely allow us to extend the learning curve of our people, from our reservoir engineers to our drilling crews," says Shepherd.

The Chakachatna project also offers an opportunity for some cost-effective exploratory drilling at some point in the future. By combining deeper extensions with existing wells, the Alaska Business Unit may be able to pursue further exploration of Cook Inlet for a fraction of the cost typically required to drill wildcat wells.

"In certain cases, we may allocate additional money in an effort to increase our potential return," Shepherd says. "Because Cook Inlet is characterized by stacked deposits, we have the option of drilling through primary and secondary objectives with a single well."

"Although we see a lot of additional potential in these secondary targets, our first priority is to establish cash flow through development, not through exploratory drilling," O'Donnell adds. "It's this increased cash flow that will eventually provide capital for higherrisk, higher-return exploration."

As noted previously, cash flow consists of revenue less cash expenses.

Accordingly, the expense side of the Cook Inlet development equation has not been ignored by Unocal's Alaska personnel.

owhere in the inlet has cost cutting made a greater bottom-line impact than at the company's Monopod platform.

Located several miles west of the Chakachatna properties in the Trading Bay field, the Monopod appeared to be nearing the end of its economic life span as recently as two years ago.



"WE'VE DEMONSTRATED WHAT
OUR PEOPLE CAN DO WHEN WE
UNLEASH THEIR CREATIVITY AND
GIVE THEM AUTHORITY TO ACT."

At the time, total production from Monopod's 23 producing wells was approximately 2,000 barrels per day, down precipitously from 1970's peak rate of more than 21,500 barrels daily. Despite the production decline, the facility was still logging average monthly expenses in excess of a half-million dollars. Clearly, O'Donnell says, oil production at Monopod was rapidly becoming an uneconomic proposition.

"We simply leveled with our Monopod personnel," he explains. "We showed them their expense-versus-revenue numbers, and let them know our strategy for improving Monopod's profitability. They did the rest themselves."

Specifically what the Monopod team did was reduce expenditures to the minimum required to maintain efficient operations. They accomplished this feat without sacrificing safety.

No expenditure, large or small, escaped the scrutiny of the Monopod crew. Platform staffing levels were cut by 25 percent, entirely through personnel transfers and normal attrition. Crew changes and supply delivery schedules were coordinated to reduce the number of expensive helicopter runs between the platform and the mainland.

Crew members also sought out more cost-effective replacement products for necessary equipment and supplies. For instance, expenditures for a specialized chemical product, used to reduce paraffin build-up in wells, were cut deeply. This came about when Monopod personnel discovered that the solvent toluene, the primary active ingredient in the specialized paraffin inhibitor, could be purchased off-the-shelf for only \$3 per gallon. The specialized product costs nearly four times as much per gallon.

The effect of these and numerous other cost reductions has been dramatic. "Last year, Monopod personnel brought their monthly expenses down to \$387,000," O'Donnell notes. "So far for 1993, they've averaged just over

\$280,000 per month. If they keep that up, Monopod will come in almost 30 percent under budget for the year."

"We were projected to bring in about \$45,000 in cash flow this year," says Monopod production foreman Dwight Johnson. "I recently ran an economic analysis that indicates that the Monopod's actual cash flow for the year will come in at around \$1.6 million. That's a pretty good turnaround."

Fittingly, the Monopod crew recently garnered Special Bonus Awards from the company as recognition for their improved performance. (See related story on page 10.) According to O'Donnell, the efforts of these people have increased the economic life span of Monopod to as many as 10 more years. "They certainly couldn't have accomplished that without a concerted team effort," he says.

Though the Monopod is not a part of the Chakachatna development program, expense-reducing lessons learned at the distinctive single-leg platform will be applied, whenever possible at all of Unocal's Cook Inlet facilities.

"Cost control is going to be the key to our profitability in the inlet," says Wylie Barrow. "We've demonstrated what our people can do when we unleash their creativity and give them the authority to act.

"We have an excellent opportunity in Cook Inlet to help the company meet its cash-flow targets. Our people have great expertise, they've proven their ability in areas of cost control, and they are committed to continuously improving their performance," Barrow adds. "I think this combination is going to bring Unocal a lot of success in the very near future."

Richard A. Anthony Jose R. Arias Neil B. Arnberger Barbara J. Arrington Bruce Arrington Frank L. Artz Mark C. Atkins Lee E. Bailey Sam D. Baker Debra E. Balisy Benjamin J. Barker Paul D. Bartolowits Paul C. Battersby Ahmet Baykan\* Charles B. Beauchamp George D. Bennett Marco Bent Fred R. Billizon Steven D. Birckett John W. Bishop Charles A. Black Carol A. Bobbe Orest J. Bodnar R. Dane Bokenkamp Forrest R. Bottomley Arthur M. Bracci B. Tom Brown Glynn B. Brown Robert B. Brown William C. Brown Jack R. Buller John D. Bunnell Stephan E. Campbell David N. Carpenter Charles J. Carroll Dennis J. Chapman John G. Chipponeri H. Don Chisum Patrick J. Cleary, Jr. Paul E. Clifton Regina B. Cole Darrell W. Collier Patrick R. Collins Charles D. Cooper Pete Coronado Christopher A. Costelloe Patrick M. Covert Michael J. K. Craig Bill R. Crawford Thomas G. Creery John S. Crews Ted C. Cudak Joseph C. Danos Philip M. Dedge Scott J. Diener Nadia Doerrler John R. Doran Ted E. Duff John B. Dunham

### Giving Credit Where It's Due

n April, Unocal announced two new incentive programs for employees: the Special Recognition Awards and the Special Bonus Awards. Their purpose is to recognize and reward Unocal employees for extraordinary individual or team accomplishments, especially those activities that improve the company's operating performance.

The Special Recognition Program provides cash awards of \$750 to individual employees, or \$500 per team member. Given on an ongoing basis, these awards go to employees who demonstrate unusual innovation in their work, or exceptional dedication in handling difficult situations. The Special Bonus Program recognizes employees or teams whose efforts yield substantial business or financial benefits to Unocal. These awards — \$3,000 to individuals or \$1,000 per team member — are given every six months.

Though front-line operations personnel comprise the greatest proportion of award winners announced so far, corporate employees are also eligible to receive such recognition. In fact, the 17 members of a Corporate Information Services (CIS) team were the recipients of the largest Special Bonus Award given out in the first half of this year. Working in association with nine counterparts from the Petroleum Products & Chemicals Division, the CIS team consolidated company computer operations at the Schaumburg office with those at the CIS Data Center in Brea. By itself, this consolidation is expected to save the company \$4 million annually.

Unocal will allocate up to \$1.5 million each year for the two employee awards programs. Both complement the company's overall performance improvement effort, whose goal is to make each Unocal business unit as efficient and profitable as possible.

"Recognition is an important element of performance improvement," says Unocal President Roger Beach. "We want to reward exceptional achievements and results. We also want to encourage and recognize employees who display high levels of creativity and innovation — those who make an extra effort to find ways to work smarter, solve problems, and do more with less."

Through the first half of this year, a total of 305 employees have been named recipients of Special Recognition Awards. In mid-June, the first group of 234 Special Bonus Award winners was announced. You'll find the names of those Special Bonus Award winners listed on these pages. On the following pages, *Seventy Six* is pleased to profile four award-winning projects. Each is representative of the kind of effort and commitment it takes to achieve results and win recognition.



### AWARD

### Winners:

Tim Noack, field superintendent

Gary Sims, plant foreman

Andy Black,

senior plant mechanic

Paul Clifton, plant mechanic

Pat Collins, plant operator

Creston Washington, plant operator

Work Location:

Chunchula NGL Plant Alabama

Recognition:

For outstanding performance during the annual plant turnaround.

### **Special Bonus Team**

Unocal's Chunchula, Alabama natural gas field has been a steady, reliable producer for many years. As would be expected, any downtime in the field or its associated natural gas liquids (NGL) plant is costly. The annual shutdown of the NGL plant for required maintenance, called a "turnaround," is a case in point. Historically, it took plant workers eight days to complete the turnaround tasks. It was clear that reducing this downtime would have a positive impact on cash flow and earnings for the company's Central U.S. business unit.

Last March, one month before the scheduled April turnaround, a frontline team of Chunchula plant personnel was convened. Their challenge was to find ways to reduce the turnaround time, while completing all the required work diligently and safely. An added wrinkle: two major new pieces of equipment needed to be installed during the shutdown.

The team began with a series of meetings, during which they prioritized tasks and worked out detailed step-by-step procedures for each one. Then they focused on finding ways to do the work more efficiently. "It was part job analysis and part brainstorming," says Tim Noack, Chunchula field superintendent. "The sessions were wide open, and one idea would build off another. Everyone got very energized as the plan took shape."

The team ultimately set an ambitious target. They would try to complete the turnaround in five days. Executing the plan would be the true test, of course. And the Chunchula group not only achieved their goal, they exceeded it. The turnaround was completed in just 3 ½ days.

"Six people won bonus awards for this accomplishment, but everyone working in the plant and in the field here contributed," Noack says. "Now we're carrying this spirit forward in other areas. Everyone knows that their ideas will be listened to and acted on, and that's a great way to encourage more improvement."

Judy W. Eldridge Patricia A. Ellis Nelson L. Emery Kenneth R. Falcone Matthew J. Fischer Marc L. Flanary Douglas W. Flaten Alexander N. Forbes Anville D. Francis Robert A. Frost Ann G. Fuller Leonard S. Gallegos Steven J. Giampaoli Thomas B. Giles Michael J. Glen Thomas J. Gordon Arthur V. Graveley Chester A. Gustafson Lois L. Hague Scott T. Hansen Bobbie L. Hardy Emmett E. Harper Christopher B. Hart William J. Haskett William E. Haupt William R. Heinrich Barbara G. Heppner William Herrick Alfred R. Herzing Linda H. Hicks John A. Hodgson A. Wayne Holt Jay P. Hong John L. Hood, III Brian A. Hopps Richard G. Horn Phillip E. Hosch David B. Huckabay Robert E. Huguenard Norbert A. Hundelt Richard B. Hundley William L. Irwin James R. Isham Ryan C. Isherwood Richard L. Jankowski Diane S. Jaros Dwight E. Johnson Wayne E. Johnson John R. Jordan John M. Kachelmeyer Miles B. Kajioka Stephen A. Kapusta\* David Kent\*\* Peter J. Kent Brian C. Kimmel Lisa M. Kinoshita Carol A. Kurz Mark E. Kuwahara Geraldine M. La Beau

W. Barry Lane Michael E. Leavitt Charles W. Lennon Hal G. Lindle Keith G. Lindsell Eng L. Looi W. Gene Loper Jeffrey M. Lott Loretta I. Mabinton R. Rick MacDonald Daniel Maguire John D. Marble Timothy E. Martin Noel C. Mayder Charles L. McCaleb Jerry W. McCown Scott A. McLean Duane E. Mesh Philip H. Messer Donald Meyer Douglas M. Miller Kevin A. Moore Paul R. Moore Lars A. Morgan Joe I. Mosteller Steven H. Mussman David L. Myers Victor N. A. Nassereddin Jane A. Neal Denise L. Newbould Francine M. Nieves Michael A. Nixson Timothy J. Noack Richard E. Oehlerts Gary A. Orr Glen O. Papp N. Richard Pastrano Robert W. Pease Gary D. Peterson Kenneth A. Peters Charles E. Pietsch Evan A. Pigford Len J. Pitre Gary K. Presley Russell J. Prokuski William E. Pyle Gregory E. Quid Bambang Rachmady \*\*\* Sheryl P. Rahman Mahmoud Ramadan Craig L. Randolph Steve W. Reynolds Christopher A. Robinson H. Wayne Rodges Harry Roesler Erwin Rosen Jim L. Rose Robert R. Rose



### AWARD

### Winners:

Rich Walloch, project manager

Paul Battersby, senior consultant

Forrest Bottomley, consultant

Virginia Woo,

advising engineer

Work Location:

San Francisco Refinery

California

Recognition:

For outstanding work in developing lower-cost alternatives for the SFR reformulated fuels project.

### Special Bonus Team

Like other California refiners, Unocal is already working to comply with stringent new gasoline formulation requirements set to take effect in 1995 and 1996. At the company's San Francisco refinery (SFR), the "reformulated fuels project" included two high-cost items: construction of a new benzene saturation unit, and devising a plan for shipping excess pentane to Unocal's Los Angeles refinery (LAR) by rail. This would necessitate construction of a new rail receiving facility at LAR. Taken together, these two projects were projected to cost in excess of \$10 million. They would also raise operating costs at both refineries.

In December of 1992, SFR formed a project team that was charged with developing potential cost-saving alternatives. The assignment had special urgency because the compliance dates were set, and the clock was ticking. "We already had a strategic plan in place that involved building the new facilities," says Rich Walloch, project manager, who assembled the team. "That would have been the safe way to go. But we felt there were opportunities to reduce the costs by rethinking our whole approach."

The four-person team, drawn from some of the refinery's most experienced hands, did far better than that. They found a

way to meet the project's needs using existing equipment — and thus avoid the need for building new facilities at either refinery. The solutions: alter an existing SFR processing unit to handle the benzene, and blend the pentane with other products already being shipped to LAR by tanker.

"Each of these ideas involved a good deal of complicated investigative and engineering work," Walloch says. "It was a real challenge, especially since we had a very tight deadline. But we had excellent teamwork, a clear goal, and strong support from management. If you've got those things, you're equipped to succeed."

Marcia A. Rutz



### AWARD

### Winner:

### Denise Newbould,

environmental specialist

Work Location:

### Kenai Chemicals Plant

Alaska

### Recognition:

For designing and coordinating a unique reforestation project.

### Special Bonus Individual

In the early years of the Kenai plant's operation, a 20-acre stand of trees near the facility died off as a result of overexposure to plant emissions. Denise Newbould, an environmental specialist at the plant, worked out a detailed plan for revegetating this plot of land. Her project was also designed to demonstrate that investment in emissions reduction equipment, and changes in plant design and operation, have significantly reduced emissions in recent years.

As part of Newbould's project, several thousand spruce trees were planted in the affected area. An additional 100 trees were planted in a control area located several miles away. A comparison of the plots after one year showed equal survival rates, with trees in both locations thriving. About 3,400

seedlings have been planted thus far. Next year, 1,500 more will be added.

"It's an honor to be recognized for my work," says Newbould, who will continue to monitor both plots in concert with several public agencies and environmental groups. "There are a lot of really outstanding people involved with this effort. I think it's a positive demonstration that Unocal is a good environmental steward."

### AWARD

### Winner:

### Nobuo Tsukada,

senior chemical engineer

Work Location:

### Kenai Chemicals Plant

Alaska

### Recognition:

For designing process modifications that reduced ammonia emissions from the Kenai plant.

### Special Bonus Individual

A key element of the Kenai plant's environmental protection plan is ongoing work to minimize plant emissions. As part of this effort, installation of a new \$1 million condenser was planned for the urea unit earlier this year. The new equipment would reduce vented ammonia by about 5 tons per day. But was there a less costly way to achieve the same end? Nobuo Tsukada, senior chemical engineer, took on the challenge of finding out.

After reviewing several year's worth of operating data, Tsukada believed he had an answer. His idea was to reroute the ammonia being vented to an existing plant condenser via a new recovery system. Once the new system was up and running it performed beautifully, cutting ammonia emissions by the planned 5 tons per day — and saving the company \$1 million in capital costs.

"I was very proud to receive this award," Tsukada says. "It shows that management truly recognizes hard work and achievement." \*\*Story by Tim Smight\*\*

Richard Salampessy Sondra D. Schmid Fred J. Schweizer Hans F. Schwing Randell G. Scott Daniel T. Seamount Wayan Senang \*\*\* Coleen C. Shannon John E. Sherborne Tina L. Simms Howard Simon Gary V. Sims Gary L. Smith Larry E. Smith Thomas W. Smith Millard F. Standifer Roderick A. Starr Rod L. Steinbrook Jerry W. Steinhardt Newell A. Stevens Richard R. Stolzke Stephen J. Stoughton Gary M. Stromberg R. Sularso \*\*\* Kevin T. Sullivan James W. Taber Christopher J. Taggart Karen K. Tajbl Barry L. Tarman Gloria A. Tekampe Randolph C. Thompson (Estate) L. Dwain Trost Nobuo Tsukada Edward C. Turner Doris F. Van Cleave Mary R. K. Vanderlinden Larry G. Vavra Gerald P. Veazey Suta Vijaya \*\*\* Richard D. Walloch Gilbert P. Walsh, Jr. Creston A. Washington Glennys A. Weiss David S. Whitacre W. Fred Wiske Joel J. Witte Bambang Wldodo \*\*\* Ronald L. Wolf Robert E. L. Wollmann Virginia S. Woo R. Doug Yates Lisa M. Yauch Redy Zahar\*\*\* Syed S. Zaman

\*Canadian payroll

\*\*UK payroll

\*\*\*Indonesian payroll

### hen he's away from the job, on his ranch north of Los Angeles, Unocal dealer Larry Fulton breaks young horses to the saddle. Sporting a wrangler's roughhewn face, he bears a slight resemblance to a husky Walter Brennan. That's fitting because when it comes

to operating his service station, Fulton has demonstrated for years that, as a businessman, he's the real McCoy.

During his three decades as a dealer — a time punctuated by economic boom and recession, embargo-spawned gasoline shortages and periods of sustained pricing competition - Fulton has relied fundamentally on horse sense and hard work to make his West Los Angeles Unocal station profitable. Like a veteran bronco buster, he's employed a combination of know-how and instinct to manage forces that are powerful and often unpredictable.

"I've been around long enough to realize that, like everything else, the gasoline business goes through up cycles and down cycles," Fulton says. "To be successful at running a service station, you've got to roll with those ups and downs as much as you can.

### A Bootstrap





"If you don't work hard at building up your shop, you just won't cut it as an independent businessman," says Unocal dealer Larry Fulton.

"Now that doesn't mean you just sit back and wait for customers to come and find you — you've got to get out there and fight for their loyalty," he continues. "If you don't work hard at building up your shop, you just won't cut it as an independent businessman."

A service station entrepreneur since the early 1960s, Fulton does far more than just cut it. "Larry has always been a top performer for the company," says Paul





### Businessman



Fulton's West Los Angeles service station was upgraded with new product dispensers, landscaping, and a new color scheme as part of Unocal Marketing's capital improvement program.

McDowell, retail business manager for Unocal's Western Marketing group. "He's achieved that over the long haul by being very customer-oriented. Both his attitude and sales volume are outstanding."

Quality products. Credit cards accepted. Service with a smile. Whether it's 1963 or 1993, Larry Fulton can tell you that some things never go out of style. But that's not to say consumer expectations and preferences haven't evolved during his years as a Unocal dealer.

Although retail gasoline consumers still value quality products and services as much as ever, market research indicates that they also demand competitive prices and speedy transactions at the service stations they patronize. Today's consumers place a high premium on convenience, too.

Convenience, in the parlance of market researchers, encompasses a variety of attributes. Broadly defined, convenience can refer to the physical location of a service station, its hours of operation or even the availability of fueling spots on site.

By these criteria, it's safe to say that Fulton's West L.A. Unocal station is more convenient than ever before. Located at the heavily traveled intersection of National and Sawtelle boulevards, the site is a stone's throw from a busy freeway on-ramp. The station is open 24 hours a day and, thanks to a company-funded capital improvement program, the number of fueling spaces has been increased from eight to 16.

ndertaken at Fulton's station last November, the 60-day capital improvement project involved the replacement of existing underground fuel storage tanks with new, larger-capacity versions. The station's pump islands were extended in length, allowing a maximum of four vehicles to refuel simultaneously at each. Previously, the islands could accommodate only two at any given time.

New, improved fuel dispensers, capable of separately delivering any of Unocal's three grades of unleaded gasoline from a single nozzle, were installed as replacements for the station's old single-fuel pumps. Because one new dispenser can take the place of three old ones, more island space became available to allow for additional fueling spots. The new pumps dispense product much faster than the old units, and they can also be

equipped with credit card readers which allow customers to refuel and pay for their gasoline purchases at the island itself.

To round out the capital improvement project, Fulton's entire station was repainted in a modern color scheme, a restroom retrofitted to improve access for handicapped patrons and new landscaping added along the perimeter of the site. Unocal's Marketing organization has allocated funds sufficient to similarly upgrade as many as 100 additional service stations by year's end.

"When a customer pulls into a Unocal station he wants service, convenience and a speedy transaction," says McDowell. "Our capital improvement program targets Unocal service stations that have high potential for increased sales volume, and gives dealers the additional

tools they need to meet consumer expectations."

So far, Fulton has made good use of his new tools. For years, he maintained two full-serve and two self-serve pump islands. Concurrent with his station's facelift, Fulton rededicated three of these to self service exclusively. It was simply a matter of "reading the writing on the wall," he says.

Indeed. According to the National Petroleum News trade publication, self-service sales volume has trended steadily upward during the past 10 to 15 years. In 1981, for example, self service comprised 70 percent of gasoline sales in California and 60 percent of U.S. volume overall. By 1991, self-service had risen to 94 percent of the Golden State's total volume and 85 percent the nation's.

"Gasoline sales account for roughly 70 percent of my cash flow and as much as 20 percent of my profit," Fulton explains. "In the old days, when full-service was in greater demand, I used to do well pumping 70,000 gallons of gasoline per month.

"But those days are over. With today's tighter margins on gas, the only way to keep profits up is by increasing sales volume. That means I can't afford to tie up half of my pumpability in full service islands that only move maybe 8 percent of my total volume."

To date, the results of Fulton's pump reconfiguration have been dramatic. By changing the full-serve to self-serve dispenser ratio, he boosted his monthly volume of gasoline sales to roughly 200,000 gallons — which translates to an increase of almost 50 percent over last year's average.

The trend toward dedicating a greater proportion of their pumps to self service has not been overwhelmingly embraced by some









long-time Unocal dealers, who for years have viewed full service as a marketing niche that fosters customer loyalty. But for Fulton, increased emphasis on self-service volume gains has kept his business profitable and allowed him to be more aggressive in terms of pricing.

"I constantly survey my competition to make sure that my prices are comparable to theirs," he says. "An increase in my volume means that I don't have to watch my customers go down the street to fill up just because I can't afford to lower my gasoline prices."

In May, technicians put the final touch on Fulton's station upgrade by installing credit card readers on all of his new gasoline pumps. With almost half of his customer base comprised of credit card users, Fulton is confident that the new card readers will get a thorough workout during the months and years to come.

From left: a technician installs a credit card reader in one of Fulton's new gasoline dispensers. "Customers definitely don't like to wait when they come in for gas. If there's a line at the pump, they'll just drive down the road to the next service station," he says. "Now that I have card readers and twice as many fueling spaces, they shouldn't have a problem getting fast access to a pump."

Though he considers himself an "old school" dealer, Fulton has nonetheless shown a willingness and determination to manage the many changes that are transforming the retail gasoline market. His efforts, combined with the support of Unocal's Marketing organization, are already paying dividends in the form of substantially increased sales volume.

"I'm an independent businessman and for the most part I stand on my own two feet," Fulton says. "But I realize that I'm also part of Unocal's overall dealer net-



work, and they have an interest in my success just like I do.

"I can see that the company is trying a lot of new ideas, like the station upgrade program, to improve its marketing strategy. It's clear that if you want to survive and prosper, you have to be willing to re-evaluate how you manage your business and adapt to what the customer demands."





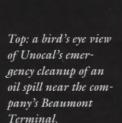
### when Every Second Counts

Unocal's oil spill response garners Coast Guard praise











Above: during the incident, members of the company's Emergency Response Strike Team worked closely with the U.S. Coast Guard and other government agencies to ensure a prompt and thorough clean up of the Beaumont spill.

THE COAST GUARD

WAS SO IMPRESSED WITH

UNOCAL'S MANAGEMENT

OF THE BEAUMONT SPILL

THAT IT ASKED THE

COMPANY TO SHARE SOME OF

ITS EXPERTISE.

A pril 20th began like any other day for Jim Strong. An environmental specialist with the Health, Environment & Safety (HES) unit of Unocal's Energy Resources Division, Strong had arrived early at his office in Bakersfield, California to prepare a presentation for a May 4th HES meeting in Houston. But just before 9 o'clock that morning, he received an urgent telephone call. Within minutes, Jim Strong found himself heading for Texas a lot sooner than he expected.

A member of Unocal's specially trained Emergency Response Strike Team (ERST), Strong was being dispatched to help personnel at the company's Beaumont Terminal respond to an estimated 2,000-barrel crude oil spill on the adjacent Neches River. He was well aware that a quick response would be crucial to successful management of the incident. And with the Beaumont flight scheduled to depart Burbank, California at approximately 1 p.m., Strong had little time to waste.

He stopped off at home only long enough to pick up a bag, which he keeps pre-packed especially for ERST emergencies, and to bid a quick farewell to his family. Following a 100-mile drive to the Burbank airport, Strong rendezvoused with fellow ERST members Jeff Callender, Roger Dombrowski, Keith Forester, Bob King, John Savage, Ellen Whelan and Deepti Zaremba for the flight aboard a company plane.

Arriving at the Beaumont Terminal around 8:00 p.m., the ERST group was joined by fellow team members Bill Sharrer, Ken Guziak and Tim Perkins, Unocal's corporate manager of Emergency Preparedness and Crisis Management. First on the agenda was a detailed incident briefing from Beaumont personnel who had already begun to implement the terminal's standard spill response plan. Within 90 minutes, ERST members began preparing an even more comprehensive strategy tailored specifically to the incident at hand.

For many team members, that meant a night without sleep. But by

early the next morning, an initial plan was complete. At 8:00 a.m. ERST presented its strategy to the U.S. Coast Guard and the Texas General Land Office, which are the federal and state agencies responsible for overseeing spill responses.

As part of the plan approval by the agencies, official control of the incident was transferred from terminal employees to ERST personnel. At that point, the strike team began the arduous task of implementing the revised spill response plan. Due to requirements in the federal Oil Pollution Act of 1990, spill response plans must address a comprehensive range of concerns. Unocal's Beaumont plan was no exception.

Among other things, the company assumed responsibility for full containment of the spill, recovery of the oil, wildlife assessment, and cleanup of affected areas. The company also initiated a natural resources damage assessment to determine the environmental impact of the spill. In addition, Unocal established a claims procedure to compensate third parties (including landowners, businesses, and recreational users of the Neches River) who were adversely affected by the spill.

Despite the myriad concerns, ERST was well-prepared for such a challenge. A second wave of strike team members left Los Angeles at 4:00 a.m. to supplement the initial response team and provide much-needed relief for Beaumont personnel and ERST's early arrivals.

At that point, the mobilization of necessary equipment and human resources shifted into high gear. Team







Above, company volunteers participate in an emergency response drill. Pictured at top (clockwise from lower left) are Jon MacArthur, Gary Stankovich, Dave Rozas, Bob Peace, Larry Walby, Ken McGinnis, Tim Perkins, Robin Yamamoto, Bob Dolan and Tom Durham.

members coordinated Unocal's efforts with those of the Coast Guard and eight other agencies involved. In only a matter of hours, an organization resembling a miniature corporation had been assembled to fully manage the incident response.

Support for that response was substantial. Crews worked tirelessly. Eighteen-hour work shifts became routine. Every morning, detailed action plans were prepared and presented to the Coast Guard. Joint-command briefings were held twice daily with the Coast Guard and various other agencies, including the U.S. Fish & Wildlife Service and the Texas Water Commission. And each evening an incident action plan for the next day was presented to those agencies.

By the time the Beaumont spill cleanup drew to a close, Unocal had utilized a warehouse of resources. In fact, more than 300 orders were placed for equipment and materials. Nearly 24,000 feet of containment boom was deployed, in addition to almost 70,000 feet of sorbent boom. Forty-three boats and skiffs, five skimmers, and two air boats were put into action along with several Coast Guard vessels.

On the manpower side, 33 ERST members were mobilized and total personnel on-site averaged 147 a day. Feeding these people also proved to be a major production, with over 4,000 meals served over a 10-day period.

In the end, Unocal's thorough response — coupled with favorable weather conditions — produced a quick, effective cleanup. Approximately 8,000 barrels of skimmed fluids, including 1,700 barrels of oil and debris, were recovered and several miles of shoreline cleaned. The spill's impact on nearby wildlife was found to be minimal.

Unocal's response to the Beaumont spill earned the company many plaudits, particularly from the agencies involved. Comments received from Coast Guard personnel ranged from "I've never seen

such a response," to "superb job." At the final joint command briefing, the on-scene commander for the Coast Guard credited Unocal with "a neartextbook response."

In fact, the Coast Guard was so impressed with Unocal's management of the Beaumont spill that it asked the company to share some of its expertise. Happy to comply, Perkins and one of his staff members returned to Texas in May to help train the Coast Guard's Gulf Strike Team on Unocal's use of emergency response systems.

Such extraordinary accolades from the Coast Guard are even more remarkable given that ERST is a relatively new organization at Unocal, and it is staffed primarily by volunteers. The group's current level of readiness was not attained overnight, however.

In May of 1989, Unocal's executive committee authorized Environmental Sciences to form, train and maintain a response team that would be available to assist any operating group in the event of a significant spill or other accidental release. The goal was to assemble a highly trained team of experts capable of rendering support to operating facilities anywhere, at any time.

Today, that team is managed through the Emergency Preparedness and Crisis Management Program of the Corporate HES Department. It consists of about 100 professionals selected for their unique expertise from Unocal's major operating units and corporate departments. Some ERST members come from Energy Resources, Petroleum Products & Chemicals, Corporate Health, Environment & Safety, or Corporate Environmental Remediation & Technology (CERT). Others hail from such diverse groups as Law, Corporate Communications, Finance, Insurance, Aviation, and Security.

To prepare for emergencies, members of ERST receive intensive training on topics including hazardous materials ERST CONSISTS OF
ABOUT 100 PROFESSIONALS
SELECTED FOR THEIR



UNIQUE EXPERTISE

FROM UNOCAL'S MAJOR

OPERATING UNITS AND

CORPORATE DEPARTMENTS.

and oil spills. Instruction is provided on Incident Command and Emergency Management, systems utilized by Unocal to handle events like oil spills. ERST also conducts two annual drills, each of which involves one day of training, followed by an exercise such as a simulated spill.

Once trained, ERST members are ready to perform specific functions on the team. Key positions reporting to the incident commander include the section chiefs for operations, planning, logistics and finance.

Supporting the section chiefs are a variety of unit leaders who are responsible for supply and procurement, staging, safety, cost control, communications and numerous other concerns. Additional unit leaders handle issues including environmental impact and damage assessment, wildlife rehabilitation, public relations and documentation of everything related to the spill response. Other unit leaders handle human-related logistics including personnel transportation, food service and housing.

The responsibility of preparing and coordinating these efforts falls on the shoulders of Tim Perkins and his staff, Jon MacArthur, Gary Stankovich and Tom Henning. Along with other duties related to emergency preparedness and crisis management, this group handles the planning, training, and supply procurement necessary to ensure that ERST remains prepared to respond to any emergency.

The type of response varies from incident to incident, depending on the scope of the emergency and the resources of the facility involved. In Beaumont — and during last August's spill at Avila Beach, California — ERST quickly marshaled emergency resources and assumed control of spill response. In both cases, however, employees from the local facilities continued to provide needed support for the response effort.

In other instances, ERST may serve only in an advisory capacity. Such was the case in May 1991 at Platform Gina, offshore California, where Energy Resources' Ventura District staff already had the equipment and training to manage a small spill.

"A few of Unocal's larger facilities have adequate resources to handle a major emergency, but the majority of our operations are small and minimally staffed," Perkins explains. "In a crisis, those smaller facilities are going to need significant support."

Mindful of this, Perkins and his staff continually look for ways to improve their support capabilities. And that requires an objective self appraisal.

"Following the Avila Beach spill last year, we sat down and critiqued every aspect of our response," says Perkins. "We analyzed what we did well, as well as what we needed to change or improve. Without a doubt, we were more efficient and effective at Beaumont because of the first-hand experience we gained at Avila."

According to Perkins, an important lesson learned at Avila was that it's best to over-react when responding to an incident. Then, based on the scope of the incident, the capabilities of the facility involved and the local resources available, the team can quickly demobilize anyone or anything that is not needed.

Other recent innovations at ERST include new oil spill training for team members and other Unocal employees, as well as implementation of the Emergency Management System. Introduced within the company last autumn, the system is designed to break down an emergency into components. This allows response personnel to delegate specific duties and manage the incident much like any other organized project.

In addition to training, other steps are being taken to increase the capabilities and readiness of ERST. Over the course of this year, additional resources AN IMPORTANT LESSON
LEARNED AT AVILA WAS
THAT IT'S BEST TO



OVER-REACT WHEN
RESPONDING TO AN
INCIDENT.

such as cargo containers, cameras to document cleanup activities, and portable industrial hygiene equipment will be added to ERST's inventory. The group also plans to outfit a mobile command post with portable radios, computers and satellite communications capability.

But the preparation doesn't stop there. Under the direction of George Walker, vice president of Health, Environment & Safety, and Larry McKelvie, manager of Safety, Perkins and his staff have developed a new corporate crisis management policy and program. After review by the operating divisions, the policy was approved by Unocal's executive committee and is now being presented to business units throughout the company.

The new program clarifies the chain-of-command for emergency response at Unocal, from the facility's role to senior management's. It also establishes a practical response-planning process, and attempts to bring consistency to the preparation and review of facility emergency response plans. The ultimate goal is to ensure that each operating facility is prepared for all reasonably anticipated emergencies and has the response equipment consistent with that facility's level of risk.

With such policies in the process of implementation, member training ongoing, and additional equipment being acquired, ERST continues to enhance its readiness. "We are also committed to reducing the costs associated with emergency response," adds Perkins, noting that changes underway at ERST are consistent with the performance improvement process taking place elsewhere in the company.

And while ERST is not looking for business, Perkins is confident that his team, if called upon, will manage each response more effectively than the previous one. \*\*

Story by Jeff Callender\*

### S E R V I C E A W A R D S

### CORPORATE

30 YEARS Howard K. Hoffman, Schaumburg, Il.

25 YEARS James W. Abbott, Los Angeles, Ca. Gloria L. Balderrama, Los Angeles, Ca. Maureen M. Chappellie, Los Angeles, Ca. Bobby G. Hill, Los Angeles, Ca. Charles S. McDowell, Los Angeles, Ca. Margaret A. Ritter, Los Angeles, Ca. Joel P. Robinson, Los Angeles, Ca. David L. Spencer, Washington, Pa. George A. Walker, Los Angeles, Ca.

20 YEARS Danilo M. Capampangan, Brea, Ca. Michael J. Russell, Los Angeles, Ca.

15 YEARS William C. Bender, Burbank, Ca. David M. Dalesandro, Anaheim, Ca. Daniel A. Franchi, Los Angeles, Ca. Astrid S. Gunn, Los Angeles, Ca. Joe C. Vasquez, Los Angeles, Ca.

10 YEARS Jesus B. Alcaraz, Los Angeles, Ca. Juliana Barrios, Los Angeles, Ca. Monica D. Esparza, Los Angeles, Ca. Brian J. Kelly, Brea, Ca. Rob Risley, Los Angeles, Ca. Robert L. Roy, Rodeo, Ca. Natalie K. Schilling, Brea, Ca. Aram G. Sogomonian, Los Angeles, Ca. Jasmina A. Theodore, Los Angeles, Ca.

Fred L. Hartley Research Center

25 YEARS Danford E. Clark, Brea, Ca.

20 YEARS Charles B. Anderson, Brea, Ca. Mukesh P. Gandhi, Brea, Ca.

15 YEARS Donald T. Leung, Brea, Ca.

10 YEARS Cheryl B. Chandler, Parachute, Co. Carla M. Kent, Parachute, Co.

### ENERGY RESOURCES

40 YEARS Bobby J. Hays, Santa Maria, Ca.

35 YEARS Wylie R. Barrow, Anchorage, Ak.

30 YEARS Robert H. Fritzler, Worland, Wy.
Edward D. Hannah, Mills, Wy.
James L. Hart, La Habra, Ca.
Richard A. Hartman, Hominy, Ok.
John F. Imle, Los Angeles, Ca.
Donald R. Powers, Andrews, Tx.
Robert G. Wheeler, Thailand

25 YEARS Jim L. Altman, Lafayette, La. Patrick Boyd, Lafayette, La. Gary E. Carlson, Indonesia
Duffy J. Duplantis, Dulac, La.
Alan E. Freiberg, Moab, Ut.
James E. Gagneaux, Surfside, Tx.
Carl D. Geisert, Kenai, Ak.
Errol P. Pierron, Houma, La.
William E. Pyle, Van, Tx.
Richard Y. Salisbury, Santa Fe Springs, Ca.

20 YEARS Mark C. Atkins, Lompoc, Ca.

Michael J. Broussard, Lafayette, La.

Dewey E. Bruner, Mills, Wy.

Edwin R. Ditto, Andrews, Tx.

Lyle L. Goodrich, Grayling, Mi.

Gilbert T. Jojola, Cloverdale, Ca.

Wayne E. Jones, Lompoc, Ca.

Sidney Madise, Mobile, Al.

Refugio J. Marquez, Taft, Ca.

Timothy J. McMahon, Brea, Ca.

Harold L. Province, Orcutt, Ca.

Albert P. Selph, Sugar Land, Tx.

Stanley G. Shatford, Brea, Ca.

Lloyd G. Shipley, Worland, Wy.

Wayne L. Stockton, Grayling, Mi.

15 YEARS Mubarak A. Aleem, Dulac, La. John K. Andrus, Bell City, La. Clarence R. Baxley, Dulac, La. Donald E. Bean, Carpinteria, Ca. Michael R. Brunet, Dulac, La. Randall D. Cooper, Sugar Land, Tx. Larry Dace, Dulac, La. John B. Dunham, Sugar Land, Tx. Michele R. Dunham, Sugar Land, Tx. Nelson L. Emery, Lafavette, La. James H. Etherton, Midland, Tx. Steven W. Gregory, Midland, Tx. Hildegard V. Gross, Orcutt, Ca. Hal L. Heitman, Sugar Land, Tx. Elizabeth A. Johnson, Sugar Land, Tx. James R. Leleux, Abbeville, La. Richard D. McCann, Clay City, Il. Rodney A. Monighetti, Taft, Ca. Ronald J. Morin, Lafayette, La. Carol A. Moudy, Ventura, Ca. David C. Nichols, Brea, Ca. Rhonda E. Nolley, Midland, Tx. Bruce A. Poret, Lafavette, La. Sam D. Sheets, Lafayette, La. Ronald C. Smith, Orcutt, Ca. James B. Strong, Bakersfield, Ca. Michael T. Vaughan, Cloverdale, Ca.

Danny West, Sugar Land, Tx. Anthony A. Wiltz, Lafayette, La.

10 YEARS Donald L. Akers, Anchorage, Ak. James A. Alexander, Sugar Land, Tx. Susan M. Buller, Bakersfield, Ca. Carlos E. Carrion, Huntington Beach, Ca. Kevin M. Doyle, Sugar Land, Tx. Leonard O. Edwards, Coalinga, Ca. Anville D. Francis, Olney, Il. William D. Grisham, Hominy, Ok. Dixie L. Gross, Coalinga, Ca. Robert Johnson, Los Angeles, Ca. John W. Meier, Cloverdale, Ca. George E. Mickle, Calipatria, Ca. Jon D. Oliver, Santa Rosa, Ca. Gregory A. Olson, Brea, Ca. Kevin Petersen, Cloverdale, Ca. Oren R. Richardson, Coalinga, Ca. Thomas R. Ripper, Moab, Ut. Ann E. Rogers, Los Angeles, Ca. Ralph F. Santos, Moab, Ut. Earle A. Schulz, Cloverdale, Ca. Sabrina C. Smith, Midland, Tx. Paul H. Strickland, Moab, Ut. Louis B. Tomme, Abbeville, La. Steve R. Trujillo, Sugar Land, Tx. John M. Turner, Huntington Beach, Ca. David A. Weaverling, Coalinga, Ca.

Unocal Canada, Ltd.

15 YEARS William N. Ritchie, Calgary, Alberta

Unocal Thailand, Ltd.

10 YEARS Prademphanta Boonnop Adisak Boonserm Rawiwan Chanpitayakit Narong Khumuang Phitchaya Kiattisaksophone Somsak Luengtheeranart Patcharawadee Mukdaprakorn Nophadol Panomnoptham Sumalee Panpiara Waranya Parnkul Theerapong Pimpat Marasri Pongrujikorn Prajim Pool-Iad Chaivat Pradithkesorn Phongthira Ruangdech Prapai Suttiratanachai Somkuan Thongniam

Poonsri Viriyasathien



Unocal Indonesia, Ltd.

20 YEARS Washingan

Nurul Achmad

Kamrul Effendi

Benyamin Minto Juwono

Jan'tje Kamagi

Robby Lembong

Tom Partomo

Johannes Picaulima

Roy Semendap

Johanis Robert Suatan

Tony Subagio

Herman Uda

15 YEARS Rachmad

Roynulus Simorangkir

Agus Susetyo

10 YEARS Hassan

Kamidjo

Kasmiadji Koeswandi

Mashadi

Pahlawi

Soepriyanto

Ssyahriaansyah

Sudarno

Sumardi

Sumarsono

Supardiman

Suparman

Johan Arifin

Handri Atmoko

Lisa Awang

Abu Hassan

Tjaka Haurisa

Abidinsyah Al Islamy

Bambang Kusuma

Syamsuri Laomo

Oscar Lesmana

Suardi St. Maradjo

Syarif R. Martakusuma

William R. Nayoan

Nora P. Oppei

Sugeng Pamudji

Agustinus Parinding

Idham C. Saleh

Eddy A. Sambuaga

John M. Situmorang

Achmad Sofiansyah

Dekon Suhartono

Eddy Suryohandono Adi Sutrisno

M. Syhada

Sophia Wahhyudi

Anneke Weley

Achmad Yusuf

Unocal U.K., Ltd.

20 YEARS Pauline Stoten, Sunbury, England

15 YEARS Wayne L. Krug, Sunbury, England

10 YEARS Henry De La Rosa, Aberdeen, Scotland Allan Manchester, Aberdeen, Scotland

Unocal Netherlands, B.V.

10 YEARS Irene Beentjes-Horst

Simon H. A. Begemann

Pieter De Waard

Diantha De Waard-Bos

Eveline C. J. Dijk-Fransen

Frenk N. Schoenmaker

Cor Van Veelen

Piet A. Walgaard

Philippine Geothermal, Inc.

15 YEARS Gregory A. Gritters, Makati

40 YEARS Donald C. Young, Brea, Ca.

35 YEARS Paul J. McDowell, North Hollywood, Ca.

Elaine E. Murphy, Los Angeles, Ca.

30 YEARS Bruce H. Anderson, Portland, Or.

Raymond A. Franco, Portland, Or.

Billy W. Gallander, San Francisco Refinery William R. Harvey, San Francisco Refinery

John P. Nelms, Memphis, Tn.

Thomas M. Rowley, Los Angeles Refinery

Linda J. Travers, San Francisco Refinery

25 YEARS Frank B. Anderson, San Francisco Refinery

Emil L. Bereczky, Cypress, Ca.

James E. Bollinger, Schaumburg, Il.

Raymond M. Braghetta, Schaumburg, Il.

Robert L. Burson, San Jose, Ca.

Marion J. Courtney, Schaumburg, Il.

Dennis J. Cser, Kennewick, Wa.

Rickey L. Flanigan, Torrance, Ca.

Donald Grelyak, Schaumburg, Il.

Nelson J. Hebert, San Francisco Refinery

David H. Heil, Los Angeles, Ca.

David M. Hess, San Francisco Refinery

Eldon R. Jackson, Los Angeles, Ca.

I. Deanne Kershall, Los Angeles, Ca.

Noel C. Mayder, Los Angeles, Ca.

David W. McCrary, San Francisco Refinery

Alex E. Miller, Brea, Ca.

Ronald M. Morofsky, San Francisco Refinery

James L. Myers, Jr., Nederland, Tx.

Louis M. Nunes, Santa Maria Refinery

Elbert E. Payton, Los Angeles, Ca.

Jimmy D. Perkins, Nederland, Tx.

Kenneth A. Peters, Schaumburg, Il.

Sandra J. Pinkerton, Los Angeles, Ca.

Ralph R. Quisito, San Francisco Refinery

Neal E. Schmale, Los Angeles, Ca.

Fred A. Swingle, San Francisco Refinery

Lloyd Toda, Los Angeles, Ca. Glen A. Wilson, Portland, Or.

Sam T. Yee, Brisbane, Ca.

20 YEARS Roy C. Adkins, Kenai, Ak.

Janice K. Anderson, Schaumburg, Il.

Remedios B. Barnes, San Francisco, Ca.

Othella Beasley, Tacoma, Wa.

Jeffrey L. Bowen, Los Angeles, Ca.

Jerriel D. Broussard, Abbeville, La.

Kenneth W. Carlfeldt, Los Angeles, Ca.

John W. Coon, Kenai, Ak.

Curtis L. Craft, San Jose, Ca.

Timothy K. Davis, Van, Tx.

Gilbert V. Espinoza, San Francisco Refinery

Ingrid K. Gallagher, San Francisco, Ca.

Donald D. Gish, Brea, Ca.

Manuel V. Gonzalez, Los Angeles Refinery

Randolph L. Howard, Los Angeles Refinery

Jimmy D. Huff, Los Angeles Refinery

Betty N. Koch, Schaumburg, Il.

Montgomery E. Learn, Schaumburg, Il.

Randy L. McFarlane, San Ramon, Ca.

William A. McNeil, Los Angeles, Ca.

Robert L. Moeller, Lemont, Il.

Donald D. Moerdyke, Los Angeles, Ca.

Stephen Plesh, San Francisco Refinery

Sandra L. Prichard, Pasadena, Ca.

Alvaro Rivas, Brisbane, Ca.

Robert A. Ross, Schaumburg, Il.

David E. Shullaw, Lemont, Il.

Ricky M. Tanaka, Richmond, Ca.

Rizalina C. Torres, San Francisco, Ca.

Steven A. Treese, Los Angeles Refinery

Roger D. Villalobos, Los Angeles, Ca.

15 YEARS Douglas E. Anderson, Kenai, Ak. Patricia A. Andres, Schaumburg, Il.

Richard A. Belcher, San Francisco Refinery

Charles W. Black, Kenai, Ak. Kevin L. Black, Los Angeles Refinery

Victoria F. Burns, Schaumburg, Il.

Leonard Cabrera, Schaumburg, Il.

Darril W. Clark, Portland, Or.

Randall B. Craig, Lemont, Il.

Douglas N. Craig, Los Angeles Refinery

Timothy P. Eggleston, Santa Paula, Ca.

Delores A. Felix, Los Angeles, Ca.

Elizabeth A. Flores, Los Angeles, Ca.

Susan M. Gosell, Schaumburg, Il.

John R. Gotaas, Schaumburg, Il.

Gordon E. Grant, Los Angeles Refinery

Lawrence F. Harper, La Mirada, Ca. Connie R. Harris, Los Angeles Refinery

Rodney K. Hogan, Santa Maria Refinery

Gary L. Kelly, Los Angeles, Ca.

Jay B. Kidd, Kenai, Ak. Eric N. Komplin, San Francisco Refinery

Maxwell B. Laidlaw, Jr., Abbeville, La.

Gregory V. Marshall, Richmond, Ca.

Daniel J. McClure, Los Angeles, Ca.

Orestes O. Morales, Los Angeles Refinery

Steve H. Nelson, Portland, Or. Marc L. Newell, Fresno, Ca.

Gary A. Olpinski, Richmond, Ca.

Michael G. Patton, Los Angeles Refinery

Carmella Pierri, Schaumburg, Il. Roger E. Reimer, Los Angeles Refinery

Ricardo R. Reyes, Los Angeles, Ca.

Sherry S. Robinson, Houston, Tx. Manuel T. Rodriguez, Los Angeles Refinery

24

# SERVICE AWARDS

Francis R. Romano, Los Angeles Refinery Freddy H. Stapp, Arroyo Grande, Ca. Delores Stokes, Schaumburg, Il. William C. Stone, Los Angeles Refinery Gary L. Tipp, Richmond, Ca. James D. Turner, Los Angeles Refinery Gary R. Williams, III Los Angeles, Ca.

10 YEARS Kurt A. Adelsberger, Orange, Ca. Teresa J. Anderson, Kenai, Ak. Cecil J. Baronet, Kenai, Ak. Monica T. Britton, Los Angeles, Ca. Mickey I. Corral, Santa Maria Refinery Michael B. Eaton, Portland, Or. Douglas L. Elder, Los Angeles Refinery W. Lawrence Green, Los Angeles Refinery Robert W. Hadden, Kenai, Ak. Rudolph Hernandez, Los Angeles Refinery William E. Horn, Los Angeles Refinery James L. Hudson, Sacramento, Ca. Frank L. Nichols, San Luis Obispo, Ca. Susan E. Oviedo, Los Angeles Refinery Elsy C. Perez, Santa Fe Springs, Ca. Mark R. Peterson, Kenai, Ak. Anthony E. Pfau, Los Angeles Refinery Ronald M. Pillen, Los Angeles Refinery David P. Roach, Pasadena, Ca. Marvin J. Schwedock, Brea, Ca. Jack L. Toney, Los Angeles Refinery An T. Tran, Los Angeles, Ca. Sharon L. Van Natta, Kenai, Ak. Robert L. Wagner, Los Angeles, Ca. Richard J. Welsh, Lemont, Il. Austin M. West, Kenai, Ak. Jeanette Whited, Wildwood, Fl. Mary K. Wyer, Schaumburg, Il. Stephen C. Yeargin, Los Angeles Refinery

Molycorp, Inc.

25 YEARS Jerald B. Tabor, Mountain Pass, Ca.

20 YEARS Diane S. Jaros, Washington, Pa.

15 YEARS Dennis D. Axe, Mountain Pass, Ca. Mary Jane Brenneman, York, Pa.

Poco Graphite Inc.

15 YEARS Dora E. Lara, Decatur, Tx.

10 YEARS Charles L. Sloan, Decatur, Tx.

Marketers & Distributors

35 YEARS Kivett Oil Co., Statesville, NC

30 YEARS Conan Fuel Service, Gig Harbor, Wa. Hays & Son Oil Co., Inc., Cullman, Al. Worsley Companies, Inc. Conway, SC 25 YEARS Samuel R. Privett, Wrangell, Ak.

10 YEARS William H. Walsh, Jr., Westport, Wa.

### RETTREMENTS

Corporate

William D. Jones, June 16, 1966
Philip Dean More, May 8, 1967
Dale L. Pickering, April 22, 1968
Homer E. Rea, Jr., February 2, 1953
Reynold T. Schmidt, July 15, 1971

Energy Resources

Richard B. Hoffman, August 23, 1978 Rene H. Moulinet, June 1, 1979 Gail A. Pellettera, January 14, 1963 A.M. Sam Sarem, October 26, 1964 Robert E. Stow, August 15, 1955

Petroleum Products & Chemicals

Lupe Adame, March 16, 1957
Edward E. Banker, January 13, 1975
Floyd H. Clifton, December 11, 1959
Daniel A. Hackett, October 1, 1967
Robert M. Healy, April 15, 1968
Clarence K. Hively, December 26, 1972
Russell M. Horton, May 23, 1966
Billie D. Norman, August 1, 1962
Weldon E. Poff, December 1, 1967
Oscar A. Salazar, July 1, 1985
Paul J. Schroeder, January 9, 1961
Joseph N. Sicuro, May 11, 1964
Leslie P. Strickler, October 1, 1968
Robert W. Ustick, March 16, 1955
Thomas A. Wilson, October 1, 1966

### IN MEMORIAM

EMPLOYEES

Petroleum Products & Chemicals

Frederick Sargent, December 2, 1992

RETIREES

Corporate

Earl Barker, February 26, 1993 Wendell Prunty, February 16, 1993

James Anderson, December 24, 1992

Energy Resources

Barbara Burdett-Freeman, February 27, 1993 Lester Burdick, January 27, 1993 Claborne Burton, December 12, 1992 Kelley Carson, January 12, 1993 George Colman, January 18, 1993 Joseph Cormeir, December 9, 1992 Patricia Cornett, February 11, 1993 Bernard Curtis, February 9, 1993 Albert Denard, December 23, 1992 Dwight Eberhart, January 28, 1993 Howard English, December 3, 1992 Perry Friday, December 24, 1992 Oliver Goldsmith, February 28, 1993 Bert Hamilton, December 3, 1992 Grant Hitchcock, February 6, 1993 Cleo Holubec, March 16, 1993 Ralph Hughes, January 8, 1993 Stephanie Kowalczyk, December 27, 1992 Clyde McCormick, December 20, 1992

Alton McNeil, March 1, 1993
Onre Moss, December 2, 1992
Bill Murch, February 11, 1993
Fred Neafus, March 9, 1993
Ruth Penhale, January 7, 1993
George Phillips, December 7, 1992
Claude Piepkorn, February 14, 1993
George Rose, February 26, 1993
Joe Simas, January 22, 1993
Jack Storey, February 14, 1993
E.E. Sutton, February 9, 1993
Pete Tolmasoff, January 13, 1993
Kelly Vaughan, December 16, 1992
Beatred Youree, December 19, 1992

Petroleum Products & Chemicals

Stanley Anderson, December 4, 1992 Lucille Bartels, December 2, 1992 Henry Bundy, December 28, 1992 Lawrence Bush, March 11, 1993 Gwendolyn Carpenter, February 8, 1993 Floyd Church, February 18, 1993 Gerald Clark, February 9, 1993 John Creswell, February 20, 1993 Clarence Falk, January 14, 1993 Albert Gutek, February 21, 1993 Angeline Hamilton, February 23, 1993 Earl Hammock, January 26, 1993 William Hammond, January 16, 1993 John Harris, January 5, 1993 Maxwell Hasty, February 18, 1993 Milton Hirsch, February 1, 1993 Walton Hughey, December 30, 1992 Charles Jackson, March 5, 1993 Paul Kemp, March 15, 1993 Jack Ketchum, December 13, 1992 Claude Kirschner, December 17, 1992 Victor Lawrence, December 19, 1992 Lawrence Lewis, February 26, 1993 Gus Malkos, February 22, 1993 Marvin McCann, March 3, 1993 Harold McCarty, December 27, 1992 Henry Meiners, December 23, 1992 Dennis Nauglebaugh, January 31, 1993 Roy Norris, January 30, 1993 Orville Poling, January 23, 1993 Victor Rodighiero, February 2, 1993 Herbert Rogers, February 18, 1993 Frontis Sherrill, January 3, 1993 Calvin Twichell, January 2, 1993 Harry Vetter, December 21, 1992 Richard Weber, February 11, 1993

Molycorp, Inc.

Joe Gallegos, February 15, 1993 Paul Wagner, January 11, 1993



Unocal Corporation P.O. Box 7600 Los Angeles, California 90051

BULK RATE U.S POSTATE PAID

LOS ANGELES, CA PERMIT NO. 76

GARY L FOY 10615 MEADOWGLEN APT 416 HOUSTON TX 77042

CONTENTS



At A Glance: Unocal 1993 Page 1 Seventy Six offers a graphic snapshot of the company in transition, including a look at its primary operating units, employee makeup and ongoing business performance.

A New Commitment To Cook Inlet

Capitalizing on almost 30 years of operating experience in southern Alaska's Cook Inlet, Unocal has

embarked on a \$120 million development drilling project.

Giving Credit Where

It's Due

Page 10

Page 4

This spring, Unocal instituted two cash incentive programs to reward employees whose efforts have helped improve the company's performance. Here are the stories of several award-winning projects and the people responsible for them.



A Bootstrap Businessman Page 14 Unocal dealer Larry Fulton understands what it takes to succeed in Southern California's competitive retail gasoline market.

When Every Second Counts Page 18 Unocal's Emergency Response Strike Team (ERST) has earned the praise of U.S. Coast Guard officials for its role in the swift and thorough clean up of an oil spill near the company's Beaumont Terminal.

Service Awards

Page 23

10



Cover: Personnel stationed on Unocal's Monopod platform in Cook Inlet, Alaska have found numerous ways of reducing operating expenses. Cost-containment lessons learned at the single-leg platform will be applied throughout the company's Cook Inlet operations as Unocal kicks off an accelerated development drilling project in the region. Story on page 4.

Seventy Six is published by the Corporate Communications Department, Unocal Corporation, Box 7600, Los Angeles, California 90051. Karen Sikkema, Vice President, Corporate Communications; Mike Broadhurst, Editor; Baker Design Associates, Art Director

Use of the name "Unocal" in Seventy Six may refer to either "Unocal Corporation" (a Delaware corporation) or "Union Oil Company of California" (its wholly owned subsidiary) or, at times, to subsidiaries of either of these companies.

©1993 Union Oil Company of California dba Unocal.

