OPEC

Organization of the Petroleum Exporting Countries

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Monthly Oil Market Report

September 2003

Next report to be issued on 17 October 2003

FEATURE ARTICLE:
OPEC price band and market volatility
(p. i)

OPEC Basket average price

US$ per barrel

Up 1.20 in August

August 2003	**28.63**
July 2003	27.43
Year-to-date	28.07

August OPEC production

in million barrels per day, according to secondary sources

Algeria	1.15	Kuwait	2.12	Saudi Arabia	8.59
Indonesia	1.02	SP Libyan AJ	1.42	UAE	2.29
IR Iran	3.74	Nigeria	2.16	Venezuela	2.52
Iraq	1.08	Qatar	0.73	Total	26.81

Supply and demand

in million barrels per day

2003	
World demand	78.17
Non-OPEC supply	52.44
Difference	**25.73**
2004	
World demand	79.33
Non-OPEC supply	53.95
Difference	**25.38**

NB *Non-OPEC supply includes OPEC NGLs and non-conventional oils*

Stocks

Commercial stocks down an unseasonable 1.7 mb in USA in August

World economy

World GDP growth revised up 0.1% for both 2003 and 2004

Inside

Data covers period up to end of August 2003, unless otherwise stated

Issued 19 September 2003

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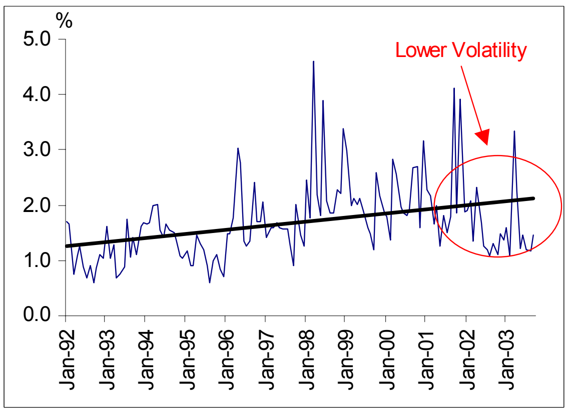
OIL MARKET HIGHLIGHTS

- World GDP is forecast to grow by 3.2% in 2003, up 0.1% from last month's estimate. The increase in the OECD forecast of 0.22% is due mainly to the better outlook for Japan, where unexpectedly strong GDP data for the second quarter is consistent with calendar year growth of 2.6%. The estimate for the United States was also raised following revised GDP data for the same period. US GDP is expected to grow by 2.5% in 2003, an increase of 0.3%. Estimates for Asia Pacific have been raised slightly as the outlook for India continues to improve. Otherwise the forecasts for developing countries, with the exception of Argentina, were largely unchanged. Most European estimates for 2003 are also unchanged, although forecasts for the fast growing economies of Turkey and Poland were raised.
- North America and Europe are expected to achieve higher growth rates in 2004, while the Japanese performance may be restrained by continued low domestic demand. The forecast for Europe in 2004 has been increased to reflect recent signs of stabilization and improving expectations, particularly in Germany. The growth rates for Asia Pacific, Latin America and Africa should benefit from the higher OECD growth rate of 2.8% in 2004, as will the growth rate of World GDP for 2004 which is expected to rise to 3.9%.
- Revised second quarter data confirmed that the expansion of the US economy has begun and that growth rates of at least 4% may be expected in the second half of 2003. So far, the impact on US production and employment is hard to establish, as the labour market still showed signs of weakness in August. The release of revised second quarter GDP data for the Japanese economy surprised financial markets as the annualized growth rate of 3.9% over the first quarter was well above expectations. This growth was achieved mainly as a result of better net exports — as imports, notably tourism, were held back by the SARS epidemic — and fast growing private investment spending. It is unlikely that these trends will lead to a further acceleration in growth in 2004, unless export demand benefits from higher US growth. Deflation will continue to restrain domestic spending for the foreseeable future.
- The OPEC Reference Basket rose for the fourth consecutive month recovering \$3.29/b from the year's low point in April at \$25.34/b. The Basket surged by \$1.20/b or 4.4 % in August to average \$28.63/b. In comparison to the first eight months of 2002, the January-August cumulative Basket price for this year showed a gain of \$5.04 /b, or 22%, with the year-to-date average already exceeding the upper limit of the price band mechanism at \$28.07/b. After the rise in late August, the Basket price dropped sharply over the two subsequent weeks, losing \$2.45/b during the first half of September to stand close to \$25.5/b in the third week of the month.
- Record-high gasoline demand during the last month of the US driving season bolstered regional gasoline prices in the USA and the rest of the world in August. As a result, refining margins were healthy, with the US Gulf continuing to lead the way. Refinery throughput, however, crept up only slightly in the USA and Europe.
- Seasonal weak activities weighed upon crude oil freight rates, leaving them close to the previous month's level, except for Aframax freight rates on some routes which displayed differing behaviour. The increase in OPEC oil production during this month was not reflected in OPEC area spot fixtures, which declined by 2.86 mb/d to stand at 11.88 mb/d.
- The incorporation of the latest OECD and China consumption data has resulted in a substantial 0.25 mb/d upward revision in the second quarter 2003 average, now estimated at 76.20 mb/d. Based on expectations for robust worldwide economic growth, the average world oil demand forecast for 2004 has been raised to 79.33 mb/d, incorporating an 1.16 mb/d increment over the estimated 2003 average.
- OPEC crude oil production, based on secondary sources, is estimated at 26.81 mb/d in August. Non-OPEC oil supply for 2003 is forecast at 48.72 mb/d, a rise of 0.91 mb/d over the 2002 figure of 47.81 mb/d. 2004 non-OPEC supply is expected to reach a level of 49.97 mb/d, an increase of 1.25 mb/d over the 2003 forecast. Net FSU exports for 2002 and 2003 were estimated at 5.56 mb/d and 6.25 mb/d respectively and are expected at 6.74 mb/d for 2004.
- US commercial onland stocks in August lost the previous month's overall gain, decreasing slightly by 1.7 mb to 935.0 mb, while the SPR continued its upward trend reaching 617 mb, an increase of 4.6 mb over the previous month. Eur-15 (EU plus Norway) displayed a considerable build of 9.3 mb to 1,068.6 mb. Japan's commercial oil stocks showed a seasonal rise of 3.6 mb to 199.8 mb. Falling commercial stocks, particularly in the US market, warrant closer monitoring in the coming weeks as they are an influential factor in the direction of the oil market.

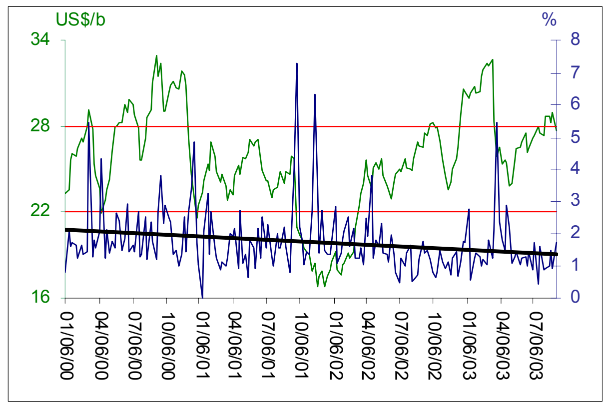
OPEC Price Band and Market Volatility

- Oil volatility is harmful to producers, consumers and the industry as a whole. For producers, it causes fluctuations of income, which disrupt government planning as some rely heavily on oil revenues. For consumers, it adds uncertainty to business plans. For industry, it generates instability on wide front, pushing up expenditures and diverting funds needed for investments in technology and human resources.
- There is evidence that price volatility has increased in the past in particular prior to the introduction of OPEC price band mechanism. The volatility of the oil price can be determined using the standard deviation of the logarithmic price change measured at regular intervals. Graph 1, which shows the standard deviation of daily prices change in each month from January 1992 to August 2003, illustrates the increase in volatility since 1992. Volatility was particularly high in 1998, when the OPEC Reference Basket (ORB) sat at a low of $9.69/b in December with a high volatility of 3.39%. By 1999 it had risen to $24.77/b with volatility around 1.84%, before finally peaking at $31.48/b in September 2000 with a relatively higher volatility of 2.68%. This demonstrates that high volatility is not only associated with higher prices, but with low price levels as well.

Graph 1: Volatility of Daily ORB in each month



Graph 2: ORB: Volatility & Level



- In order to avoid price extremes at both ends and to reduce price volatility, OPEC established in 2000 the price band mechanism for ORB, which seeks to keep prices within a reasonable range of $22-$28/b. An empirical analysis over the period since the introduction of ORB price band confirms the success of the price band both in terms of its level (average around $25/b) and the reduced degree of volatility.
- Graph 2 illustrates the weekly price for the ORB since the inception of the price-band mechanism. From this graph, three price ranges can be selected: the first when the ORB is inside the established band, the second when the ORB is above the upper limit of the range, and the third when the ORB is below the bottom of the range. Based on the volatility measured in this three ranges, the calculation shows that the $22-28/b price range is optimal for minimizing volatility, as volatility is lower within this range than in the ranges above or below the OPEC price band (Table 1).
- This clearly demonstrates that OPEC's proactive production management within a broad price band of $22-$28, maintained through frequent meetings of the Ministerial Conference and the close collaboration of other major exporting countries, has helped to reduce oil price volatility.
- The high volatility observed recently, which has occurred at a time when the prices are above the upper limit of the band, has raise two important issues. The first concerns the dynamics of the futures markets. Indeed, the price structure has been and still in is backwardation, which creates a disincentive to hold stocks and traditionally signals underproduction, despite the fact that the available data indicates that the market is sufficiently supplied. Over the last year, OPEC and non-OPEC have significantly increased production well beyond the rise in oil demand. This can be seen in the volume of crude oil imports in countries like the USA, which registered a record 10 mb/d in imports in May and recently in July of this year. At the same time, the SPR has witnessed a steadily rise in line with the US administration's decision to gradually fill these reserves to their 700 mb capacity.
- The second issue concerns the need to reevaluate the accepted minimum operational level for commercial crude oil stocks. This influential indicator has a strong impact on market perception, which in turn affects prompt prices and their forward curve.
- There is a growing awareness that the current level of commercial crude stocks — and the accompanying relative higher volatility — is the result of a recently established trend in the industry to operate with lower inventories as part of cost cutting and streamlining of operations. However, until all market participants accept a new norm for "minimum operating level", the old measure will continue to affect market psychology and increase price volatility. This in turn will require even greater efforts by OPEC and major non-OPEC exporting countries to maintain market stability.

Table 1: Volatility of Daily ORB

$(22-28)/b	>$28/b	<$22/b
1.59%	1.75%	2.31%

HIGHLIGHTS OF THE WORLD ECONOMY

Economic growth rates 2003
%

	World	G-7	USA	Japan	Euro-zone
2003	**3.2**	**1.9**	**2.5**	**2.6**	**0.8**
2004	**3.9**	**2.7**	**3.9**	**1.0**	**1.9**

Industrialised countries

United States of America

Lack of employment growth threatens sustainable recovery

Revisions to second quarter GDP data confirmed that a strong expansion is under way in the USA. The growth in investment spending was particularly impressive, pushing the overall growth rate to an annual rate of 3.1%. According to Morgan Stanley, American companies are finding it easier to achieve higher margins which have helped boost profits growth. Consumer spending remains the engine of the recovery as August retail sales rose 5.4% over the level of 2002. Signs also indicate that falling inventories will encourage American companies to produce more. Exports have at last shown some recovery with a 2.1% rise over June levels. The Institute for Supply Management (ISM) manufacturing index for August was consistent with annual GDP growth of about 4%, while the ISM service index for that month was also encouraging, holding on to July's high levels. However, a number of concerns trouble the US financial markets and it is by no means certain that this expansion can be prolonged far into 2004. Ten-year bond yields have risen by well over 1% since June and consumers are no longer able to re-finance their mortgages at the rates available in early 2003. The US Federal Deficit continues to grow and, despite stabilizing in the second quarter, the current account deficit remains over 5% of GDP. The major problem is that although the recovery has been underway for nearly two years, the economy is not creating jobs. In August non-farm payrolls contracted for the seventh consecutive month, a weakness widespread in most industries. If employment does not recover, the stimulus from tax cuts, export growth and inventory adjustment may not be sufficient to preserve the momentum of the economy. The preliminary index of consumer sentiment from the University of Michigan for September showed a surprising drop, probably related to persistent concerns regarding employment security. Barriers to employment growth in the USA persist, notably high pension and health-care costs, and businesses may simply be waiting until the better conditions to be confirmed by significant revenue growth before increasing payrolls. The conclusion from last month's *MOMR* still stands: The US recovery has certainly begun but the duration of the expansion remains an open question until employment growth creates a wider base of prosperity which can keep the economy moving over the medium term.

Japan

Japan's second quarter economic growth rate revised up to 1.0% on accelerating business spending

Japan's economy is heading in a positive direction, as the government revised its GDP growth rate for second quarter up to 1.0% from the first quarter, for an annual pace of 3.9%. Capital spending contributed to four-fifth of the growth, rising 5.3%, its fastest pace in two and half years, as manufacturers boosted spending on factories and equipment to fill increasing overseas orders. Exports have sparked a 35% rally in the Nikkei 225 stock average, following the two-decade low scored in April, to widen the current account surplus to 32% in July. These developments show that exports are the key engine to this recovery. The business outlook for the third quarter appears to be improving, despite concern over the negative impact of cool summer weather and electricity cutbacks due to power plant shutdowns. Both the August PMI and the Ministry of Finance business outlook survey for the third quarter indicate the resilience of the recovery. However, growth in consumer spending, which makes up more than half of the world's second largest economy, hasn't kept pace with manufacturing and investment, rising only 0.3% as Japanese companies cut jobs and wages to pare cost. Japanese wages fell in July, while its jobless rate held at 5.3%, the same as in June. Although the strong rebound in second quarter capital investment and its encouraging outlook have brightened the views of some analysts toward the Japanese growth trajectory for the entire fiscal year, but it's too early to say whether the recent improvement in Japan's economy will be sustainable, unless greater efforts are made to overcome continuing deflation and weakness in the country's corporate and financial sectors, especially banking. Public debt, which represents as much as 140% of GDP, is another great challenge as Japanese banks are facing up to $381 billion in bad loan.

Euro- zone

Pre-conditions for growth are in place, expectations are improving, but evidence of recovery is scarce

The revised estimate of euro-zone GDP for the second quarter confirmed that total output fell by 0.1% quarter-on-quarter (q-o-q). Domestic demand increased by a slight 0.1%, as growing government consumption managed to compensate for falling investment and a slow-down in private consumption. Net trade had a negative effect on output, however, as the strong euro led to a fall in exports for the third consecutive quarter. The data from Italy showed no sign of recovery in the second quarter, which made the strong showing by ISAE business confidence index for August a surprise. It may be that conditions have stabilized and businesses expect some recovery towards the end of the year. The French GDP data was similarly disappointing as GDP fell 0.3% q-o-q. Early indications suggest that the French budget for 2004 will be consistent with a deficit of at least 4% of GDP but the overall fiscal stance will be close to neutral in 2004, which means the recovery will have to depend on private sector confidence in the prospects for domestic demand. Although the German recession was confirmed by the second quarter data, expectations have turned increasingly positive. In August the IFO index rose for the fourth consecutive month while a survey conducted by the market research firm GfK showed an improvement in consumer sentiment. Exports and industrial production data for July were good and the OECD index of leading indicators for Germany has shown a highly positive trend since May. Germany has taken the lead in bringing forward the 2005 tax cuts package which should support consumer spending from the first quarter of 2004, while the stabilization of the euro should halt the decline in exports. The financial condition for recovery are present, as private sector balances are generally in surplus and signs of US and Japanese momentum may be sufficient to spark a revival in European business confidence. However, as in the USA, a sustained recovery will hinge on employment growth.

Former Soviet Union

FSU's growth rate improved on positive performance of the hydrocarbon sector, with an expected rise near 6% in 2003

Real GDP data of this area for the last eight months look impressive. The hydrocarbons sector is the principal engine of economic expansion, as more oil-and-gas fields come on stream and governments continue to use export revenue to develop the downstream sector. GDP is expected to rise nearly 6% this year. The Russian economy grew about 7% in the first eight months. While most credit is given to higher oil prices, strong consumption and investment were the other main drivers, with the former rising 14.5% year-on-year (y-o-y) and the latter 12%. Meanwhile, seven-month data for the five basic sectors show output rises for industry (6.8%), freight transport (97.3%), construction (14.4%), and retail trade (8.7%). Only agriculture shows a contraction (3.2%), as bad weather is expected to yield a poor grain harvest. Oil production was up by 11% y-o-y in August 2003 to 8.6% mb/d, while exports leapt 15% to a record 3.8 mb/d. Much of the increase in real fixed investment, running at an annual rate of above 10%, can be traced to oil companies' investments. Furthermore, consumers continued to do their part to keep Russian aggregate output growing over the last few months. Retail sales were up 8.8% y-o-y in June, against an 8.9% increase registered in the entire first half. Growth in consumer spending has continued to be bolstered by a rapid rise in real wages and incomes. Consumer price inflation remains high, supported by unfavorable agriculture conditions and rapid growth in the money supply. Still, this index saw a surprising fall to 0.4% in August, following an average month-on-month increase of 0.9% in the second quarter and 0.7% in July. As a consequence, y-o-y growth in inflation slowed to 13.3% from 14.0% last month. On the external accounts, official data on foreign trade developments showed that the cumulative trade surplus in January-June 2003 reached $28.7 billion, up 39.1% from the surplus earned in the first half of 2002.

Eastern Europe

Growth disappoints in Hungary and Czech Republic, while Poland's economy continues to prosper

The Hungarian trade deficit widened in July to €615 million and any improvement may have to wait until the German economy recovers. The current account deficit may reach about 6% of GDP this year from 4.2% in 2002 largely due to rapid growth in imports and a negative balance in services. The first estimate of GDP growth in the second quarter was 2.4% y-o-y, the slowest rate since early 1997. The Czech Republic achieved a similar second quarter growth rate, at only 2.1%, although the first quarter was revised up to 2.4%. Household consumption and higher inventories were the main sources of growth as fixed investment spending continued to stagnate. The Polish GDP data for the second quarter has not been released but expectations are optimistic, with the consensus growth rate forecast at over 3%. Polish exports have been performing well and industrial production continues to grow at an annual rate of about 7%. The main problem facing the economy is the high and growing budget deficit. The National Bank of Poland has highlighted the dangers of the deficit in a period of high economic growth but the Bank expects inflation to stay below 2% for the remainder of 2003. For the first time this year the Polish Monetary Policy Committee left interest rates unchanged at their 28 August meeting, in recognition of this year's sharp and broad-based recovery in the economy. With an unexpected reduction in the fiscal deficit or a further decline in inflation, rates may have reached the bottom for this economic cycle.

OPEC Member Countries

Agriculture, services and the gas sector will enhance economic growth in some Member Countries

Venezuela is expected to register positive output figures in the fourth quarter of this year and experience a stronger statistical rebound in the first quarter of 2004 as well. New developments are expected to take place, particularly in the energy sector, as well as some possible import-substitution activities by small- and medium-sized industries. This should provide a boost to tourism and domestic travel as a lack of dollars has prompted Venezuelan holidaymakers to prefer local destinations. However, the economic outlook for the year is generally gloomy with GDP growth anticipated to decline 10.0%. In Indonesia, growth in household consumption is expected to slow to 3.6% this year from 4.7% in 2002, as confidence falters on a cocktail of problems such as the SARS outbreak, heightened security risks, and an uncertain global economy. However, consumption should be enhanced by a significant increase in wages and salaries for civil servants and strong growth in agricultural product prices. The GDP growth rate is expected at 3.5% this year, slightly lower than the 3.7% the year before, but this is expected to accelerate to 4.2% in 2004. In Nigeria, growth in agriculture and services should remain reasonably strong in 2003, and, although weaker than last year, it will be supported by a gradual pick-up in the oil sector, which should spark improved growth in the industrial sector. The GDP growth rate is forecast at 3.3%, slightly higher than last year's 3%, which should climb to 3.9% in 2004, as the forecast increase in offshore oil production and investment in the gas sector would normally support such a trend.

Developing countries

The economies of China and India accelerate while Sub-Saharan Africa and Brazil grow slow and slower

Retail sales in China once again grew at the nearly double-digits y-o-y in July, compared to rates from the first quarter, recorded during the height of the SARS epidemic in May. The disease also had a delayed effect on FDI inflows as it discouraged executives from visiting the country in May and June, which resulted in fewer deals being signed. Consequently, utilized FDI was up a meagre 2.5% y-o-y in June before falling 37.5% in July. China's GDP growth rate is expected to grow by 7.7% in 2003, within the official target. India's economy is poised to accelerate as the agricultural sector recovers. Real GDP growth is forecast to hit 6% in the fiscal year 2003-04, inflation is subdued, and interest rates are relatively low, supporting faster growth. The Brazilian industrial sector continued to decline last July, with output shrinking 2.5% y-o-y. Although seasonally-adjusted production increased 0.4% from the previous month, this performance underscores the recessionary state of the overall economy. Brazil's GDP growth is estimated at 1.6% this year and is expected to edge up to 2.9% in 2004. In Sub-Saharan Africa, domestic political developments and weather patterns are still largely determining growth prospects. Growth for the region should hit 2.5% for the year, before climbing to 4.8% in 2004.

Oil price, US dollar and inflation

US dollar rose against other major currencies, pushing the OPEC Reference Basket price up further in real terms in August

In August, the US dollar rose against other major currencies in the modified Geneva I+ US$ basket*. On average the euro was quoted at $1.1137, down 2.06%, while the pound exchanged at $1.5923, a slide from $1.6260 previous month. In the same month, the dollar climbed to ¥118.82 and CHF1.383 from ¥118.67 and CHF1.361 in July.

The dollar advanced versus other major currencies in early August, but less than market expectation. This rise was mainly attributed to the Labor Department report which showed the US economy lost 44,000 jobs in July. Euro market sentiment eroded on news that Italy had slipped into recession in the second quarter, the first time in more than a decade, accelerating the dollar's gain against the single currency. Adding support was a European Union report that suggested the euro-zone economy fell into stagnation in the last quarter.

Encouraging reports about the recovery of the US economy changed the financial markets' momentum significantly, with most participants shifting their attention from bonds to equities and the foreign exchange markets. The euro came under more pressure in the exchange markets, especially on reports that the French economy had contracted 0.3% in second quarter, and Germany confirmed its economy remained in recession during the same period.

The dollar also made progress against the Swiss franc and the British pound, heightened by the underperformance of those economies. However, as before, the dollar's gain against the Japanese yen was marginal, due to better-than-expected economic growth in Japan, as well as the BoJ preference for a weaker currency.

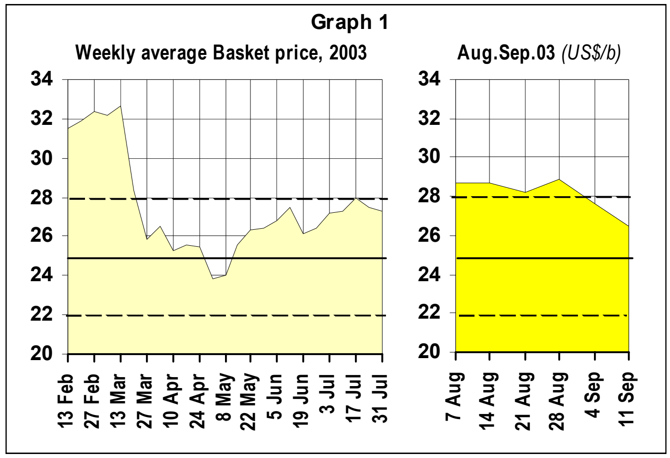
In the same month, the OPEC Reference Basket rose $1.20 or 4.34% to $28.63/b from $27.43/b in July. In real terms (base July 1990=100) after accounting for inflation and currency fluctuation, the Basket price surged 5.67% to $22.74/b from $21.52/b with dollar appreciation adding additional price support. As measured by the import-weighted modified Geneva I+US dollar basket, the dollar rose 1.34% with inflation slightly diminishing crude's value.

* *The 'modified Geneva I + US$ basket' includes the euro, the Japanese yen, the US dollar, the pound sterling and the Swiss franc, weighted according to the merchandise imports of OPEC Member Countries from the countries in the basket.*

CRUDE OIL PRICE MOVEMENTS

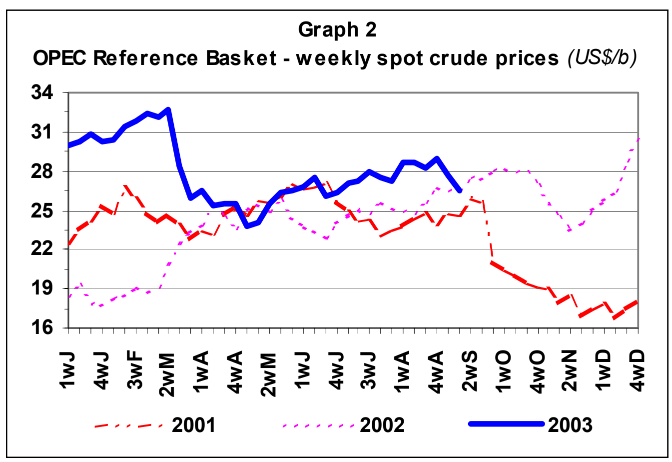
The Reference Basket rose 4.4 % or $1.20/b to average $28.63/b

The OPEC Reference Basket rose for the fourth consecutive month recovering $3.29/b from the year's low point in April at $25.34/b. The Basket surged by $1.20/b or 4.4% in August to average $28.63/b. Compared to the first eight months of 2002, the January-August cumulative Basket price for this year showed a gain of $5.04 /b, or 22%, with the year-to-date average already exceeding the upper limit of the price band mechanism at $28.07/b. After the rise in late August, the Basket plummeted over the two subsequent weeks, initially losing $1.26/b in the week ending 4 September before falling a further $1.19/b to average $26.44/b in the second week of September.



The Basket started the month on a strong note gaining $1.40/b to average $28.66/b in the week ending 7 August, before advancing another 6¢/b in the following week to average $28.72/b. The Basket then retreated in the third week losing 49¢/b or 1.7% to average $28.23/b for the week, still above the upper limit of the price band mechanism. It recovered the upside momentum during the last week of August, advancing 66¢/b or 2.34% to average $28.89/b. All seven Basket components ended higher, with Saharan Blend leading the gains, followed by light-sweet Nigerian Bonny Light and Isthmus. Arab Light, Minas and Dubai posted smaller gains, with Tia Juana Light registering the month's smallest recovery.

Strong gasoline demand boosted crude oil prices late in the month followed by a correction in September



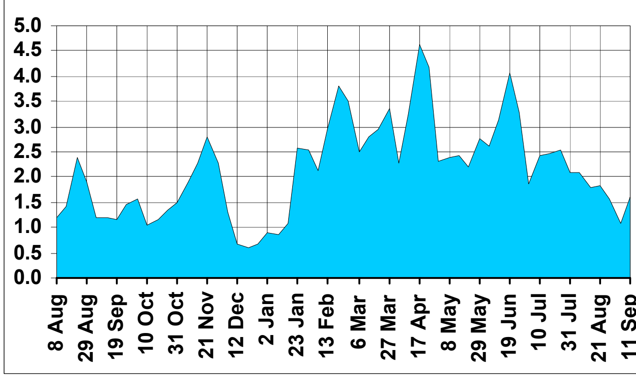
Demand for motor gasoline in the USA, which dipped in May and early June, made a significant recovery in the first week of August, underpinning crude oil prices and creating a mini gasoline crisis. According to the EIA's latest figures, gasoline demand soared to 9.3-9.6 mb/d in recent weeks. Relatively low gasoline stocks in the USA, at 196.9 mb or just 6% on a y-o-y basis, are not enough to justify the inflated $1.12/g price. Given the steep 15¢/g backwardation between the Nymex September front contract and the October contract seen in late August, one can expect the strong gasoline prices to undergo a correction. The late summer gasoline spike lifted prices for the US benchmark, WTI, well above $32/b and widened the spread versus its North Sea counterpart, attracting the flow of cargoes to the West Coast. The gasoline demand boom was not restricted to the USA. In Asia-Pacific, refinery problems have prompted Indonesia to double its usual spot requirements, while a scandal in Nippon Oil, the largest Japanese refining company, forced the closure of two refineries while a third refinery was hit by a fire. Judging from the latest news coming from Iraq, production is estimated to average around 1.05 mb/d in the third quarter of 2003 and 1.6 mb/d in the fourth, reaching 1.8-1.9 mb/d in December. On the export side, preliminary figures show that shipments averaged approximately 700,000 b/d in August and are expected to rise to 900,000 b/d in the following three months to reach 1 mb/d in December. No export volumes are foreseen from the northern fields until the Kirkuk/Ceyhan (Turkey) pipeline is repaired, which should occur in mid-October. In the meantime, around 200,000 b/d of Kirkuk production is being re-injected following degasification. Early in September, the exuberant rise in the gasoline price, which, in turn, had pulled up crude oil prices, suffered a strong correction. On Wednesday 2 September, oil prices plunged, with losses ranging from 4–8 %. Even more pronounced was the 8 % fall in gasoline futures following the Labor Day holiday. After the correction, the major benchmark crudes, WTI and Brent, were neighbouring $30/b and $28/b, respectively, levels more consistent with actual market fundamentals. The next price setter could be around the corner: distillate, specifically heating oil. This year the cold and prolonged winter made US refiners run their plants at maximum distillate yield to cope with demand. This prevented a switch to gasoline production and started the driving season off with compromise stocks. Now US refiners are faced with a similar situation of having maximized gasoline production until the end of the driving season, which prevented them from producing much-needed heating oil for the approaching autumn and winter quarters. The chance of a severe winter and both planned and unplanned autumn refinery maintenance in the USA could make matters worse.

US and European markets

Imports soared above 10 mb/d as refiners coped with high gasoline demand

The US driving season was slow to arrive, but consumption finally materialized in August with apparent demand topping 9.5 mb/d at mid-month. The gasoline boom made refiners particularly thirsty for gasoline-rich crudes and despite import levels exceeding 10 mb/d in the past few weeks, refiners were unable to build up either crude or product stocks. Crude inventories closed the month at 284.9 mb, falling to 278.2 mb in the first week of September, or 20.1 mb below the same period of last year. The strong rebound in gasoline demand helped create the conditions for a price spike in the gasoline futures market which pulled up WTI prices above $32/b and widened the premium to Brent, Forcados and Oseberg (BFO), thus attracting a steady flow of crude to the US East and Gulf coasts. The huge power cuts across the US Eastern region and Canada on 14 August affected several refineries, exacerbating concern over low product stock levels and creating the conditions for volatile trading. Strong fuel oil demand caused by a shortage of hydropower during the prolonged summer in Europe underpinned demand for heavier sour grades. The particularly long summer has caused river levels to drop, making the transport of products by barges difficult, creating dislocations and leaving inland stocks at compromised levels. EU product stocks at the end of August were 18.8 mb below the same period last year while distillate stocks were 21.6 mb lower.

Graph 3
WTI premium to Dated Brent *(US$/b)*



Distillate-rich crudes benefited from healthy demand while competing supplies put heavier sour grades under pressure

Far East market

A two-tiered market developed in Asia during August. Heavier sour grades, such as Oman, dipped to discounts to their official selling price (OSP) on limited demand and the prospects of increasing competition from rising exports of Basrah Light as Iraq's production and exports recovered. Abu Dhabi's light-sour, kerosene-rich Murban traded at strong premiums to its OSP, reflecting rising demand ahead of the winter season in north-east Asia. Growing demand for distillates ahead of the heating season underpinned distillate-rich regional grades and widened the spread to rival West African crudes. This, combined with low freight rates and a narrower BFO to the Dubai premium, induced the eastward movement of Bonny Light and several other grades. As a result, it is estimated that approximately 800,000 b/d of Brent-related Atlantic basin crudes were sold to the Asia-Pacific market in September. Towards the end of the month, when trading for October allocations began, buyers snapped up October-loading cargoes of distillate-rich Middle Eastern grades, causing premiums to soar. Prices received a further boost as October and November supplies of Abu Dhabi's Upper Zakum were lower due to maintenance.

Graph 4
Dated Brent premium to Dubai *(US$/b)*

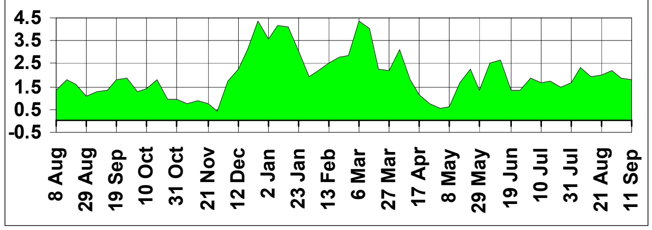


Table 1
Monthly average spot quotations for OPEC's Reference Basket and selected crudes
US $/b

			Year-to-date average	
	Jul 03	**Aug 03**	2002	**2003**
Reference Basket	27.43	**28.63**	23.03	**28.07**
Arabian Light	27.24	**28.36**	23.36	27.47
Dubai	26.66	**27.66**	22.92	26.58
Bonny Light	28.39	**29.79**	23.92	28.71
Saharan Blend	27.91	**29.59**	23.57	28.63
Minas	27.33	**28.38**	23.48	29.47
Tia Juana Light	26.71	**27.52**	21.11	27.30
Isthmus	27.79	**29.08**	22.86	28.32
Other crudes				
Brent	28.34	**29.78**	23.86	28.78
WTI	30.61	**31.60**	24.81	31.40
Differentials				
WTI/Brent	2.27	1.82	0.95	2.62
Brent/Dubai	1.68	2.12	0.94	2.20

PRODUCT MARKETS AND REFINERY OPERATIONS

Record-high gasoline demand during the last month of the US driving season bolstered regional gasoline prices in the USA and the rest of the world in August. As a result, refining margins were healthy, with the US Gulf continuing to lead the way. Refinery throughput, however, crept up only slightly in the USA and Europe.

US gasoline prices headed skyward in August, supported by record-high demand and a rash of refinery outages. Consequently, refining margins were healthy, leading to an increased US refinery utilization rate of almost 96%

US Gulf market

Gasoline led product price rises in the USA in August. The monthly average price of gasoline surged 15% in the US East Coast and 11% in the US Gulf Coast, thereby overwhelming a 5% increase in its underlying crude counterpart, WTI. However, the average monthly gasoil price saw only a limited increase of 4%, and the price of high sulphur fuel oil (HSFO) nudged up a slight 1% in these same markets compared to their counterparts from the month before. The Energy Information Agency's four-week average, which represents the bulk of US refinery and product activities in August, showed continued gains in gasoline demand, reaching 9.43 mb/d, its highest level ever and a 3% increase above the levels of both the previous month and year before. During the same time, gasoline refinery output increased nearly 1% to 8.88 mb/d, while gasoline imports fell 8% to 0.86 mb/d. The gasoline supply shortage was exacerbated by the power failure that hit the Eastern and Mid-west regions of the USA and Canada, which caused several refinery outages, and an additional refinery glitch and major pipeline outage in the US Western Coast region. Consequently, gasoline stocks experienced a further substantial draw of almost 10 mb to settle near 192 mb. In contrast, US distillate stocks enjoyed a further build of 5 mb in August, as the modest distillate demand of 3.6 mb/d was not enough to outpace the almost 3.7 mb/d refinery distillate output. Fuel oil demand rose 23% primarily on decent Mexican demand and prevailing cracking of feedstocks into gasoline and distillate products.

Average WTI refining margins in August in the US Gulf enjoyed healthy profits of more than $3/b, owing largely to the sharp rise in gasoline prices.

Despite enormous refining earnings, the average US refinery throughput crept slightly higher by 47,000 b/d to register 15.90 mb/d in August, reflecting the many refinery outages. The corresponding refinery utilization rate was 95.7%, 1.3 percentage points above last year's runs.

The European gasoline market remained tight, facing rising export activity, while the other two main products were relatively abundant in August. Refining margins improved and the refinery utilization rate in Eur-16 hit 86.5%

Rotterdam market

Average monthly product prices moved in different directions in August. Gasoline rose 8% while gasoil hit 4%, both outperforming the 3% increase in their marker crude, Brent. The average HSFO price, however, dropped 2% for the same period. Nevertheless, gasoline and distillate fundamentals stayed close to last month's trends. The European gasoline market, which has been characterized by tight supply since June this year, enjoyed higher activity in arbitrage trading on rising demand in newly-emerged destinations such as Middle Eastern countries and West Africa, on top of increased shipments across the Atlantic. On the other hand, distillate trade remained thin, exacerbated by the low Rhine river water level, which slowed barge movements from Rotterdam to inland European countries at a time of increased Russian distillate exports. This caused a distillate supply glut in the Rotterdam area, which exerted downward pressure on spot prices. The double effect of plentiful Russian supply and lower eastbound activity to the Asian market turned the fuel oil market in Europe from tight to plentiful.

Brent's refining margins rose moderately in positive territory in August, supported by strong prices for distillates, Europe's main refined product, together with soaring gasoline prices. Consequently, margins outpaced falling fuel oil values and the modest increase in the Brent price.

Refinery throughput in the Eur-16 hovered at 11.87 mb/d in August, a marginal increase of 50,000 b/d over the preceding month's level. However, the refinery utilization rate was 86.5%, indicating a 0.7 percentage point drop from the year-ago level.

Gasoil price scored an exceptional rise in Singapore in August. Refining profits posted further gains

Singapore market

After modest increases in recent months, the average gasoil price enjoyed a significant gain of 13% in August, thereby outperforming the 8% surge in its counterpart gasoline and the 4% increase in the marker crude value, Dubai. The corresponding HSFO price tumbled by 5% for the same period. A hefty gasoline and gasoil purchase by Indonesia's Pertamina supported spot prices for these products in the first two weeks of the month. However, as August progressed, the gasoline price retreated on news of a processing deal between Indonesia's Pertamina and the Singapore Petroleum

Corporation to cover the 128,000 b/d production loss at the Balongan refinery due to planned turnaround. Distillate supply tightened further following two unscheduled refinery outages in South Korea, which had already scaled back exports, while regional demand held modestly strong. The HSFO market remained bearish on the continued absence of the largest regional buyer, China, at a time of increased foreign fuel oil cargoes.

The widening crack spreads of the light and middle ends of the barrel eclipsed both Dubai's rising price and falling fuel oil values, thus pushing Dubai's refining margin to exceed $1/b in August.

Refinery throughput in Japan fell 83,000 b/d to average 3.88 mb/d in August, reflecting in part the unexpected shut-down of two refineries of Japan's largest refiner, Nippon, for an unspecified period. The equivalent utilization rate was 81.4%, showing a 1.4% drop from last year's attainable rate.

Table 2
Refined product prices
US $/b

		Jun 03	Jul 03	**Aug 03**	**Change Aug/Jul**
US Gulf					
Regular gasoline	*(unleaded)*	34.96	37.36	**41.48**	+4.12
Gasoil	*(0.2% S)*	31.07	32.22	**33.57**	+1.35
Fuel oil	*(3.0% S)*	22.35	25.64	**25.95**	+0.31
Rotterdam					
Premium gasoline	*(unleaded)*	33.15	35.36	**38.04**	+2.68
Gasoil	*(0.2% S)*	30.57	31.08	**32.47**	+1.39
Fuel oil	*(3.5% S)*	21.57	24.15	**23.72**	-0.43
Singapore					
Premium gasoline	*(unleaded)*	31.59	34.59	**37.30**	+2.71
Gasoil	*(0.5% S)*	29.33	29.57	**33.27**	+3.70
Fuel oil	*(380 cst)*	24.51	26.18	**24.92**	-1.26

Table 3
Refinery operations in selected OECD countries

	Refinery throughput *mb/d*			**Refinery utilization*** *%*		
	Jun 03	Jul 03	**Aug 03**	Jun 03	Jul 03	**Aug 03**
USA	15.93	15.86	**15.90**	95.8	95.4	**95.7**
France	1.69	1.59	**1.44**	88.8	83.5	**75.4**
Germany	2.11	1.92	**2.21**	92.8	84.6	**97.7**
Italy	1.70	1.86 R	**1.84**	74.0	80.8 R	**79.8**
UK	1.51	1.51	**1.53**	84.4	84.3	**85.6**
Eur-16	11.82 R	11.82 R	**11.87**	86.1	86.1 R	**86.5**
Japan	3.73 R	3.96 R	**3.88**	78.3	83.2 R	**81.4**

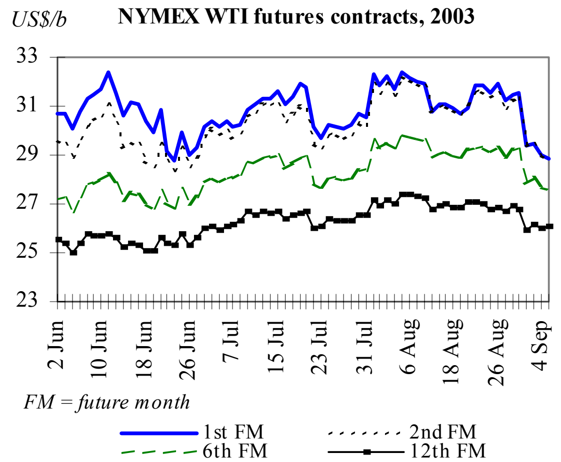
* *Refinery capacities used are in barrels per calendar day.*
R *Revised since last issue.*
Sources: *OPEC Statistics, Argus, Euroilstock Inventory Report/IEA.*

THE OIL FUTURES MARKET

Speculators' bullish exuberance earlier in the month underwent a drastic correction magnified by the weakness in gasoline futures

Non-commercials (speculators) went into August with a very bullish perception of the market, hiking their net long positions to a new record of 132,720 contracts, according to the Commodity Futures Trading Commission's (CFTC) Commitment of Traders Report for the week of 5 August. During the week, funds increased their long positions by 32,663, while shorts rose 7,744 contracts with the net-long positions standing at 60,000 lots. This exuberant behaviour on the part of non-commercials was underpinned by supportive factors from the fundamental side, namely low inventory levels of crude and products mainly in the US markets. Meanwhile, the WTI front month contract surged above $32/b to reach an intra-day high of $32.49/b on 5 August to close at $32.22/b

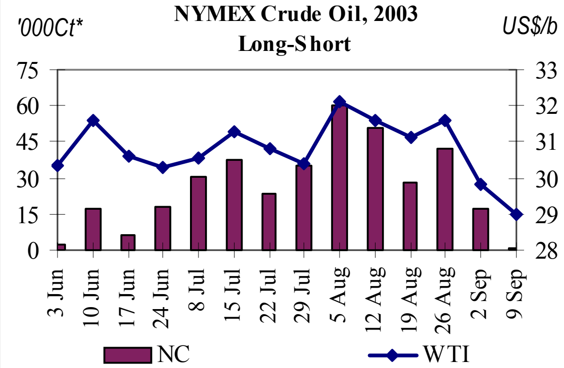
Graph 5
NYMEX WTI futures contracts, 2003



No longer as convinced as before that crude prices could sustain such a high level, non-commercials started to steadily unwind their long positions. Net-longs for the week of 12 August fell by 9,414 lots to 50,611 with the open interest rising 7,787 lots to 562,524. WTI futures remained strong oscillating, within the $31-32.85/b range during the 6-12 August period, supported by the problems in Nigeria and Iraq.

The Commitment of Traders Report released on Friday, 22 August, showed speculators heavily disposing of their long positions in Nymex crude. Non-commercials trimmed their long positions by 34,657 lots, or 27%, while at the same time reducing their shorts. It is important to point out that speculators held on to their long positions in gasoline futures that week, indicating that expectations were bullish on strong late summer gasoline demand and prices.

Graph 6
Futures Commitment of Traders Report: NYMEX Crude Oil, 2003
Long-Short



NC = Non-commercials: funds, investments and banks.
Ct = * Each contract is 1,000 barrels.

In the following week non-commercials reversed the trend of the previous two weeks, increasing their longs by 12,644 lots while shorts fell by 946 with net-longs rising 13,590 lots to 42,008. The move was supported by developments in gasoline futures, which saw the largest-ever single-day increase in front-month gasoline futures. In the week ending 2 September, non-commercials heavily disposed of their long positions while increasing shorts at the same time. The gasoline-induced big drop in WTI futures shaved more than $2/b off the front month contract.

In the following week beginning 9 September, any remaining bullish thoughts were erased from speculators' minds. Funds continued to heavily dispose of their long positions leaving net-longs at an almost flat position of 869 lots. Meanwhile, WTI futures plummeted to mid-$28/b with indications that lower levels lay ahead. A big correction in gasoline prices following the Labor Day weekend also dramatically changed speculators' perception of the market.

THE TANKER MARKET

OPEC area spot-fixtures declined 2.86 mb/d to 11.88 mb/d in August

OPEC area spot-chartering declined 2.86 mb/d to stand at 11.88 mb/d in August. As mentioned in the last *MOMR*, the chartering figure for July was overestimated as OPEC oil production declined during that month. This was reflected in the downward revision of 0.46 mb/d to 14.74 mb/d in the July figure, down from 15.20 mb/d. Lower spot-fixtures for August do not represent the slight rise in OPEC oil production this month, as reported by secondary sources, which observed an increase of about 0.44 mb/d from the previous month. Decreased activity on the Middle East eastbound long-haul route amounted to almost 40% of the month's decline, while fixtures on the Middle East westbound route dropped roughly 17%. OPEC's share of global chartering moved up slightly by 1% to about 61%. Eastbound and westbound long-haul chartering represented nearly the same shares as in the previous month, at 35% and 14% respectively. Non-OPEC spot-fixtures also decreased by 2.41 mb/d to 7.45 mb/d in August, which was equivalent to a 39% share in global fixtures, a drop of 1% from a month ago. Global spot-chartering fell a considerable 5.27 mb/d to 19.33 mb/d, or marginally below last year's level. This could turn out to be a very conservative estimate, one that will have to be revised upward in the future given the higher OPEC oil production for the month. Estimated sailings from the OPEC area in August rose 1.05 mb/d to 24.32 mb/d. Sailings out of the Middle East contributed marginally to this rise, increasing 0.11 mb/d to 16.40 mb/d, which placed their share of OPEC area sailings at about 67%, down 6% from the month before. Arrivals in the US Gulf, East and the Caribbean and in NW Europe showed increases of 1.42 mb/d to 12.05 mb/d and 0.24 mb/d to 7.23 mb/d respectively, while arrivals in the Euromed and Japan declined 0.23 mb/d to 3.96 mb/d and 0.51 mb/d to 3.39 mb/d respectively.

Seasonal weak activity depressed crude oil freight rates

Crude oil freight rates did not show any improvement on most of the main routes due to the seasonably weak activities. In August, freight rates remained nearly at the previous month's averages, except for the Aframax rates from the Mediterranean to the NW Europe, which dropped a massive 52 points to WS 86 on the back of a huge accumulation of available tonnage, combined with very low activity. However, the monthly average of Aframax freight rates within the Mediterranean did not follow the same trend, registering an increase of 6 points to WS 146. This was attributed to higher rates at the beginning of the month, which declined steadily as the month wore on. Aframax tankers from Indonesia to the US West Coast also showed gains, rising 4 points to a monthly average of WS 128 on steady activity, while on the Caribbean to the US East Coast route they shed a marginal 3 points to WS 134. VLCC freight rates managed to remain close to the previous month's level on higher end-month activity, as chartering for October cargoes started earlier than usual, due to the upcoming regional holidays. Rates dropped by 2 points on both the Middle East eastbound long-haul route and the westbound long-haul route to reach WS50 and WS46 respectively. Suezmax freight rates followed VLCCs' pattern as early month gains, combined with a late month improvement to keep rates close to the previous month's level, down a point to WS 80 on the West Africa/US Gulf route and two points to WS 84 on the NW Europe to the US East and Gulf Coast route.

Relatively good trade strengthened product freight rates

Relatively good trade managed to fuel product freight rates, especially at the beginning of August. Most tanker sizes along most routes enjoyed some increases, except for tankers carrying 25–30,000 DWT along the Singapore/East route, which fell by 20 points to WS 259 due to thin activity in the second half of the month. Medium-range tankers carrying 30-50,000 DWT along the Middle East to the East route showed an increase of 37 points to WS 250, benefiting from healthy demand as some regional refineries were still shut down due to scheduled maintenance. Along the Caribbean/US Gulf route, rates rose a significant 22 points to WS 231 as strong US demand continued to push rates higher. Another route showing a tremendous increase was NW Europe to the US East and Gulf coasts, which gained 43 points to WS299 as higher US product prices attracted materials across the Atlantic. Modest gains were also seen within the Mediterranean and from there to NW Europe, rising 3 points to WS 213 and 12 points to WS 248 respectively.

Table 4
Spot tanker chartering: sailings and arrivals
mb/d

	Jun 03	Jul 03	Aug 03	Change Aug/Jul
Chartering				
All areas	21.61	24.60	**19.33**	–5.27
OPEC	10.45	14.74	**11.88**	–2.86
Middle East/east	3.96	5.28	**4.14**	–1.14
Middle East/west	1.68	2.16	**1.69**	–0.48
Sailings				
OPEC	22.32	23.27	**24.32**	1.05
Middle East	15.88	16.30	**16.40**	0.10
Arrivals				
US Gulf Coast, US East Coast, Caribbean	10.37	10.63	**12.05**	1.42
North-West Europe	7.21	6.99	**7.23**	0.24
Euromed	4.45	4.19	**3.96**	–0.23
Japan	4.32	3.90	**3.39**	–0.51

Source: "Oil Movements" and Lloyd's Marine Intelligence Unit

Table 5
Spot tanker freight rates
Worldscale

	Size *1,000 DWT*	Jun 03	Jul 03	Aug 03	Change Aug/Jul
Crude					
Middle East/east	200–300	75	52	50	–2
Middle East/west	200–300	60	48	46	–2
West Africa/US Gulf	100–160	131	81	80	–1
North-West Europe/US East Coast	100–160	123	86	84	–2
Indonesia/US West Coast	70–100	130	124	128	4
Caribbean/US East Coast	40–70	202	137	134	–3
Mediterranean/Mediterranean	40–70	191	140	146	6
Mediterranean/North-West Europe	70–100	193	138	86	–52
Products					
Middle East/east	30–50	189	213	250	37
Singapore/east	25–30	246	279	259	–20
Caribbean/US Gulf Coast	25–30	193	209	231	22
North-West Europe/US East Coast	25–30	189	186	229	43
Mediterranean/Mediterranean	25–30	195	210	213	3
Mediterranean/North-West Europe	25–30	207	236	248	12

Source: Gailbraith Tanker Market Report as well as other relevant industry publications.

WORLD OIL DEMAND

Historical data

Due to a minor upward revision in actual Middle East consumption, total world oil demand for 2002 has been revised up by 0.02 mb/d to 76.98 mb/d, compared to the 76.96 mb/d reported in the last *MOMR*.

Estimates for 2003

World

World demand for 2003 revised up 0.08 mb/d to 78.17 mb/d, an increase of 1.19 mb over 2002 figure

The average world consumption forecast for 2003 has been revised up slightly by 0.08 mb/d due to a 0.02 mb/d upward revision in the 2002 historical data and a 0.06 mb/d increase in the year's incremental demand The adjustment to this year's estimates mostly stem from a major 0.25 mb/d upward revision to the second quarter average alongside minor upward revisions to the first and fourth quarter averages, which have been partly offset by a marginal downward revision to the third quarter average. The incorporation of a higher than estimated actual second quarter consumption for OECD and China, together with higher than expected economic growth in the second half of the year, are the reasons behind raising the demand increment for 2003. Compared with the lower 78.09 mb/d and 1.13 mb/d reported in the last *MOMR*, the forecast for the yearly average and the yearly increment — the difference between the 2002 and the 2003 averages — now stand at 78.17 mb/d and 1.19 mb/d respectively. Quarterly and regional details are given in Table 6.

On a regional basis, following a minor fall of 0.07 mb/d in 2002, demand for 2003 is forecast to rise a healthy 0.71 mb/d in the OECD. The former CPEs' consumption is forecast to grow a considerable 0.39 mb/d or 4.14%, almost double the volume of the 0.21 mb/d or 2.21% growth seen in 2002. In the developing countries, only a moderate 0.08 mb/d or 0.40% rise in consumption is forecast in 2003, following a much higher growth of 0.18 mb/d in 2002.

Table 6
World oil demand in 2003
mb/d

							Change 2003/02	
	2002	1Q03	2Q03	3Q03	4Q03	**2003**	Volume	%
North America	24.17	24.57	24.09	24.51	24.56	24.43	0.27	1.10
Western Europe	15.07	15.19	14.93	15.20	15.45	15.19	0.12	0.83
OECD Pacific	8.50	9.61	8.04	8.23	9.40	8.82	0.32	3.80
Total OECD	**47.73**	**49.36**	**47.06**	**47.94**	**49.42**	**48.44**	**0.71**	**1.49**
Other Asia	7.47	7.54	7.58	7.55	7.71	7.59	0.12	1.59
Latin America	4.75	4.54	4.69	4.83	4.70	4.69	–0.06	–1.24
Middle East	4.95	4.88	4.77	5.15	4.98	4.95	0.00	0.02
Africa	2.54	2.55	2.56	2.53	2.58	2.56	0.02	0.69
Total DCs	**19.71**	**19.51**	**19.60**	**20.06**	**19.98**	**19.79**	**0.08**	**0.40**
FSU	3.77	4.01	3.35	3.73	4.37	3.87	0.10	2.61
Other Europe	0.74	0.77	0.73	0.79	0.76	0.76	0.02	2.65
China	5.03	5.41	5.46	5.32	5.05	5.31	0.28	5.50
Total "Other Regions"	**9.54**	**10.20**	**9.54**	**9.84**	**10.18**	**9.94**	**0.39**	**4.14**
Total world	**76.98**	**79.07**	**76.20**	**77.83**	**79.58**	**78.17**	**1.19**	**1.54**
Previous estimate	76.96	79.04	75.95	77.75	79.61	78.09	1.13	1.46
Revision	0.02	0.03	0.25	0.08	–0.03	0.08	0.06	0.08

Totals may not add due to independent rounding.

On a quarterly basis, compared with an exceptionally weak first quarter 2002, world demand is estimated to have grown a significant 2.96% or 2.27 mb/d to average 79.07 mb/d in the first quarter 2003 due to a host of factors, such as the much colder than normal weather in most parts of the northern hemisphere, fuel substitution in Japan brought about by nuclear power reactor maintenance, stockpiling ahead of the anticipated war on Iraq, and record-high natural gas prices in the USA. Thanks to robust economic growth in China and continued fuel substitution in Japan, second quarter 2003 consumption is estimated to have risen by 1.28% or 0.96 mb/d to average 76.20 mb/d when compared to the exceptionally weak second quarter 2002. The pace of demand growth is expected to moderate further in the third quarter slowing to 0.74 mb/d or 0.96%. However, fourth quarter demand is forecast to register slightly higher at 0.80 mb/d or 1.01%. Detailed quarterly comparisons are presented in Tables 7 and 8.

Table 7
First and second quarter world oil demand comparison for 2003
mb/d

			Change 2003/02				Change 2003/02	
	1Q02	1Q03	Volume	%	2Q02	2Q03	Volume	%
North America	23.93	24.57	0.63	2.64	24.04	24.09	0.05	0.22
Western Europe	15.14	15.19	0.05	0.34	14.62	14.93	0.31	2.10
OECD Pacific	9.06	9.61	0.55	6.04	7.64	8.04	0.41	5.33
Total OECD	**48.13**	**49.36**	**1.23**	**2.56**	**46.30**	**47.06**	**0.77**	**1.66**
Other Asia	7.29	7.54	0.25	3.40	7.50	7.58	0.08	1.06
Latin America	4.70	4.54	-0.16	-3.49	4.78	4.69	–0.10	–2.04
Middle East	4.83	4.88	0.05	1.01	4.91	4.77	–0.14	–2.89
Africa	2.56	2.55	0.00	-0.13	2.50	2.56	0.06	2.43
Total DCs	**19.38**	**19.51**	**0.13**	**0.67**	**19.70**	**19.60**	**-0.10**	**–0.50**
FSU	3.78	4.01	0.23	6.20	3.39	3.35	–0.05	-1.45
Other Europe	0.77	0.77	0.00	0.09	0.73	0.73	0.00	0.60
China	4.74	5.41	0.67	14.23	5.12	5.46	0.34	6.65
Total "Other Regions"	**9.29**	**10.20**	**0.91**	**9.79**	**9.24**	**9.54**	**0.30**	**3.20**
Total world	**76.80**	**79.07**	**2.27**	**2.96**	**75.24**	**76.20**	**0.96**	**1.28**

Totals may not add due to independent rounding.

Table 8
Third and fourth quarter world oil demand comparison for 2003
mb/d

			Change 2003/02				Change 2003/02	
	3Q02	3Q03	Volume	%	4Q02	4Q03	Volume	%
North America	24.34	24.51	0.17	0.70	24.35	24.56	0.21	0.88
Western Europe	15.17	15.20	0.03	0.18	15.34	15.45	0.11	0.73
OECD Pacific	8.03	8.23	0.20	2.44	9.26	9.40	0.15	1.58
Total OECD	**47.55**	**47.94**	**0.39**	**0.83**	**48.95**	**49.42**	**0.47**	**0.97**
	0.00							
Other Asia	7.47	7.55	0.08	1.05	7.64	7.71	0.07	0.96
Latin America	4.81	4.83	0.01	0.27	4.69	4.70	0.01	0.23
Middle East	5.10	5.15	0.05	1.00	4.93	4.98	0.05	0.94
Africa	2.52	2.53	0.01	0.27	2.58	2.58	0.01	0.22
Total DCs	**19.91**	**20.06**	**0.15**	**0.75**	**19.84**	**19.98**	**0.14**	**0.69**
FSU	3.65	3.73	0.09	2.45	4.25	4.37	0.12	2.82
Other Europe	0.73	0.79	0.05	7.49	0.74	0.76	0.02	2.49
China	5.27	5.32	0.05	0.95	5.00	5.05	0.05	1.02
Total "Other Regions"	**9.64**	**9.84**	**0.19**	**2.02**	**9.99**	**10.18**	**0.19**	**1.90**
Total world	**77.10**	**77.83**	**0.74**	**0.96**	**78.78**	**79.58**	**0.80**	**1.01**

Totals may not add due to independent rounding.

OECD

OECD consumption is forecast at 48.44 mb/d, constituting 62% of total world demand in 2003. Out of the forecast 1.19 mb/d world oil consumption increment for 2003, about 0.71 mb/d or nearly 60% is expected to initiate in the OECD. Within the group, OECD Pacific ranks first in forecast demand growth at 0.32 mb/d, close to 45% of the group's total demand increment. North America ranks second with 0.27 mb/d, equivalent to 37%, while Western Europe ranks third with 0.12 mb/d, or nearly 18%.

The actual second quarter data indicates that OECD consumption rose 0.77 mb/d or 1.66% over the corresponding 2002 period, which saw a 0.80 mb/d decline. More than half of consumption growth, 0.41 mb/d, was registered in the OECD Pacific, while Western Europe experienced a 0.31 mb/d rise and North America increased by a marginal 0.05 mb/d.

Actual consumption data suggests that OECD January-June oil requirements were up 1.00 mb/d compared to their corresponding 2002 period. The leading volume gainer for this period was gasoil/diesel — also the volume leader for the January-May period reported in the last *MOMR* — which experienced a 0.61 mb/d or 5.25% rise in consumption, due to fuel switching in the USA and across Europe. The leading percentage gainer was residual fuel oil, which saw a consumption increase of 9.23% or 0.27 mb/d, mostly due to colder than normal weather, Japan's nuclear reactor maintenance, and high natural gas prices in the USA.

DCs

In developing countries, oil demand is forecast to grow 0.08 mb/d or 0.40% to 19.79 mb/d. Latin America's consumption is expected to contract by 0.06 mb/d or 1.24% to average 4.69 mb/d, indicating a relative improvement over last year when demand weakened by 0.12 mb/d on persistent economic and financial problems. Other Asia is forecast to register the highest volume and percentage growth at 0.12 mb/d and 1.59%, followed by Africa with 0.02 mb/d or 0.69%. The Middle East is expected see negligible demand growth.

Other regions

Apparent demand in the former CPEs for 2003 is forecast at 13% of total world consumption, equivalent to 9.94 mb/d. Demand growth is expected at 0.39 mb/d or 4.14%, which represents close to 33% of the total world demand increment and slightly less than double the figure of 2002. Within the group, China's 5.31 mb/d demand is forecast to register the highest volume and percentage growth at 0.28 mb/d and 5.50%, singly accounting for 23% of the total world increment. The FSU, with an average 3.87 mb/d, is expected to experience the second highest demand rise at 0.10 mb/d or 2.61%. Apparent demand in the Other Europe is expected to enjoy an increase of 0.02 mb/d or 2.65%.

Forecast for 2004

World demand for 2004 forecast at 79.33 mb/d, a rise of 1.16 mb over 2003 figure

Based on the latest revisions, average world oil demand for 2004 is forecast at 79.33 mb/d, incorporating a rise of 1.16 mb/d or 1.49% over 2003 consumption. Compared with the figures from the last *MOMR*, the volume has been raised by 0.08 mb/d, while the increment remains the same due to a similar upward revision in the historical 2002 volume.

All three major groups of countries are forecast to register positive growth in 2004. The OECD is expected to rank first with 0.44 mb/d growth, which is equivalent to 38% of the total world demand increment. Developing Countries are expected to rank second with 0.41 mb/d growth or 36% of the increase in global demand. The former CPEs should rank third with a substantial 0.31 mb/d rise in oil consumption.

Each quarter of 2004 is forecast to register a growth in consumption over its corresponding quarter in 2003. The first quarter is expected to account for the lowest growth rate at 0.63 mb/d or 0.79%, while the second and third quarters are forecast to enjoy much higher rises of 1.14 mb/d and 1.33 mb/d respectively. The highest growth of the year is expected to take place in the fourth quarter, at 1.53 mb/d or 1.92%.

Table 9
World oil demand forecast for 2004
mb/d

	2003	1Q04	2Q04	3Q04	4Q04	2004	Change 2004/03 Volume	Change 2004/03 %
North America	24.43	24.70	24.28	24.84	25.01	24.71	0.28	1.13
Western Europe	15.19	15.24	15.03	15.33	15.61	15.30	0.11	0.73
OECD Pacific	8.82	9.64	8.09	8.29	9.47	8.87	0.05	0.59
Total OECD	**48.44**	**49.58**	**47.41**	**48.45**	**50.08**	**48.88**	**0.44**	**0.90**
Other Asia	7.59	7.64	7.80	7.78	7.94	7.79	0.20	2.65
Latin America	4.69	4.59	4.73	4.89	4.76	4.75	0.06	1.18
Middle East	4.95	4.95	4.87	5.26	5.11	5.05	0.10	2.04
Africa	2.56	2.61	2.64	2.56	2.64	2.61	0.06	2.24
Total DCs	**19.79**	**19.80**	**20.05**	**20.50**	**20.46**	**20.20**	**0.41**	**2.10**
FSU	3.87	4.05	3.47	3.89	4.54	3.99	0.12	3.18
Other Europe	0.76	0.79	0.79	0.80	0.77	0.79	0.03	3.42
China	5.31	5.47	5.62	5.52	5.27	5.47	0.16	3.00
Total "Other Regions"	**9.94**	**10.31**	**9.89**	**10.21**	**10.58**	**10.25**	**0.31**	**3.10**
Total world	**78.17**	**79.69**	**77.34**	**79.17**	**81.11**	**79.33**	**1.16**	**1.49**
Previous estimate	78.09	79.61	77.15	79.03	81.19	79.25	1.16	1.48
Revision	0.08	0.08	0.20	0.14	–0.08	0.08	0.00	0.00

Totals may not add due to independent rounding.

Table 10
First and second quarter world oil demand comparison for 2004
mb/d

	1Q03	1Q04	Change 2004/03 Volume	Change 2004/03 %	2Q03	2Q04	Change 2004/03 Volume	Change 2004/03 %
North America	24.57	24.70	0.14	0.57	24.09	24.28	0.19	0.79
Western Europe	15.19	15.24	0.05	0.33	14.93	15.03	0.11	0.71
OECD Pacific	9.61	9.64	0.03	0.33	8.04	8.09	0.05	0.63
Total OECD	**49.36**	**49.58**	**0.22**	**0.45**	**47.06**	**47.41**	**0.35**	**0.74**
Other Asia	7.54	7.64	0.11	1.40	7.58	7.80	0.23	2.97
Latin America	4.54	4.59	0.05	1.16	4.69	4.73	0.05	1.01
Middle East	4.88	4.95	0.07	1.36	4.77	4.87	0.10	2.12
Africa	2.55	2.61	0.06	2.36	2.56	2.64	0.08	3.03
Total DCs	**19.51**	**19.80**	**0.29**	**1.46**	**19.60**	**20.05**	**0.45**	**2.30**
FSU	4.01	4.05	0.04	1.02	3.35	3.47	0.13	3.85
Other Europe	0.77	0.79	0.02	3.05	0.73	0.79	0.05	7.47
China	5.41	5.47	0.05	1.00	5.46	5.62	0.16	2.96
Total "Other Regions"	**10.20**	**10.31**	**0.12**	**1.16**	**9.54**	**9.89**	**0.35**	**3.62**
Total world	**79.07**	**79.69**	**0.63**	**0.79**	**76.20**	**77.34**	**1.14**	**1.50**

Totals may not add due to independent rounding.

Table 11
Third and fourth quarter world oil demand comparison for 2004
mb/d

	3Q03	3Q04	Change 2004/03 Volume	%	4Q03	4Q04	Change 2004/03 Volume	%
North America	24.51	24.84	0.32	1.32	24.56	25.01	0.45	1.82
Western Europe	15.20	15.33	0.13	0.86	15.45	15.61	0.15	0.99
OECD Pacific	8.23	8.29	0.06	0.74	9.40	9.47	0.06	0.66
Total OECD	**47.94**	**48.45**	**0.51**	**1.07**	**49.42**	**50.08**	**0.66**	**1.34**
Other Asia	7.55	7.78	0.24	3.17	7.71	7.94	0.23	3.01
Latin America	4.83	4.89	0.07	1.35	4.70	4.76	0.06	1.20
Middle East	5.15	5.26	0.11	2.09	4.98	5.11	0.13	2.56
Africa	2.53	2.56	0.03	1.24	2.58	2.64	0.06	2.33
Total DCs	**20.06**	**20.50**	**0.44**	**2.21**	**19.98**	**20.46**	**0.48**	**2.39**
FSU	3.73	3.89	0.16	4.22	4.37	4.54	0.16	3.71
Other Europe	0.79	0.80	0.01	1.56	0.76	0.77	0.01	1.86
China	5.32	5.52	0.20	3.84	5.05	5.27	0.22	4.28
Total "Other Regions"	**9.84**	**10.21**	**0.37**	**3.80**	**10.18**	**10.58**	**0.39**	**3.85**
Total world	**77.83**	**79.17**	**1.33**	**1.71**	**79.58**	**81.11**	**1.53**	**1.92**

Totals may not add due to independent rounding.

WORLD OIL SUPPLY

Non-OPEC

Non-OPEC supply for 2003 revised up to 48.72 mb/d, an increase of 0.91 mb/d over 2002 figure

Forecast for 2003

The 2003 non-OPEC supply figure was revised down to 48.72 mb/d. A significant 0.11 mb/d downward revision was made to the second quarter supply, mainly in the USA, while the third and fourth quarters have been revised sharply upward on new data released. Significant increases in Mexico, Australia and Russia were partially offset by considerable declines in the UK and Norway. The quarterly distribution now stands at 48.64 mb/d, 47.95 mb/d, 48.96 mb/d and 49.34 mb/d respectively. The yearly average increase stands at 0.91 mb/d, compared with the 2002 figure.

Table 12
Non-OPEC oil supply in 2003
mb/d

	2002	1Q03	2Q03	3Q03	4Q03	2003	Change 03/02
North America	14.51	14.74	14.47	14.86	14.86	14.74	0.22
Western Europe	6.63	6.75	6.21	6.30	6.58	6.46	–0.18
OECD Pacific	0.76	0.67	0.64	0.71	0.72	0.68	–0.07
Total OECD	**21.90**	**22.17**	**21.32**	**21.87**	**22.16**	**21.88**	**–0.02**
Other Asia	2.27	2.34	2.34	2.35	2.38	2.35	0.08
Latin America	3.90	3.86	3.79	3.86	3.89	3.85	–0.05
Middle East	2.08	2.05	2.01	2.02	2.01	2.02	–0.06
Africa	3.03	2.96	3.01	3.12	3.12	3.05	0.03
Total DCs	**11.28**	**11.22**	**11.15**	**11.34**	**11.40**	**11.28**	**0.00**
FSU	9.33	9.88	10.09	10.40	10.40	10.20	0.86
Other Europe	0.18	0.17	0.17	0.17	0.17	0.17	0.00
China	3.39	3.40	3.44	3.39	3.39	3.41	0.01
Total "Other regions"	**12.90**	**13.46**	**13.71**	**13.96**	**13.96**	**13.77**	**0.87**
Total non-OPEC production	**46.08**	**46.84**	**46.18**	**47.17**	**47.52**	**46.93**	**0.85**
Processing gains	1.73	1.81	1.77	1.79	1.82	1.79	0.06
Total non-OPEC supply	**47.81**	**48.64**	**47.95**	**48.96**	**49.34**	**48.72**	**0.91**
Previous estimate	47.81	48.64	48.06	48.83	49.20	48.69	0.87
Revision	**0.00**	**0.00**	**–0.11**	**0.13**	**0.14**	**0.04**	**0.04**

Totals may not add due to independent rounding.

Non-OPEC supply for 2004 expected at 49.97 mb/d, 1.25 mb/d above 2003 figure

Expectations for 2004

Non-OPEC supply for 2004 is expected to rise 1.25 mb/d. The major contributors to this expected increase are FSU, Africa, North America and Latin America. The quarterly distribution now stands at 49.85 mb/d, 49.17 mb/d, 50.23 mb/d and 50.62 mb/d respectively. The yearly average is forecast at 49.97 mb/d.

Table 13
Non-OPEC oil supply in 2004
mb/d

	2003	1Q04	2Q04	3Q04	4Q04	2004	Change 04/03
North America	14.74	14.88	14.61	15.00	15.01	14.88	0.14
Western Europe	6.46	6.80	6.26	6.35	6.63	6.51	0.05
OECD Pacific	0.68	0.66	0.63	0.70	0.71	0.67	–0.01
Total OECD	**21.88**	**22.34**	**21.50**	**22.05**	**22.34**	**22.06**	**0.18**
Other Asia	2.35	2.38	2.38	2.38	2.41	2.39	0.04
Latin America	3.85	4.01	3.94	4.01	4.04	4.00	0.15
Middle East	2.02	2.00	1.96	1.97	1.96	1.97	–0.05
Africa	3.05	3.23	3.29	3.42	3.42	3.34	0.29
Total DCs	**11.28**	**11.63**	**11.57**	**11.78**	**11.85**	**11.71**	**0.43**
FSU	10.20	10.48	10.70	11.02	11.02	10.81	0.61
Other Europe	0.17	0.17	0.17	0.17	0.17	0.17	0.00
China	3.41	3.38	3.42	3.37	3.37	3.39	–0.02
Total "Other regions"	**13.77**	**14.03**	**14.29**	**14.57**	**14.56**	**14.36**	**0.59**
Total non-OPEC production	**46.93**	**48.00**	**47.36**	**48.39**	**48.75**	**48.13**	**1.20**
Processing gains	1.79	1.86	1.81	1.84	1.87	1.84	0.05
Total non-OPEC supply	**48.72**	**49.85**	**49.17**	**50.23**	**50.62**	**49.97**	**1.25**
Previous estimate	48.69	49.86	49.29	50.09	50.48	49.93	1.25
Revision	**0.04**	**–0.01**	**–0.12**	**0.14**	**0.14**	**0.04**	**0.00**

Totals may not add due to independent rounding.

Net FSU oil export for 2004 expected at 6.74 mb/d, 2003 forecast at 6.25 mb/d

The FSU net oil export for 2004 is expected at 6.74 mb/d, while the 2003 figure has been revised up to 6.25 mb/d. Figures for 2000-2002 remain unchanged from the last *MOMR*.

Table 14
FSU net oil exports
mb/d

	1Q	2Q	3Q	4Q	Year
2000	3.97	4.13	4.47	4.01	**4.14**
2001	4.30	4.71	4.89	4.47	**4.59**
2002 (estimate)	5.14	5.76	5.85	5.49	**5.56**
2003 (forecast)	5.87	6.75	6.47	5.92	**6.25**
2004 (forecast)	6.42	7.23	6.92	6.38	**6.74**

OPEC natural gas liquids

OPEC NGL for 2004 expected at 3.71 mb/d

OPEC NGL figure for 2004 is expected at 3.98 mb/d, 0.27 mb/d higher than the upward revised 2003 figure of 3.71 mb/d. The 2002 figure has also been revised up to 3.75 mb/d due to recent data released from some member countries. Figures for 2000 and 2001 remain unchanged at 3.34 mb/d and 3.58 mb/d respectively, compared with the figures in the last *MOMR*.

OPEC NGL production — 2000–2004
mb/d

2000	2001	2002	1Q03	2Q03	3Q03	4Q03	2003	Change 03/02	2004	Change 04/03
3.34	**3.58**	**3.75**	3.57	3.72	3.78	3.78	**3.71**	-0.04	**3.98**	0.27

Available secondary sources put OPEC's August production at 26.81 mb/d

OPEC crude oil production

Available secondary sources indicate that OPEC output for August was 26.81 mb/d, or 0.44 mb/d higher than the revised July figure of 26.37 mb/d. Table 15 shows OPEC production as reported by selected secondary sources.

Table 15
OPEC crude oil production based on secondary sources
1,000 b/d

	2001	2002	1Q03	2Q03	Jul 03*	**Aug 03***	Aug 03– Jul 03
Algeria	820	864	1,069	1,128	1,155	**1,154**	–1
Indonesia	1,214	1,120	1,072	1,027	1,016	**1,015**	–1
IR Iran	3,665	3,428	3,701	3,722	3,765	**3,741**	–24
Iraq	2,381	2,006	2,106	288	641	**1,081**	440
Kuwait	2,021	1,885	2,108	2,250	2,122	**2,115**	–7
SP Libyan AJ	1,361	1,314	1,394	1,423	1,416	**1,421**	5
Nigeria	2,097	1,969	2,081	1,989	2,150	**2,155**	6
Qatar	683	648	743	750	733	**734**	1
Saudi Arabia	7,939	7,535	8,874	9,033	8,569	**8,587**	18
UAE	2,163	1,988	2,203	2,294	2,249	**2,285**	36
Venezuela	2,862	2,586	1,449	2,570	2,557	**2,522**	–35
Total OPEC	**27,207**	**25,341**	**26,800**	**26,473**	**26,372**	**26,810**	**438**

Totals may not add due to independent rounding.
* *Not all sources available.*

RIG COUNT

Non-OPEC rig count up 17 in August

Non-OPEC

Rig activity rose in August. North America saw a rise of 22 rigs, compared with the July figure. Mexico's rig activity rose 7 rigs to 96. Western Europe's rig activity declined by 2 rigs to 83, mainly from Denmark. Rig activity in Australia was up 2 rigs to 11. Latin America witnessed a decline of 7 rigs to 110, mainly from Argentina and Peru.

Table 16
Non-OPEC rig count in 2002-2003

	2001	**2002**	**Change 02/01**	**Jul 03**	**Aug 03**	**Change Aug/Jul**
North America	1,552	1,162	–390	1,568	1,590	22
Western Europe	95	85	–10	85	83	–2
OECD Pacific	20	17	–3	17	18	1
OECD	**1,667**	**1,264**	**–403**	**1,670**	**1,691**	**21**
Other Asia	95	111	16	115	119	4
Latin America	141	106	–35	117	110	–7
Middle East	50	62	12	70	72	2
Africa	36	43	7	44	41	–3
DCs	**321**	**322**	**1**	**346**	**342**	**–4**
FSU	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other Europe	3	2	–1	2	2	0
China	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other regions	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
Total non-OPEC	**1,991**	**1,588**	**–403**	**2,018**	**2,035**	**17**

Totals may not add due to independent rounding. *n.a. not available*
Source: Baker Hughes International.

OPEC rig count up 3 in August

OPEC

OPEC's rig count was 225 in August, 3 rigs higher when compared with the July figure. Algeria and Indonesia added 2 rigs each to 21 and 45 respectively, compared with last month's figures.

Table 17
OPEC rig count

	2001	2002	Change 02/01	Jul 03	Aug 03	Change Aug/Jul
Algeria	20	20	0	19	21	2
Indonesia	41	46	6	43	45	2
IR Iran	30	34	4	35	33	–2
Iraq	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Kuwait	9	6	–3	7	6	–1
SP Libyan AJ	5	10	5	9	10	1
Nigeria	12	12	0	10	11	1
Qatar	9	13	4	7	8	1
Saudi Arabia	30	32	2	32	31	–1
UAE	15	16	0	16	16	0
Venezuela	67	42	–25	44	44	0
Total OPEC	**238**	**231**	**–7**	**222**	**225**	**3**

Totals may not add due to independent rounding. *n.a. not available*
Source: Baker Hughes International.

STOCK MOVEMENTS

Moderate unseasonable draw of 1.7 mb in USA in August

USA

US commercial onland stocks lost the previous month's overall gain, decreasing unseasonably by 1.7 mb or at a rate of 0.06 mb/d to 835.0 mb during the period 1-29 August 2003. Crude oil stocks registered a slight draw of 0.2 mb to 280.4 mb for the same period, after dropping as low as 278.6 mb in the week ending 22 August. This draw could be attributed to the fact that, crude runs increased by 0.1 mb/d to 15.6 mb/d and that despite a 0.3 mb/d rise in crude imports to 10.1 mb/d, some extra barrels were diverted to the US Strategic Petroleum Reserve. Even with the draw, the y-o-y deficit was around 5.6%, down from the 8% reported in the last *MOMR*. On the product side, gasoline stocks continued their seasonal draw, sliding 9 mb to 191.9 mb due to strong demand, which was up 2.8%, and a substantial 8.3% fall in imports, to end the driving season with a yearly shortage of 6.4%. At the same time, distillate stocks, which contain heating and diesel oil, registered a build of 5.6 mb to 124.7 mb, narrowing the yearly deficit to 4.7% from the 11% reported in the last *MOMR*. Although heating oil stocks contributed to the build, increasing 4.9 mb, they remained 18.4% below last year's level, just prior to the upcoming winter season. Fuel oil and jet fuel inventories decreased 3.0 mb to 30.7 mb and a marginal 0.1 mb to 38.3 mb, respectively. Total oil stocks were around 81 mb or 8% below last year's figure at this time.

The US Strategic Petroleum Reserve continued its upward trend reaching 617.0 mb, or 4.6 mb higher than the level observed at the end of July 2003.

During the week ending 5 September, total commercial oil stocks in the USA showed a build of 4.6 mb to 939.6 mb, but still 71 mb or 7% below the year-ago level. Crude oil inventories fell 4.2 mb to 276.2 mb, reflecting the 0.5 mb/d drop in imports and flat week-on-week refinery inputs. This left the y-o-y deficit at around 5.7%. On the product side, the focus shifted from gasoline to distillates, following the end of the driving season. Gasoline stocks rose by 0.7 mb to 192.6 mb, or 5.7% lower than this time last year. Distillate stocks saw a build of 3.7 mb to 128.4 mb, or nearly the same level as last year, despite heating oil inventories being stuck 16.2% lower than the year-ago figure.

During the week ending 5 September, the SPR added another 1.5 mb to reach a record-high of 618.5 mb.

Table 18
US onland commercial petroleum stocks*
mb

	27 Jun 03	1 Aug 03	29 Aug 03	Change Aug/July	29 Aug 02	5 Sept 03**
Crude oil (excl. SPR)	282.1	280.2	**280.4**	**0.20**	297.0	276.2
Gasoline	205.0	201.8	191.9	–9.90	205.0	192.6
Distillate fuel	109.7	119.1	124.7	5.60	130.9	128.4
Residual fuel oil	34.3	33.7	30.7	–3.00	32.1	32.9
Jet fuel	39.1	38.3	38.2	–0.10	39.3	40.1
Unfinished oils	88.6	85.8	85.2	–0.60	85.5	83.5
Other oils	165.8	177.9	183.9	6.00	226.1	185.9
Total	924.6	936.7	**935.0**	**–1.70**	1,015.8	939.6
SPR	607.3	612.4	617.0	4.60	581.9	618.5

* *At end of month, unless otherwise stated.*
** *Latest available data at time of report's release.*
Source: US Department of Energy's Energy Information Administration.

Considerable build of 9.3 mb in Eur-16 in August

Western Europe

Commercial onland stocks in the EUR-16 (EU plus Norway) displayed a seasonal build of 9.30 mb or 0.3 mb/d to stand at 1,068.6 mb, their highest level since April 2003. Most of the build came from distillate stocks ahead of the winter months. Following the massive increase observed last month, crude oil stocks registered a small build of 1.2 mb to 452.7 mb, still a comfortable 12.1 mb over last year's level at this time. This build, which occurred despite a slight rise in crude runs, was due to the restart of crude exports from West Africa. Gasoline stocks stood at 137.3 mb, nearly unchanged from July, which left the y-o-y deficit at 1.1%, a much lower draw than analysts had expected from the peak summer driving season. Middle distillate stocks — which contain heating oil, diesel and jet fuel — rose by 5.2 mb to 339.4 mb, but the y-o-y shortage remains strong at around 22%. Low demand was behind this massive build, the largest since April 2003. Fuel oil stocks registered a build of 2.3 mb to 114.1 mb or 4.3 mb above the same time last year, mainly due to a drop in utility demand from the high level seen in July. The August build reduced the y-o-y deficit to 3.2 mb or 0.3%.

Table 19
Western Europe's oil stocks*
mb

	Jun 03	Jul 03	Aug 03	Change Aug/Jul	Aug 02
Crude oil	446.0	451.5	**452.7**	**1.2**	440.6
Mogas	137.7	137.4	137.3	–0.1	138.9
Naphtha	25.5	25.1	25.1	0.0	21.5
Middle distillates	330.7	333.5	339.4	5.9	361.0
Fuel oils	111.3	111.8	114.1	2.3	109.8
Total products	605.1	607.8	**615.9**	**8.1**	631.1
Overall total	1,051.10	1,059.3	**1,068.6**	**9.3**	**1,071.7**

* *At end of month, with region consisting of the Eur-16.*
Source: Argus Euroilstock.

Continued seasonal build of 3.6 mb in Japan in July

Japan

At the end of July 2003, total commercial oil stocks in Japan showed a seasonal build of 3.6 mb or 0.12 mb/d to 199.8 mb. The July figure represented a y-o-y hike of 23.5 mb or 13.3%. Product stocks were the main contributor to this build, while the draw on crude oil inventories provided a cap. Indeed, crude oil inventories fell 1.4 mb to 126.0 mb on a decline of crude oil imports of around 0.5 mb/d, combined with a 0.3 mb/d rise in crude oil runs. Despite this draw, crude oil stocks stood at a comfortable level of 76.8 mb or 15.4% above a year ago. Gasoline stocks moved up a slight 0.7 mb to 14.5 mb, around 10% above last year's level at the same time, with both imports and production providing an upward lift. Middle distillate inventories registered a build of 4.1 mb to 37.3 mb, the bulk of which occurred in kerosene stocks as imports experienced higher growth and domestic sales fell. In addition, Japanese refiners typically boost kerosene stocks at this time of the year in preparation for the rise in demand during winter. Fuel oil stocks remained unchanged, but are 14.3% above the level registered a year ago.

Table 20
Japan's commercial oil stocks*
mb

	May 03	Jun 03	Jul-03	Change Jul/Jun	Jul 02
Crude oil	108.4	127.4	**126.0**	**–1.4**	109.2
Gasoline	14.3	13.9	14.5	0.7	13.2
Middle distillates	33.2	33.2	37.3	4.1	34.7
Residual fuel oil	22.0	21.7	21.9	0.2	19.2
Total products	69.5	68.8	73.8	4.9	67.1
Overall total**	177.9	196.2	**199.8**	**3.6**	176.3

** At end of month. ** Includes crude oil and main products only.*
Source: MITI, Japan.

BALANCE OF SUPPLY AND DEMAND

2003 supply/demand difference revised down to 25.73 mb/d

The summarized supply/demand balance table for 2003 shows an upward revision to total non-OPEC supply of 0.11 mb/d to 52.44 mb/d and to world oil demand of 0.08 mb/d to 78.17 mb/d, resulting in an estimated annual difference of around 25.73 mb/d. This represents a drop of 0.03 mb/d from the last *MOMR* figure, with a quarterly distribution of 26.85 mb/d, 24.53 mb/d, 25.10 mb/d and 26.46 mb/d respectively. The balance for the first quarter has been revised up by 0.05 mb/d to –0.05 mb/d, while the second quarter was revised down significantly by 0.27 mb/d to 1.94 mb/d.

Table 21
Summarized supply/demand balance for 2003
mb/d

	2002	1Q03	2Q03	3Q03	4Q03	2003
(a) World oil demand	76.98	79.07	76.20	77.83	79.58	78.17
(b) Non-OPEC supply(1)	51.56	52.22	51.67	52.74	53.12	52.44
Difference (a – b)	**25.42**	**26.85**	**24.53**	**25.10**	**26.46**	**25.73**
OPEC crude oil production(2)	25.34	26.80	26.47			
Balance	**-0.08**	**-0.05**	**1.94**			

(1) Including OPEC NGLs + non-conventional oils,
(2) Selected secondary sources.
Totals may not add due to independent rounding.

2004 supply/demand difference expected at 25.38 mb/d

The summarized supply/demand balance table for 2004 shows world oil demand expected at 79.33 mb/d and total non-OPEC supply expected at 53.96 mb/d, resulting in a difference of around 25.38 mb/d, with a quarterly distribution of 26.00 mb/d, 24.18 mb/d, 24.88 mb/d and 26.44 mb/d respectively.

Table 22
Summarized supply/demand balance for 2004
mb/d

	2003	1Q04	2Q04	3Q04	4Q04	2004
(a) World oil demand	78.17	79.69	77.34	79.17	81.11	79.33
(b) Non-OPEC supply(1)	52.44	53.69	53.16	54.29	54.67	53.96
Difference (a – b)	**25.73**	**26.00**	**24.18**	**24.88**	**26.44**	**25.38**

(1) Including OPEC NGLs + non-conventional oils,
Totals may not add due to independent rounding.

Table 23
World oil demand/supply balance
mb/d

	1999	**2000**	**2001**	**2002**	1Q03	2Q03	3Q03	4Q03	**2003**	1Q04	2Q04	3Q04	4Q04	**2004**
World demand														
OECD	47.7	47.8	47.8	47.7	49.4	47.1	47.9	49.4	48.4	49.6	47.4	48.5	50.1	48.9
North America	23.8	24.1	24.0	24.2	24.6	24.1	24.5	24.6	24.4	24.7	24.3	24.8	25.0	24.7
Western Europe	15.2	15.1	15.3	15.1	15.2	14.9	15.2	15.5	15.2	15.2	15.0	15.3	15.6	15.3
Pacific	8.7	8.6	8.5	8.5	9.6	8.0	8.2	9.4	8.8	9.6	8.1	8.3	9.5	8.9
DCs	18.9	19.2	19.5	19.7	19.5	19.6	20.1	20.0	19.8	19.8	20.0	20.5	20.5	20.2
FSU	4.0	3.8	3.9	3.8	4.0	3.3	3.7	4.4	3.9	4.1	3.5	3.9	4.5	4.0
Other Europe	0.8	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
China	4.2	4.7	4.7	5.0	5.4	5.5	5.3	5.1	5.3	5.5	5.6	5.5	5.3	5.5
(a) Total world demand	75.5	76.2	76.7	77.0	79.1	76.2	77.8	79.6	78.2	79.7	77.3	79.2	81.1	79.3
Non-OPEC supply														
OECD	21.3	21.8	21.8	21.9	22.2	21.3	21.9	22.2	21.9	22.3	21.5	22.0	22.3	22.1
North America	14.1	14.2	14.4	14.5	14.7	14.5	14.9	14.9	14.7	14.9	14.6	15.0	15.0	14.9
Western Europe	6.6	6.7	6.7	6.6	6.7	6.2	6.3	6.6	6.5	6.8	6.3	6.3	6.6	6.5
Pacific	0.7	0.8	0.8	0.8	0.7	0.6	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7
DCs	10.7	10.9	10.9	11.3	11.2	11.2	11.3	11.4	11.3	11.6	11.6	11.8	11.8	11.7
FSU	7.5	7.9	8.5	9.3	9.9	10.1	10.4	10.4	10.2	10.5	10.7	11.0	11.0	10.8
Other Europe	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Processing gains	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.8
Total non-OPEC supply	44.5	45.7	46.4	47.8	48.6	47.9	49.0	49.3	48.7	49.9	49.2	50.2	50.6	50.0
OPEC NGLs + non-conventionals	3.2	3.3	3.6	3.8	3.6	3.7	3.8	3.8	3.7	3.8	4.0	4.1	4.1	4.0
(b) Total non-OPEC supply and OPEC NGLs	47.7	49.1	50.0	51.6	52.2	51.7	52.7	53.1	52.4	53.7	53.2	54.3	54.7	54.0
OPEC crude oil production (secondary sources)	26.5	28.0	27.2	25.3	26.8	26.5								
Total supply	74.2	77.0	77.2	76.9	79.0	78.1								
Balance (stock change and miscellaneous)	-1.3	0.8	0.5	-0.1	0.0	1.9								
Closing stock level (outside FCPEs) *mb*														
OECD onland commercial	2446	2530	2621	2467	2408	2520								
OECD SPR*	1284	1268	1283	1343	1357	1361								
OECD total	3730	3798	3904	3810	3765	3881								
Other onland	997	1016	1044	1019	1007	1038								
Oil-on-water	808	876	831	811	856	882								
Total stock	5535	5690	5779	5640	5628	5801								
Days of forward consumption in OECD														
Commercial onland stocks	51	53	55	51	51	53								
SPR	27	27	27	28	29	28								
Total	78	79	82	79	80	81								
Memo items														
FSU net exports	3.4	4.1	4.6	5.6	5.9	6.7	6.7	6.0	6.3	6.4	7.2	7.1	6.5	6.8
(a) - (b)	27.8	27.1	26.7	25.4	26.9	24.5	25.1	26.5	25.7	26.0	24.2	24.9	26.4	25.4

Note: Totals may not add up due to independent rounding.

** Korean government stocks are now included in Total OECD.*

Table 24
World oil demand/supply balance: changes from last month's table †
mb/d

	1999	2000	2001	2002	1Q03	2Q03	3Q03	4Q03	2003	1Q04	2Q04	3Q04	4Q04	2004
World demand														
OECD	-	-	-	-	-	0.5	0.2	-	0.2	-	0.4	0.2	-	0.2
North America	-	-	-	-	-	-	0.1	0.1	-	-	-	0.1	-	-
Western Europe	-	-	-	-	-	0.2	-	-0.1	-	-	0.2	0.1	-0.1	-
Pacific	-	-	-	-	-	0.3	0.1	0.1	0.1	-	0.3	0.1	0.1	0.1
DCs	-	-	-	-	-	-0.2	-	0.1	-	-	-0.3	-	-	-
FSU	-	-	-	-	-	-0.2	-	-	-0.1	-	-0.2	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	0.2	-0.1	-0.1	-	-	0.2	-0.1	-0.1	-
(a) Total world demand	-	-	-	-	-	0.3	0.1	-	0.1	0.1	0.2	0.1	-0.1	0.1
Non-OPEC supply														
OECD	-	-	-	-	-	-0.1	-0.1	0.1	-	-	-0.1	-0.1	0.1	-
North America	-	-	-	-	-	-0.1	0.1	0.1	-	-	-0.1	0.1	0.1	-
Western Europe	-	-	-	-	-	-	-0.2	-0.2	-0.1	-	-	-0.2	-0.1	-0.1
Pacific	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	0.2	0.1	0.1	-	-	0.2	0.1	0.1
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	-0.1	0.1	0.1	-	-	-0.1	0.1	0.1	-
OPEC NGLs + non-conventionals	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	-	-	-	0.1	0.1	-	0.2	0.2	0.1	-	-0.1	0.2	0.2	0.1
OPEC crude oil production (secondary sources)	-	-	-	-	-	-								
Total supply	-	-	-	0.1	0.1	-								
Balance (stock change and miscellaneous)	-	-	-	-	-	-0.3								
Closing stock level (outside FCPEs) *mb*														
OECD onland commercial	-	-	-	-	0.6	4.8								
OECD SPR	-	-	-2.0	-	-	3.3								
OECD total	-	-	-2.0	-	0.6	8.1								
Other onland	-	-	-	-	-	2.2								
Oil on water	-	-	1.6	0.6	6.1	23.2								
Total stock	-	-	-1.0	0.6	6.9	33.6								
Days of forward consumption in OECD														
Commercial onland stocks	-	-	-	-	-	-								
SPR	-	-	-	-	-	-								
Total	-	-	-	-	-0.8	-								
Memo items														
FSU net exports	-	-	-	-	-	0.2	0.2	0.1	0.1	-	0.2	0.2	0.1	0.1
(a) - (b)	-	-	-	-	-	0.3	-0.1	-0.2	-	-	0.3	-	-0.3	-

† *This compares Table 23 in this issue of the MOMR with Table 23 in the August 2003 issue.*
This table shows only where changes have occurred.

Table 25
World oil stocks (excluding former CPEs) at end of period

	1997	1998	1999	2000	2001	2002	1Q01	2Q01	3Q01	4Q01	1Q02	2Q02	3Q02	4Q02	1Q03	2Q03
Closing stock level *mb*																
OECD onland commercial	2,615	2,698	2,446	2,530	2,621	2,467	2,525	2,597	2,661	2,621	2,598	2,645	2,567	2,467	2,408	2,520
North America	1,211	1,283	1,127	1,146	1,263	1,172	1,159	1,231	1,269	1,263	1,235	1,259	1,216	1,172	1,096	1,174
Western Europe	912	963	881	930	915	885	918	909	918	915	927	939	912	885	899	893
OECD Pacific	492	453	437	454	443	410	447	457	473	443	435	447	440	410	413	453
OECD SPR	1,254	1,302	1,284	1,268	1,283	1,343	1,269	1,267	1,267	1,283	1,303	1,314	1,319	1,343	1,357	1,361
North America	563	571	567	543	550	601	544	545	547	550	563	578	589	601	601	611
Western Europe	329	362	346	354	353	352	351	347	345	353	353	348	344	352	363	358
OECD Pacific*	362	369	370	370	380	389	374	374	375	380	386	388	386	389	393	393
OECD total	**3,869**	**4,000**	**3,730**	**3,798**	**3,904**	**3,810**	**3,794**	**3,864**	**3,928**	**3,904**	**3,901**	**3,959**	**3,886**	**3,810**	**3,765**	**3,881**
Other onland	1,035	1,070	997	1,016	1,044	1,019	1,015	1,033	1,050	1,044	1,043	1,059	1,039	1,019	1007	1038
Oil-on-water	812	859	808	876	831	811	903	829	870	831	791	800	802	811	856	882
Total stock	**5,715**	**5,929**	**5,535**	**5,690**	**5,779**	**5,640**	**5,712**	**5,726**	**5,848**	**5,779**	**5,735**	**5,818**	**5,727**	**5,640**	**5,628**	**5,801**
Days of forward consumption in OECD																
OECD onland commercial	56	57	51	53	55	51	54	55	55	54	56	56	52	50	51	53
North America	52	54	47	48	52	48	49	51	53	53	51	52	50	48	45	48
Western Europe	60	63	58	61	61	58	62	59	59	60	63	62	59	58	60	59
OECD Pacific	58	52	51	53	52	47	56	57	54	49	57	56	47	43	51	55
OECD SPR	27	27	27	27	27	28	27	27	26	27	28	28	27	27	29	28
North America	24	24	24	23	23	25	23	23	23	23	23	24	24	24	25	25
Western Europe	21	24	23	23	23	23	24	22	22	23	24	23	22	23	24	24
OECD Pacific	43	42	43	43	45	44	47	47	43	42	51	48	42	41	49	48
OECD total	**83**	**84**	**78**	**79**	**82**	**79**	**81**	**81**	**82**	**81**	**84**	**83**	**79**	**77**	**80**	**81**
Days of global forward consumption	**88**	**89**	**83**	**84**	**86**	**83**	**86**	**85**	**86**	**86**	**87**	**86**	**83**	**82**	**84**	**85**

** Korean government stocks are now included in Total OECD Pacific.*

Table 26
Non-OPEC supply and OPEC natural gas liquids
mb/d

	1999	2000	2001	2002	Change 02/01	1Q03	2Q03	3Q03	4Q03	2003	Change 03/02	1Q04	2Q04	3Q04	4Q04	2004	Change 04/03
USA	8.11	8.11	8.05	8.04	-0.01	8.07	7.81	7.93	7.95	7.94	-0.10	8.12	7.86	7.98	8.00	7.99	0.05
Canada	2.60	2.69	2.74	2.88	0.14	2.92	2.92	3.08	3.06	3.00	0.12	3.04	3.03	3.20	3.19	3.12	0.12
Mexico	3.35	3.45	3.57	3.59	0.03	3.75	3.75	3.85	3.85	3.80	0.21	3.72	3.72	3.82	3.82	3.77	-0.03
North America	**14.05**	**14.25**	**14.36**	**14.51**	**0.15**	**14.74**	**14.47**	**14.86**	**14.86**	**14.74**	**0.22**	**14.88**	**14.61**	**15.00**	**15.01**	**14.88**	**0.14**
Norway	3.06	3.32	3.42	3.33	-0.09	3.40	3.16	3.23	3.33	3.28	-0.05	3.43	3.19	3.26	3.36	3.31	0.03
UK	2.84	2.64	2.53	2.51	-0.03	2.53	2.25	2.30	2.43	2.38	-0.13	2.51	2.23	2.28	2.41	2.36	-0.02
Denmark	0.30	0.36	0.35	0.37	0.02	0.38	0.36	0.34	0.37	0.36	0.00	0.40	0.38	0.36	0.40	0.38	0.02
Other Western Europe	0.43	0.41	0.40	0.43	0.03	0.44	0.44	0.43	0.44	0.44	0.01	0.46	0.46	0.45	0.46	0.46	0.02
Western Europe	**6.63**	**6.74**	**6.70**	**6.63**	**-0.06**	**6.75**	**6.21**	**6.30**	**6.58**	**6.46**	**-0.18**	**6.80**	**6.26**	**6.35**	**6.63**	**6.51**	**0.05**
Australia	0.59	0.77	0.71	0.70	0.00	0.62	0.59	0.66	0.66	0.64	-0.07	0.61	0.58	0.65	0.65	0.63	-0.01
Other Pacific	0.07	0.06	0.06	0.05	-0.01	0.05	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.00
OECD Pacific	**0.66**	**0.83**	**0.77**	**0.76**	**-0.01**	**0.67**	**0.64**	**0.71**	**0.72**	**0.68**	**-0.07**	**0.66**	**0.63**	**0.70**	**0.71**	**0.67**	**-0.01**
Total OECD*	**21.34**	**21.82**	**21.82**	**21.90**	**0.08**	**22.17**	**21.32**	**21.87**	**22.16**	**21.88**	**-0.02**	**22.34**	**21.50**	**22.05**	**22.34**	**22.06**	**0.18**
Brunei	0.18	0.19	0.20	0.20	0.01	0.20	0.21	0.21	0.21	0.21	0.01	0.20	0.21	0.21	0.21	0.21	0.00
India	0.75	0.74	0.73	0.75	0.01	0.75	0.72	0.74	0.75	0.74	-0.01	0.75	0.72	0.74	0.75	0.74	0.00
Malaysia	0.72	0.70	0.68	0.72	0.03	0.75	0.77	0.78	0.77	0.77	0.05	0.77	0.79	0.80	0.78	0.79	0.02
Papua New Guinea	0.09	0.07	0.06	0.05	-0.01	0.05	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.00
Vietnam	0.26	0.31	0.34	0.34	0.00	0.36	0.36	0.35	0.36	0.36	0.01	0.38	0.38	0.37	0.38	0.38	0.02
Asia others	0.15	0.18	0.19	0.21	0.02	0.22	0.23	0.23	0.23	0.23	0.01	0.22	0.23	0.23	0.23	0.23	0.00
Other Asia	**2.15**	**2.19**	**2.20**	**2.27**	**0.06**	**2.34**	**2.34**	**2.35**	**2.38**	**2.35**	**0.08**	**2.38**	**2.38**	**2.38**	**2.41**	**2.39**	**0.04**
Argentina	0.84	0.80	0.82	0.80	-0.02	0.78	0.78	0.78	0.78	0.78	-0.01	0.78	0.78	0.78	0.78	0.78	0.00
Brazil	1.36	1.49	1.57	1.75	0.18	1.76	1.72	1.76	1.76	1.75	0.00	1.84	1.80	1.84	1.85	1.83	0.08
Colombia	0.82	0.70	0.61	0.59	-0.03	0.56	0.55	0.56	0.56	0.56	-0.03	0.55	0.54	0.55	0.55	0.55	-0.01
Ecuador	0.38	0.40	0.41	0.40	-0.01	0.40	0.36	0.37	0.38	0.38	-0.03	0.45	0.41	0.42	0.43	0.43	0.05
Peru	0.11	0.10	0.10	0.09	-0.01	0.09	0.09	0.09	0.11	0.10	0.01	0.10	0.10	0.10	0.12	0.11	0.01
Trinidad & Tobago	0.14	0.14	0.13	0.15	0.02	0.15	0.17	0.17	0.17	0.17	0.01	0.17	0.19	0.19	0.19	0.19	0.02
L. America others	0.11	0.12	0.13	0.12	-0.01	0.12	0.12	0.12	0.12	0.12	0.00	0.12	0.12	0.12	0.12	0.12	0.00
Latin America	**3.76**	**3.75**	**3.77**	**3.90**	**0.13**	**3.86**	**3.79**	**3.86**	**3.89**	**3.85**	**-0.05**	**4.01**	**3.94**	**4.01**	**4.04**	**4.00**	**0.15**
Bahrain	0.19	0.19	0.19	0.19	0.00	0.19	0.19	0.19	0.19	0.19	-0.01	0.19	0.19	0.19	0.19	0.19	0.00
Oman	0.91	0.95	0.95	0.90	-0.04	0.85	0.82	0.83	0.83	0.83	-0.07	0.83	0.80	0.81	0.81	0.81	-0.02
Syria	0.55	0.54	0.53	0.54	0.01	0.56	0.55	0.54	0.54	0.55	0.01	0.52	0.52	0.51	0.51	0.52	-0.03
Yemen	0.42	0.45	0.47	0.45	-0.01	0.46	0.46	0.46	0.46	0.46	0.01	0.46	0.46	0.46	0.46	0.46	0.00
Middle East	**2.06**	**2.13**	**2.13**	**2.08**	**-0.05**	**2.05**	**2.01**	**2.02**	**2.01**	**2.02**	**-0.06**	**2.00**	**1.96**	**1.97**	**1.96**	**1.97**	**-0.05**
Angola	0.76	0.75	0.74	0.89	0.15	0.83	0.89	0.93	0.92	0.90	0.00	0.94	1.00	1.04	1.04	1.01	0.11
Cameroon	0.10	0.10	0.08	0.07	-0.01	0.07	0.07	0.07	0.07	0.07	-0.01	0.07	0.07	0.07	0.07	0.07	0.00
Congo	0.27	0.27	0.27	0.26	-0.01	0.24	0.24	0.24	0.24	0.24	-0.02	0.24	0.24	0.24	0.24	0.24	0.00
Egypt	0.83	0.80	0.76	0.75	-0.01	0.76	0.76	0.74	0.74	0.75	0.00	0.76	0.76	0.74	0.74	0.75	0.00
Gabon	0.36	0.34	0.31	0.30	-0.01	0.29	0.29	0.29	0.29	0.29	-0.02	0.29	0.29	0.29	0.29	0.29	0.00
South Africa	0.17	0.19	0.19	0.19	0.00	0.19	0.19	0.20	0.20	0.20	0.01	0.21	0.21	0.22	0.22	0.22	0.02
Africa other	0.28	0.41	0.46	0.56	0.10	0.58	0.58	0.66	0.66	0.62	0.06	0.73	0.73	0.83	0.83	0.78	0.16
Africa	**2.78**	**2.85**	**2.80**	**3.03**	**0.23**	**2.96**	**3.01**	**3.12**	**3.12**	**3.05**	**0.03**	**3.23**	**3.29**	**3.42**	**3.42**	**3.34**	**0.29**
Total DCs	**10.74**	**10.92**	**10.91**	**11.28**	**0.37**	**11.22**	**11.15**	**11.34**	**11.40**	**11.28**	**0.00**	**11.63**	**11.57**	**11.78**	**11.85**	**11.71**	**0.43**
FSU	**7.47**	**7.91**	**8.53**	**9.33**	**0.81**	**9.88**	**10.09**	**10.40**	**10.40**	**10.20**	**0.86**	**10.48**	**10.70**	**11.02**	**11.02**	**10.81**	**0.61**
Other Europe	**0.18**	**0.18**	**0.18**	**0.18**	**-0.01**	**0.17**	**0.17**	**0.17**	**0.17**	**0.17**	**0.00**	**0.17**	**0.17**	**0.17**	**0.17**	**0.17**	**0.00**
China	**3.21**	**3.23**	**3.30**	**3.39**	**0.10**	**3.40**	**3.44**	**3.39**	**3.39**	**3.41**	**0.01**	**3.38**	**3.42**	**3.37**	**3.37**	**3.39**	**-0.02**
Non-OPEC production	**42.95**	**44.06**	**44.74**	**46.08**	**1.34**	**46.84**	**46.18**	**47.17**	**47.52**	**46.93**	**0.85**	**48.00**	**47.36**	**48.39**	**48.75**	**48.13**	**1.20**
Processing gains	1.58	1.65	1.69	1.73	0.04	1.81	1.77	1.79	1.82	1.79	0.06	1.86	1.81	1.84	1.87	1.84	0.05
Non-OPEC supply	**44.53**	**45.71**	**46.43**	**47.81**	**1.38**	**48.64**	**47.95**	**48.96**	**49.34**	**48.72**	**0.91**	**49.85**	**49.17**	**50.23**	**50.62**	**49.97**	**1.25**
OPEC NGLs + non-conventionals	**3.16**	**3.34**	**3.58**	**3.75**	**0.17**	**3.57**	**3.72**	**3.78**	**3.78**	**3.71**	**-0.04**	**3.83**	**3.99**	**4.05**	**4.05**	**3.98**	**0.27**

Note: Totals may not add up due to independent rounding.

** Former East Germany is included in the OECD.*

Table 27
Non-OPEC Rig Count

	2000	1Q01	2Q01	3Q01	4Q01	2001	Change 01/00	1Q02	2Q02	3Q02	4Q02	2002	Change 02/01	1Q03	2Q03	Jul03	Aug03	Change Aug03- Jul03
USA	916	1,141	1,239	1,231	1,004	1,156	240	818	806	853	847	831	-325	901	1,028	1,081	1,090	9
Canada	344	515	252	320	278	342	-2	383	147	250	283	266	-76	494	203	398	404	6
Mexico	44	50	48	56	62	54	10	63	61	62	76	65	11	82	84	89	96	7
North America	**1,305**	**1,706**	**1,539**	**1,607**	**1,344**	**1,552**	**247**	**1,264**	**1,014**	**1,165**	**1,206**	**1,162**	**-390**	**1,476**	**1,315**	**1,568**	**1,590**	**22**
Norway	22	24	22	22	22	23	1	20	20	17	19	19	-4	18	19	21	21	0
UK	18	18	25	28	26	24	6	28	30	24	23	26	2	19	21	23	22	-1
Denmark	3	4	5	4	5	4	1	5	4	3	5	4	0	3	5	5	2	-3
Other Western Europe	82	43	44	42	47	44	-38	39	38	33	34	36	-8	36	34	36	38	2
Western Europe	**125**	**89**	**95**	**96**	**100**	**95**	**-30**	**92**	**91**	**76**	**81**	**85**	**-10**	**77**	**78**	**85**	**83**	**-2**
Australia	10	11	11	10	10	10	0	9	9	9	9	9	-2	10	10	9	11	2
Other Pacific	7	10	9	8	10	9	2	8	7	7	10	8	-1	8	7	8	7	-1
OECD Pacific	**17**	**20**	**20**	**18**	**20**	**20**	**3**	**17**	**16**	**16**	**19**	**17**	**-3**	**18**	**17**	**17**	**18**	**1**
Total OECD*	**1,447**	**1,815**	**1,655**	**1,721**	**1,464**	**1,667**	**220**	**1,373**	**1,121**	**1,257**	**1,306**	**1,264**	**-403**	**1,571**	**1,411**	**1,670**	**1,691**	**21**
Brunei	2	3	3	2	2	3	1	2	3	3	3	3	0	3	4	4	4	0
India	49	51	48	50	50	50	1	52	54	55	57	55	5	59	60	61	61	0
Malaysia	7	10	11	13	12	11	4	12	13	15	14	14	2	14	13	16	15	-1
Papua New Guinea	0	0	1	2	1	1	1	1	1	1	1	1	0	1	2	2	2	0
Vietnam	8	9	8	8	8	8	0	8	8	9	10	9	0	9	9	10	9	-1
Asia others	16	22	23	24	18	22	5	26	29	33	32	30	8	31	28	22	28	6
Other Asia	**83**	**96**	**95**	**98**	**90**	**95**	**12**	**100**	**109**	**116**	**117**	**111**	**16**	**117**	**115**	**115**	**119**	**4**
Argentina	57	69	74	77	64	71	14	49	45	49	54	49	-22	59	66	62	57	-5
Brazil	23	28	30	29	26	28	5	27	27	27	26	27	-2	27	27	27	26	-1
Colombia	14	15	16	14	16	15	1	13	13	10	9	11	-4	10	9	10	10	0
Ecuador	7	9	10	10	11	10	3	10	9	8	8	9	-1	9	11	7	8	1
Peru	4	4	4	3	3	4	0	2	2	2	1	2	-2	2	2	4	2	-2
Trinidad & Tobago	4	6	5	4	5	5	1	5	4	4	4	4	-1	3	3	3	3	0
L. America others	12	9	8	6	6	7	-4	4	4	4	5	5	-3	3	4	4	4	0
Latin America	**120**	**141**	**147**	**144**	**130**	**141**	**20**	**110**	**103**	**104**	**107**	**106**	**-35**	**113**	**121**	**117**	**110**	**-7**
Bahrain		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Oman	24	24	24	25	26	25	1	27	29	30	32	29	5	33	34	32	38	6
Syria	14	19	19	20	19	19	5	20	21	23	24	22	3	23	23	27	25	-2
Yemen	6	6	6	5	6	6	0	8	9	9	11	9	3	11	10	10	8	-2
Middle East	**45**	**49**	**49**	**49**	**51**	**50**	**5**	**57**	**60**	**64**	**69**	**62**	**12**	**70**	**68**	**70**	**72**	**2**
Angola	6	6	5	4	6	5	0	5	6	6	5	5	0	3	4	3	3	0
Cameroon		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Congo	3	1	2	1	1	1	-1	1	1	1	1	1	0	0	1	0	1	1
Egypt	18	21	22	22	23	22	4	22	23	22	23	23	1	26	26	28	25	-3
Gabon	2	2	4	1	1	2	0	1	2	2	2	2	0	3	4	1	1	0
South Africa	1	2	1	0	1	1	0	1	1	1	0	1	0	0	1	0	0	0
Africa other	5	4	5	5	3	4	0	11	12	12	12	12	7	12	14	12	11	-1
Africa	**34**	**36**	**40**	**34**	**35**	**36**	**2**	**41**	**45**	**44**	**43**	**43**	**7**	**45**	**50**	**44**	**41**	**-3**
Total DCs	**282**	**322**	**330**	**325**	**307**	**321**	**40**	**307**	**317**	**328**	**336**	**322**	**1**	**346**	**354**	**346**	**342**	**-4**
FSU													0					
Other Europe	**3**	**3**	**3**	**3**	**4**	**3**	**0**	**2**	**2**	**2**	**2**	**2**	**-1**	**2**	**2**	**2**	**2**	**0**
China													0					
Non-OPEC Rig count	**1,732**	**2,140**	**1,988**	**2,049**	**1,774**	**1,991**	**260**	**1,682**	**1,440**	**1,587**	**1,644**	**1,588**	**-403**	**1,919**	**1,767**	**2,018**	**2,035**	**17**

Note: Totals may not add up due to independent rounding.

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MONTHLY OIL MARKET REPORT

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