Where Has All The Oil Gone?

After Sitting on Crude, Speculators Unload It. The World's Eyes Fall on Cushing, Oklahoma

By ANN DAVIS

October 6, 2007; Page A1

Since summer, one of North America's most important oil towns has witnessed a disappearing act.

The mammoth storage tanks that blanket the rolling grasslands around this remote prairie town had been filled to the brim with crude oil. They aren't anymore. Since May, millions of barrels of crude have been sold off, and Cushing's inventory has fallen by nearly 35%.

Oil traders around the globe obsess about inventory. Storage levels have fallen, not just in Cushing, but in other oil depots as well. Fearful that the U.S. cushion of spare fuel could hit a low by year-end, traders drove prices to a record of nearly $84 a barrel last month. On Friday, oil closed at $81.22 on the New York Mercantile Exchange, up 33% this year.

The reasons Cushing's crude has been disappearing are surprisingly complex, and shed light on the growing involvement of speculators in the global oil market. Tanks are emptying partly because producers have been straining to keep up with demand. But investment banks and other financial firms also played a part by abruptly shifting their oil-trading strategies this summer. Even the credit crunch sparked by the subprime mortgage fiasco had an effect.

Until mid-July, unprecedented conditions in the oil market had given oil companies and speculators alike a financial incentive to sock away oil in storage tanks for sale later. Then, almost overnight, it became more lucrative to sell oil immediately, and in short order, the cushion of stored oil shrank.

The financial players who have piled en masse into commodities trading in recent years have made oil markets more unpredictable. Some are simply betting that oil prices will rise over the long term. Others are pouncing on pricing anomalies as short-term trading opportunities. Many of them move in herds.

"Factors other than supply and demand are now impacting the price," contends oil-and-gas trader Stephen Schork, who publishes the Schork Report on energy markets. "We now have to factor in how the speculators are going to affect the market, because they have different priorities in managing their portfolios."

U.S. storage tanks are being drained at a time when fears of a recession have been looming. That could make the economy more vulnerable to an oil-price spike that would lead to higher prices at the gas pump.

http://online.wsj.com/article_print/SB119162309507450611.html
Investing in oil is more complicated than buying stocks or bonds or bars of gold. Most institutional investors don't want to actually own crude. To bet on it, they invest in oil futures — agreements to buy or sell oil at a set date in the future. They usually unwind the contracts before the oil-delivery date arrives, eventually taking their profits or losses without actually handling the oil. If they leave the contracts in place, oil must be delivered to an officially designated delivery point. Cushing is the main such point in the U.S.

The price of oil for future delivery isn't the same as the price for immediate delivery. When traders figure supplies might run low, oil delivered in the future can become significantly more expensive than oil purchased on the spot market for delivery right away. Until recently, such price differentials gave oil companies and trading firms alike an incentive buy oil and store it in tanks in Cushing and elsewhere.

Although Cushing isn't located on a major highway or railroad, it's one of the world's main oil junctions. It's home to just 8,500 people -- if you count the 1,000 or so prison inmates. Downtown has one stand-alone bar, the Buckhorn. At the movie theater near City Hall, tickets cost $1.50, $2 on weekends.

About a century ago, wildcat drillers discovered oil here. By 1940, most of the wells had run dry, but a maze of pipelines and tanks had sprouted. Cushing's position as a global oil crossroads was cemented in 1983 when the New York Mercantile Exchange, or Nymex, designated it as the official delivery point for its new futures contract for light, sweet crude -- a grade preferred by gasoline refiners. This Nymex price now serves as a global benchmark. Cushing has also become an important way station for heavier Canadian crude.

These days, the steel oil tanks on the outskirts of town stretch to the horizon, covering more than nine square miles. The biggest hold 575,000 barrels. The vista is so vast "it takes two grown men and a small boy just to look at it," quips an executive with Enbridge Energy Partners LP, a tank owner.

Oil producers and traders closely follow inventory numbers from around the world in order to gauge supply and demand, which in turn allows them to make decisions about production and investment. Officially, the U.S. commercial-crude inventory stood at 321.8 million barrels on Sept. 28, but much of it is moving through pipelines or sitting at refineries waiting to be processed, says Barclays Capital analyst Paul Horsnell. While that's a little higher than in some years, it isn't a big surplus. It's only enough to feed refineries for about 21 days.

The traders and producers pay particular attention to oil levels in Cushing, which holds 5% to 10% of the total U.S. crude inventory. Cushing provides clues about what's on hand to feed America's midcontinent refineries and about oil speculation on the Nymex.

In decades past, storage was handled mostly by companies that produced and refined crude, such as the oil majors. But as global oil consumption skyrocketed this decade, transport firms such as pipeline companies bought storage tanks from oil companies and expanded hubs such as Cushing. Even some financial firms involved in oil trading got into the storage business. That gave them the means to set aside oil when the market wasn't ripe to sell it profitably, and to take a cut as middlemen.

Last year, the Vitol Group, a large oil-trading firm based in the Netherlands and Switzerland, paid $170 million to buy an oil-terminal complex in Amsterdam. Wall Street investment bank Morgan Stanley bought TransMontaigne Inc., an oil-products transportation and distribution company; it also bought a European company that manages oil tankers. In Singapore, trading firms are among the port city's largest storage providers.

Nearly three years ago, the oil market became especially attractive for investors with the means to set aside oil in storage tanks. The price of oil delivered in the future rose far above the spot price -- a market condition known as "contango." That made it profitable to store oil rather than to sell it right away.
Part of this price differential was logical -- it costs money to store oil. But the gap was accentuated by several other factors, including concerns about possible shortages linked to growing demand from China and to the potential for unrest in oil-rich nations to interrupt production. That led traders to bet that oil would get scarcer, says John Shapiro, global head of commodities for Morgan Stanley.

Nations belonging to the Organization of Petroleum Exporting Countries, which supply about 40% of the world's oil, had been pumping at nearly maximum capacity to meet higher demand. With so many wells near their limits, oil traders sharply bid up the price of future oil -- namely, oil in storage -- because they "intuitively" feared that an event might crimp that output, says Thomas Kivisto, chief executive officer of SemGroup LP, a storage and pipeline company. "The market was looking for a stable inventory above ground," he says.

In addition, investors had developed a voracious appetite for commodities, but many of them had no desire to take delivery on any oil, so they bought futures. Over the past four years, the number of oil-futures contracts outstanding tripled on the Nymex as hedge funds and other institutional investors jumped in. Many pension funds parked money in oil futures as a diversification strategy, replacing expiring contracts with new ones month after month, according a formula. The regular buying boosted confidence in long-term prices.

The gap between the spot and futures markets widened more than it had in past contango markets. This spring, the price difference between oil to be delivered soon and, say, oil four months out surpassed $6 a barrel, up from less than $2 a couple of years ago, according to OilAnalytics.net.

Storing oil became big business. Tank owners and companies that leased storage, including Wall Street giants such as Morgan Stanley, turned sizeable profits simply by sitting on tanks of oil. They would buy oil for immediate delivery and stick it in their storage tanks, then sell contracts for future delivery at a higher price. When delivery dates neared, they closed out existing contracts and sold new ones for future delivery of the same oil. The oil never budged. The maneuver was known as the oil-storage trade.

It was "effectively a free lunch," says Neil McMahon, energy analyst with research firm Sanford C. Bernstein & Co. Several gasoline refiners, he adds, made "good pocket money" just from trading around extra storage they already leased or owned.

In Cushing, most storage tanks are owned by four entities: oil giant BP PLC, and energy-transport and logistics firms Enbridge Energy Partners (an affiliate of Canada's Enbridge Inc.), Plains All American Pipeline LP, and SemGroup Energy Partners LP.

Bruce MacPhail, who manages Enbridge's U.S. oil-terminal leasing, estimates financial firms now lease 25% to 35% of the company's storage. Enbridge, which bought several Shell tank farms in 2004, has gone from having no presence in Cushing to owning just over one-third of the town's tanks. One of Enbridge's clients is Morgan Stanley, people familiar with the matter say. The investment bank recently helped Enbridge bankroll the construction of new tanks.

The Cushing tank-building boom got so heated that when property abutting the tank farms went on the block last year, terminal operator Teppco Partners LP showed up with an armored truck and edged out Enbridge in a cash auction, says Robert Felts, head of the Cushing Industrial Authority.

Plains All American Pipeline has nearly tripled its storage capacity since 2004. In recent years, it has used nearly 20% of that capacity in order to make storage trades for its own account, using a $1.2 billion line of credit to do so. Last year, the marketing unit that handles trading, among other things, contributed about half of the company's total profits before interest and taxes -- some $228 million.
"It's a little bit like finding a $20 bill in your pocket when you're doing the laundry," says Greg Armstrong, the company's chief executive officer, about the trading opportunity. "You don't throw it in the trash can."

By the end of last year, independent oil-storage firms around the world were 97% full, according to Sanford Bernstein analysts. Two tank owners in Cushing say that by this April they were turning potential customers away. Some traders even leased ocean tankers to use for storage, although that cost twice as much, or more, than land-based storage. Through it all, U.S. consumption was relatively flat. Over the summer, OPEC ministers pointed to high oil inventories in the U.S. as a reason to keep a lid on production.

This summer, however, several factors conspired to squeeze the profit out of oil-storage trades. Global oil demand kept growing, and when supplies lagged, prices for immediate delivery rose. A big Midwestern refinery suddenly began consuming a lot more of Cushing's benchmark crude, which helped lift spot prices.

Buyers began paying more to get oil right away than to take delivery in the future -- a market condition known as backwardation. The contango market had ended. It no longer paid to hold oil off the market, so investors sitting on stored oil began selling. Inventory levels in Cushing and elsewhere began to drop.

Moves by financial firms accelerated the changes. Some hedge funds had entered into agreements to sell oil at a set price in the future, but they didn't have oil sitting in storage to fulfill the contracts. With spot prices outstripping futures prices, they had to move rapidly to close out their contracts at big losses.

Separately, the subprime mortgage mess sparked a credit crunch, which made it more expensive to buy oil with borrowed money. Mr. Armstrong, chief executive of Plains, says some of his smaller customers with low credit ratings saw their borrowing costs go up 8% or more in August and September. Some traders unloaded their stored oil to cover losses on other investments.

"The credit crunch has made it very expensive to hold oil," says independent energy economist Philip Verleger.

Now that market conditions have shifted, economists worry that institutional investors will push up oil prices even more. Conditions are especially profitable now for the pension funds and others who are holding near-term oil futures. More money is pouring into this trading strategy, exerting upward pressure on prices.

It's normal for oil inventories to drift down in the fall because fuel use temporarily slows, but this year's declines have been steeper than usual. In September, after inventory drops at Cushing and rising prices on the Nymex, OPEC decided to boost production modestly. But prices kept rising, and some analysts now forecast $90 or $100 oil.

Some analysts contend that Cushing may give a distorted view of market dynamics. "The market seems to be pricing in a looming shortage," says Tim Evans, an analyst at Citigroup Inc. "But the only place in the U.S. that seems short of crude oil is one very small, but influential location -- Cushing, Oklahoma."

Write to Ann Davis at ann.davis@wsj.com