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Magnolia Oil and Gas

Improved inventory visibility extends long term FCF, initiate at Buy, PO $25

Initiating Coverage: BUY | PO: 25.00 USD | Price: 21.99 USD

26 February 2024

Equity

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Differentiated versus SMID cap peers

We initiate coverage of Magnolia Oil & Gas (MGY) at a Buy rating with a PO of $25, implying 17% TSR. Since inception MGY has been differentiated by a strategy that prioritizes capital discipline and cash returns. Amidst a sector consolidation trend that we believe is driven by inventory accumulation, MGY's outlook is dependent on resource delineation that can more than double the 10 years we believe is a reasonable base case. With our valuation defined by free cashflow and one of the most capital efficient business models in the industry that caps spending at 55% of EBITDAx, we believe our assessment of fair value of $25/sh on a DCF basis (long term $70 WTI and $4.00 HH) is a starting point that has significant upside as resource visibility improves.

Conservative strategy, material upside

MGY is a mid-cap ($4.5bn) oil and gas company focused in the Eagle Ford shale in South Texas that was founded by Steve Chazen, legendary OXY CEO, who built the company around an operating model that now defines the industry. MGY was the original 'Capital Discipline' play, with a framework anchored on maintaining a strong balance sheet and spending capped as a proportion of EBITDAx. Growth is an output, with the emphasis on cash returns predominantly through share buybacks and targeting a sustainable and growing dividend. Since 2019 management has reduced its share count by 20%. By our estimates MGY can buyback over 50% of its market capitalization over the next 5 years while growing production.

Initiate at Buy, $25 PO: acreage delineation is an upside

Critically, an acreage position that spans 498,000 acres has just 150,000 allocated to a defined development plan. However, with current completion designs versus legacy Eagle Ford development, management's definition of Giddings as a re-emerging area that can ultimately deliver 1,000 drilling locations or a ~20-year backlog is an upside case that is a free option today. At current levels we see MGY with competitive upside vs SMID cap peers, with continuation of the successful resource assessment that comes with continued D&C operational execution we see every quarter the catalyst we believe can support share outperformance. Our $25 PO assumes a 10 year inventory, long-term $70WTI / $4.00 HH and a 8% WACC reflecting a defensive capital structure.

Estimates (Dec) (US$)	2022A	2023A	2024E	2025E	2026E
EPS	4.03	1.90	2.14	2.28	2.57
GAAP EPS	5.59	2.29	2.31	2.47	2.81
EPS Change (YoY)	NA	-52.9%	12.6%	6.5%	12.7%
Consensus EPS (Bloomberg)			2.03	2.29	2.43
DPS	0.50	0.46	0.52	0.57	0.63
Valuation (Dec)					
P/E	5.4x	11.5x	10.2x	9.6x	8.5x
GAAP P/E	3.9x	9.5x	9.5x	8.8x	7.8x
Dividend Yield	2.3%	2.1%	2.4%	2.6%	2.9%
EV / EBITDA*	3.0x	4.6x	4.2x	4.0x	3.8x
Free Cash Flow Yield*	19.7%	11.2%	11.2%	11.6%	13.1%

* For full definitions of *iQmethod*SM measures, see page 21.

Stock Data

Price	21.99 USD
Price Objective	25.00 USD
Date Established	26-Feb-2024
Investment Opinion	C-1-7
52-Week Range	18.72 USD - 24.02 USD
Mrkt Val (mn) / Shares Out (mn)	4,012 USD / 182.5
Free Float	93.6%
Average Daily Value (mn)	59.85 USD
BofA Ticker / Exchange	MGY / NYS
Bloomberg / Reuters	MGY US / MGY.N
ROE (2024E)	19.7%
Net Dbt to Eqty (Dec-2023A)	-0.4%
ESGMeter™	Medium

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".

WTI – West Texas Intermediate
boepd – barrel of oil equivalent per day
EBITDAX –EBITDA before exploration
HH – Henry Hub

Timestamp: 26 February 2024 05:43PM EST

iQprofile℠ Magnolia Oil and Gas

iQ**method* ℠ **– Bus Performance

(US$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	51.4%	17.9%	16.4%	15.4%	15.3%
Return on Equity	54.4%	19.8%	19.7%	18.7%	18.7%
Operating Margin	63.4%	42.7%	40.5%	38.7%	39.4%
Free Cash Flow	786	447	448	462	521

iQ**method* ℠ **– Quality of Earnings

(US$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	1.7x	2.4x	2.4x	2.4x	2.4x
Asset Replacement Ratio	1.9x	1.3x	1.2x	1.1x	1.1x
Tax Rate	0.6%	19.9%	22.0%	22.0%	22.0%
Net Debt-to-Equity Ratio	-16.4%	-0.4%	-8.5%	-15.8%	-24.1%
Interest Cover	45.8x	NM	NM	NA	NA

Income Statement Data (Dec)

(US$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	1,694	1,227	1,326	1,403	1,481
% Change	57.1%	-27.6%	8.1%	5.8%	5.6%
Gross Profit	1,074	523	537	543	583
% Change	78.2%	-51.2%	2.5%	1.2%	7.4%
EBITDA	1,352	883	960	1,005	1,063
% Change	65.3%	-34.6%	8.6%	4.7%	5.8%
Net Interest & Other Income	(17)	15	(3)	6	15
Net Income (Adjusted)	**757**	**358**	**385**	**394**	**427**
% Change	**NA**	**-52.7%**	**7.7%**	**2.3%**	**8.3%**

Free Cash Flow Data (Dec)

(US$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	1,050	432	416	428	467
Depreciation & Amortization	243	325	402	438	456
Change in Working Capital	46	(14)	0	0	0
Deferred Taxation Charge	(66)	75	77	80	87
Other Adjustments, Net	(23)	54	17	18	19
Capital Expenditure	(465)	(425)	(464)	(503)	(507)
Free Cash Flow	**786**	**447**	**448**	**462**	**521**
% Change	**74.2%**	**-43.1%**	**0.2%**	**3.1%**	**12.8%**
Share / Issue Repurchase	(352)	(205)	(145)	(140)	(134)
Cost of Dividends Paid	(75)	(88)	(94)	(99)	(105)
Change in Debt	0	0	0	0	0

Balance Sheet Data (Dec)

(US$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	675	401	565	740	968
Trade Receivables	171	0	0	0	0
Other Current Assets	5	190	190	190	190
Property, Plant & Equipment	1,533	2,052	2,115	2,179	2,230
Other Non-Current Assets	189	113	113	113	113
Total Assets	**2,573**	**2,756**	**2,982**	**3,222**	**3,502**
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	340	315	315	315	315
Long-Term Debt	390	393	393	393	393
Other Non-Current Liabilities	102	166	243	323	410
Total Liabilities	**832**	**874**	**951**	**1,030**	**1,117**
Total Equity	**1,740**	**1,883**	**2,032**	**2,191**	**2,384**
Total Equity & Liabilities	**2,573**	**2,756**	**2,982**	**3,222**	**3,502**

* For full definitions of ***iQ**method*℠ measures, see page 21.

Company Sector

Oil & Gas Producers

Company Description

MGY is SMID cap E&P with operations focused in the general Eagle Ford trend in core Karnes county and the Giddings field

Investment Rationale

Our Buy rating on MGY reflects are base case of 10 year of inventory where continued operational execution and acreage delineation is the catalyst to drive market recognition of value

Stock Data

Average Daily Volume	2,721,724

Quarterly Earnings Estimates

	2023	2024
Q1	0.46A	0.45E
Q2	0.40A	0.54E
Q3	0.54A	0.58E
Q4	0.50A	0.56E

Magnolia Oil & Gas

Differentiated amongst peers: initiate at Buy, PO $25

We initiate coverage of Magnolia Oil & Gas with a Buy rating and Price Objective of $25/sh. Our base case assumes long term $70 WTI and $4.00 HH. MGY is a mid-cap ($4.5bn) oil and gas company focused in the Eagle Ford shale in South Texas with current oil & gas production of ~85,000 boepd. Despite its relatively small size, MGY was one of the first to design its entire strategy around capital discipline, with a framework anchored on maintaining a strong balance sheet with spending capped as a proportion of EBITDAX. Growth is an output, with the emphasis on cash returns predominantly through opportunistically share buybacks and targeting a sustainable and growing dividend. Since 2019, management has bought back around 30% of outstanding shares and has no net debt at the end-2023.

MGY's operating footprint is entirely in the Eagle Ford shale, specifically in the Giddings field with some activity in Karnes County, legacy core Eagle Ford. At inception, Karnes dominated the company's production and cashflow; however, Giddings dominates its land holdings representing ~96% of a total 498,000 net acres. Over the past few years, the company's focus has been to delineate and expand its acreage position in Giddings, which it has characterized as a re-emerging shale play, with modern frac techniques establishing this part of the basin as a viable growth asset. Since 2018, Giddings production has increased over 6-fold, more than offsetting declines at Karnes which has declined by 37%. In the last two years, total company oil & gas production has increased by 19%.

Looking forward, we see the critical debate around inventory depth noting management does not provide guidance beyond an objective to maintain 5 years of forward planning activity. At the current planned pace of ~60 gross wells per year, this implies visibility on ~300 drilling locations across a development area that until recently was defined across 70,000 acres but has doubled recently to 150,000 acres due to recent bolt-on acquisitions with the most recent adding 48,000 acres for $300mm that closed in 4Q23. We believe management has established a track record of conservative resource assessment defined by a heavily risked inventory position.

Based on our assessment of MGY's 'core' development area we believe a reasonable starting point to assess MGY's drilling backlog has similarly doubled to 10 years, and already supports an attractive valuation vs peers, with significant upside in the full field development case. However, we note management's commentary around recent drilling results vs expectations five years ago suggests an upside case across its Giddings acreage could be at least 1,000 locations, which would materially reset visibility on long-term growth potential and free cashflow. In summary, we see MGY's combination of capital discipline, resource upside from existing acreage and visible free cashflow differentiating its outlook vs similar sized peers, with a lower risked route to extend resource depth from a large existing acreage position.

We include a detailed analysis of Gidding's historical well results below.

Price objective $25, assuming 10 yrs of inventory

Our $25 PO is based on our DCF analysis at MGY's current drilling pace, which implies modest growth production from 4Q23 levels, including the impact of the recent acquisition. We assume a 10-year drilling backlog at the current 2 rig pace, no additional acquisitions and a continued shift in production mix from Karnes to Giddings. A summary of our valuation can be found below.

Exhibit 1: Assuming long term $70 WTI and $4 HH at a 8% WACC and 10 years of inventory our PO is $25
MGY detailed DCF

Discount rate	**8.0%**	**1Q24**	**2Q24**	**3Q24**	**4Q24**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**
WTI ($ / bbl)		72.50	77.50	77.50	72.50	72.50	70	70	70	70	70			
Henry Hub ($/Mmbtu)		2.50	2.55	2.55	3.25	3.15	4.00	4.00	4.00	4	4			
Production (Mboe / d)		85	90	92	94	98	102	104	106	107	109			
EBITDA		213	243	252	249	1,005	1,063	1,064	1,058	1,058	1,060			
US														
Debt Adjusted Cash Flow		203	232	240	238	960	1,017	1,019	1,016	1,024	1,027	1,027	1,027	1,027
Capital Expenditures		(131)	(111)	(111)	(111)	(503)	(507)	(512)	(517)	(522)	(527)	(527)	(527)	(527)
Corporate														
Facilities														
US Free cash flow	**-**	**72**	**121**	**129**	**127**	**458**	**509**	**507**	**499**	**502**	**501**	**501**	**501**	**501**
US														
PV		5,253												
PV (2024-2025)		834												
PV (2025+)		4,419												
US Total PV		5,253												
net debt (net cash)		(8)												
Equity value		5,261												
PO		**25**												
Shares		206												

Source: BofA Global Research

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Other key assumptions are as follows:

- A 8% WACC with zero net debt balance sheet and low free cashflow break even mitigating its relatively small size.
- We assume 10yrs of inventory as recent M&A doubles MGY's development area. Our estimates suggest at the current drilling pace long/term production nears ~109,000 boepd by 2030 implying average growth of ~4% with a constant 2 rig program.

Valuation sensitivities

The tables below show our assessed valuation sensitivity for MGY for a $5 / barrel change in oil prices, $0.25/mcf change in natural gas. And change in inventory depth versus a 0.5% change to the WACC.

However, we believe it is appropriate to assume 10 years of inventory, double the 5 years of operation visibility, as Magnolia doubled its Giddings development area from 70,000 acres to 150,000 late last year after announcing a $300mm acquisition that added 48,000 acres which we see as providing better visibility on inventory depth. While MGY does not need to acquire additional acreage we see bolt on acquisitions that leverage learnings from past activity creating unique opportunities that would not otherwise be available in more well known basins such as the Permian or Bakken.

Critically, we believe share outperformance can occur via continued operational execution and acreage delineation. However, we note that MGY is testing shallower formations that will have oiler production but economics similar to historical Giddings wells. If the tests are successful, we see this as an upside catalyst not in our base case.

Exhibit 2: At current levels we see the shares 'discounting' $65 WTI/$3.5HH

Sensitivity to changes in long-term oil and natural gas prices

		WTI ($/bbl)				
		$60	$65	$70	$75	$80
	$3.25	18	20	23	26	29
	$3.50	18	21	24	27	30
HH ($/mcf)	$3.75	19	22	25	27	30
	$4.00	20	22	25	28	31
	$4.25	21	23	26	29	32

Source: BofA Global Research estimates

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Exhibit 3: Inventory and WACC sensitivity

Inventory and WACC sensitivity assumes l/term $70 WTI and $4HH

		Years of inventory				
		8	9	10	11	12
	7.0%	27	27	28	28	29
	7.5%	26	26	27	27	27
WACC	8.0%	25	25	25	26	26
	8.5%	24	24	24	25	25
	9.0%	23	23	24	24	24

Source: BofA Global Research estimates

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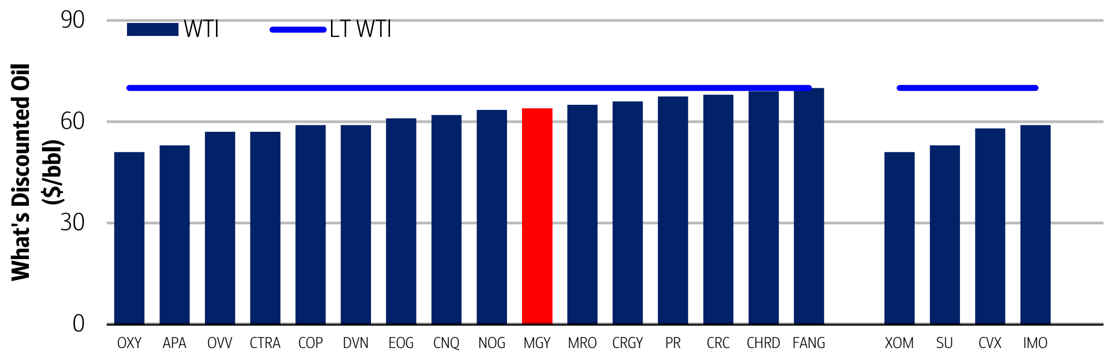
At our base case that assumes a 10 year drilling backlog we see the shares reflecting long-term $4 HH / $64 WTI. In our view the biggest question facing management is the veracity of inventory depth.

Exhibit 4: MGY trends towards the mid-point of peers at $64/bbl

Oil price discounted among E&P peers



Source: BofA Global Research

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Company overview, mid-cap with large cap MGMT

MGY was created from a special acquisition vehicle (SPAC), that had recruited former Occidental CEO Steve Chazen to build a 'new' E&P business defined by free cashflow from inception. Specifically, MGY was formed after TPG Pace Energy Holdings (a SPAC affiliated with the private equity group TPG) purchased Enervest's Eagle Ford and Austin chalk assets in a deal that closed in July of 2018. Afterwards the company was renamed Magnolia Oil and Gas, led by Mr Chazen. After his passing in 2022 former OXY CFO under Mr Chazen, and MGY CFO Christopher Stavros was named CEO. In our view, this management team, known for capital discipline and conservative management within the commodity industry is the starting point that differentiates MGY.

Ownership and capital structure, equity overhang is minimal

As a consequence of its SPAC history MGY has two classes of shares:

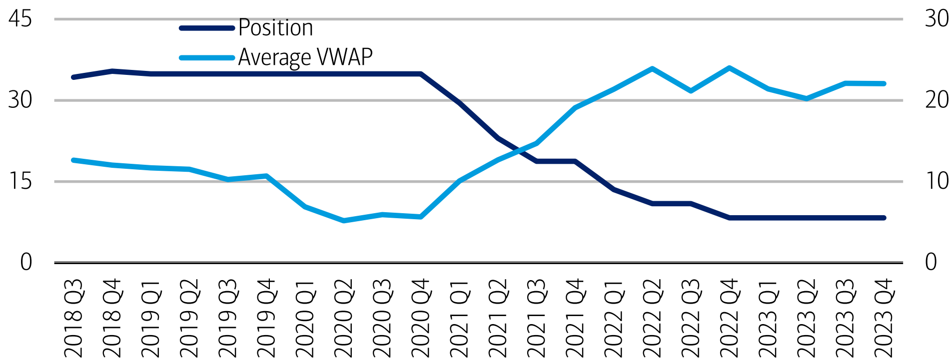
- Class A: listed and traded on the NYSE. As of February 12th 2024 Magnolia has 182,450,146 Class A Common shares outstanding.

- Class B: Created as a result of the Karnes and Gidding acquisition in 2018 where the sellers (Enervest) received 83,939,434 shares, which later peaked at 93,346,000 due to an earnout provisions.

After the 2018 acquisition and through 2020 Enervest was the largest single shareholder of class A shares in the company. Over time, Enervest lowered its position decreasing the equity overhang to now the 5th largest position owning 4.55% of the A shares.

Exhibit 5: After decreasing its position Enervest has held its class A ownership steady

Meanwhile B shares have fallen to 21,826,805 as of February 12th 2024



Source: Bloomberg

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Through share repurchases/cancelations and conversion to A shares the B shares have fallen to 21,826,805 as of February 12th 2024. The B shares vote with the A shares as a single class and have historically received the same per share cash dividend the A shares receive but income attributable to the B shares are accounted for as non-controlling interest. We note that the B shares with an equivalent amount of Magnolia LLC units can be converted to an equivalent amount of A shares or at the discretion of Magnolia LLC an equivalent amount of cash.

The 4 largest positions currently make up 31.56% of the current outstanding A shares. In the top 5 of ownership we see 4 long only names such as T Rowe Price, Vanguard, Blackrock, and Grace Partners.

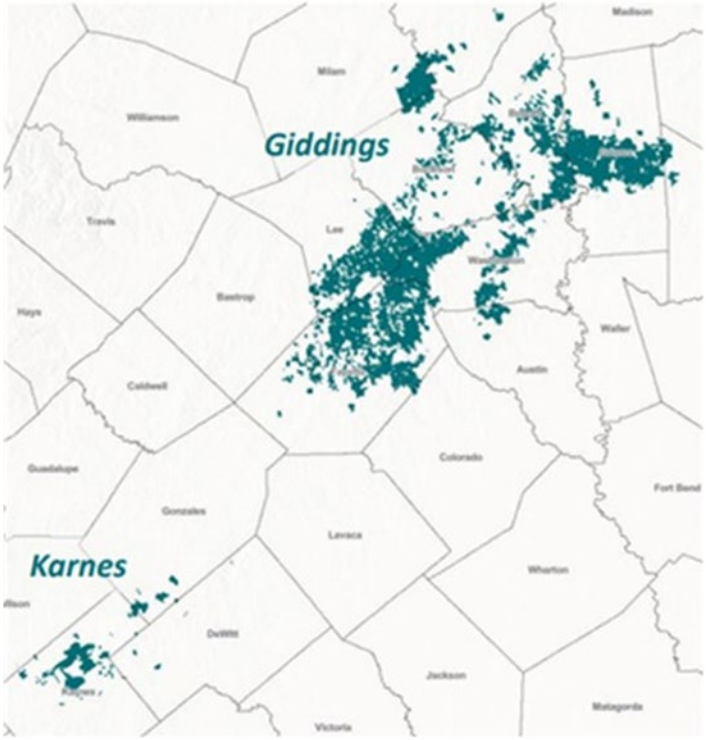
Company strategy: conservative by nature

MGY is a pioneer in the oil and gas sector as one of the first companies to follow a capital discipline framework with low growth, low leverage, and a fortress balance sheet. Led by the former management of one of the largest oil and gas companies in the US, this ‘pure play’ upstream SMID cap company is focused on developing and operating unconventional oil and gas wells with two assets in the broader Eagle Ford trend – Karnes in the core of the play and Giddings in the re-emerging ‘combo’ area of the basin.

- Karnes is a mature and well-developed free cash flow generating asset with limited inventory located mostly in Karnes County.
- The second is a lesser-known region in the general Eagle Ford trend that Magnolia calls the Giddings field.

Over the past decade continued exploration, development, and execution have helped to de-risk the newer area. Per management there is still work to be done to fully de-risk Giddings. However continued development and exploration in Giddings, improvements in operational efficiencies, and opportunistic bolt-on acquisitions have improved economics in the field and in our view can potentially create a compelling upside case not included in our assumptions.

Exhibit 6: MGY acreage map that includes the recent bolt-on acquisition
The total acreage position is nearly 500,000 acres



Source: Company Report

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For now we believe it is appropriate to recognize progress to date:

- demonstrated by company growing its development area for Giddings from 70,000 to 150,000 acres, including a recent $300mm bolt-on of 48,000 acres which underlines our view that inventory is reasonably 10-years at the current 2 rig pace.
- For perspective MGY has spent more than $700mn on bolt-on acquisitions, notably completing multiple deals in the last 12 months including a small bolt-on for $40mn that closed in July & acreage, mineral rights & working interest acquisitions in 4Q22.

Breaking the company down into its separate components we see Karnes and the current PDP base in Giddings fully priced in the stock. The upside case is from further development at Giddings, which we review in detail below.

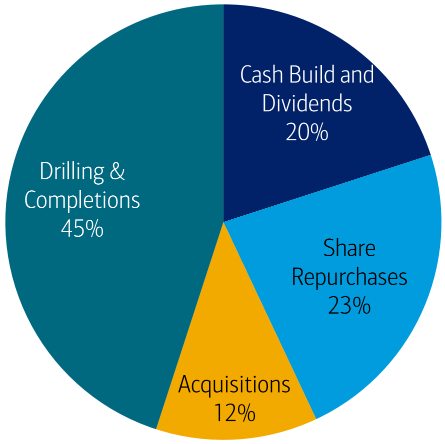
Balance sheet and the emphasis on capital returns

Since inception, Magnolia has led peers on its commitment to capital discipline, retaining a conservative balance sheet historically contributing only 57% of CFO to drilling and completions and M&A activity with 23% going towards share buybacks.

By our estimates which assume $75 WTI in 2024 and long term $70 from 2026, MGY can generate $2.3bn of free cashflow or ~53% of its current market capitalization over the next five years. Management's priority for cashflow can be summarized as:

- continue with small bolt on acquisitions including acreage, minerals, and additional working interest in Giddings and Karnes.
- Repurchase at least 1% of outstanding shares each quarter and dividend growth, noting MGY raised its dividend 13% at the start of 2024 to an annual rate of $0.52/sh ($0.13/qtr).

Exhibit 7: MGY historical use of CFO from July 2018 to September 2023
57% of CFO has been used for D&C + M&A with 23% going to share repurchases



Source: BofA Global Research

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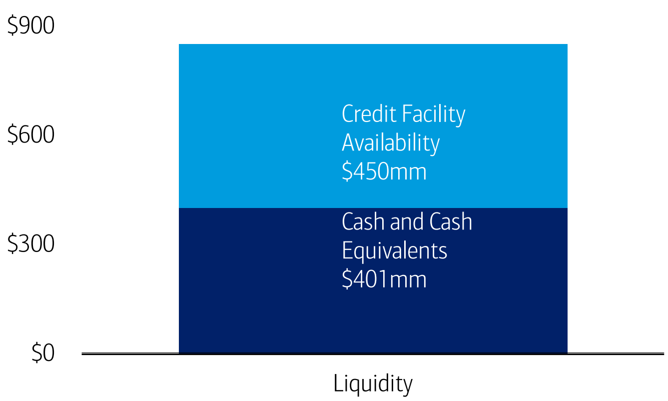
As of year-end 2023, MGY has no net debt

In July of 2018 Magnolia sold $400mn of Senior unsecured notes due in August of 2026 that is still outstanding.

The company also has a RBL with no borrowings and a borrowing base of $450mn which was amended and restated on February 16th, 2022, and will now mature in February 2026. All in, the company has $851mm of available liquidity.

Exhibit 8: A slight new cash position + an undrawn revolver leaves $851mn of liquidity
Liquidity overview



Source: Company reports

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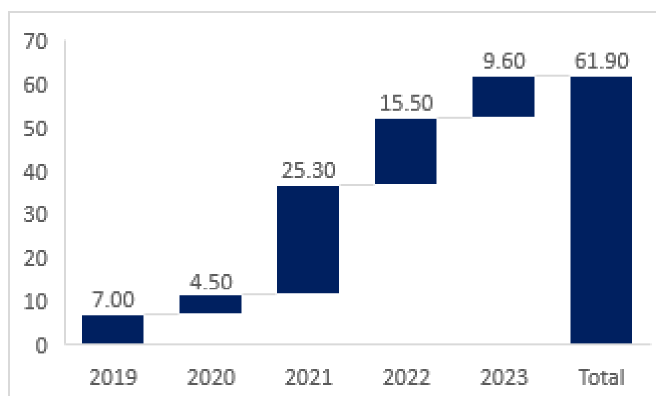
Exhibit 9: Reduced diluted share count by 20% since 2019
Share repurchase history



Source: Company reports

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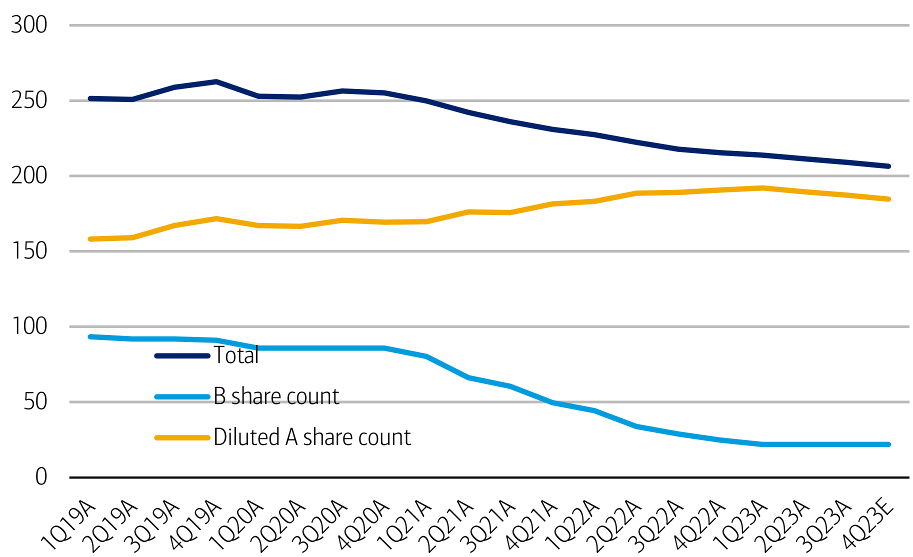
- Management has reduced its diluted share count by 20% since 2019

  Magnolia began its buyback program in 3Q19 and has since bought back ~34% or 61.9mm shares. At year end 2023 MGY had ~9.2mm shares remaining under its current authorization.

Note that a large part of the decline in total shares has been due to a reduction in 'B' shares from the original business combination. Since the number of 'B' shares peaked at the start of 2019 the share count has fallen by 77% to 21,826,805, net of conversion to 'A' shares. Note that we view the total share count as a better indicator of the impact of share buybacks. B shares have substantially declined but the A shares have risen by 21% mitigating the effect of the buyback as the total share count only declined by 20%.

Exhibit 10: While the B shares have declined a rising A share count have mitigated some of the effect it would have on the total share count

MGY historical share count



Source: BofA Global Research

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Other investment considerations

Potential acquisition risk

Currently Magnolia's Gidding position is nearly 500,000 acres. During a time where onshore exploration has come to an almost standing halt we see companies with this much potential inventory as attractive to larger peers who may be facing an inventory cliff.

Inventory

On the other side Giddings is still an exploratory play and the homogeneity of the acreage that is economic is still being determined limiting how much credit the Street is giving to the company's current inventory.

Productivity

Recent productivity trends show a downward trend that may risk the quality of acreage. However, management's commentary has provided confidence recent well performance is inline with future productivity expectations.

Use of cash

Magnolia is in a net cash on its balance sheet which it is continuing to grow. We see MGY well positioned to be opportunistic with the use of cash but note uncertainty around timing of that use cash.

Industry backdrop

Our base case assuming long term $70 WTI and $4 HH reflect the futures curve of each commodity noting that OPEC spare capacity has weighed on the long term price of oil while growth from US LNG demand has had a positive uplift on natural gas futures. Please see our 4Q23 preview for more detail.

Sector positioning

MGY is a midcap oil and gas company with large cap roots, noting that the founding CEO and CFO held their respective positions at OXY, one of the largest independent E&Ps in the world. The company has carved out a niche as one of the few remaining US onshore E&Ps with exploration upside.

Asset review

Giddings is the future, Karnes is mature

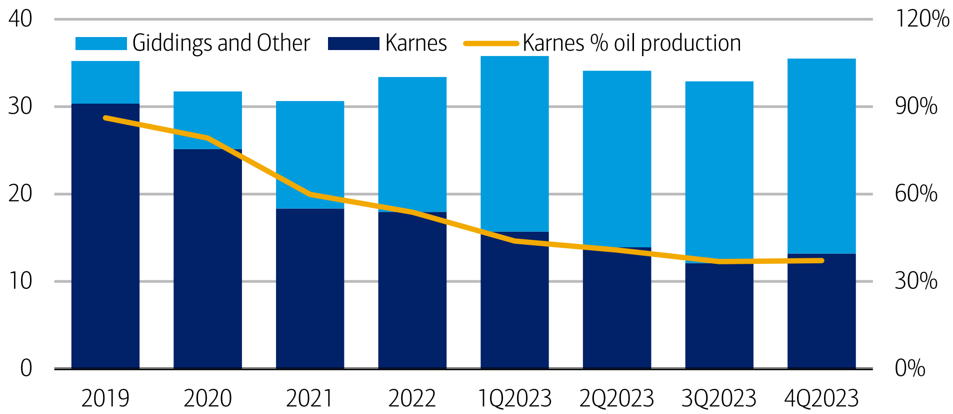
Since MGY was created in 2019, the role of legacy Karnes and exploration (Giddings) has seen the production mix shift significantly.

- In 4Q23 Karnes production averaged 22.4 boepd versus 63 boepd at Giddings;
- Of that Karnes oil production was ~13.2 kbpd of oil which compares to Giddings at 22.3 kbpd.

Oil production for Karnes peaked in 2019 averaging 30.35 kbopd. It has since declined by over 50% as activity shifted to Giddings where oil production increased by over 3x in the same time.

Exhibit 11: Karnes and Giddings oil production

Giddings continues to take up a larger portion total corporate production



Source: BofA Global Research

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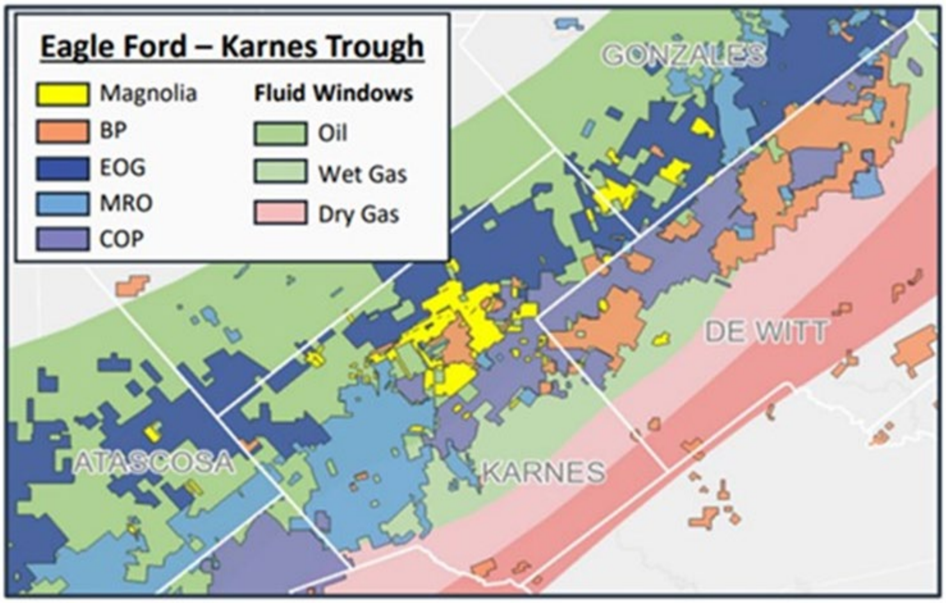
This should not be a surprise as the Karnes Trough is a well-known and mature basin with over a decade of production development known for its high oil cut, steep decline, high IP, and short payback.

Karnes asset summary: quality acreage but limited inventory

Magnolia's position consists of 22,800 net acres primarily in the oil window in Karnes County. Note that 60% of its position is operated (98% held by production), and of the balance EOG represents 60% of non-op activity. The company's acreage position is geographically located between large peers including COP, MRO, and EOG.

Exhibit 12: Karnes County overview
Located in the core Eagle Ford and Austin Chalk

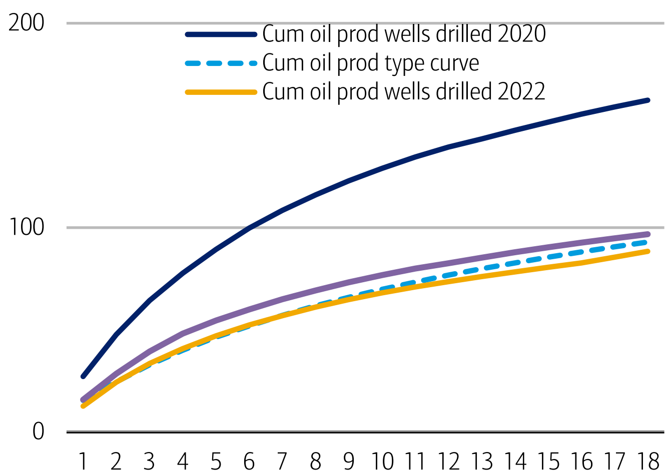


Source: Company reports

BofA GLOBAL RESEARCH

Below we show our observed cumulative type curves compared to historical 2 stream production where assume production to be inline with well results versus 2020, 2021, and 2022 Karnes is a well know play that has been de-risked the area. We note that 2023 production is missing as 3rd party data has only started to come in.

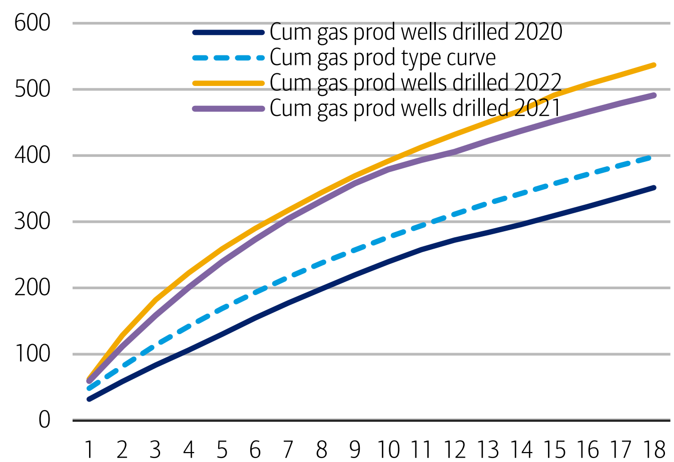
Exhibit 13: Cum oil production 2020, 2021, and 2022 vs type curve
Future produce estimates are measured between 2020, 2021, and 2022 well results



Source: BofA Global Research, Rystad

BofA GLOBAL RESEARCH

Exhibit 14: Cum gas production 2020, 2021, and 2022 vs type curve
Similar with oil we estimate future production to be between 2020 to 2022 historical



Source: BofA Global Research, Rystad

BofA GLOBAL RESEARCH

Below are our observed individual well economics for Karnes.

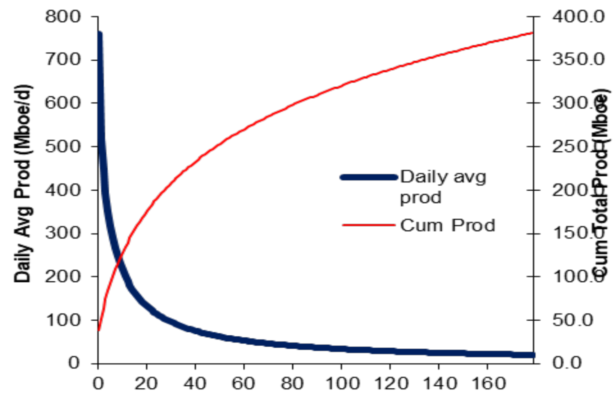
Exhibit 15: Karnes individual well economics
We see limited inventory and lower relative IRR indicating a preference for further development at Giddings

30d Avg IP	**Boe/d**	**760**
Total EUR	*Mboe*	**381**
10y reserves	*Mboe*	338
Total revenues ($mm)		**17.5**
Royalties		-3.3
Total Opex		-3.5
Total Capex		-6.0
Pre-tax CF		**4.7**
Total Income Tax		-0.5
Post-tax CF		**4.2**
Gross Pre-tax NPV ($mm)		**2.3**
Net Pre-tax NPV ($mm)		2.1
Pre-tax IRR		*29%*

Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 16: Estimated production
Assume an average 30 day IP of 760 boepd

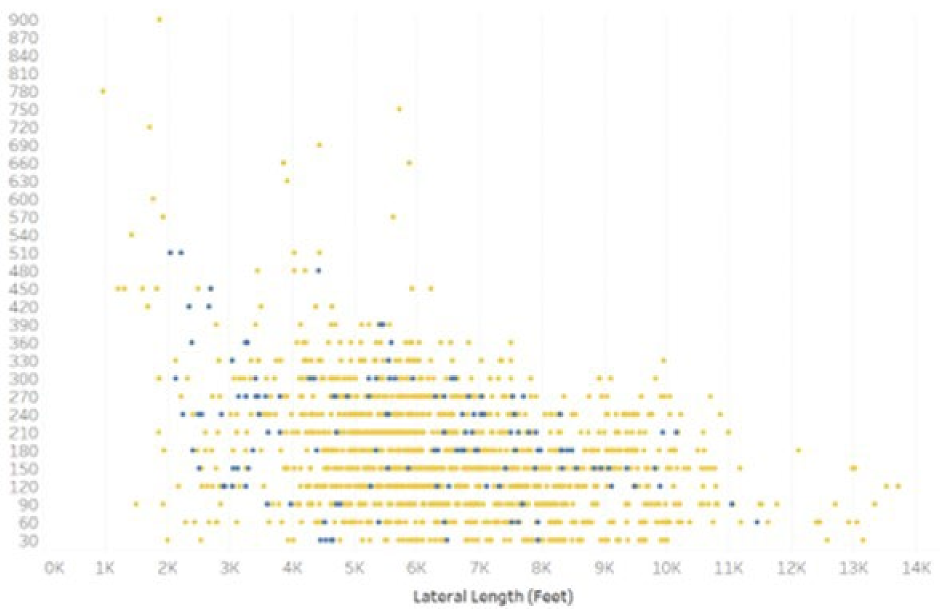


Source: BofA Global Research

BofA GLOBAL RESEARCH

This is not to say that the Karnes acreage, in Wilson, De Witt, and Karnes, is not economic. In fact, we see productivity of the acreage in line with peers such as COP, EOG, and MRO. However, inventory depth is a limiting factor and puts the emphasis on Giddings to drive the future outlook as cashflow is harvested from Karnes.

Exhibit 17: Karnes lateral length vs productivity
Productivity is competitive with peers but inventory depth lacks



Source: BofA Global Research

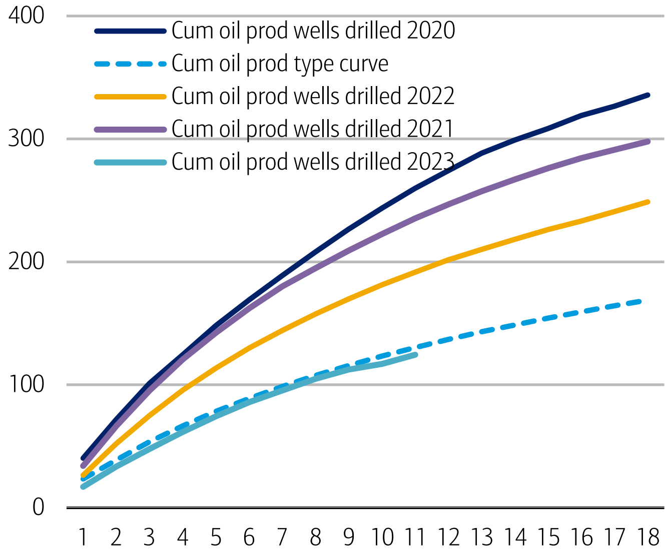
BofA GLOBAL RESEARCH

For Magnolia we see inventory and the potential for further development as limited.

Giddings asset review: inventory depth can rerate value

Conversely MGY's acreage position in Giddings is significant, although it comes with a different productivity mix. Below is a comparison of cumulative 2 stream production for the Giddings area that compares cumulative 12 month production since 2020 to our type curve normalizing for an 8,500 ft lateral. We see cum production for 2021, 2022, and 2023 levels declining from 2020 highs with a consistent downward trend for oil productivity.

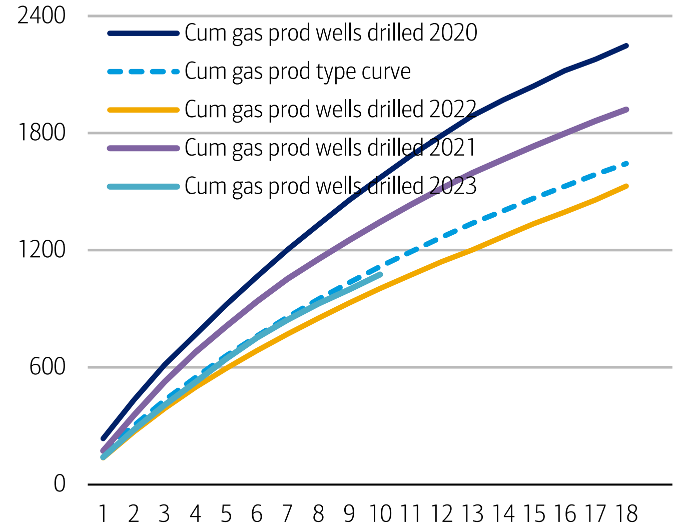
Exhibit 18: Cum oil production 2020 to 2023 vs type curve
Given the continued exploratory success of Giddings



Source: BofA Global Research, Rystad

BofA GLOBAL RESEARCH

Exhibit 19: Cum gas production 2020 to 2023 vs type curve
we estimate well production to be in line with past results

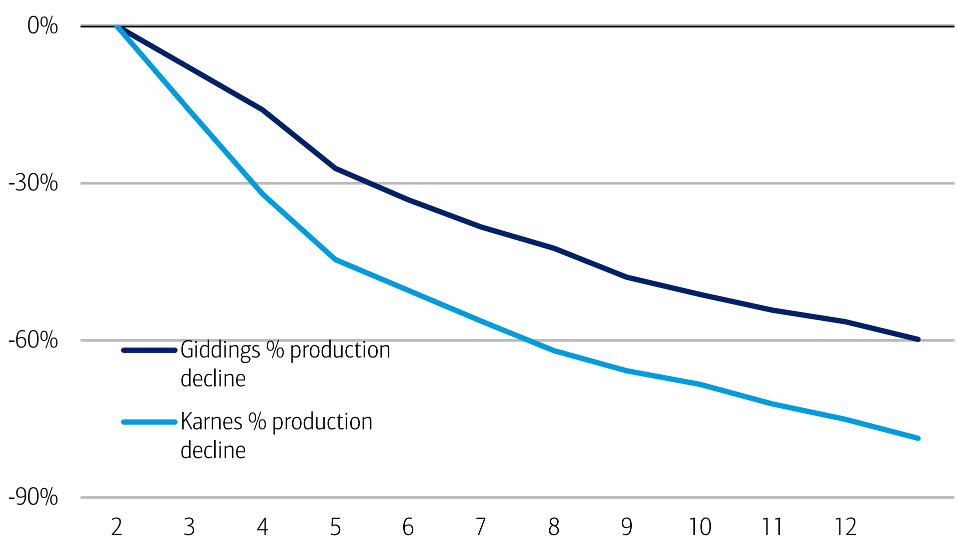


Source: BofA Global Research, Rystad

BofA GLOBAL RESEARCH

However, by our analysis lower declines and potentially lower costs on shallower acreage drive better returns. Comparing production declines, from wells that have been turned inline since 2020 we see that average production from the Karnes wells have declined 19% more after 12 months vs wells turned inline in Giddings. The graph below shows the average percent production decline compared to the first full month of production.

Exhibit 20: Giddings Karnes production decline
After 12 months the avg Giddings well have declined 60% vs the avg EF well which has decline 79%



Source: Rystad, BofA Global Research

BofA GLOBAL RESEARCH

We estimate the average Giddings well has a pre-tax IRR of 57% versus Karnes at 29% at 2026+ $70WTI and $4.00HH. And given the potential for further operational improvements we see an upside scenario potentially further reducing costs while continued exploration could de-risk more acreage adding to inventory depth not in our PO.

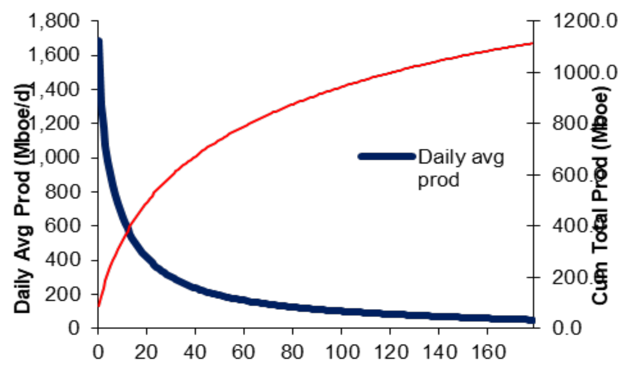
Exhibit 21: Giddings single well economics
Pre-tax IRR of 57% compares with Karnes at 29%

30d Avg IP	**Boe/d**	**1,685**
Total EUR	*Mboe*	**1,114**
10y reserves	*Mboe*	994
Total revenues ($mm)		**39.9**
Royalties		-7.6
Total Opex		-9.8
Total Capex		-9.4
Pre-tax CF		**13.2**
Total Income Tax		-1.5
Post-tax CF		**11.6**
Gross Pre-tax NPV ($mm)		**8.0**
Net Pre-tax NPV ($mm)		7.2
Pre-tax IRR		57%

Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 22: Giddings type curve
Long laterals and shallower declines at Giddings improve cum production



Source: BofA Global Research

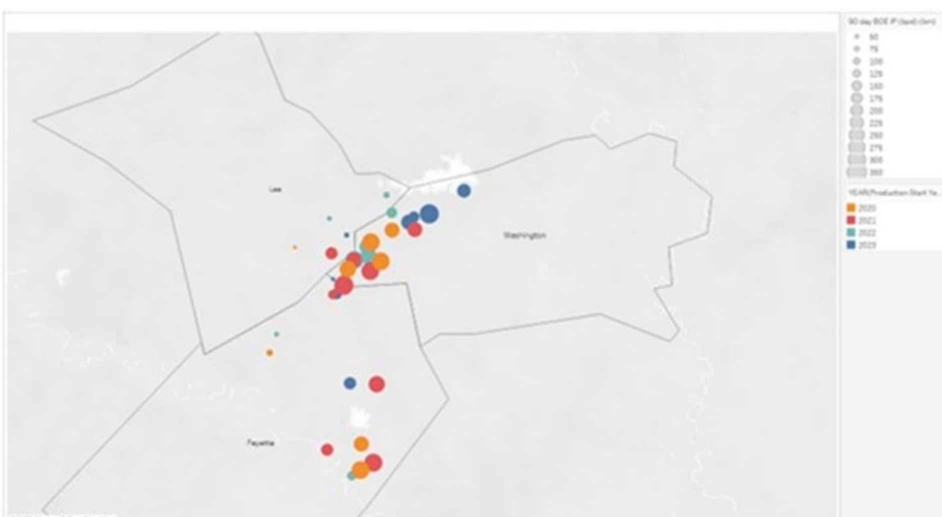
BofA GLOBAL RESEARCH

Giddings, improved inventory outlook w/potential to increase

The Giddings field is the exploratory play for MGY in stark contrast to the well-known mostly developed Karnes county acreage.

The area is spread out over six countries (Fayette, Lee, Burleson, Washington, Brazos, and Grimes). The position has ~476,000 net acres that is > 90% HBP (held by production) meaning there is minimal risk of having to release acreage. Magnolia estimates the field could have at least 1,000 locations. However, most of this area has yet to be proved up limiting how much value we can assign to a large portion of the position, as such we risk the number lower to 500. MGY has focused most of the development in Lee, Fayette, and Washington counties with the strongest wells located in Washington county near the border of Lee.

Exhibit 23: 90 day BOE IP heat map
The strongest wells trend to western Washington county



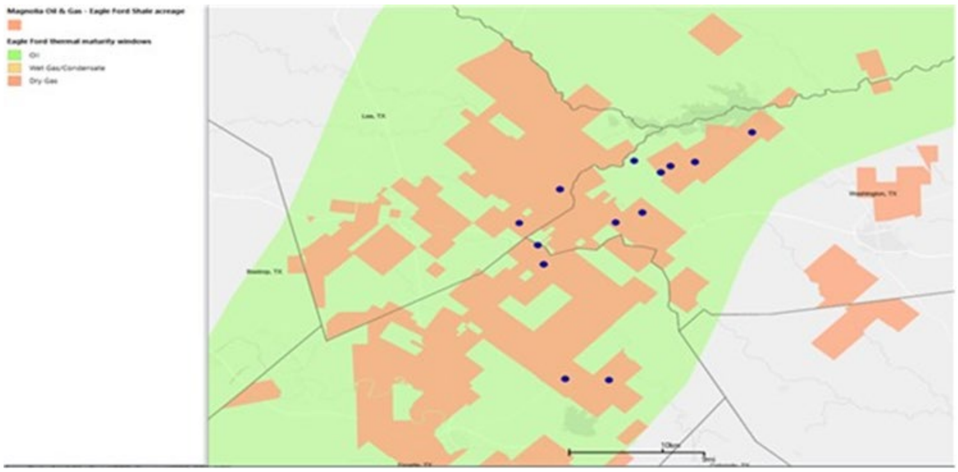
Source: Rystad, BofA Global Research

BofA GLOBAL RESEARCH

In 2022 the focus was on the western Washington county while the graph below will show 2023 has seen more development in Fayette and along the border of Washington county towards Burleson.

Given the recent acquisitions announced by MGY and prior management commentary we expect one rig to remain in Giddings with the other spending time between both fields.

Exhibit 24: Giddings wells turned in-inline in 2023
Activity is focused in Washington county



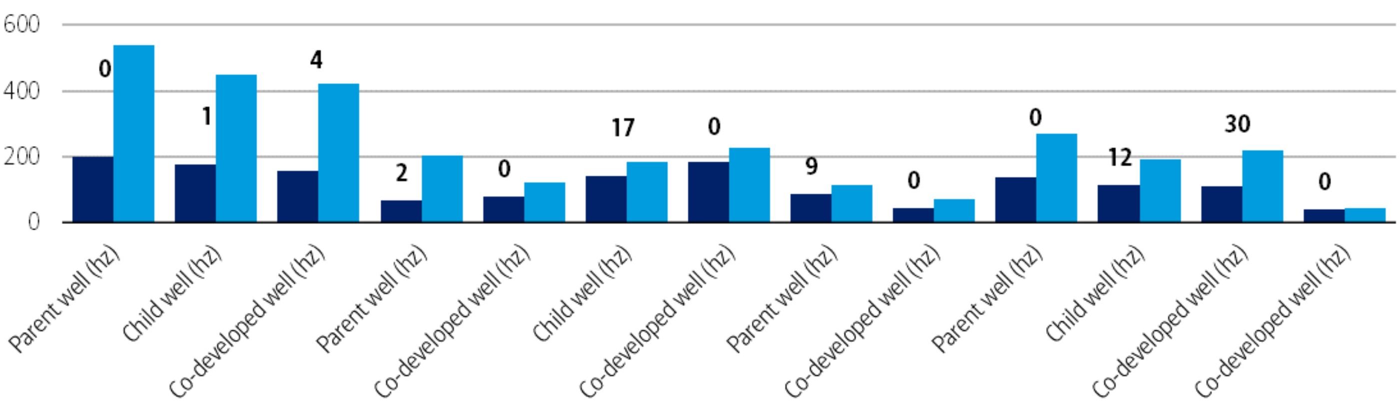
Source: Rystad

BofA GLOBAL RESEARCH

Well data shows that 90 day BOE Ips/1000ft for wells turned online from 2020 to 2023 averaged 225 boepd for Karnes Co-developed wells and 220 for Washington co-development wells, the most developed areas in the respective fields.

Even though, Giddings development has yielded low IP 90 and 30s/1000 ft we argue that operational synergies such as 4 well pad development, longer laterals, and higher EURs have yielded a higher per well IRR than those in Karnes.

Exhibit 25: 2020 to 2023 MGY wells turned in line
90 day oil and boe ips per 1000ft measured with well count



Source: Bofa Global Research, Rystad

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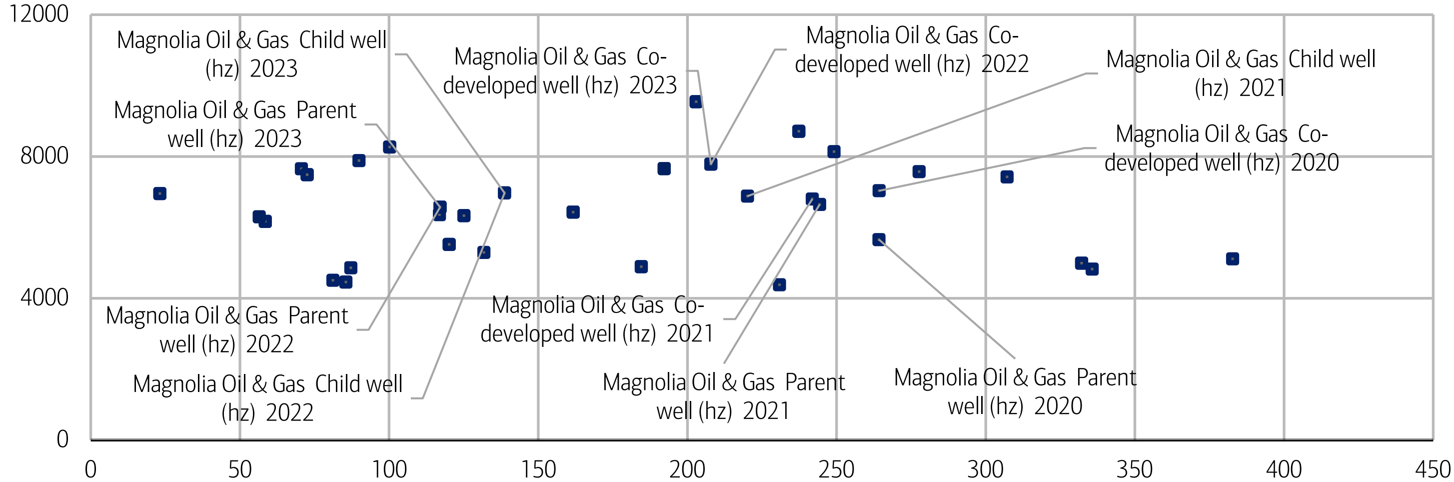
Magnolia's Giddings 90 day boe ip/1000 ft and lateral length show that, on average, well results from 2020 to 2023 have been with-in results of its peers. MGY's Giddings acreage is competitive but not extraordinary. However, we note that there have been wells drilled over the last 4 years that have been a notable step down and steps up from MGY's results and other peers. We see these as mostly outliers versus what is representative of the region.

The graph below shows the average 90 day boe ip/1000 ft vs average lateral length broken down by operator, parent child relationship, and year the well started production.

Exhibit 26: Lateral length vs 90 day boe ip/1000 ft by operators, parent child, and production start year

MGY's Giddings well results are spread among other operators in the region



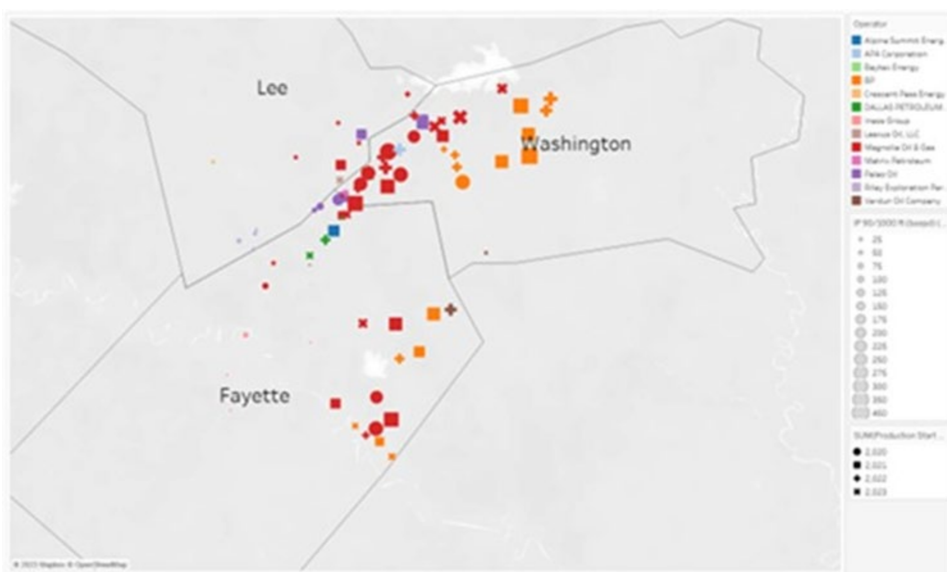
Source: Rystad, BofA, Global Research

BofA GLOBAL RESEARCH

Below is a heat map showing productivity between Washington, Lee, and Fayette county. The Western border of Washington county is not the only productive region in the tri-state area as seen in eastern Fayette and central Washington county.

Exhibit 27: Giddings 90 day IP/1000 ft heat map

Western Washington county is not the only productive spot in Giddings

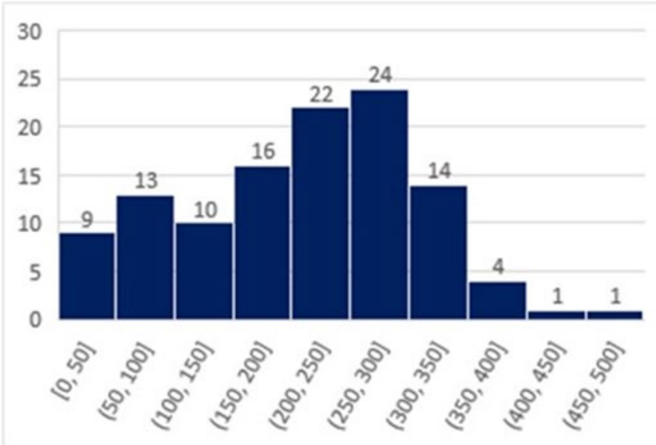


Source: BofA Global Research

BofA GLOBAL RESEARCH

On a per well basis we see well's 90 day boe IP/1000 ft in the Washington, Lee, and Fayette counties coming online usually between 150 to 300 boepd which compares to our type curve which is near 178 boepd. To put this in perspective only ~25% of wells turned inline between 2020 and 2023 had 90 day IPs below that. However, of the areas tested so far, the acreage looks prospective.

Exhibit 28: Most wells in Giddings have IPs between 200-300
Wells turned inline from 2020-23 90 day IP/1000 ft



Source: BofA Global Research

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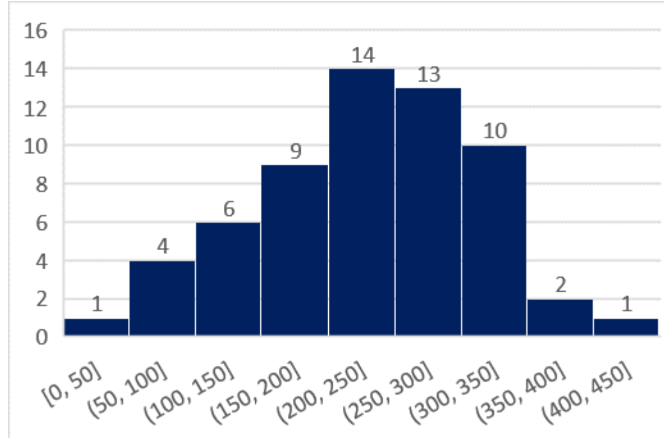
Exhibit 29: inline with MGY's well results
MGY wells turned inline from 2020-23 90 day IP/1000 ft



Source: BofA Global Research

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Asset conclusion inventory depth is key

Giddings acreage delineation is encouraging for an upside case

In summary we believe MGY's track record of delineation, improving cost efficiency and production improvements is encouraging for continued expansion of its drilling backlog. However, we this as an upside case. Our base case, that assumes a drilling backlog of 10 years, including recent acquisitions already supports an attractive valuation that we believe merits a Buy rating vs peers.

Appendix 1

Comp Sheet

Currently we see MGY trading at a 4.4x 2025E multiple compared to a peer group average of 4.7x which we see reflecting uncertainty around inventory quality and depth. Our implied 2025 multiple is 5.2x.

Exhibit 30: Comp sheet

$25 PO implies a 2025 5.2x EV/EBITDA multiple

						2024 PRODUCTION				**2025 PRODUCTION**				**Y/Y Growth**			
Company	Ticker	Price	Market Cap	Net Debt	Enterprise Value	Equivalent (Mboe /d)	Gas (MMcf/d)	NGL (Mboe/d)	Oil (Mb/d)	Equivalent (Mboe/d)	Gas (MMcf/d)	NGL (Mboe/d)	Oil (Mb/d)	Equivalent	Gas	NGL	Oil
Devon Energy	DVN	43.98	28,176	5,170	34,037	649	1,033	161	316	646	1,015	159	318	0%	-2%	-1%	1%
Diamondback	FANG	176.68	31,528	5,330	38,392	375	557	95	273	375	563	93	276	0%	1%	-2%	1%
EOG Resources	EOG	112.45	65,221	282	64,375	1,051	1,908	237	496	1,109	2,110	246	511	6%	11%	4%	3%
Matador	MTDR	60.58	7,237	839	9,608	167	402	-	100	182	438	N/A	109	9%	9%	n/a	9%
Marathon Oil	MRO	23.87	13,778	3,003	19,005	381	695	72	193	375	678	69	193	-2%	-3%	-5%	0%
Ovintiv	OVV	46.03	12,560	4,509	19,636	466	1,532	79	164	466	1,511	76	157	0%	-1%	-4%	-4%
Magnolia Oil & Gas	MGY	21.77	4,447	(8)	4,439	90	172	24	38	98	208	24	40	9%	21%	0%	6%

		RESERVES			LEVERAGE	FCF		FCF Yield		EBITDA		EV / EBITDA	
Company	Ticker	Equivalent	Oil	Pct Oil	NET DEBT / 2024EBITDA	2024	2025	2024	2025	2024	2025	2024	2025
Devon Energy	DVN	1,815	1,286	71%	0.7x	2,893	2,968	10%	11%	7,198	7,208	4.7x	4.7x
Diamondback	FANG	2,178	1,678	77%	0.9x	2,928	2,889	9%	9%	6,110	6,032	6.3x	6.4x
EOG Resources	EOG	4,238	2,806	66%	0.0x	5,392	5,694	8%	9%	12,731	13,040	5.1x	4.9x
Matador	MTDR	188	196	105%	0.4x	723	789	10%	11%	2,341	2,542	4.1x	3.8x
Marathon Oil	MRO	1,338	955	71%	0.7x	1,786	1,780	13%	13%	4,198	4,345	4.5x	4.4x
Ovintiv	OVV	2,273	1,142	50%	1.0x	1,836	1,748	15%	14%	4,681	4,759	4.2x	4.1x
Average					0.6x			11%	11%			4.8x	4.7x
Magnolia Oil & Gas		169.8	119.6	70%	0.0x	451	458	10%	10%	960	1,005	4.6x	4.4x

PO implied 2025 EV/ EBITDA multiple	
Equity value	5,263
Net Debt	(8)
Est. Enterprise Value	**5,255**
Implied 2025 multiple	5.2x

Source: BofA Global Research, Consensus

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Appendix 2

Free cash flow and leverage sensitivities

We estimate MGY can generate a FcF flow yield between 10% to 12% at our base case (2026+ $70 WTI and $4.00 HH). At strip we see MGY having a FcF flow yield between 10% and 11% from 2024 to 2026.

Exhibit 31: FCF sensitivity analysis

At our base case FCF yield ranges from 9% to 10% between 2024 and 2026

BofA base case				
PO	**25**			
Commodity Deck	2023	2024	2025	2026
Henry Hub ($/Mcf)	2.65	2.75	3.15	4.00
WTI ($/bbl)	78	75	73	70
Production (mboe/d)	82.3	90.2	98.4	102.3
% Oil	4%	10%	6%	0%
% Sequential growth	9%	10%	9%	4%
Net debt to EBITDA	0.0x	-0.2x	-0.3x	-0.9x
Cash flow operations	872	910	964	1,028
Capex	(425)	(464)	(503)	(507)
FcF before fixed dividend	447	446	462	521
Fixed dividend	87	94	99	105
FcF after fixed dividend	360	352	363	416
% FcF yield before fixed dividend	10%	10%	10%	12%

Sensitivity: Plus $5 to WTI oil prices				
Commodity Deck	2023	2024	2025	2026
Henry Hub ($/Mcf)	2.65	2.75	3.15	4.00
WTI ($/bbl)	78	80	78	78
Production (mboe/d)	82.3	90.2	98.4	102.3
% Oil	4%	10%	6%	0%
% Sequential growth	9%	10%	9%	4%
Net debt to EBITDA	0.0x	-0.2x	-0.4x	-1.0x
Cash flow operations	872	972	1,032	1,111
Capex	(425)	(464)	(503)	(507)
FcF before fixed dividend	447	508	530	603
Fixed dividend	87	94	99	105
FcF after fixed dividend	360	414	431	499
% FcF yield before fixed dividend	10%	11%	12%	13%

Sensitivity: Minus $5 to WTI oil prices				
Commodity Deck	2023	2024	2025	2026
Henry Hub ($/Mcf)	2.65	2.75	3.15	4.00
WTI ($/bbl)	72.7	70	67.5	65
Production (mboe/d)	82.3	90.2	98.4	102.3
% Oil	4%	10%	6%	0%
% Sequential growth	9%	10%	9%	4%
Net debt to EBITDA	0.0x	-0.1x	-0.2x	-0.8x
Cash flow operations	872	848	896	957
Capex	(425)	(464)	(503)	(507)
FcF before fixed dividend	447	384	394	450
Fixed dividend	87	94	99	105
FcF after fixed dividend	360	290	295	345
% FcF yield before fixed dividend	10%	9%	9%	10%

Sensitivity at l/term strip 2/22/2024				
Commodity Deck	2023	2024	2025	2026
Henry Hub ($/Mcf)	2.65	2.75	3.15	4.00
WTI ($/bbl)	78	76	71	68
Production (mboe/d)	82.3	90.2	98.4	102.3
% Oil	4%	10%	6%	0%
% Sequential growth	9%	10%	9%	4%
Net debt to EBITDA	0.0x	-0.2x	-0.3x	-0.9x
Cash flow operations	872	920	946	992
Capex	(425)	(464)	(503)	(507)
FcF before fixed dividend	447	456	443	484
Fixed dividend	87	94	99	105
FcF after fixed dividend	360	362	344	380
% FcF yield before fixed dividend	10%	10%	10%	11%

Source: BofA Global Research

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Price objective basis & risk

Magnolia Oil and Gas (MGY)

Our price objective of $25/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 8% reflecting a defensive capital structure, 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) productivity of new acreage, (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.

Analyst Certification

I, Noah Hungness, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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	CNQ	CNQ US	Doug Leggate
	Chesapeake Energy	CHK	CHK US	Doug Leggate
	Chevron Corp.	CVX	CVX US	Doug Leggate
	ConocoPhillips	COP	COP US	Doug Leggate
	Coterra Energy Inc	CTRA	CTRA US	Doug Leggate
	EQT Corporation	EQT	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
	Magnolia Oil and Gas	MGY	MGY US	Noah Hungness
	Occidental Petroleum Corp.	OXY	OXY US	Doug Leggate
	Ovintiv Inc	YOVV	OVV CN	Doug Leggate
	Ovintiv Inc	OVV	OVV US	Doug Leggate
	Range Resources Corp	RRC	RRC US	Doug Leggate
	Suncor	YSU	SU CN	Doug Leggate
	Suncor	SU	SU US	Doug Leggate
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

US - Large Cap Oils Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	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				
	Pioneer Natural Resources	PXD	PXD US	Doug Leggate

*iQ*method℠ Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization	Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations – Total Capex	N/A

Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt – Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense

Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt + Other LT Liabilities	Sales
EV / EBITDA	Enterprise Value	Basic EBIT + Depreciation + Amortization

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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%

[R2] Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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