

ALG Estimate on Price Impact of Releasing Strategic Oil Reserves

It takes about 1 to 4 weeks for gasoline to be refined,¹ and according to NYMEX light sweet crude about a month ago,² the price per barrel was about \$100. Today's gas price (national average according to Gas Buddy on 6/24/11) is \$3.62.³



We know about 46% of a barrel goes to finished gasoline,⁴ so about \$46 of the \$100 barrel produces 19.4 gallons of gas (the average according to American Petroleum Institute)⁵ at a base cost of \$2.37 a gallon. The additional \$1.25 would then go to the actual refining costs, distribution, marketing, taxes, and profits.

From there it follows that **at \$95 barrel** (where oil was before the reserves release announcement):

$\$95 \times .46 = \43.7 of the barrel produces 19.4 gallons of gas
 $\$43.7 / 19.4 = \2.25 base cost per gallon of gas
 $\$2.25 + \1.25 for refining, distribution, marketing, taxes, and profits = **\$3.50 a gallon**
(the price per gallon when oil is \$95 a barrel)

If one is generous and assumes the entire \$4 drop in the price per barrel⁶ was because of releasing the reserves, how much will consumers save per gallon? We know the price drop could last for about a month as the reserves release occurs. Assuming it stays **at about \$91 a barrel** through this period, it then follows:

$\$91 \times .46 = \41.86 of the barrel produces 19.4 gallons of gas
 $\$41.86 / 19.4 = \2.15 base cost per gallon of gas
 $\$2.15 + \1.25 for refining, distribution, marketing, taxes and profits = **\$3.40 a gallon** (the price per gallon when oil is \$91 a barrel)

So, a \$4 drop in a barrel of oil produced by releasing the reserves will generate a \$.10 drop in the price of gasoline at the pump.

Therefore, Obama jeopardized national security to, at best, save consumers about \$1.50 per fill up if they happen to fill up when the “flood” of new gasoline hits the market. If a consumer fills up 4 times in a month he or she will save a total of \$6.

¹ <http://www.cheresources.com/questions/refining-33.html>

² <http://www.eia.doe.gov/emeu/international/crude2.xls>

³ <http://gasbuddy.com/>

⁴ http://www.eia.gov/dnav/pet/pet_pnp_pct_dc_nus_pct_m.htm

⁵ <http://answers.google.com/answers/threadview/id/193727.html>

⁶ <http://www.businessweek.com/ap/financialnews/D901L4780.htm>