

US Oil and Gas

OIM# 657: Consolidation takes the lead ... but how much worse can natural gas get?

Industry Overview

Sector rotation or fundamental recovery?

After the first month of the year where refiners led the charge for the energy sector, the E&P's have bounced back in an apparent response to slower Fed easing, as expectations of interest rate cuts have waned in just the past few weeks. At a high level we see the US oils as a beneficiary of a sector rotation – perhaps exacerbated by a position that per BofA's Global Fund Manager's Survey is the most underweight in energy since late 2020.

A closer look distills the strongest performance with consolidation leaders - and natural gas! In first place are the 'rate of change' stocks, led by FANG and CRC following material acquisitions relative to their size, with FANG's addressing inventory questions and diluting the significance of VNOM in its consolidated free cash flow. The second group of stocks is led in part by Permian 'sympathy' stocks – those seen with M&A potential such as - Vital and Permian Resources. However, we see the rebound in oil prices that is contributing to the sector move with mixed fundamental support but a supportive near-term technical outlook bifurcating sector performance between names with high leverage to spot oil prices and laggards not obviously being in the acquisition discussion, or by virtue of scale are generally lower beta (COP, CNQ).

Disinclined to chase oil, lean in to natural gas

At the start of the 2023 we suggested the US oils will be rangebound, with trading opportunities that follow near dated commodity volatility. While M&A has boosted the broader sector, we believe this is still a good representation of the outlook. However, with the overhang from spare OPEC+ production capacity, we continue to view backwardation as a headwind to sector valuations. While spot WTI prices stand at \$78, this falls below \$70 by end 2025, which is the limit of liquidity of the forward curve that we believe the market will reasonably discount. At our base case, that assumes I/term \$70 oil from 2026, we see average upside for the US oils at ~17%. Conversely, we see a very different outlook for natural gas equities – which outside of M&A have led the rebound in E&P performance on the beginning of reducing spending in the wake of the worst gas price market in a decade. In our view this signals reduced drilling is within sight, providing a potentially supportive supply outlook as LNG plants start in 2H24.

Near term, the risk for oil prices is obviously framed by the ongoing Red Sea conflict and related logistical impacts. However, aside from those names where we see attractive valuations, with conservative oil leverage and rate of change to drive market recognition of value, we are disinclined to chase this latest bounce that looks increasingly detached from a declining forward curve. Conversely, we see extraordinary weakness in US natural gas prices, well below the incremental cost of supply resetting risk / reward by forcing an activity response, already seen from the handful of some of the natural gas names that have reported so far. In our view, weak spot prices improve the risk / reward of positioning for changing US natural gas dynamics that remains a case of when, not if. Our top sector ideas amongst the US oils remain led by XOM, CVX, OXY and CHK.

Please join us for our 21st Global refining conference in NY City on March 14th: reach out for details.

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16 February 2024

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Exhibit 1: BBG vs. Actuals (mbbls)

Gasoline draws while crude inventories build

Crude Stocks	
Est	1,514
Actual	5,520
Diff	4,006
Distillate Stocks	
Est	(2,146)
Actual	(3,221)
Diff	(1,075)
Gasoline Stocks	
Est	836
Actual	(3,146)
Diff	(3,982)
Utilization	
Est	83.5%
Actual	82.4%
Diff	-1.1%

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OPEC – organization of petroleum exporting countries

E&P – exploration and production

IEA – international energy agency

DOE – department of energy

OIM – oil inventory monitor

bpd – barrel per day

bbl - barrel

DUC - drilled uncompleted

VNOM - Viper Energy

OIM #657

Exhibit 2: Summary DOE

Summary of DOE Weekly Statistics

	Current	Prev	Change	%
Crude Oil	439.5	427.4	12.018	2.8%
of which cushing	28.8	28.1	0.710	2.5%
Lower 48 Production	12.900	12.900	0.000	0.0%
Motor Gasoline	247.3	251.0	(3.658)	-1.5%
Gasoline production	9.175	9.0	0.164	0.0
Gasoline demand	8.168	8.807	(0.639)	-7.3%
Gasoline demand cover	30.3	28.5	1.782	6.3%
Distillate	125.7	127.6	(1.915)	-1.5%
of which Heating Oil	7.7	6.2	1.536	24.9%
of which Diesel	117.9	121.4	(3.451)	-2.8%
Distillate demand	3.5	3.8	(0.303)	-7.9%
Distillate demand cover	35.8	33.4	2.337	7.0%
Jet Fuel	41.0	40.9	0.067	0.2%
Jet fuel demand	1.4	1.6	(0.250)	-15.6%
Jet fuel demand cover	30.3	25.5	4.757	18.7%
Residual	27.7	27.5	0.198	0.7%
Resid demand	0.5	0.3	0.158	47.7%
Resid demand cover	56.6	83.0	(26.429)	-31.8%
Utilization	80.6%	82.4%	-1.8%	na
Product Stocks	1232.3	1227.1	5.2	0.8%
Source: DOF				

Source: DOE

Crude and products inventory change

Exhibit 3: Distillate inventory by PADD

Distillate inventories drew by -1916 kbbls

BBG Estimates	(1,896)
Actual stock change	(1,915)
Exports	971
Imports	135
Prod / consumption net	562
Production	4,076
Product Supplied	(3,514)
PADD 1	721
PADD 2	(392)
PADD 3	(2,768)
PADD 4	372
PADD 5	151
Total	(1,916)
Source: BofA Global Research, Bloomberg	

Exhibit 5: Gasoline inventory by PADD

Gasoline inventories drew by -3659 kbbls

BBG Estimates	(1,758)
Fnsh'd MoGas stock chn'g	48.1
Exports	968
Imports	9
Prod / consumption net	1,007
Production	9,175
Product Supplied	(8,168)
PADD 1	(449)
PADD 2	(2,513)
PADD 3	(258)
PADD 4	88
PADD 5	(527)
Total	(3,659)
Source: BofA Global Research, Bloomberg	

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Exhibit 4: Crude inventory by PADD

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Crude inventories built by 12017 kbbls

BBG Estimates	3,299
Actual stock change	12,018
Exports (Monthly avg)	4,347
Imports	6,470
Prod / consumption net	(6,470)
Production	13,300
Product Supplied	(19,770)
PADD 1	682
PADD 2	2,819
PADD 3	6,975
PADD 4	133
PADD 5	1,408
Total	12,017

Source: BofA Global Research, Bloomberg

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Exhibit 6: Jet inventory by PADD Jet inventories built by 67 kbbls

DDC Estimatos

BBG Estimates	
Actual stock change	67
Exports	221
Imports	(326)
Prod / consumption net	129
Production	1,483
Product Supplied	(1,354)
PADD 1	1,165
PADD 2	(18)
PADD 3	(268)
PADD 4	9
PADD 5	(821)
Total	67

Source: BofA Global Research, Bloomberg



Consolidation takes the lead

How much worse can gas get?

After the first month of the year where refiners led the charge for the energy sector, the E&P sector has bounced back hard in an apparent response to slower Fed easing, as expectations of interest rate cuts have waned in just the past few weeks. But a closer look distills the strongest performance with consolidation leaders - and natural gas!

In first place are the 'rate of change' stocks, led by Diamondback and California Resources. Both have announced major acquisitions relative to their size, with FANG's planned acquisition of Endeavor in particular addressing inventory questions and diluting the significance of Viper Energy in its consolidated free cash flow;

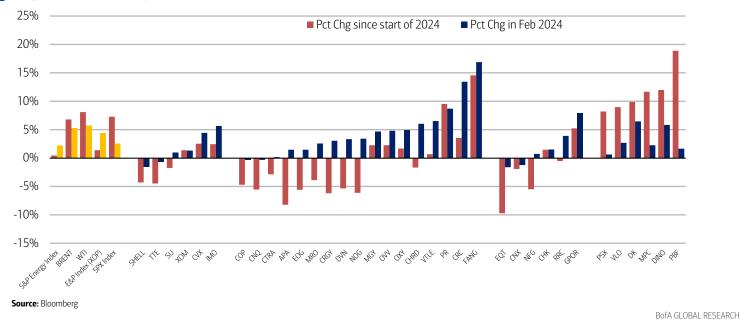
The second group of stocks rebounding in February appear led in part by Permian 'sympathy' stocks – those perhaps seen with M&A follow through such as – Vital and Permian Resources;

But acknowledging the rebound in oil prices that has mixed fundamental support but a supportive technical outlook, names with higher oil leverage at the front of the curve have seen improved performance over the past two weeks. Notable is that stocks that are not obviously in the acquisition discussion, or by virtue of scale are generally lower beta have lagged (COP, CNQ). Also notable is that several of the natural gas E&P's signaling reduced spending in the wake of the worst spot gas price market in a decade – but perhaps signaling that the anticipated activity response to weak spot natural gas prices is within sight, providing a potentially supportive supply outlook as anticipated LNG plants start up in 2H24.

After a strong start to the year the lead in the US oil & gas sector has shifted from refiners to E&P's. But beyond M&A, we see US E&P's rangebound, and remain wary chasing momentum vs where we see absolute value with rate of change to close the gap.

Exhibit 7: Share price performance

Energy outperforms in February as inflation expectations shift



At a high level we see the US oils as a primary beneficiary of sector rotation – perhaps exacerbated by a position that per BofA's fund manager survey suggests was the most underweight in energy since late 2020.



Exhibit 8: Energy is the most underweight since COVID

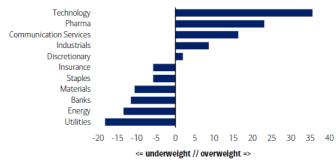
Net percentage of surveyed market participants under/overweight energy



Source: BofA Global Research

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Exhibit 9: Positioning for lower rates = underweight energy / long tech Sector positioning according to BofA's Global Portfolio Manager's Survey



Source: BofA Global Research

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But this also comes with a rebound in oil prices, back to near resistance levels per our Technical team, where the decision tree is whether WTI breaks higher or remains range-bound near the top of technical limits.

Exhibit 10: WTI technicals

\$79.3 is a key resistance



Source: Bloomberg, BofA Global Research

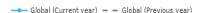
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To answer this question, the debate whether oil markets are tight or whether the recent move up from technical support is justified by supply & demand we glance back at Kayross satellite data which shows the juxtaposition of falling onshore global oil & product inventories that is almost fully offset by a sharp increase in oil-on-the-water.

In our view, this seems logical given longer transit times associated with freight disruptions in the Red Sea and is not indicative of tight oil markets.

Exhibit 11: Global crude inventories

Global inventories continue to decline



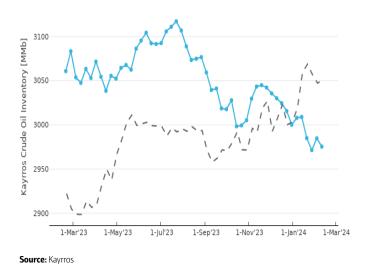
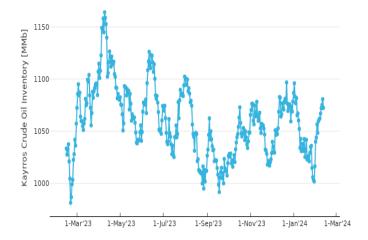


Exhibit 12: Crude on water

As crude on water rise to the top end of its recent range



Source: Kayrros

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Adding to the debate is the latest round of major agency reports on the global supply demand outlook – which on the whole has tipped negative for the fundamental oil outlook. Referencing the charts below:

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The latest EIA and OPEC monthly oil reports provided a second update to their view of the health of the oil market for the year and a first look into what global production might look like in 1Q24 – including the first data points on what the impact of planned OPEC cuts will have on global balances. Key takeaways can be summarized as follows:

IEA monthly oil market report:

The IEA's latest oil market report (February), seen often as the baseline for many commentator forecasts reinforced the balanced outlook for oil markets in 2024. Estimates for demand growth were trimmed only slightly to 1.28mm bpd (103mm bpd); but with non-OPEC supply raised by 200,000 bpd, total supply growth ex OPEC is now seen at 1.5mm bpd, so that there is no room for OPEC to add back supplies. Critically, the IEA estimates that 1Q24 will now see a slight build despite the expected implementation of OPEC cuts and the supply impacts from the winter storm in the US in mid-January. However, the IEA does note that ongoing Red Sea conflict is impacting supply side logistics as oil on water has increased adding downward pressure on useable onshore barrels which stands at the lowest level since 2016, and which we suggest has some impact from a backward oil curve.

OPEC Monthly Oil Market report

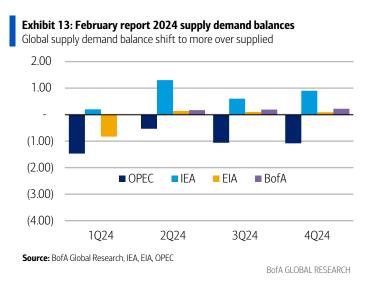
As with the EIA's STEO report OPEC's February MOMR is little changed from last month's print as 2024 balances move from a 900 kbd deficit to 800 kbd on a 100 kbd increase in non-OPEC supply. Supply growth is led by the US, Canada and Guyana. Demand estimates are unchanged with an upward revision in US demand offsetting a downward revision in OECD Europe. 2024 demand growth is estimated at 2.2mm bpd – some 1mm bpd above the IEA; in 2025 demand growth slows slightly to 1.8mm bpd led by non-OECD Asia at 1.7mm bpd. Non-OPEC supply growth is unchanged at 1.3 mmbd in 2025 lead by the US, Brazil, and Canada. Notably low is Guyana estimated at 70,000 bpd of growth but with Yellowtail expected to come online in 2025 that will add 250,000 bpd. Frankly OPEC's estimates simply look wrong versus the other two commentators.

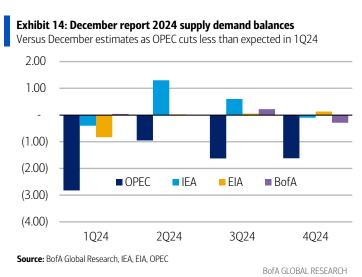


EIA short term energy outlook

2024 balances are unchanged, averaging a 100,000 bpd supply deficit that is 1Q weighted. Global consumption of liquid fuels increased from 1.3mm bpd in January's report to 1.4mm bpd noting that demand growth is led by non-OECD Asia, specifically China and India while OECD demand is expected to be relatively flat. Supply growth this year is mainly from non-OPEC sources that is expected to increase by 800 kbd y/y more than offsetting the OPEC production cuts. We note that from December to January OPEC production declined by 230,000 bpd but is expected to steepen in February and March maxing out at a 600 kbd decline. 2025 balances are expected to be in a slight surplus as the EIA estimates the OPEC will unwind some of its cuts but keep the market balanced.

The charts below show the change in outlook between the three agencies outlook in December and the latest February reports. On average, projected surpluses, or in the case of OPEC's report, balances have loosened further.





Critically the Feb 1st joint Ministerial Monitoring Committee of the OPEC+ organization reported sequential production fell by 220,000 bpd, some 550,000 bpd below the pledge made for 1Q24.

From December to January OPEC production fell by roughly 300 kbd but we note that this includes Libya which does not have a quota. The main producers who have not met their production quotas – the UAE (300,000 bpd), Iraq (230,000 bpd) and Kazakhstan (150,000 bpd) have pledged to make up any over production in the next four months. However, we note that Iraq has commented that it is producing at the 4 mmbd while OPEC and the IEA suggest it is above that level.

The result is that balances for the first part of the year have tipped into a slightly oversupplied market that compares to initial estimates of a deficit. While demand is expected to grow in 2024, there is little room for OPEC to add back supply, once its pledge to cut output in 1Q24 expires.

Footnote: Oil market technical and paper markets

Paper market net positions have split between bearish WTI, well below the 5 year range versus Brent which is more balanced as shorts have fallen off through the year and long positioning has followed seasonal trends and impacts of Red Sea freight that we see as transitory until logistics reroute.



Exhibit 15: WTI net managed money

WTI net managed falls below the 5 year range

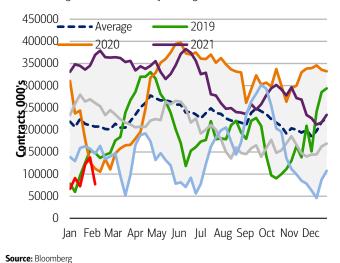
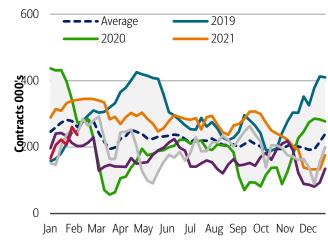


Exhibit 16: Brent net managed money

While Brent net managed money slightly declines



Source: Bloomberg

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Impact on Sector strategy

At the start of the 2023 we suggested the US oils will be rangebound, with trading opportunities that follow near dated commodity volatility. While M&A has boosted the broader sector, we believe this is still a good representation of the outlook. However, with the overhang from spare capacity, we continue to view backwardation as a material headwind to sector valuations.

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The charts below show the current backwardation in the WTI curve, and the move up since the start of the year and in the past week. However, notable is that spot WTI prices of \$78 fall below \$70 at end 2025 and is the limit of liquidity of the forward curve that we believe ethe market will reasonably discount.

At our base case, that assumes long term \$70 oil from 2026, we see average upside for the US oils at ~17%. For context we also the outcome at I/term \$80 WTI, which would require the market to 'discount' long term oil prices well above the current curve.

Exhibit 17: WTI forward curve 2025 WTI has risen by \$2.47 in a week

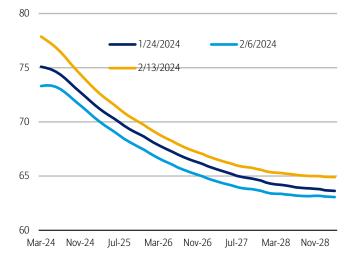
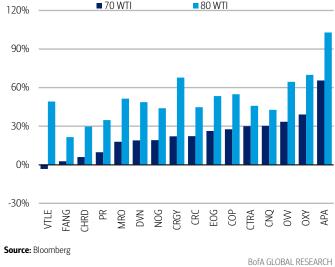


Exhibit 18: US oil E&P's at \$70 WTI I/term versus \$80 WTI

Average upside increases from 23% (\$70) to 53% (\$80)



Source: Bloomberg

Near term, the risk for oil prices is obviously framed by the ongoing Red Sea conflict and related logistical impacts.

However, aside from those names where we see attractive valuations, with conservative oil leverage and rate of change to drive market recognition of value, we are disinclined to chase this latest bounce that looks increasingly detached from a declining forward curve. Conversely, we see extraordinary weakness in US natural gas prices, well below the incremental cost of supply resetting risk / reward by forcing an activity response, already seen from the handful of some of the natural gas names that have reported so far. In our view, weak spot prices improve the risk / reward of positioning for changing US natural gas dynamics that remains a case of when, not if.

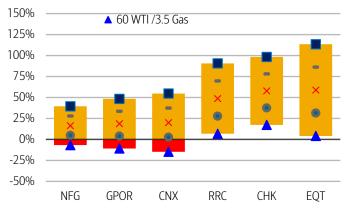
Our top sector ideas amongst the US oils remain led by XOM, CVX, OXY and CHK.

Exhibit 19: HH forward curve

2024 has collapsed: 2026 remains \$1.43 higher



Exhibit 20: US gas E&P's at \$4.00/mcf HH gas Average upside is 31%



Source: Bloomberg

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Exhibit 1: Company mentioned

Table including companies mentioned

			Rating	PO
Ticker	Price	Company		
Integrateds				
XOM	\$103.73	B-1-7	BUY	\$140
YSU	\$44.58	B-1-7	BUY	\$60
CVX	\$154.46	B-1-7	BUY	\$196
YIMO	\$81.30	B-1-7	BUY	\$92
Large Cap E&P				
APA	\$31.25	C-1-7	BUY	\$49
COP	\$111.00	B-1-7	BUY	\$140
YCNQ	\$84.75	B-1-7	BUY	\$105
OVV	\$44.13	C-1-7	BUY	\$56
OXY	\$60.11	C-1-7	BUY	\$80
CTRA	\$24.66	B-1-7	BUY	\$31
CRC	\$53.93	C-2-7	NEUTRAL	\$64
DVN	\$43.19	C-2-7	NEUTRAL	\$50
EOG	\$114.25	C-2-7	NEUTRAL	\$140
FANG	\$178.52	C-2-7	NEUTRAL	\$170
MRO	\$23.24	C-3-7	U/PERFORM	\$26
Gas levered E&P				
RRC	\$30.13	C-1-7	BUY	\$42
CHK	\$78.09	B-1-7	BUY	\$120
GPOR	\$134.58	C-2-9	NEUTRAL	\$151
Source: BofA Global Rese	arch			

DOE Review

US Crude inventories saw the largest build of the year increasing by 12 mmbbls with 7 mmbbls in PADD 3 and 3 mmbbls in PADD 2.

- Commercial inventories are still at the low end of the 5 year range but have recovered from lows due to the winter storm.
- Cushing also saw a slight build of 700 kbbls adding some relief but inventories are still below the 5 year range.

Production held flat while net import fell by 1.2 mmbd. However, refining utilization has been messy as big refineries such as VLO's Port Author and BP's Whiting refineries have had prolonged downtime while smaller refineries such as DK's El Dorado refineries have had recent issues adding more downward pressure on refining utilization that has dropped from 82.4% to 80.6% w/w.

Distillate inventories fell by 1.9 mmbbls while product supplied fall by 600 kbd w/w. Notable is the 721 kbbl build in PADD 1 that adds more relief to tight inventories. Gasoline is a similar story as it declined by 3.7 mmbbls that we see as the start of the decline in inventories ahead of the switch to summer grade gasoline but also watch the Whiting refinery which can produce upwards of 230 kbd of gasoline that is still down and critical to PADD 2.

All-in-all we see product inventories struggling to build given the heavy downtime that has had the opposite effect on crude inventories which is the main driver of the recent builds we are seeing.

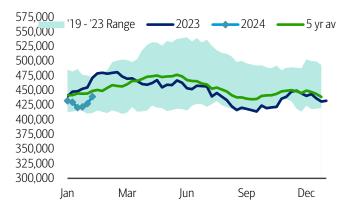
Global oil & product inventories fell by 9.36 mmbbls lead by declines in APAC, MENA, and Europe (see prior Kayrros charts). Since the start of the year inventories have averaged a 740 kbd decline. However notable is, crude on water has continued to rise now at the top end of the recent range which we attribute to oil tankers being rerouted from the Suez Canal to the Cape of Good Hope. As trade flow readjust once again we see more barrels being tied up on the water as ships are taking a route that takes ~14 to 21 days versus 3. Critically, we see this raising the clearing price for a ship to reroute that could exacerbate volatility and limit optionality in the complex.



Crude oil stocks

Exhibit 22: Crude Stocks

Crude Stocks 2.8% Higher w/w and -9.3% Lower y/y

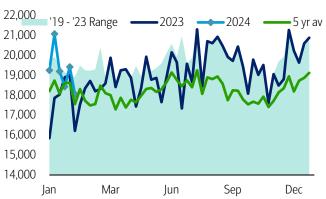


Source: DOE

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Exhibit 24: Crude Implied Demand (000 bpd)

Crude Implied Demand -7.0% Lower w/w and 19.8% Higher y/y

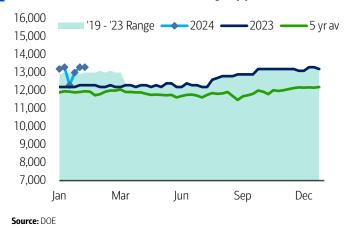


Source: DOE

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Exhibit 26: Crude Production

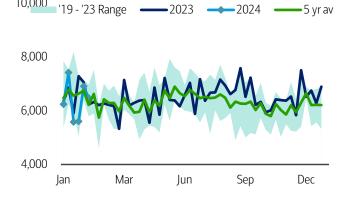
Crude Production 0.0% in linew/w and 8.1% Higher y/y



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Exhibit 23: Crude Imports

Crude Imports -6.3% Lower w/w and 10.8% Higher y/y

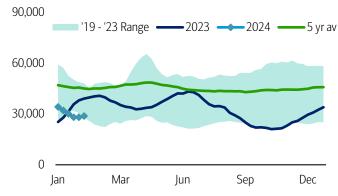


Source: DOE

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Exhibit 25: Cushing Inventory

Cushing Inventory 2.5% Higher w/w and -29.3% Lower y/y

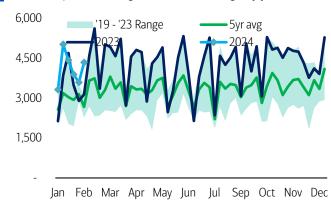


Source: DOE

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Exhibit 27: Crude Oil Exports

Crude Oil Exports 20.9% Higher w/w and 14.3% Higher y/y



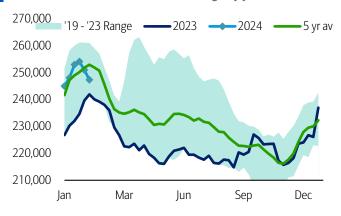
Source: DOE



Gasoline stocks

Exhibit 28: Gasoline Stocks

Gasoline Stocks -1.5% Lower w/w and 3.7% Higher y/y

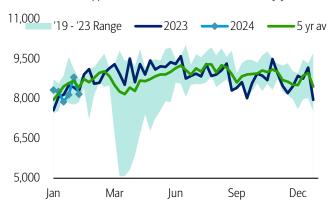


Source: DOE

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Exhibit 30: Gasoline Product Supplied (000 bpd)

Gasoline Product Supplied -7.3% Lower w/w and 6.4% Lower y/y

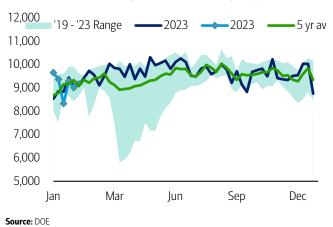


Source: DOE

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Exhibit 32: Gasoline Production

Gasoline Production 1.8% Higher w/w and -0.9% Higher y/y



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Exhibit 29: Gasoline Imports

Gasoline Imports -18.7% Lower w/w and -9.0% Lower y/y

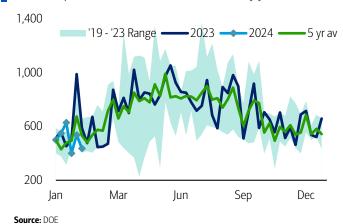
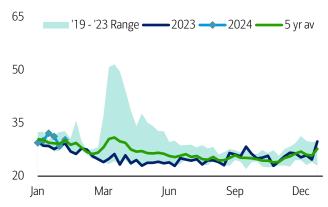


Exhibit 31: Gasoline Demand Cover

Gasoline Demand Cover 6.3% Higher w/w and -2.5% Higher y/y



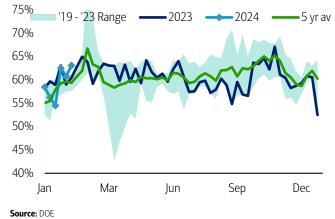
Source: DOE

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Exhibit 33: Gasoline Yield

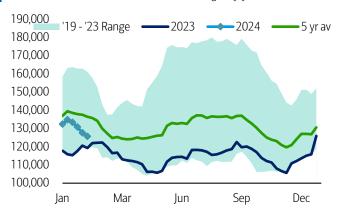
Gasoline Yield 5.6% Higher w/w and -0.8% Higher y/y



Distillate stocks

Exhibit 34: Distillate Stocks

Distillate Stocks -1.5% Lower w/w and 7.0% Higher y/y

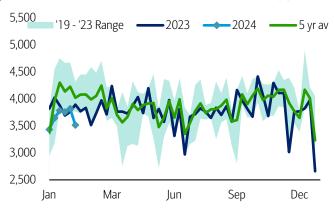


Source: DOE

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Exhibit 36: Distillate Product Supplied (000 bpd)

Distillate Product Supplied -7.9% Lower w/w and -2.0% Lower y/y

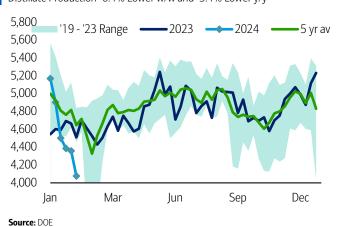


Source: DOE

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Exhibit 38: Distillate Production

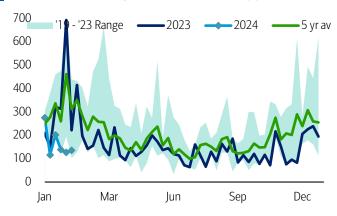
Distillate Production -6.4% Lower w/w and -3.4% Lower y/y



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Exhibit 35: Distillate Imports

Distillate Imports 7.1% Higher w/w and -43.0% Lower y/y



Source: DOE

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Exhibit 37: Distillate Demand Cover

Distillate Demand Cover 7.0% Higher w/w and 9.2% Higher y/y



Source: DOE

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Exhibit 39: Distillate Yield

Distillate Yield -4.5% Lower w/w and -2.2% Lower y/y



Source: DOE

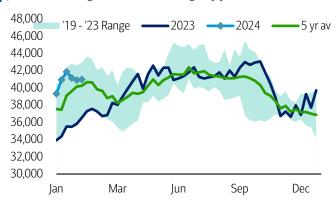
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Jet stocks

Exhibit 40: Jet Stocks

Jet Stocks 0.2% Higher w/w and 11.9% Higher y/y

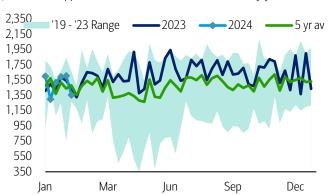


Source: DOE

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Exhibit 42: Jet Implied Demand (000 bpd)

Jet Product Supplied -15.6% Lower w/w and 11.4% Lower y/y

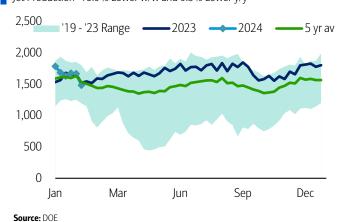


Source: DOE

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Exhibit 44: Jet Production

Jet Production -10.9% Lower w/w and 9.5% Lower y/y

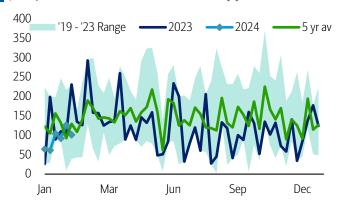


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Exhibit 41: Jet Imports

Jet Imports -19.8% Lower w/w and -45.5% Lower y/y

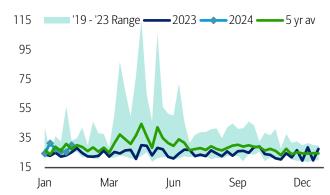


Source: DOE

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Exhibit 43: Jet Demand Cover

Jet Demand Cover 18.7% Higher w/w and 0.5% Higher y/y

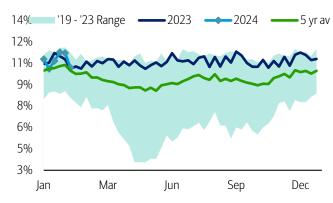


Source: DOE

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Exhibit 45: Jet Yield

Jet Yield -9.1% Lower w/w and 10.9% Higher y/y

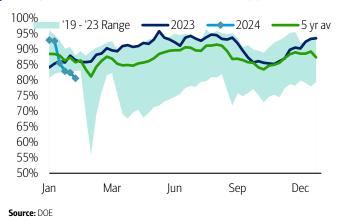


Source: DOE

Refinery Utilization

Exhibit 46: Utilization

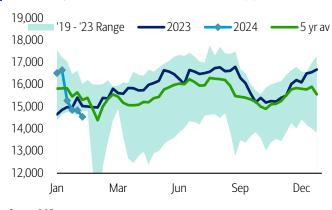
Refinery Utilization -2.2% Lower w/w and -4.7% Lower y/y



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Exhibit 47: Crude Throughput

Crude Throughput -2.0% Lower w/w and -1.2% Lower y/y

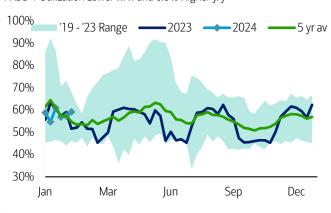


Source: DOE

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Exhibit 48: PADD I Utilization

PADD 1 Utilization Lower w/w and 6.8% Higher y/y



Source: DOE

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Exhibit 49: PADD II Utilization

PADD 2 Utilization 4.3% Higher w/w and -10.8% Lower y/y

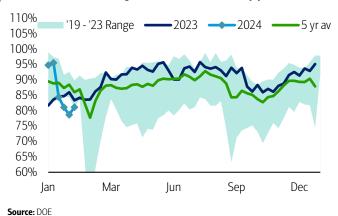


Source: DOE

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Exhibit 50: PADD III Utilization

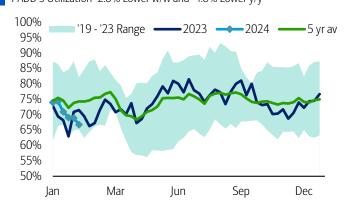
PADD 3 Utilization 3.4% Higher w/w and -11.1% Lower y/y



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Exhibit 51: PADD V Utilization

PADD 5 Utilization -2.8% Lower w/w and -4.8% Lower y/y



Source: DOE

Crude demand coverage

Exhibit 52: US Crude Demand Cover US Crude Demand Cover 4.9% Higher w/w and -8.2% Lower y/y 55 50 45 40 35 30 25 20 15

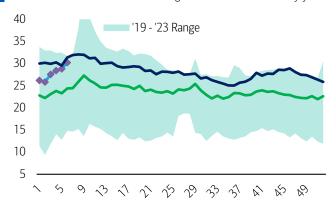
Source: DOE

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Exhibit 53: PADD I Crude Demand Cover

PADD 1 Crude Demand Cover 6.3% Higher w/w and -8.3% Lower y/y

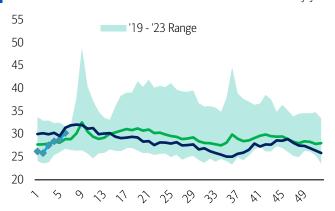


Source: DOE

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Exhibit 55: PADD III Crude Demand Cover

PADD 3 Crude Demand Cover -10.6% Lower w/w and 10.5% Lower y/y

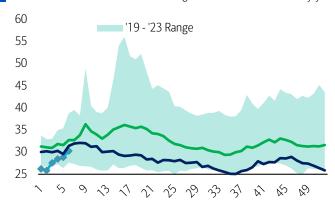


Source: DOE

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Exhibit 54: PADD II Crude Demand Cover

PADD 2 Crude Demand Cover 17.4% Higher w/w and -16.9% Lower y/y

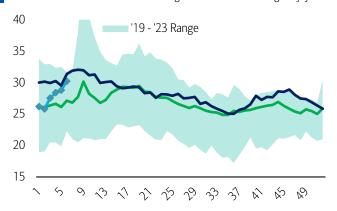


Source: DOE

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Exhibit 56: PADD V Crude Demand Cover

PADD 5 Crude Demand Cover 6.4% Higher w/w and -4.4% Higher y/y

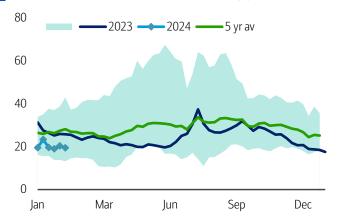


Source: DOE

NGL pricing

Exhibit 57: Ethane

Ethane Price is -8.7% Lower w/w and -17.6% Lower y/y



Source: Bloomberg

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Exhibit 59: Butane

Butane Price is 3.6% Higher w/w and -26.4% Lower y/y

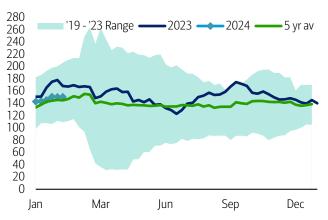


Source: Bloomberg

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Exhibit 61: Natural Gasoline

Natural Gasoline Price is 7.2% Higher w/w and -14.1% Lower y/y

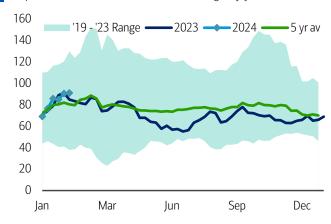


Source: Bloomberg

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Exhibit 58: Propane

Propane Price is -0.5% Lower w/w and 8.3% Higher y/y

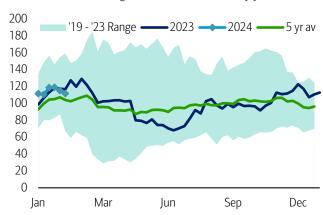


Source: Bloomberg

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Exhibit 60: Isobutane

Isobutane Price is 0.9% Higher w/w and -14.3% Lower y/y

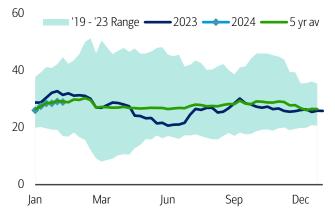


Source: Bloomberg

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Exhibit 62: NGL Composite Barrel

NGL Composite Barrel is -71.3% Lower w/w and -15.6% Lower y/y



Source: Bloomberg

Crack spreads

Exhibit 63: Gulf Coast 321

Gulf Coast 321 LLS -12.1% Lower w/w and -6.1% Lower y/y

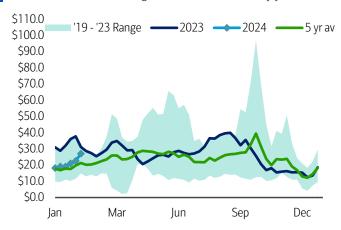


Source:Bloomberg

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Exhibit 64: West Coast 321

West Coast 321 ANS 72.5% Higher w/w and -46.7% Lower y/y

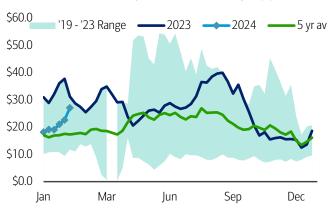


Source:Bloomberg

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Exhibit 65: Northeast 321

New York 321 Brent 24.0% Higher w/w and -14.1% Higher y/y



Source:Bloomberg

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Exhibit 66: Midcont 321

Mid Cont 321 WTI 91.1% Higher w/w and -63.3% Lower y/y

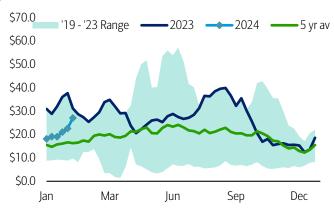


Source:Bloomberg

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Exhibit 67: NWE 321

Northwest Europe 321 Brent -29.5% Lower w/w and -10.7% Lower y/y

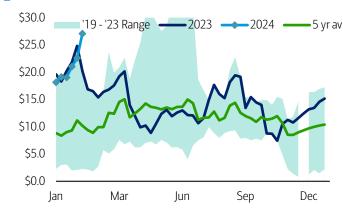


Source:Bloomberg

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Exhibit 68: Dubai 321

Dubai 321 15.4% Higher w/w and -6.9% Higher y/y

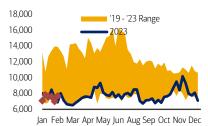


Source:Bloomberg

Regional Breakdown

Exhibit 69: PADD I Crude Stock

PADD 1 Crude Stock -12.1% Lower w/w and - $17.8\% \ y/y$

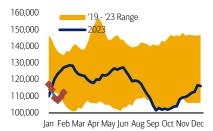


Source: EIA

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Exhibit 72: PADD 2 Crude Stock

PADD 2 Crude Stock -2.5% Lower w/w and - $18.6\%\,\text{y/y}$

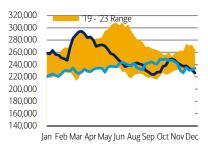


Source: EIA

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Exhibit 75: PADD 3 Crude Stock

PADD 3 Crude Stock -1.2% Lower w/w and -13.4% y/y

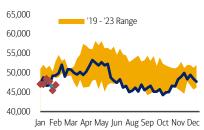


Source: EIA

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Exhibit 78: PADD 5 Crude Stock

PADD 5 Crude Stock 6.1% Higher w/w and -2.0% y/y



Source: EIA

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Exhibit 70: PADD I Gasoline Stock

PADD 1 Gasoline Stock 1.2% Higher w/w and -7.3% y/y

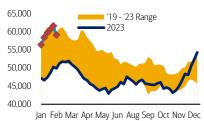


Source: EIA

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Exhibit 73: PADD 2 Gasoline Stock

PADD 2 Gasoline Stock 7.5% Higher w/w and - 4.1% y/y

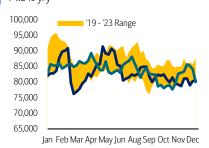


Source: EIA

BofA GLOBAL RESEARCH

Exhibit 76: PADD III Gasoline Stocks

PADD 3 Gasoline Stock 2% Higher w/w and - $14.5\% \ \text{y/y}$

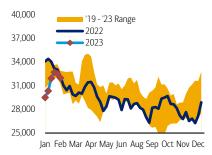


Source: EIA

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Exhibit 79: PADD 5 Gasoline Stock

PADD 5 Gasoline Stock 6.5% Higher w/w and - 13.0% y/y

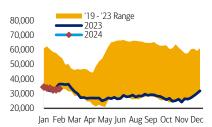


Source: EIA

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Exhibit 71: PADD I Distillate Stock

PADD 1 Distillate Stock -0.3% Lower w/w and - $32.7\% \ y/y$

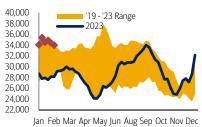


Source: EIA

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Exhibit 74: PADD 2 Distillate Stock

PADD 2 Distillate Stock 6.7% Higher w/w and - 1.4% y/y

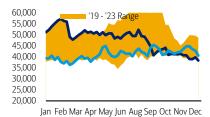


Source: EIA

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Exhibit 77: PADD III Distillate Stocks

PADD 5 Distillate Stock 1% Higher w/w and - 1.3% y/y



Source: EIA

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Exhibit 80: PADD 5 Distillate Stock

PADD 5 Distillate Stock 1.6% Higher w/w and - $15.2\% \ y/y$



Source: EIA



Amsterdam, Rotterdam, Antwerp

Exhibit 81: Total ARA Petroleum Stocks (thousand barrels)

Inventories -1% lower w/w 130,000 2020 2021 2024 2023 2022 120,000 110,000 100.000 90,000 80,000

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

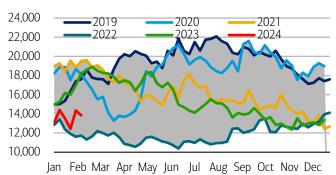
Source: Genscape, PJK

70.000

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Exhibit 83: ARA Gasoil Stocks (thousand barrels)

Inventories -4% lower w/w

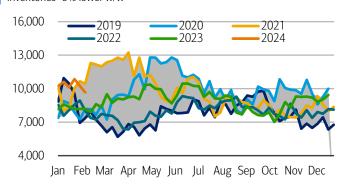


Source: Genscape, PJK

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Exhibit 85: ARA Fuel Oil Stocks (thousand barrels)

Inventories -6% lower w/w

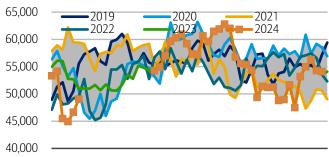


Source: Genscape, PJK

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Exhibit 82: Genscape ARA Crude Stocks (thousand barrels)

Inventories 5% higher w/w



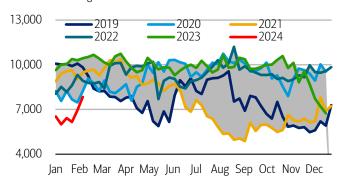
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Source: Genscape, PJK

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Exhibit 84: ARA Gasoline Stocks (thousand barrels)

Inventories 13% higher w/w



Source: Genscape, PJK

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Exhibit 86: ARA Jet Stocks (thousand barrels)

Inventories -8% lower w/w



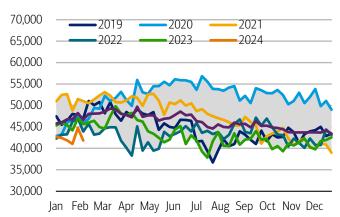
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Source: Genscape, PJK

Singapore

Exhibit 87: Total Singapore Light Distillate, Middle Distillate and **Residue Stocks (thousand barrels)**

Inventories -7% lower w/w

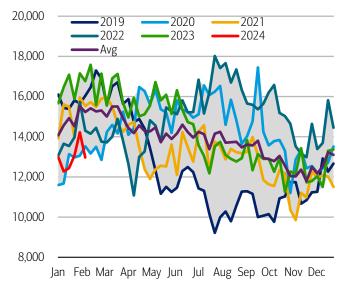


Source: International Enterprise

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Exhibit 89: Singapore Light Distillate Stocks (thousand barrels)

Inventories -9% lower w/w

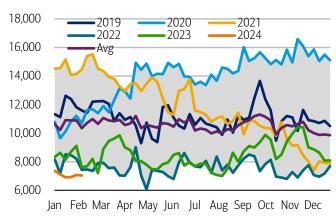


Source: International Enterprise

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Exhibit 88: Singapore Middle Distillate Stocks (thousand barrels)

Inventories -1% lower w/w

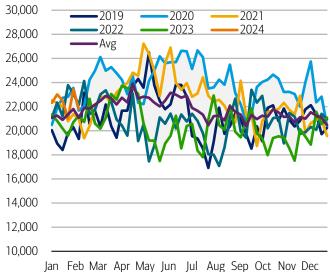


Source: International Enterprise

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Exhibit 90:

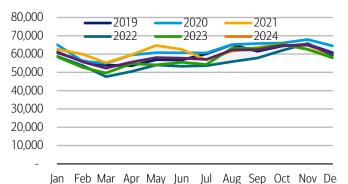
Inventories 12% higher w/w



Japan

Exhibit 91: Japan Heavy Fuel Oil Stock (thousand barrels)

Inventories 1% higher w/w

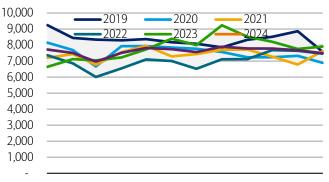


Source: Ministry of Economy Trade and Industry of Japan

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Exhibit 93: Japan Heavy Fuel Oil Stock (thousand barrels)

Inventories 1% higher w/w



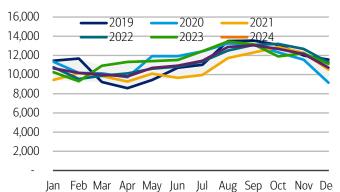
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov De

Source: Ministry of Economy Trade and Industry of Japan

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Exhibit 95: Japan Heavy Fuel Oil Stock (thousand barrels)

Inventories 1% higher w/w

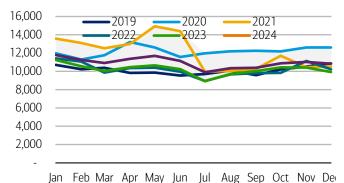


Source: Ministry of Economy Trade and Industry of Japan

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Exhibit 92: Japan Heavy Fuel Oil Stock (thousand barrels)

Inventories 1% higher w/w

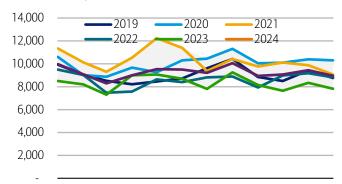


Source: Ministry of Economy Trade and Industry of Japan

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Exhibit 94: Japan Heavy Fuel Oil Stock (thousand barrels)

Inventories 1% higher w/w



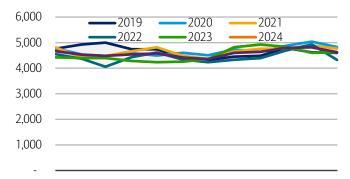
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov De

Source: Ministry of Economy Trade and Industry of Japan

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Exhibit 96: Japan Heavy Fuel Oil Stock (thousand barrels)

Inventories 1% higher w/w



Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov De

Source: Ministry of Economy Trade and Industry of Japan



Exhibit 96: Reported Global Oil and Product Stocks

Crude oil Increased 18,653 thousand barrels and Products Decreased -9,219 thousand barrels

Current

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	Crude	Products	Light Distillates	Middle Distillates	Heavy Distillates / Residue	For Week Endec
US	798,213	441,637	247,330	166,620	27,687	2/9/2024
Japan	68,899	88,756	34,799	34,593	19,363	2/3/2024
ARA		36,108	7,836	18,611	9,661	2/8/2024
Singapore		41,807	12,965	7,039	21,803	2/7/2024
Fujairah		19,152	6,932	2,868	9,352	2/12/2024
Previous						
	Crude	Products	Light Distillates	Middle Distillates	Heavy Distillates / Residue	
US	785,449	446,945	250,988	168,468	27,489	
Japan	63,010	89,482	34,724	35,327	19,430	
ARA		36,716	6,949	19,527	10,240	
Singapore		44,745	14,221	7,085	23,439	
Fujairah		18,791	6,662	2,539	9,590	
Stock Change						
· ·	Crude	Products	Light Distillates	Middle Distillates	Heavy Distillates / Residue	
US	12,764	(5,308)	(3,658)	(1,848)	198	
Japan	5,889	(726)	74	(734)	(67)	
ARA		(608)	887	(916)	(579)	
Singapore		(2,938)	(1,256)	(46)	(1,636)	
Fujairah		361	270	329	(238)	
Plus / Minus	18,653	(9,219)	(3,683)	(3,215)	(2,322)	

Source: EIA, International Enterprise Singapore, Jetroleum Association of Japan, FEDCom/S&P Global Platts

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Price objective basis & risk

APA Corporation (APA)

Our \$49 PO assumes ex growth discounted cash flow value, which assumes \$75 Brent and \$70 West Texas Intermediate (WTI) long term. We also assume long-term Henry Hub natural gas as \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 8.4%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

Upside risks to achieving our price objective are 1) higher commodity prices, 2) exploration success in Suriname, 3) exploration success and increased drilling activity in Egypt. Downside risks to achieving our price objective are (1) lower commodity prices, (2) Egyptian political risk, (3) exploration risk in Suriname.

California Resources Corporation (CRC)

Our price objective of \$64/sh is based on ex growth DCF value using BofA's base case commodity view through 2024 and a Long-term (2025+) oil price assumption of \$75 Brent. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 9.6%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

Upside risks to our PO are a higher sustaining commodity price than we have in our base case and faster than expected monetization of carbon capture/sequestration technology/acumen. Downside risks to our price objective are (1) regulatory risks in California, (2) project timing delays could impact our growth rates, and (3) as an oil leveraged company, a weak oil price environment would affect our estimates and



valuation. (4) A slower than expected monetization of carbon capture/sequestration technology/acumen.

Canadian Natural Resources (YCNQ / CNQ)

Our C\$105 / US\$79 assumes ex growth discounted cash flow value, which assumes \$75 Brent and \$70 WTI long-term. We also assume long term Henry Hub natural gas as \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 8.8%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation) and (4) potential currency exchange risk. Upside risks to our price objective are (1) potentially improving cost of capital as company deleverages balance sheet and (2) higher oil & gas prices.

Chesapeake Energy (CHK)

Our price objective of \$120/sh assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.2%, which is based on the BofA Strategy team's assumed risk premium and a five-year monthly beta.

Downside risks to our price objective are: E&P companies, in general, are subject to commodity price volatility, commensurate slowdowns in development drilling, and potential investor apathy. Company-specific downside risks to our price objective are: (1) Potential M&A as the company does consider potential acquisitions, (2) potential regional bottleneck, and (3) a production mix heavily weighted towards natural gas, making it more susceptible if commodity prices were to decline.

Upside risks to our PO 1) higher potential long-term gas and 2) the debottlenecking of US gas as LNG infrastructure is built along the Gulf Coast.

Chevron Corp. (CVX)

Our price objective of \$196/sh assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.7%, which is based on the BofA Strategy team's assumed risk premium and a five-year monthly beta.

The risks to our price objective are: (1) commodity price volatility, (2) operational execution particularly on new projects, and (3) inability to capture the price environment due to cost pressures (opex, capex and taxation), unseen integration issues with the recently announced acquisition. Upside risks to our price objective are higher oil prices and lower cap ex spending.

ConocoPhillips (COP)

Our price objective of \$140/share assumes ex growth discounted cash flow value, which assumes \$75 Brent and \$70 West Texas Intermediate (WTI) long term. We also assume long-term Henry Hub natural gas as \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.6%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, and (3) inability to capture the price environment due to cost pressures (operating expense, capex, and taxation). Upside risks to our price objective are higher oil prices and lower capital expenditure spending.



Coterra Energy Inc (CTRA)

Our price objective of \$31/sh assumes ex growth discounted cash flow value, which assumes \$75 Brent and \$70 West Texas Intermediate (WTI) long term. We also assume long-term Henry Hub natural gas as \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 6.8%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation) and (4) lower natural gas prices compared to our estimates. Upside risks to our price objective are higher oil & gas prices, unexpected narrowing of basis differential and lower cap ex spending.

Devon Energy Corp. (DVN)

Our price objective of \$50/sh assumes ex growth discounted cash flow value, which assumes \$75 Brent and \$70 West Texas Intermediate (WTI) long term. We also assume long-term Henry Hub natural gas as \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of about 8%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, and (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation). Upside risks to our price objective are higher oil & gas prices.

Diamondback Energy Inc. (FANG)

Our price objective of \$170/sh assumes ex growth discounted cash flow value, which assumes \$75 Brent and \$70 West Texas Intermediate (WTI) long term. We also assume long-term Henry Hub natural gas as \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 8.2%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

Downside risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, and (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation). Upside risks to our price objective are higher oil & gas prices, new & unexplored plays, and further technological advances that add downside pressures to costs.

EOG Resources (EOG)

Our price objective of \$140/sh assumes ex growth discounted cash flow value, which assumes \$75 Brent and \$70 West Texas Intermediate (WTI) long term. We also assume long-term Henry Hub natural gas as \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 8.2%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, and (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation). Upside risks to our price objective are higher oil & gas prices.

ExxonMobil Corp. (XOM)

Our price objective of \$140/sh assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.25. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.7%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.



The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its growth targets, and (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation). Upside risks to our price objective are higher oil & gas prices.

Gulfport Energy Corporation (GPOR)

Our \$151PO is based on a DCF, which assumes long-term \$4.00 HH / \$70 WTI / \$75 Brent and an 9% WACC

Downside risks to our price objective are (1) potential acquisitions risk, (2) regional pipeline disruptions (3), and a potential equity overhang

Upside risks to our price objective are (1) higher gas prices, (2) better visibility on extent of 'core' inventory, and (3) further cost deflation

Imperial Oil (YIMO / IMO)

Our price objective of C\$92 / US\$69 assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 8.1%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

Risks are: (1) oil price risk, (2) tax policy in the regions in which it operates, (3) environmental risks related to higher taxes, fines, etc., (4) project implementation risk, and (5) a potential shortage of pipeline capacity that can occur in periods of high output.

Marathon Oil Corp. (MRO)

Our price objective of \$26/sh assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.6%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation), and (4) limited visibility around long-term upstream developments necessary to sustain production. Upside risks to our price objective are higher oil & gas prices.

Occidental Petroleum Corp. (OXY)

Our price objective of \$80/sh assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.9%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

Downside risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, and (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation).

Upside risks to our price objective are higher oil & gas prices.

Ovintiv Inc (OVV / YOVV)

Our price objective of \$56 US (\$75 CN) assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 8.5%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.



The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation) and (4) potential currency exchange risk and (5) is contingent upon the acquisition of certain Midland Basin assets closing by mid-2023. Upside risks to our price objective are (1) potentially improving cost of capital as company deleverages balance sheet and (2) higher oil & gas prices.

Range Resources Corp (RRC)

Our \$42 PO is based on ex growth discounted cash flow value, which assumes long-term $4.00 \, \text{HH} / 70 \, \text{WTI} = 75 \, \text{Brent}$. We apply a long-term (post tax) WACC of approximately 7.3%, which is based on the BofA strategy team's assumed risk premium and a 5-year monthly beta.

Downside risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, and (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation). Upside risks to our price objective are (1) higher gas prices, (2) potential asset sales that improve leverage outlook, and (3) further cost reductions

Suncor (YSU / SU)

Our price objective of $60 \, \text{CN} / 45 \, \text{US}$ assumes \$75 Brent / \$70 WTI / \$4.0 HH long-term. We apply a long-term (post tax) WACC of approximately 9.1%, which is based on the BofA strategy team's assumed risk premium and a 5-year monthly beta

The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, and (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation). Upside risks to our price objective are higher oil & gas prices and execution on operational and safety targets laid out as part of the 2025 plan. Downside risks to our PO for Suncor are (1) lower commodity prices (2) deterioration in refining margins, (3) interruption of production at units related to operational issues, fires, etc., (4) tax policy in the regions in which it operates, (5) A lack of execution on operational targets laid out in its 2025 plan

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US - Large Cap Oils Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	APA Corporation	APA	APA US	Doug Leggate
	Canadian Natural Resources	YCNQ	CNQ CN	Doug Leggate
	Canadian Natural Resources	CNO	CNQ US	Doug Leggate
	Chesapeake Energy	CHK	CHK US	Doug Leggate
	Chevron Corp.	CVX	CVX US	Doug Leggate
	ConocoPhillips	COP	COPUS	Doug Leggate
	Coterra Energy Inc	CTRA	CTRA US	Doug Leggate
	EQT Corporation	EOT	EQT US	John H. Abbott
	ExxonMobil Corp.	XOM	XOM US	Doug Leggate
	Granite Ridge Resources, Inc	GRNT	GRNT US	John H. Abbott
	Imperial Oil	IMO	IMO US	Doug Leggate
	Imperial Oil	YIMO	IMO CN	Doug Leggate
	Kimbell Royalty Partners	KRP	KRP US	John H. Abbott
	Occidental Petroleum Corp.	OXY	OXY US	Doug Leggate
	Ovintiv Inc	YOVV	OVV CN	Doug Leggate
	Ovintiv Inc	OVV	OW US	Doug Leggate
	Range Resources Corp	RRC	RRC US	Doug Leggate
	Suncor	YSU	SU CN	Doug Leggate
	Suncor	SU	SU US	Doug Leggate
	Santo		33 03	2006 2066000
NEUTRAL				
	California Resources Corporation	CRC	CRC US	Kalei Akamine
	CNX Resources	CNX	CNX US	John H. Abbott
	Delek US Holdings, Inc.	DK	DK US	Doug Leggate
	Devon Energy Corp.	DVN	DVN US	Doug Leggate
	Diamondback Energy Inc.	FANG	FANG US	Doug Leggate
	EOG Resources	EOG	EOG US	Doug Leggate
	Gulfport Energy Corporation	GPOR	GPOR US	Doug Leggate
	HF Sinclair Corporation	DINO	DINO US	Doug Leggate
	Marathon Petroleum Company	MPC	MPC US	Doug Leggate
	PBF Energy	PBF	PBF US	Doug Leggate
	Permian Resources Corporation	PR	PR US	Doug Leggate
	Phillips 66	PSX	PSX US	Doug Leggate
	Valero Energy Corp.	VLO	VLO US	Doug Leggate
UNDERPERFORM				
	Chord Energy Corporation	CHRD	CHRD US	John H. Abbott
	Crescent Energy Company	CRGY	CRGY US	John H. Abbott
	Marathon Oil Corp.	MRO	MRO US	Doug Leggate
	National Fuel Gas Company	NFG	NFG US	John H. Abbott
	Northern Oil and Gas	NOG	NOG US	John H. Abbott
	Vital Energy Inc	VTLE	VTLE US	John H. Abbott
RSTR				
ROIR	Diagram Material Danser	DVD	DVD LIC	D
	Pioneer Natural Resources	PXD	PXD US	Doug Leggate

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Energy Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	83	61.48%	Buy	64	77.11%
Hold	28	20.74%	Hold	21	75.00%
Sell	24	17.78%	Sell	18	75.00%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22 84%	Sell	383	47.46%

R1 Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.



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Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

 Buy
 ≥ 10%
 ≤ 70%

 Neutral
 ≥ 0%
 ≤ 30%

 Underperform
 N/A
 ≥ 20%

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