



While working for an organization that delivers lunches to elderly shut-ins, I used to take my four-year-old daughter on my after-noon rounds. She was unfailingly intrigued by the various appli-ances of old age, particularly the canes, walkers and wheel-airs. One day I found her staring at a pair of false teeth soaking in a glass. As I braced myself for the inevitable barrage of questions, she merely turned and whispered, **“The tooth fairy will never believe this!”**



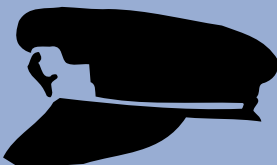
I was driving with my three young children one warm summer evening when a woman in the convertible ahead of us stood up and waved.

She was stark naked! As I was reeling from the shock, I heard my five-year-old shout from the back seat, **“Mom, that lady isn’t wearing a seat belt!”**

A little boy got lost at the YMCA and found himself in the women’s locker room. When he was spotted, the room burst into shrieks, with ladies grabbing towels and running for cover. The little boy watched in amazement and then asked, **“What’s the matter, haven’t you ever seen a little boy before?”**



While taking a routine vandalism report at an elementary school, I was interrupted by a little girl about six years old. Looking up and down at my uniform, she asked, “Are you a cop?” “Yes,” I answered and continued writing the report. “My mother said if I ever needed help, I should ask the police.” “Is that right?” “Yes, that’s right,” I told her “Well, then,” she said as she extended her foot toward me, **“Would you please tie my shoe?”**



It was the end of the day when I parked my police van in front of the station. As I gathered my equipment, my K-9 partner, Jake, was barking, and I saw a little boy staring in at me. “Is that a dog you got back there?” he asked. “It sure is,” I replied. Puzzled, the boy looked at me and then towards the back of the van. Finally he said, **“What’d he do?”**

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July 2010



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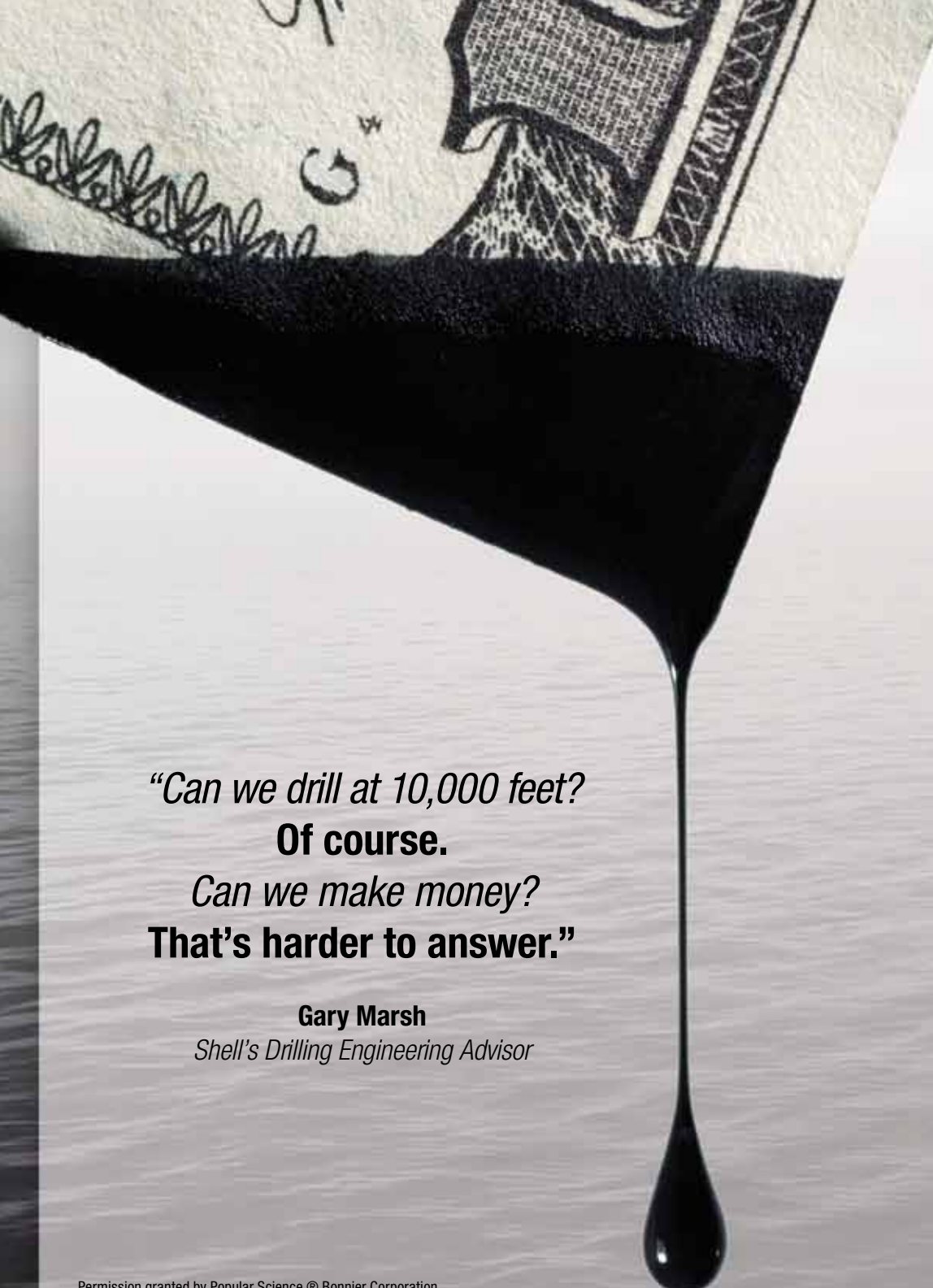
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OFFSHORE OIL

HOW DEEP CAN THEY GO?

An article in the January 1992 issue of *Popular Science*



*“Can we drill at 10,000 feet?
Of course.
Can we make money?
That’s harder to answer.”*

Gary Marsh

Shell’s Drilling Engineering Advisor

Some years ago someone gave us an article from the January 1992 issue of *Popular Science*. Barber shops sometimes kept magazines around for a long time. Note that the haircut took place long after 1992. We found the article fascinating and we reprint (with permission) parts of that article:

“ Twenty-four years ago, the D/V *Glomar Challenger* hovered over the Sigsbee Knolls – a group of sub-sea promontories nearly 500 miles due south of Louisiana. Some 11,600 feet below, its drill bit entered the soft mud of Challenger Knoll and penetrated 470 feet into late Miocene sand. Soon the National Science Foundation’s Deep Sea Drilling Project had a fine core sample on deck – and what a core sample it was.

The project’s aim was to determine what was going on under ocean floors and to investigate the continental drift theory of Earth’s land formations. Researchers found many answers, but at longitude 92° 35.2 west, latitude 23° 27.3 north, they found more than anyone had bargained for.

Global Marine engineering development director Sherman Wetmore, whose company operated the drilling vessels, recalls how ‘one minute, paleontologists and geologists aboard were enthralled just by the concept of drilling thousands of feet into the earth beneath 10,000 feet of water. The next minute they were flabbergasted as the 6.5-foot-long core sample came up. The three-inch diameter tube was oozing something no one thought would be there – that something was crude oil.’

The drill bit had penetrated a perfectly normal geological formation in which hydrocarbons – oil and gas – could collect and languish under heat and pressure. But the best that *Glomar Challenger* could do was plug the hole, mark the spot, and have the core analyzed by a team of geologists, who

pronounced it ‘bona fide crude oil.’ There was little else anyone could do: recovery of oil at that depth was unthinkable, for in 1968, 600 feet of water was about the limit for off-shore oil production.

Now oil companies are thinking – and starting to do – the unthinkable. Although offshore oil technology proceeds at an admittedly slow pace, the talk has turned dead serious about oil drilling and recovery in water depths approaching 10,000 feet.

Offshore oilmen still recall with dread the infamous Bay of Campeche Ixtoc I blowout in the summer of 1979. In only 164 feet of water, this 30,000-barrel-a-day runaway was finally stopped after Red Adair’s oil-fire-fighting company drilled a relief well nearby.

But today in the Gulf of Mexico there are only a handful of vessels capable of aiding a stricken well at the depths now being approached. Fortunately, however, careful mud analysis can give clear indications of the presence of high-pressure gas deposits like those found at the Ixtoc blowout. But there are other potential troublemakers lurking. Hydrostatic pressures of 1,200 pounds per square inch at 3,000 feet of water, are new factors. Elements of drilling such as remotely operated vehicles, marine risers and blowout preventers must be re-designed to withstand these pressures; the 35°F temperatures at the seabed combine with the pressure and gas to create the climate conducive for hydrates and paraffins. These are thick, icy substances that can foul blowout preventers and other mechanisms, causing malfunctions. ”

We particularly liked the last short paragraph of the article:

“ But, where there’s a drill there’s a way, Shell’s drilling engineering advisor, Gary Marsh, puts the deepwater movement in perspective. ‘Can we drill at 10,000 feet? Of course. Can we make money? That’s harder to answer.’ ”

Alex Chisholm