



This Week in Petroleum

Posted by [Robert Rapier](#) on May 19, 2007 - 11:16am

Topic: [Demand/Consumption](#)

Tags: [eia](#), [gas inventories](#), [gas prices](#), [oil inventories](#), [twip](#) [[list all tags](#)]

Introduction

If you follow the petroleum markets, or you just want to know what is going on in the world of energy, the weekly reports from the [Energy Information Administration](#) (EIA) are invaluable. Every Wednesday the EIA releases reports detailing information on petroleum and product inventory levels, imports, prices, refinery utilization, etc. For those who follow this information, the recent run-up in gasoline prices is not a surprise, as you would have seen it coming. The price increase is not driven – as certain politicians and consumer groups have indicated – by a renewed willingness on the part of oil companies to gouge consumers. On that topic, I quote Paul Sankey, of Deutsche Bank, in [his Senate testimony on May 15th](#):

Anybody who blames record high US gasoline prices on "gouging" at the pump simply reveals their total ignorance of global oil supply and demand fundamentals. The real reason for high pump prices is the lack of global gasoline supply relative to demand. Just in the US, overall US refining capacity, at 17 million barrels per day (mb/d), is far below demand at 22 mb/d. In turn, pump prices are effectively set by import prices. With strong demand outside the US on the back of global economic growth and a weak dollar, the era of abundant US oil supply augmented by willing international sellers is dead.

But this essay is not about allegations of price gouging. I know people have strong opinions on both sides of the matter, and I will leave that debate for another day. This essay is intended to introduce you to an accessible, easy to understand tool that will help you more clearly understand the fundamentals that affect price and supply at the pump. In fact, it was largely the information in these reports that led me to start sounding warnings at the first of March that we had potential gasoline supply problems looming this summer.

The roots of the current situation go back to last winter. After record high prices, demand softened, autumn rolled around, and prices plunged. Consumers, having become accustomed to gasoline near \$3/gal, were now looking at prices closer to \$2/gal. This spurred record demand. When refineries started coming down for spring turnarounds, the gasoline drawdown was very steep due to such high demand (which you could see in the weekly reports), and prices were too slow to respond. So, now prices are trying to make up for lost ground.

The links you want to bookmark, if you want to be more informed about what's happening in the world of energy, are:

[Text File of Highlights](#)

This is the first report to come out. It is released at 10:30 a.m. EST each Wednesday. This is a text file that provides all of the important details, although without the graphics. But it is a link that I typically click into within 5 minutes of the release of the report each week.

The second link that I read every Wednesday is:

[This Week in Petroleum:](#)

This is a comprehensive and graphical look at the trends and developments. The report is released at 1 p.m. EST, and is primarily written by EIA analyst Doug MacIntyre, who has been [making himself available for answering questions](#) following my blog postings on the weekly report.

TWIP 5-16-07

The focus of this week's edition of [This Week in Petroleum](#) was the gasoline situation. Some excerpts:

Why are gasoline prices so high?

Gasoline inventories have recently been drawn down at a dramatic rate to bridge the gap between supply and demand (see [Figure 4](#), in the Weekly Petroleum Status Report (WPSR)). Over 12 consecutive weeks during February, March, and April, total gasoline inventories declined by a cumulative total of more than 34 million barrels (15 percent). This is **the sharpest decline in gasoline inventories over a consecutive 12-week period in EIA's recorded historical data.**

Is there an end in sight or will gasoline prices continue to rise all summer?

Although **gasoline inventories are expected to remain lower than normal throughout the summer**, high prices have encouraged more supply and inventories have increased slightly the last two weeks. Domestic gasoline production has increased by more than 500,000 barrels per day in the last three weeks and total gasoline imports (including blending components) during the week ending May 11, rose above 1.5 million barrels per day, making that week the fifth highest weekly import volume ever and the highest since last May. Should imports continue at such levels and more domestic refinery capacity come back online, supplies will improve and wholesale prices could come down. However, with gasoline inventories likely to remain low all summer, **retail prices are expected to remain close to \$3 per gallon during the entire summer season.** Prices could rise again towards the end of summer if demand surges, as it often does, in late July and August.

Inventory Highlights

I had predicted that this week would see a build, but it would fall short of what we need to stay out of an unprecedented Memorial Day inventory situation. I was correct on both counts:

U.S. commercial crude oil inventories (excluding those in the Strategic Petroleum Reserve) rose by 1.0 million barrels compared to the previous week. At 342.2 million barrels, U.S. crude oil inventories are just below the upper end of the average range for this time of year. **Total motor gasoline inventories climbed by 1.7 million barrels last week, but remain well below the lower end of the average range.** Distillate fuel inventories increased by 1.0 million barrels per day, and are at the upper end of the average range for this time of year.

We now have 2 weeks in which to gain (200.7-195.2), or 5.5 million barrels, else we set a record low for Memorial Day. So we will need to average 2.75 million barrels each of the next two weeks. Impossible? No. Unlikely? Yes. The significance? I have been kicking that around. We could get off with no real problems, other than higher prices. What these low inventory levels do is increase the level of risk in case of an emergency of some sort. If a hurricane shuts down major production, we could see gas outages and a very fast run-up in gasoline prices. Time will tell whether we luck out this summer. Best to keep your tanks topped off this summer, especially if you live in a hurricane prone area.

Pre-Release Information

The above section was written following the release of the report. The following section was written prior to the release, and details the hole we have dug.

I will update this as soon as this week's report is released. But as I await the report, I wondered just how far we have to go to dig ourselves out of the hole we are currently in on gasoline inventories.

Last week's report showed gasoline stocks at 193.5 million barrels. Just eyeballing the gasoline inventory graph, the 5-year average for gasoline on Memorial Day - the traditional start of summer driving season - ranges from a low of 208 million barrels to a high of 218 million barrels. Counting last week's numbers, which will be reported in today's [This Week in Petroleum](#) (TWIP), we have 3 weeks to get back to the lower end of the range. That would require a weekly build of $(208 - 193.5)/3$, or 4.8 million barrels a week. Impossible?

No, but it looks unlikely. The largest weekly gain that was ever recorded happened the week of May 28th in 1993. The increase in gasoline stocks that week was 11.5 million barrels. That appears to be quite an anomaly, because the next highest May increase was in 1994 at 5.6 million barrels. If we only look at the data since 2000 - which would be more in line with the current supply/demand picture - the largest May gain occurred in 2001 at 4.3 million barrels.

So, in order to avoid going into the summer driving season below the lower end of the range, we would have to see 3 consecutive weekly gains that have not been seen this century - fueled by very strong import levels (or record-breaking demand destruction). So, again **I go out on a little limb and say that we will enter summer driving season below the bottom of the average range.**

If we have an uneventful summer, prices may not go too much higher. But in my opinion we will go through the summer about one gulf hurricane away from nationwide average gasoline prices rushing past \$4/gallon. They could go much higher in the event of a major refinery disruption ala

Hurricane Katrina. It is really hard to imagine where gasoline prices could top out given current inventory levels.

Going for a Record?

To put the matter in a bit more perspective, here are the Memorial Day gasoline inventory levels since 1990.

Date	Vol (million bbl)
May 25, 1990	218.5
May 31, 1991	215.7
May 29, 1992	218.0
May 28, 1993	229.9
May 27, 1994	214.4
May 26, 1995	210.0
May 31, 1996	206.1
May 30, 1997	200.7
May 29, 1998	218.2
May 28, 1999	223.0
May 26, 2000	201.1
May 25, 2001	208.0
May 31, 2002	215.9
May 30, 2003	207.3
May 28, 2004	204.3
May 27, 2005	216.7
May 26, 2006	209.3

Table 1. End of May Gasoline Inventories since 1990

The lowest number on the list is 1997 at 200.7 million barrels. Even to reach that number, we would have to gain $(200.7-193.5)/3$, or 2.4 million barrels for the next 3 weeks (7.2 million barrels total). And while I think we are likely to see a gain in inventories this week as higher prices continue to bite into demand, we aren't likely to gain 7.2 million barrels over the next 3 weeks. So, again **I go out on a limb and say we will hit Memorial Day with record low inventory levels.**

How TWIP is Written

I recently asked Doug MacIntyre how he goes about writing TWIP. Here was his response:

Actually, I wish I knew sometimes. As I write this comment, it's Tuesday afternoon and I have NO idea what my hook or topic will be (although gasoline does seem to be an obvious choice, not every report can be on gasoline). Sometimes it is mostly written by Tuesday, but most of the time, not a word has been written until Wednesday morning,

plus I have to wait until I write those pithy 4 paragraphs of text that gets released with the data at 10:30 am ET! Often, the issues that take the least amount of time seem to be the ones I like the best. Anyway, right now, I'm at a blank for what tomorrow's edition will be.

BTW, while I write the vast majority of them, I have some colleagues that pitch in every now and then, which I truly appreciate!

I told him he could always write about the blogger who had the amazing foresight months ago to start warning of potential record gasoline prices - based on his weekly reading of TWIP and the EIA statistics. :-) On a more serious note, I have suggested that he devote an upcoming version to the subject of imports: where they come from, how long it takes them to reach our shores, etc.

Further Reading

Following are some of the essays that I have published this year addressing gasoline inventories/prices.

[Why Are Gas Prices Rising?](#)

[Gouging is an Idiotic Explanation](#)

[This Week in Petroleum 3-28-07](#)

[This Week in Petroleum 4-4-07](#)

[This Week in Petroleum 4-11-07](#)

[This Week in Petroleum 4-18-07](#)

[This Week in Petroleum 4-25-07](#)

[This Week in Petroleum 5-2-07](#)

[This Week in Petroleum 5-9-07](#)

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