



HORNSBY & COMPANY, INC.

www.hornsblyco.com

Energy Risk  
Management Services

---

International Petroleum Analysis

June 19, 2009

## World Petroleum Perspectives Monthly Review and Outlook

### Summary

Since our last report the prompt NYMEX crude oil contract has gained by some \$5.00 per barrel on a point-to-point basis. A broadly weaker dollar has partly accounted for the rise, accompanied by weekly inventory data revealing that that U.S. crude oil supplies have, on average, finally peaked. While July WTI had previously risen to settle in excess of \$72.00 per barrel, more recently the market has modestly retraced. The Federal Reserve Board reported that May manufacturing activity dropped by 15.3% versus May of 2008, confirming our previous thoughts that, as opposed to showing signs of improvement, the U.S. economy was experiencing a “stretched u” type of contraction. Equity and commodity markets overall are realizing they perhaps have “overly discounted” the timing of any economic recovery. Thus far at least, a weaker dollar and concerns over Iran’s internal stability have precluded a major selloff in WTI. Having said this, however, our long-standing Base Case has assumed that calendar July WTI would average about \$66.20 per barrel when first discussed back in January. As far we are concerned, therefore, prompt NYMEX crude oil could in fact retrace back below \$70.00 per barrel and still remain fully consistent with our outlook. If so, our forecast has also assumed that WTI would trade back above \$70.00 per barrel in August.

With regard to our overall balances, we have made relatively little revision since our last report. Our forecast remains an “outlier”, more constructive than the consensus but particularly the IEA. In this report we provide our first official look at 2010. Our balances suggest a recovery in world oil demand by more than 1.0% next year, paced by China. However, we are also looking for some improvement within the OECD. Non-OPEC supply growth is expected to be minimal, allowing OPEC’s market share to recover. In terms of price, we have made no revision to our forecast for the second half of 2009, expecting prices to peak in August and retrace through year end. For 2009 as a whole, purely because the last couple months have averaged a bit above our Base Case expectations, we now expect prompt WTI to average about \$56.75 per barrel, a roughly \$1.00 per barrel upward revision from last month. For 2010, we believe a WTI average of about \$65.00 per barrel is reasonable.

- 
- + World oil demand is expected to decline marginally in 2009.
  - + Non-OPEC supply is forecast to rise by 490 MB/D this year.
  - + Our balances still imply a net global stock draw for 2009, but the process is likely to be prolonged.
-

## Viewpoint

Since publishing our last monthly report the prompt NYMEX crude oil contract has gained by some \$5.00 per barrel on a point-to-point basis, from about \$66.00 per barrel to \$71.00 per barrel.

A broadly weaker dollar has partly accounted for the gain, with the greenback falling versus the euro over this time period by about 2.0%. In addition, however, weekly U.S. inventory data began revealing that U.S. crude oil supplies have possibly peaked for the year, consistent with our Base Case refinery balances.

While July WTI had previously risen to settle in excess of \$72.00 per barrel on June 12, more recently prices have retraced back toward \$70.00 per barrel.

The Federal Reserve Board reported that May manufacturing activity dropped by 15.3% versus May of 2008, a deeper year-over-year fall than reported for April, thus confirming our previous discussion concluding that, as opposed to showing signs of improvement, the U.S. economy was in the midst of a “stretched u” type of contraction where the trough is quite prolonged.

In response, both equity and commodity markets are realizing they have possibly “over-discounted” the timing of an economic recovery.

Thus far, however, a weaker dollar and geopolitical concerns over Iran’s internal stability have precluded a major selloff in WTI that would be consistent with some rethinking of the strength of demand.

Having said this, however, our long-standing Base Case has assumed that calendar July WTI would average about \$66.20 per barrel when we first discussed our outlook back in January.

Thus, as far we are concerned, prompt NYMEX crude oil could in fact retrace back below \$70.00 per barrel and still remain fully consistent with our outlook. If so, our forecast has also assumed that WTI would subsequently recover and trade back above \$70.00 per barrel in August.

In terms of our overall balances, we have made relatively little revision since our last report. Our forecast, particularly for

demand, remains an “outlier”, more constructive than the consensus but particularly the IEA.

We would emphasize, however, that in its most recent report the IEA was a bit less negative in terms of world oil demand for 2009, and in this context we would expect the Agency to further revise up their assessment in subsequent reports.

In addition, the IEA had realized they were perhaps too bearish on non-OPEC supply growth for this year, having revised up output prospects for this group of countries in their latest outlook.

In this report we provide our first official look at 2010. Our balances suggest a recovery in world oil demand by more than 1.0% next year, paced by China and other non-OECD countries. However, we also anticipate a modest improvement within the OECD.

Non-OPEC supply growth is expected to be minimal, allowing OPEC's market share to recover. North Sea production should continue to decline along with Mexico, and we see gains in Brazil and elsewhere moderating to a degree.

With regard to price, we have made no revision to our forecast for the second half of this year, and we still anticipate a peak in August, retracing through year end.

For 2009 as a whole, purely because the last couple months have averaged a bit above our Base Case expectations, we now expect prompt WTI to average \$56.75 per barrel, a roughly \$1.00 per barrel upward revision from last month. For 2010, we believe a WTI average of about \$65.00 per barrel is reasonable.

## Global Oil Demand

World oil demand is forecast to fall by some 340 MB/D this year. This marks a slight downward revision from our view of a few months ago, but we must concede that second quarter U.S. oil demand is coming in a bit weaker than we originally expected.

OECD oil demand is anticipated to decline by 2.4%, or some 1.0 MMB/D this year, while non-OECD oil demand is forecast to rise by 1.7%, or about 685 MB/D.

For 2010, we anticipate world oil demand to rise by 1.4%, or about 1.1 MMB/D. OECD oil demand is expected to recover marginally, by 0.3%, or some 115 MB/D. Non-OECD oil demand is forecast to rise by 2.5%, or about 1.0 MMB/D.

## **United States**

In previous reports we have discussed how weak U.S. implied distillate demand has been over the last couple months after adjusting for weather. Such analysis of implied diesel demand has been helpful to us over the years in gauging current manufacturing activity, and not relying on the prior months' history like most economists.

We had raised the possibility of an economic "double dip" if you will, but concluded that a "stretched u" was likely more accurate, i.e. an economy that was limping along at the same trough it had established toward the end of the first quarter.

Our view has been confirmed by the latest economic stats. The Federal Reserve Board reported that industrial production in May fell by 13.4% versus May of 2008, while manufacturing output dropped a larger 15.3% versus the prior year.

Within the aggregate manufacturing index, durable manufacturing such as primary metal and metal products suffered greatly, down 43.9% and 21.8% versus May of 2008, respectively.

We have thus been compelled to make some modest revisions to our second quarter diesel demand estimate, but still believe that by the end of the third quarter some improvement will appear.

In addition, second quarter gasoline demand is coming in a bit stronger than expected, even though our outlook had assumed less negative gasoline demand in the second half of the year reflecting some recovery in discretionary driving.

Although we would look for second quarter implied gasoline demand to be revised down when the near final data from the Petroleum Supply Annual are available, we believe we have taken this into account.

Overall, for 2009 we are expecting U.S. refined product demand to decline by 3.0%, or some 585 MB/D. For 2010, we expect a continued improvement in average fleet fuel efficiency to lead to a decline in gasoline demand of 1.7%, or about 155 MB/D.

However, under our assumption that manufacturing activity will register gains versus 2009, all other product demand is expected to increase over this year. On balance, for 2010 we expect U.S. refined product demand to rise by 0.2%, or about 40-45 MB/D, to slightly under 18.9 MMB/D.

## **Europe**

Preliminary data for the early second quarter also reveal a weak picture for OECD Europe oil demand. Warmer temperatures played a role, which compounded the secular weakness in gas oil demand reflecting conservation and alternative fuel substitution.

In addition, however, products more directly sensitive to economic activity weakened severely, implying that Europe as well is experiencing a "stretched u" type of economic cycle.

LPG and naphtha demand both registered double-digit declines, while even diesel demand weakened by more than 7.0% in April, which had previously been supported by the consumer move away from gasoline powered vehicles.

By the fourth quarter, however, we expect OECD Europe oil demand to be "less weak" but still decline from the previous year nonetheless. For 2009 as a whole, we anticipate Europe oil demand to decline by 1.6%, or some 190 MB/D.

Next year, as with the United States we expect a continuation of a modest economic recovery which we believe will begin before the end of this year. As such, we forecast OECD oil demand in 2010 will rise, but by only 0.1% or some 10 MB/D, reflecting the continuation of a secular trend in conservation and alternative fuel usage.

## **Japan and South Korea**

Preliminary early second quarter data for Japan reveal continued severe weakness, though somewhat less so than the record 20%+ plunge in February demand versus the prior year.

The only product to register an increase in April from the previous year was naphtha, most likely due to restocking of petrochemical feedstock on down the supply chain.

As with the rest of the OECD, the second quarter overall will prove to be, on average, somewhat weaker than the first, both economically and in terms of oil demand.

As such, like the rest of the OECD we must be willing to retain our forecast of improvement before year end, and not rely on any “green shoots”. By the fourth quarter, we expect Japan oil demand to decline, but only marginally versus the fourth quarter of 2008.

For 2010, we anticipate that oil demand will be about flat with this year, despite a modest improvement in consumer sentiment and manufacturing activity. Conservation and fuel substitution will lead to modest declines in most products, offset by a rise in LPG and naphtha consumption.

At this point it would appear that second quarter South Korea oil demand will hold up better than Japan, aided by stronger implied naphtha demand.

While non-primary destocking likely accounted for some of the gain, it would also appear that deliveries to other Asian countries have held up reasonably well.

For 2009 we anticipate that South Korea demand will decline by 1.6%, or about 30 MB/D, while next year oil demand should recover, but by less than 1.0%.

## **Non-OECD**

Markets have been speculating that China’s stimulus package will yield tangible results sooner than economists expected at the beginning of the year. Our Base Case had

assumed from the start that implied oil demand would begin recovering by the second quarter.

Preliminary April data suggest that implied demand rose by more than 6.0% versus the previous year, so in fact there is some evidence of a recovery. Gasoline, petrochemical feedstocks, and other products most sensitive to manufacturing output registered double-digit gains in April.

First quarter vehicle sales were strong, and thus consumers were putting the cars to immediate use as suggested by the gain in gasoline demand.

Looking out, we believe the stimulus will continue to bear fruit, and as such we are looking for 2009 China implied oil demand to rise by 2.1%, or 140 MB/D, in contrast to the IEA view which forecasts a modest decline in demand for this year.

For 2010, absent a weak first quarter as experienced this year, we expect China implied oil demand to gain by 3.0%, or some 205 MB/D.

Elsewhere outside the OECD, we see little reason to revise our outlook. OPEC oil demand should continue to gain within our expectations given higher oil revenues.

As previously discussed, higher oil prices should also give a boost to the Russian economy beyond consensus expectations, leading to a recovery later in the year and implying flat oil demand for the FSU as a whole for 2009.

On balance, for this year we anticipate non-OECD oil demand to rise by 1.7%, or about 685 MB/D. For 2010, largely reflecting an acceleration in China, we forecast non-OECD oil demand to gain by 2.5%, or around 1.0 MMB/D.

## **Global Oil Supply**

### **Non-OPEC**

Based on data for April and May it appears that Russian production averaged about in line with our expectations, but somewhat stronger than the IEA had expected.

In addition to our less negative demand outlook we have also been forecasting a gain in non-OPEC supplies for this year.

The IEA had been expecting no growth, but given the latest Russian data modestly revised up their aggregate non-OPEC assumption.

Once again much of our expected growth derives from the United States, assuming a net recovery from last year's hurricane downtime, little storm impact this year, as well as new offshore production continuing to build up. For 2009 as a whole, we expect U.S. crude oil production to increase by 290 MB/D.

This is a one-time jump in our view, however, unlikely to continue into next year, and we expect 2010 U.S. crude oil production to fall by a net 30 MB/D.

North Sea production should continue to drop this year and next, and there is little indication that Mexico production will turn around for the foreseeable future.

Helping to offset declines in these countries in addition to the United States will be a rise in Brazil production of an estimated 40 MB/D this year, with a modestly larger gain forecast for 2010.

Overall, we are looking for non-OPEC supply to rise by 490 MB/D this year, with a smaller 230 MB/D increase forecast for 2010.

## OPEC and Inventory

OPEC crude oil production continues to creep up, but not so materially as to suggest a drive for market share. As our customary table below reveals, for the month of June we expect OPEC "11" crude oil production to average about 25.945 MMB/D.

This suggests in turn an "overage" relative to the official ceiling of 24.845 MMB/D by some 1.1 MMB/D. Relative to May, we estimate slight increases for Iran and Venezuela, the habitual "cheaters" along with Angola, Libya, and Nigeria.

### OPEC "11" Targeted Allocations v.

### Estimated June Production (MB/D)

	Estimated Allocations	Production	Prod. Vs. Allocations
Algeria	1,202	1,250	+48
Angola	1,517	1,755	+238
Ecuador	434	475	+41
Iran	3,336	3,705	+369
Kuwait	2,223	2,225	+2
Libya	1,469	1,575	+106
Nigeria	1,673	1,995	+322
Qatar	731	720	-11
S. Arabia	8,052	7,900	-152
UAE	2,223	2,225	+2
Venezuela	1,985	2,120	+135
Total	24,845	25,945	+1,100

The market appears not to care at this point, and we believe that any incremental volumes reflect a slight rise in refiner requirements. While analysts and the market tend to view OPEC "overproduction" as a negative, there appear to be more "important" factors in crude oil price determination these days, such as the vagaries of the dollar and the S&P 500.

In any event, in the second half of the year we expect OPEC "11" deliveries to rise further, such that fourth quarter volumes average about 26.8 MMB/D.

For 2010 as a whole, a modest recovery in demand combined with a smaller gain in non-OPEC supplies suggest that OPEC's market share will improve. For the OPEC "11", we forecast that crude oil deliveries will average almost 27.3 MMB/D, with Saudi deliveries averaging about 8.3 MMB/D, well under sustainable capacity. We assume little change in Iraq production for next year, which we believe is quite reasonable given the uncertainty that is likely to ensue as U.S. troop strength is reduced.

Putting together our demand and supply outlook, our balances imply a net draw in global stocks this year averaging about 115 MB/D. As discussed in previous reports, we expect floating storage will still total around 20 million barrels by year end.

For 2010, our balances suggest another net global stock draw, averaging a bit larger at 160 MB/D. Thus, we believe the balance will improve at a slow pace, with a continuation of excess OPEC sour crude capacity as well as refinery capacity in most countries.

### Implications for Price

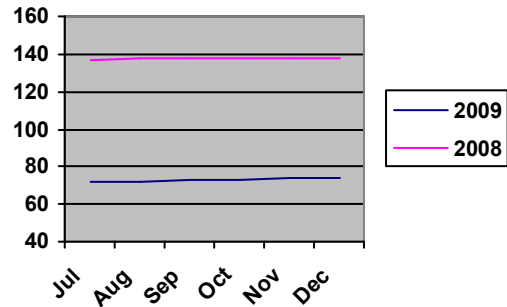
Although in January we presented one of the most bullish crude oil price outlooks for 2009, thus far the second quarter WTI average has exceeded even our expectations. A weaker-than-assumed dollar has clearly played a role.

However, it also appears that financial entities have been buying crude oil in advance of the turn in the underlying fundamentals irrespective of the dollar in greater volume than even we had assumed.

As previously discussed, however, there now appears to be some concern that the equity and commodity markets may have “over discounted” the timing and degree of a U.S. economic recovery this year, given clear evidence that the second quarter has shown little sign of “life” under our “stretched u” type of configuration.

Thus, we would not be surprised to see prompt WTI retrace back into the “60s” per barrel. We would emphasize, however, that we do not anticipate a complete reversal, defined as WTI falling back toward \$50.00 per barrel or below, unless the dollar strengthens back to its high of the last six months *in combination with* a more severe deterioration in global oil demand for the remainder of 2009 than we have experienced to date. We do not believe that such a major decline in crude oil prices would be catalyzed by a strong recovery in the dollar in isolation.

### Current Six-Month NYMEX Crude Oil Term Structure 2009 vs. 2008



We are compelled to retain our forecast that following the second quarter, world oil demand will begin to stabilize and recover by year end. Thus, even if crude oil prices retrace back below \$70.00 per barrel over the next few weeks, we anticipate a recovery back above \$70.00 per barrel in August, consistent with our long-standing Base Case.

Now that we have proven our points with regard to the financial influence on oil prices for this year and the consensus has become bullish once again, perhaps the most controversial aspect of our WTI forecast going forward is our expectations that following an August peak, prices begin to fall back, such that fourth quarter WTI averages “only” a bit above \$56.00 per barrel.

Our rationale has been, and remains, that once prompt WTI reaches \$70.00-\$75.00 per barrel, it will be viewed as a type of intermediate term “terminal price”.

That is, above this range there is concern that demand and the economic recovery would be adversely impacted, while below this range the economics of incremental non-OPEC supply become less favorable. This range is roughly equal to the price that Saudi oil minister Ali Naimi and King Abdullah have suggested the world could support once economic recovery is under way.

Our terminal price concept is our own assumption, however, and it remains to be seen whether it has any validity or not. We would note, however, that at the present time with prompt WTI thus far failing at \$73.00 per barrel or so, one rationale for the retracement back to \$70.00 per barrel was in fact the concern that such prices could derail economic recovery.

There is clearly the chance that even if our terminal price concept is valid, prompt NYMEX crude oil could remain at \$70.00-\$75.00 per barrel through the end of the year.

However, we have assumed that such prices will continue to elicit more and more barrels from OPEC where, although demanded by refiners, such barrels would be viewed as a lack of discipline, leading in turn to a liquidation of length over concerns of aggressive market share moves.

Also, the market may begin to assume that the longer prices remain at \$70.00 per barrel and above, the greater the probability that oil demand could be adversely impacted into 2010.

Another possibility is that internal unrest in Iran following the presidential election result could lead to a situation akin to 1979 with a major reduction in production and exports.

However, we assume, right or wrong, that dissent is not so widespread and unanimous as to lead to an outright revolution. In addition, Saudi Arabia has approximately enough spare capacity to make up for a complete elimination of Iranian crude oil exports, particularly if accompanied by a likely IEA stock release.

We will concede, however, that if our fourth quarter forecast is off the mark, the odds favor somewhat higher prices than we currently anticipate. By the same token, however, we do not envision a \$100.00+ per barrel world for some period of time.

In this regard, when we take our first look at 2010, we believe a WTI average for next year of about \$65.00 per barrel strikes a reasonable balance between a modest recovery in demand, a market discounting minimal gains in non-OPEC supply, countered by the realization that a substantial volume of excess capacity remains in OPEC, albeit largely Saudi sour barrels.

Perhaps more important, however, is the continued existence of excess refining capacity, the result of more modest demand growth in combination with new grass roots and conversion projects coming online.

In our minds this implies a “terminal” refining margin for 2010, if you will, which will help restrain crude oil prices below levels

that might otherwise reflect a relatively tight global refinery balance.

**Forecast Prompt NYMEX Crude Oil Prices By Quarter: Base Case**

	<b>2008</b>	<b>2009(E)</b>	<b>2010(E)</b>
<b>Q1</b>	<b>\$97.90</b>	<b>\$43.08</b>	<b>\$60.00</b>
<b>Q2</b>	<b>\$123.76</b>	<b>\$59.90</b>	<b>\$75.00</b>
<b>Q3</b>	<b>\$116.19</b>	<b>\$67.86</b>	<b>\$65.00</b>
<b>Q4</b>	<b>\$60.74</b>	<b>\$56.28</b>	<b>\$60.00</b>
<b>Yr.</b>	<b>\$99.65</b>	<b>\$56.78</b>	<b>\$65.00</b>

June 19, 2009

Table 1  
OECD Oil Demand  
(Thousands of Barrels Daily)

BASE CASE 6/19/09	% Chng						% Chng					
	Q1E	Q2E	Q3E	Q4E	2009E	09/08	Q1E	Q2E	Q3E	Q4E	2010E	10/09
DEMAND												
United States	19051	18804	18428	19033	18829	-3.0	18916	18834	18421	19315	18871	0.2
Motor Gasoline	8791	9200	9003	8913	8977	0.2	8536	9069	8881	8802	8822	-1.7
Jet Fuel	1462	1471	1494	1384	1453	-4.3	1477	1486	1509	1398	1467	1.0
Distillate	3907	3498	3478	3777	3665	-7.0	4051	3618	3530	4081	3820	4.2
Residual	538	576	518	618	563	-9.1	544	582	526	627	570	1.3
Other	4353	4059	3935	4342	4172	-4.8	4310	4079	3974	4407	4192	0.5
Canada	2158	2075	2132	2119	2121	-0.5	2170	2086	2153	2145	2139	0.8
Naphtha	74	73	70	79	74	1.0	75	74	71	80	75	1.3
LPG	215	290	227	140	218	1.3	217	293	230	141	220	1.0
Gasoline	717	747	818	779	765	-0.3	721	749	826	790	772	0.9
Kerosene	81	79	91	81	83	-0.1	81	80	92	81	83	0.5
Gasoil/Diesel	661	458	496	592	552	-0.8	661	458	501	598	555	0.5
Fuel Oil	138	92	81	151	115	-2.0	139	93	82	153	117	1.0
Other	272	335	349	298	313	-1.3	275	339	353	301	317	1.2
Mexico	1952	2011	2052	2035	2013	-0.2	1971	2031	2073	2056	2033	1.0
United Kingdom	1460	1397	1385	1538	1445	-0.9	1455	1397	1385	1539	1444	-0.1
Naphtha	81	75	62	89	77	-0.7	82	76	62	90	78	1.0
LPG	127	135	115	132	127	-0.6	128	136	116	133	129	1.0
Gasoline	414	371	380	399	391	-2.8	405	364	373	391	383	-2.0
Kerosene	248	202	219	215	221	-0.1	248	202	219	215	221	-0.1
Gasoil/Diesel	357	479	465	548	462	0.2	362	486	472	556	469	1.5
Fuel Oil	139	43	39	52	68	-1.7	136	42	38	51	67	-2.0
Other	94	91	105	103	98	-0.4	93	90	106	103	98	-0.4
France	1717	1568	1745	1599	1657	-1.5	1722	1569	1749	1604	1661	0.2
Naphtha	151	146	225	248	192	-1.8	152	146	226	249	193	0.5
LPG	155	94	76	129	113	-1.7	155	94	76	129	114	0.1
Gasoline	195	260	224	168	212	-3.3	192	254	220	165	208	-2.0
Kerosene	95	111	121	87	103	-1.0	94	110	120	86	102	-1.0
Gasoil/Diesel	964	751	898	792	851	-1.2	973	759	907	800	860	1.0
Fuel Oil	89	90	58	75	78	-2.4	88	89	57	74	77	-1.0
Other	68	116	143	99	107	0.2	69	116	144	100	107	0.2
Italy	1468	1415	1442	1406	1433	-3.6	1462	1405	1437	1402	1427	-0.4
Naphtha	65	79	48	37	57	-0.8	66	80	48	37	58	1.0
LPG	140	100	106	145	123	-1.1	141	101	107	146	124	1.0
Gasoline	322	300	316	286	306	-3.1	316	297	313	283	302	-1.3
Kerosene	67	73	76	64	70	-0.1	67	73	76	64	70	-0.1
Gasoil/Diesel	572	468	569	542	538	-1.6	578	473	575	547	543	1.0
Fuel Oil	159	290	199	191	210	-14.2	151	276	189	181	199	-5.0
Other	143	104	127	142	129	1.0	144	105	129	143	130	1.0
Germany	2265	2240	2289	2501	2324	-1.9	2270	2244	2295	2510	2330	0.3
Naphtha	231	220	218	249	230	-3.1	231	221	218	250	230	0.2
LPG	122	128	117	112	120	-4.0	122	128	117	112	120	0.1
Gasoline	515	564	506	554	535	-2.5	510	559	501	549	530	-1.0
Kerosene	98	140	145	122	126	-0.1	98	140	145	122	126	-0.1
Gasoil/Diesel	1118	925	991	1198	1058	-1.7	1129	934	1001	1210	1069	1.0
Fuel Oil	62	75	112	94	86	-1.5	59	74	111	95	85	-1.5
Other	118	188	200	171	169	1.0	119	189	202	173	171	1.0
Austria	220	211	235	286	238	-1.2	216	209	232	283	235	-1.2
Belgium	416	408	382	450	414	-2.2	420	412	386	454	418	1.0
Denmark	213	188	200	213	203	0.3	211	186	202	217	204	0.3
Finland	220	222	219	218	220	0.6	218	224	221	221	221	0.6
Greece	295	255	279	340	292	-1.5	292	252	276	337	289	-1.0
Iceland	12	16	26	25	20	2.0	13	16	27	26	20	1.8
Ireland	126	116	126	135	126	1.0	127	117	127	137	127	1.0
Luxembourg	53	48	48	47	49	2.0	53	49	49	48	50	1.7
Netherlands	411	388	391	389	395	-2.5	415	379	381	379	389	-1.6
Norway	195	190	196	207	197	1.1	197	192	198	209	199	1.0
Portugal	196	285	269	292	261	1.0	198	288	272	295	263	1.0
Spain	870	762	934	900	867	-2.7	878	769	943	908	874	0.9
Sweden	380	332	308	318	335	-0.2	383	331	308	318	335	0.1
Switzerland	269	268	277	361	294	-0.6	272	265	271	368	294	0.1
Turkey	553	462	620	549	546	-1.2	558	453	619	543	543	-0.5
OECD Europe	11338	10770	11371	11774	11313	-1.6	11357	10757	11378	11799	11323	0.1
Japan	5124	4181	4151	4773	4558	-4.5	5134	4187	4148	4767	4559	0.0
Naphtha	632	567	586	774	640	-1.2	640	576	595	786	649	1.4
LPG	872	605	578	695	688	-1.9	894	614	584	702	698	1.6
Gasoline	888	917	834	905	886	-3.9	879	908	826	896	877	-1.0
Kerosene	994	446	361	627	607	-2.4	984	441	358	621	601	-1.0
Gasoil/Diesel	1088	1037	883	1156	1041	-3.0	1089	1038	884	1157	1042	0.1
Fuel Oil	312	320	506	225	341	-14.0	315	323	501	214	338	-0.7
Other	155	156	207	227	186	-6.6	152	155	208	230	186	-0.2
Direct Crude	184	134	195	163	169	-19.0	182	132	193	162	167	-1.0
South Korea	2031	1896	1790	1873	1897	-1.6	2011	1915	1812	1901	1909	0.6
Australia	878	845	851	889	866	0.9	887	854	864	898	876	1.1
New Zealand	106	108	106	112	108	0.5	107	109	106	113	109	0.5
Total OECD	42639	40691	40881	42610	41705	-2.4	42554	40772	40956	42993	41819	0.3

Information contained herein is believed to be reliable but its accuracy cannot be guaranteed. Past performance is not indicative of future results and the risk of loss is substantial in futures trading. Hornsby & Company, Inc. and W.H. Brown may, from time to time, have positions in the futures market relative to these recommendations.

Table 2  
World Oil Demand  
(Thousands of Barrels Daily)

BASE CASE 6/19/09	% Chng						% Chng					
	Q1E	Q2E	Q3E	Q4E	2009E	09/08	Q1E	Q2E	Q3E	Q4E	2010E	10/09
<b>DEMAND</b>												
United States	19051	18804	18428	19033	18829	-3.0	18916	18834	18421	19315	18871	0.2
Canada	2158	2075	2132	2119	2121	-0.5	2170	2086	2153	2145	2139	0.8
Mexico	1952	2011	2052	2035	2013	-0.2	1971	2031	2073	2056	2033	1.0
United Kingdom	1460	1397	1385	1538	1445	-0.9	1455	1397	1385	1539	1444	-0.1
France	1717	1568	1745	1599	1657	-1.5	1722	1569	1749	1604	1661	0.2
Italy	1468	1415	1442	1406	1433	-3.6	1462	1405	1437	1402	1427	-0.4
Germany	2265	2240	2289	2501	2324	-1.9	2270	2244	2295	2510	2330	0.3
Austria	220	211	235	286	238	-1.2	216	209	232	283	235	-1.2
Belgium	416	408	382	450	414	-2.2	420	412	386	454	418	1.0
Denmark	213	188	200	213	203	0.3	211	186	202	217	204	0.3
Finland	220	222	219	218	220	0.6	218	224	221	221	221	0.6
Greece	295	255	279	340	292	-1.5	292	252	276	337	289	-1.0
Iceland	12	16	26	25	20	2.0	13	16	27	26	20	1.8
Ireland	126	116	126	135	126	1.0	127	117	127	137	127	1.0
Luxembourg	53	48	48	47	49	2.0	53	49	49	48	50	1.7
Netherlands	411	388	391	389	395	-2.5	415	379	381	379	389	-1.6
Norway	195	190	196	207	197	1.1	197	192	198	209	199	1.0
Portugal	196	285	269	292	261	1.0	198	288	272	295	263	1.0
Spain	870	762	934	900	867	-2.7	878	769	943	908	874	0.9
Sweden	380	332	308	318	335	-0.2	383	331	308	318	335	0.1
Switzerland	269	268	277	361	294	-0.6	272	265	271	368	294	0.1
Turkey	553	462	620	549	546	-1.2	558	453	619	543	543	-0.5
OECD Europe	11338	10770	11371	11774	11313	-1.6	11357	10757	11378	11799	11323	0.1
Japan	5124	4181	4151	4773	4558	-4.5	5134	4187	4148	4767	4559	0.0
South Korea	2031	1896	1790	1873	1897	-1.6	2011	1915	1812	1901	1909	0.6
Australia	878	845	851	889	866	0.9	887	854	864	898	876	1.1
New Zealand	106	108	106	112	108	0.5	107	109	106	113	109	0.5
Total OECD	42639	40691	40881	42610	41705	-2.4	42554	40772	40956	42993	41819	0.3
Non-OECD	38959	40543	41196	39628	40081	1.7	39905	41560	42272	40608	41086	2.5
FSU	4152	3158	3218	4094	3656	0.0	4227	3215	3276	4168	3722	1.8
Non-OECD Europe	2503	2358	2394	2531	2446	-0.5	2487	2343	2380	2531	2435	-0.5
China	5502	8275	8177	5560	6879	2.1	5667	8523	8422	5727	7085	3.0
OPEC	8330	7682	8183	8199	8099	6.0	8855	8154	8684	8694	8597	6.1
Argentina	484	530	511	548	518	0.3	484	530	511	548	518	0.0
Brazil	1921	2203	2298	2303	2181	1.6	1959	2247	2344	2349	2225	2.0
Other L. A.	1530	1619	1807	1852	1702	1.3	1545	1635	1843	1871	1723	1.3
Egypt	581	598	598	604	595	2.4	592	613	613	619	609	2.4
South Africa	469	508	519	531	507	2.1	479	521	530	542	518	2.1
Other Africa	1095	1136	1203	1207	1160	1.7	1114	1154	1226	1226	1180	1.7
Non-OPEC M. E.	672	646	661	664	661	2.3	693	659	674	678	676	2.3
India	2319	2358	2249	2361	2322	2.4	2368	2408	2297	2411	2371	2.1
Other Asia	4102	4185	4080	3856	4056	0.4	4123	4210	4109	3883	4081	0.6
Int. Bunkers	2029	2034	2032	2036	2033	-1.6	2023	2039	2043	2043	2037	0.2
Refinery F/L	3270	3253	3265	3280	3267	-1.6	3290	3309	3321	3319	3310	1.3
Grand Total Demand	81598	81234	82076	82238	81786	-0.4	82459	82332	83228	83601	82905	1.4

Note: Demand by country is shown on an "inland" basis, i.e., excluding bunkers and refinery fuel/loss.

Information contained herein is believed to be reliable but its accuracy cannot be guaranteed. Past performance is not indicative of future results and the risk of loss is substantial in futures trading. Hornsby & Company, Inc. and W.H. Brown may, from time to time, have positions in the futures market relative to these recommendations.

Table 3  
World Oil Supply  
(Thousands of Barrels Daily)

BASE CASE 6/19/09					% Chng						% Chng	
	Q1E	Q2E	Q3E	Q4E	2009E	09/08	Q1E	Q2E	Q3E	Q4E	2010E	10/09
Grand Total Demand	81598	81234	82076	82238	81786	-0.4	82459	82332	83228	83601	82905	1.4
Inventory Change	144	84	-461	-231	-116		-205	386	-211	-615	-161	
<b>SUPPLY</b>	81742	81318	81615	82007	81670	-1.6	82254	82717	83017	82987	82744	1.3
United States	5236	5250	5253	5247	5246	5.9	5142	5468	5128	5122	5215	-0.6
United Kingdom	1495	1339	1409	1377	1405	-2.2	1545	1258	1423	1336	1391	-1.0
Norway	2235	2083	2083	2185	2146	-1.3	2190	2041	2041	2142	2103	-2.0
Denmark	380	380	380	380	380	0.0	380	375	375	380	378	-0.7
Netherlands	52	51	51	53	52	0.0	51	51	51	53	52	-0.5
Other OECD Europe	460	460	460	460	460	0.0	455	455	455	460	456	-0.8
Non-OECD Europe	305	305	305	305	305	0.0	305	305	305	305	305	0.0
Mexico	2710	2710	2705	2695	2705	-3.5	2700	2685	2675	2670	2683	-0.8
Canada	2655	2610	2710	2710	2671	0.9	2710	2710	2710	2710	2710	1.5
Argentina	640	640	635	635	638	-0.2	645	645	645	645	645	1.2
Brazil	1900	1925	1940	1975	1935	3.0	2065	2070	2080	2080	2074	7.2
Colombia	545	545	540	540	543	1.6	530	530	530	530	530	-2.3
Peru	105	105	105	105	105	0.0	105	105	105	105	105	0.0
Trinidad & Tobago	130	130	135	130	131	0.0	130	130	130	130	130	-1.0
Other L. A.	75	80	80	80	79	0.0	80	80	80	80	80	1.6
Bahrain	37	37	38	38	38	0.0	38	37	38	38	38	0.7
Oman	645	640	640	640	641	-5.0	670	670	665	665	668	4.1
Syria	335	335	335	335	335	-2.5	345	340	340	340	341	1.9
Other Middle East	365	365	365	365	365	0.0	365	360	360	360	361	-1.0
Congo	195	195	195	195	195	0.0	195	195	190	190	193	-1.3
Egypt	645	640	640	640	641	1.0	620	620	620	620	620	-3.3
Gabon	265	265	265	265	265	0.0	265	265	265	265	265	0.0
Tunisia	130	130	125	125	128	0.0	125	125	125	125	125	-2.0
Other Africa	365	375	380	380	375	0.0	380	380	380	380	380	1.3
Australia	660	655	655	660	658	12.6	590	590	590	590	590	-10.3
India	710	710	700	700	705	2.0	680	680	680	685	681	-3.4
Indonesia	800	800	800	800	800	-5.0	845	845	845	845	845	5.6
Malaysia	685	680	680	680	681	1.3	670	670	670	680	673	-1.3
Brunei	135	135	130	130	133	0.0	130	130	130	130	130	-1.9
Other Asia/Pacific	610	610	615	615	613	0.0	610	610	610	610	610	-0.4
FSU	11952	12141	11752	11680	11881	1.2	12071	12262	11870	11797	12000	1.0
China	3810	3810	3805	3805	3808	0.5	3790	3790	3790	3790	3790	-0.5
NGL	4942	4941	4995	5050	4982	1.3	5009	5009	5065	5122	5051	1.4
Ref. Gain/Other	1836	1828	1847	1850	1840	-0.4	1855	1852	1873	1881	1865	1.4
Non-Conventional	1230	1224	1230	1245	1232	2.7	1261	1255	1261	1276	1263	2.5
Total Non-OPEC	49275	49128	48983	49077	49115	1.0	49548	49594	49099	49136	49344	0.5
<b>OPEC SUPPLY</b>	32467	32190	32632	32931	32555	-5.3	32706	33124	33918	33851	33400	2.6
OPEC NGL	1930	1930	1930	1935	1931	1.2	1935	1935	1935	1935	1935	0.2
OPEC CONDENSATE	1900	1900	1900	1900	1900	1.1	1900	1900	1900	1900	1900	0.0
OPEC CRUDE SALES	28637	28360	28802	29096	28724	-6.1	28871	29289	30083	30016	29565	2.9
Saudi Arabia	8100	7900	7900	8000	7975	-11.3	7700	8000	8700	8650	8263	3.6
Iran	3692	3590	3712	3796	3697	-1.4	3681	3724	3773	3756	3733	1.0
Iraq	2285	2250	2250	2250	2259	-1.0	2250	2250	2250	2250	2250	-0.4
Kuwait	2275	2200	2200	2200	2219	-9.5	2225	2250	2300	2300	2269	2.3
Qatar	720	720	840	840	780	-6.9	835	835	840	840	838	7.4
UAE	2300	2250	2250	2250	2263	-11.8	2250	2300	2300	2300	2288	1.1
Algeria	1295	1300	1300	1325	1305	-7.2	1410	1410	1410	1410	1410	8.0
Angola	1800	1800	1850	1900	1838	-3.0	1910	1910	1910	1910	1910	3.9
Nigeria	1995	2000	2000	2000	1999	3.7	2100	2100	2100	2100	2100	5.1
Libya	1600	1600	1745	1745	1673	-3.4	1745	1745	1745	1745	1745	4.3
Ecuador	475	475	480	490	480	0.0	465	465	465	465	465	-3.1
Venezuela	2100	2275	2275	2300	2238	-1.9	2300	2300	2290	2290	2295	2.6
Inventory Change	144	84	-461	-231	-116		-205	386	-211	-615	-161	
Assumed Inventory Position(c)												
Days Supply of MOV	50	50	49	49	49		49	49	49	49	49	
Days Supply of UC	18	18	18	18	18		18	18	18	17	17	
Days Supply of MOV+	68	68	67	67	67		67	67	66	66	66	
Days Supply of S/C	14	14	14	14	14		14	14	14	14	14	

- a) OPEC supply measured on a delivered sales basis, i.e. accounting for tanker transit and storage time lag, plus net producer stock change.  
b) Includes share of Neutral Zone, shared equally.  
c) MOV: Minimum Operating Volume; UC: Usable Commercial; S/C: Strategic/Compulsory.

Information contained herein is believed to be reliable but its accuracy cannot be guaranteed. Past performance is not indicative of future results and the risk of loss is substantial in futures trading. Hornsby & Company, Inc. and W.H. Brown may, from time to time, have positions in the futures market relative to these recommendations.

**Table 3**  
**World Oil Supply**  
**(Thousands of Barrels Daily)**

BASE CASE 4/20/09											% Chng	
	Q1	Q2	Q3	Q4E	2008E	08/07	Q1E	Q2E	Q3E	Q4E	2009E	09/08
Grand Total Demand	83105	82046	81784	81566	82125	-0.6	81733	81744	82548	82575	82150	0.0
Inventory Change	114	1351	1144	920	882		143	-285	-580	-1195	-479	
<b>SUPPLY</b>	<b>83219</b>	<b>83397</b>	<b>82928</b>	<b>82486</b>	<b>83008</b>	<b>1.0</b>	<b>81876</b>	<b>81459</b>	<b>81967</b>	<b>81379</b>	<b>81671</b>	<b>-1.6</b>
United States	5115	5146	4655	4902	4954	-2.9	5249	5250	5253	5247	5250	6.0
United Kingdom	1508	1424	1395	1420	1437	-6.4	1495	1339	1409	1377	1405	-2.2
Norway	2215	2125	2125	2230	2174	-4.3	2235	2083	2083	2185	2146	-1.3
Denmark	380	380	380	380	380	-0.7	380	380	380	380	380	0.0
Netherlands	52	51	51	53	52	-1.0	52	51	51	53	52	0.0
Other OECD Europe	460	460	460	460	460	0.0	460	460	460	460	460	0.0
Non-OECD Europe	305	305	305	305	305	0.0	305	305	305	305	305	0.0
Mexico	2945	2775	2765	2730	2804	-9.3	2710	2710	2705	2695	2705	-3.5
Canada	2605	2615	2695	2672	2647	0.5	2655	2610	2710	2710	2671	0.9
Argentina	655	625	635	640	639	-3.2	640	640	635	635	638	-0.2
Brazil	1905	1885	1880	1845	1879	3.7	1900	1925	1940	1975	1935	3.0
Colombia	515	525	545	550	534	6.7	545	545	540	540	543	1.6
Peru	105	105	105	105	105	0.0	105	105	105	105	105	0.0
Trinidad & Tobago	130	130	135	130	131	0.0	130	130	135	130	131	0.0
Other L. A.	75	80	80	80	79	0.0	75	80	80	80	79	0.0
Bahrain	37	37	38	38	38	0.0	37	37	38	38	38	0.0
Oman	695	685	675	645	675	-4.8	645	640	640	640	641	-5.0
Syria	345	345	345	340	344	-11.0	335	335	335	335	335	-2.5
Other Middle East	365	365	365	365	365	25.9	365	365	365	365	365	0.0
Congo	195	195	195	195	195	0.0	195	195	195	195	195	0.0
Egypt	625	645	635	635	635	2.0	645	640	640	640	641	1.0
Gabon	265	265	265	265	265	0.0	265	265	265	265	265	0.0
Tunisia	130	130	125	125	128	0.0	130	130	125	125	128	0.0
Other Africa	365	375	380	380	375	0.0	365	375	380	380	375	0.0
Australia	525	560	595	655	584	15.6	660	655	655	660	658	12.6
India	685	690	690	700	691	1.3	710	710	700	700	705	2.0
Indonesia	875	850	835	810	843	-1.7	800	800	800	800	800	-5.0
Malaysia	670	670	670	680	673	-3.9	685	680	680	680	681	1.3
Brunei	135	135	130	130	133	0.0	135	135	130	130	133	0.0
Other Asia/Pacific	610	610	615	615	613	1.9	610	610	615	615	613	0.0
FSU	11775	11985	11636	11565	11740	1.9	11952	12141	11752	11680	11881	1.2
China	3745	3805	3795	3815	3790	1.5	3810	3810	3805	3805	3808	0.5
NGL	4879	4876	4928	4983	4916	1.3	4942	4941	4995	5050	4982	1.3
Ref. Gain/Other	1870	1846	1840	1835	1848	-0.6	1839	1839	1857	1858	1848	0.0
Non-Conventional	1189	1194	1200	1215	1199	2.5	1230	1224	1230	1245	1232	2.7
Total Non-OPEC	48949	48894	48168	48492	48626	-0.2	49291	49139	48993	49084	49127	1.0
<b>OPEC SUPPLY</b>	<b>34270</b>	<b>34503</b>	<b>34760</b>	<b>33994</b>	<b>34382</b>	<b>2.7</b>	<b>32585</b>	<b>32320</b>	<b>32974</b>	<b>32295</b>	<b>32544</b>	<b>-5.3</b>
OPEC NGL	1895	1910	1915	1915	1909	7.8	1930	1930	1930	1935	1931	1.2
OPEC CONDENSATE	1875	1885	1880	1880	1880	7.5	1900	1900	1900	1900	1900	1.1
OPEC CRUDE SALES	30500	30708	30965	30199	30593	2.1	28755	28490	29144	28460	28712	-6.1
Saudi Arabia	8950	9100	9100	8800	8988	2.8	8150	7900	7900	8100	8013	-10.8
Iran	3690	3653	3780	3874	3749	0.6	3760	3720	3709	3730	3730	-0.5
Iraq	2295	2295	2265	2275	2283	9.6	2285	2250	2250	2275	2265	-0.8
Kuwait	2425	2525	2550	2310	2453	-0.4	2275	2200	2350	1350	2044	-16.7
Qatar	835	835	840	840	838	2.8	720	720	840	840	780	-6.9
UAE	2550	2650	2650	2405	2564	2.4	2300	2250	2250	2300	2275	-11.3
Algeria	1410	1410	1410	1395	1406	4.4	1295	1300	1400	1410	1351	-3.9
Angola	1895	1900	1875	1910	1895	13.6	1800	1800	1910	1910	1855	-2.1
Nigeria	1905	1805	1995	2005	1928	-8.3	1995	2000	2000	2000	1999	3.7
Libya	1745	1745	1725	1710	1731	0.7	1600	1600	1745	1745	1673	-3.4
Ecuador	485	475	480	480	480	6.1	475	475	480	490	480	0.0
Venezuela	2315	2315	2295	2195	2280	-2.8	2100	2275	2310	2310	2249	-1.4
Inventory Change	114	1351	1144	920	882		143	-285	-580	-1195	-479	
Assumed Inventory Position(c)												
Days Supply of MOV	50	51	51	50	50		50	49	49	49	49	
Days Supply of UC	14	16	17	18	18		18	18	17	17	17	
Days Supply of MOV+	64	66	68	68	68		68	67	67	66	66	
Days Supply of S/C	14	14	14	14	14		14	14	14	14	14	

- a) OPEC supply measured on a delivered sales basis, i.e. accounting for tanker transit and storage time lag, plus net producer stock change.  
b) Includes share of Neutral Zone, shared equally.  
c) MOV: Minimum Operating Volume; UC: Usable Commercial; S/C: Strategic/Compulsory.

Information contained herein is believed to be reliable but its accuracy cannot be guaranteed. Past performance is not indicative of future results and the risk of loss is substantial in futures trading. Hornsby & Company, Inc. and W.H. Brown may, from time to time, have positions in the futures market relative to these recommendations.