



EAST DALEY
ANALYTICS

The Dirty Little Secrets

Commodity Ties: Don't Balk at the Bakken

East Daley Vision

Drive Transparency In Energy Markets

Crude Oil, Natural Gas, and NGLs are linked together in ways in which they have never been in history. These commodities are not independent of each other.

No current market participant has ever traded or spent capital in a market like this: The US has never been the major global supplier of all three hydrocarbons.

The U.S. is unique: The U.S. has 1,000's of individual players across basins, upstream, midstream and downstream, not one state-controlled entity.

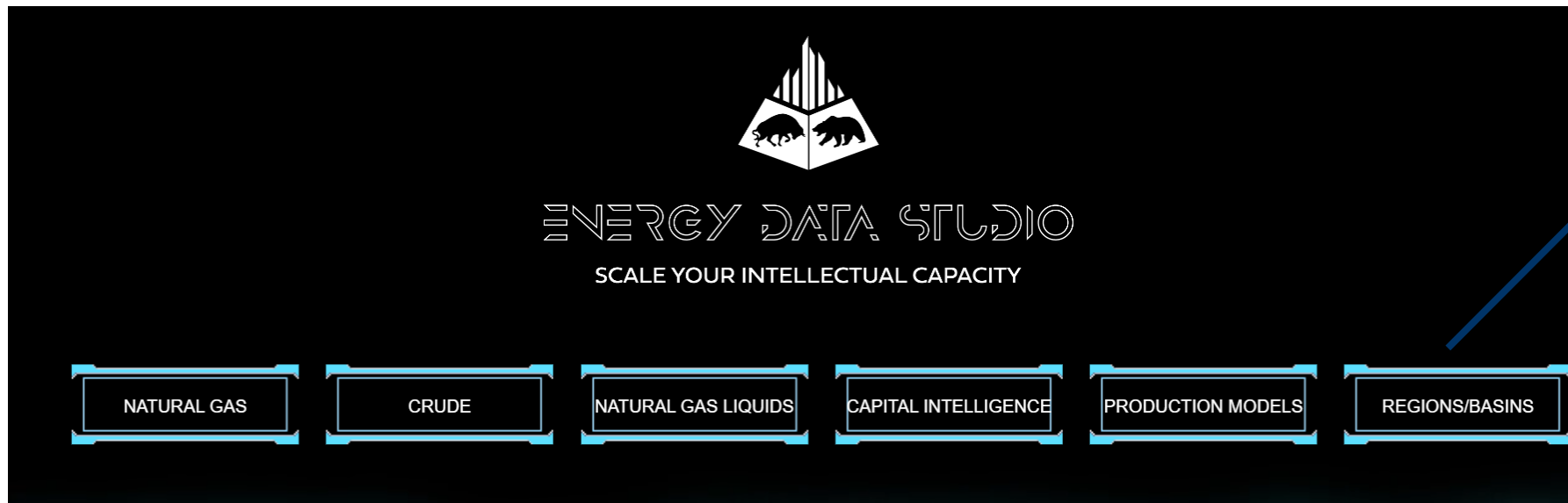
Production & Infrastructure growth will create opportunities. Each incremental molecule introduces more complexity to get to market.



Agenda

- ✓ Energy Data Studio: New Basin/Region Dashboards
- ✓ US Production Outlook for 2025
- ✓ Bakken Production Outlook for 2025
- ✓ Commodity Ties: Crude infrastructure is still going to be tight
- ✓ NGL Optionality: Commodity Markets Wrong....Equity Markets Right
- ✓ The Dirty Little Secret: Upcoming Sections

Energy Data Studio – Region/Basin Option



REGIONS/BASINS

- ▼ BAKKEN
- ▼ NATURAL GAS S&D
- ▼ GATHERING AND PROCESSING
 - G&P Comparison Tool
 - G&P System Analysis
 - G&P System Financials
 - Rig Activity Tracker
 - Processing Capacity Analysis
 - Processing Plant Data
 - Producer to System Analysis
- ▼ CRUDE
 - Crude Hub Model
 - Bakken - Guernsey - DJ
- ▼ NATURAL GAS LIQUIDS
 - NGL Purity Product
 - Production Model



Don't Balk at the Bakken

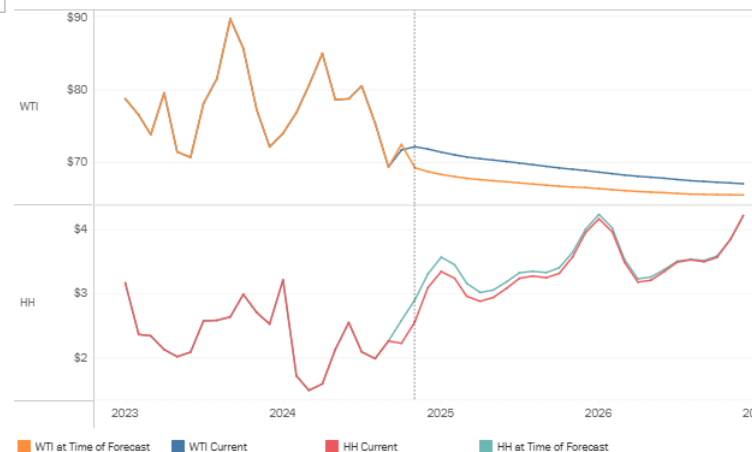
Production Outlook – Commodity Ties
With Maria Paz Urdaneta



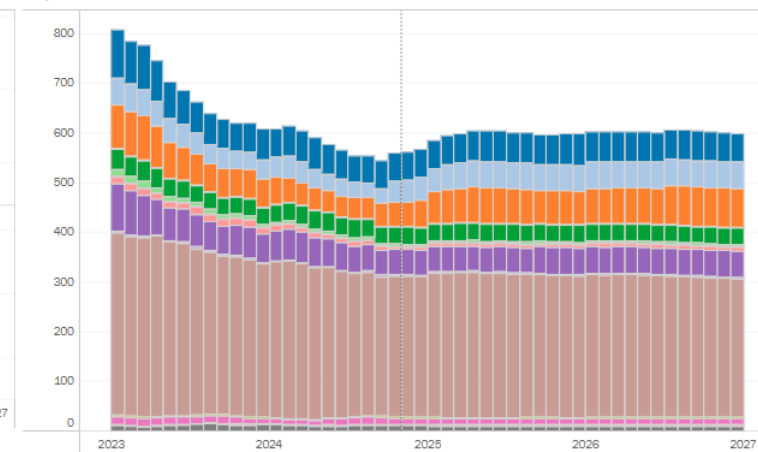
US Production Outlook

Basin:			
(All)			
	2023	2024	2025
Gross Gas (Bcf/d)	111.08	109.26	114.64
Residue Gas (Bcf/d)	96.59	94.15	98.64
Crude (MMb/d)	10.02	10.22	10.57
NGLs (MMb/d)	6.18	6.52	6.76

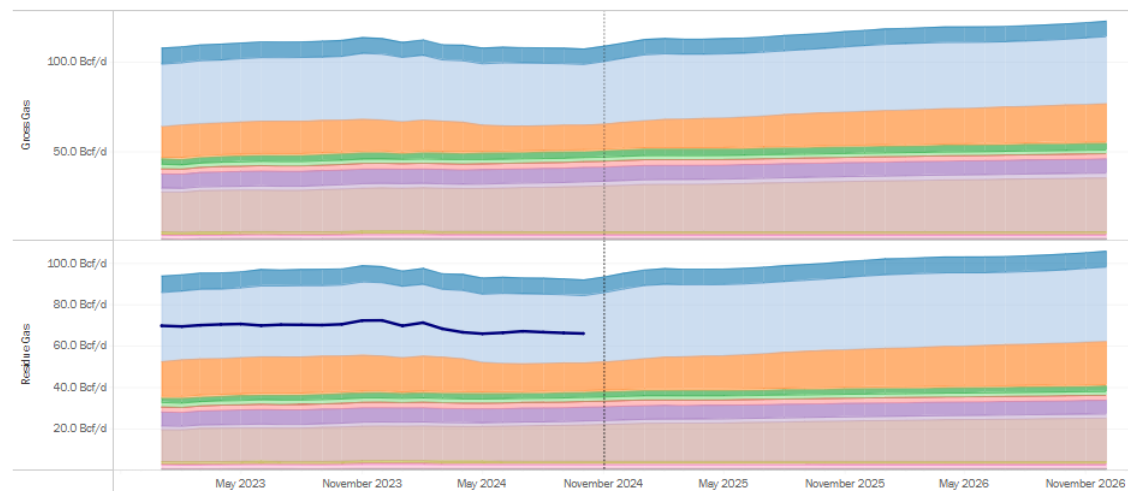
Commodity Prices



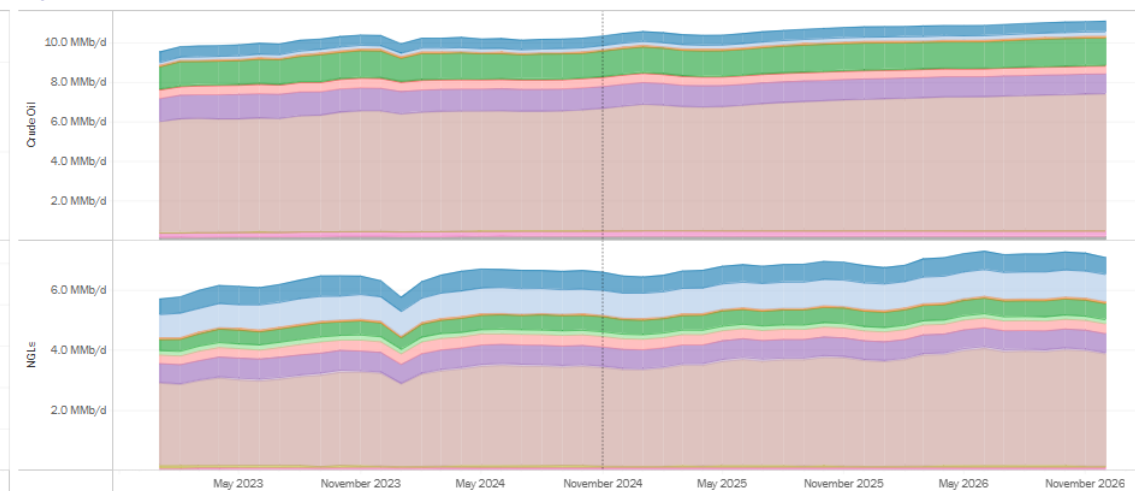
Rig Counts



Gas Production Volumes

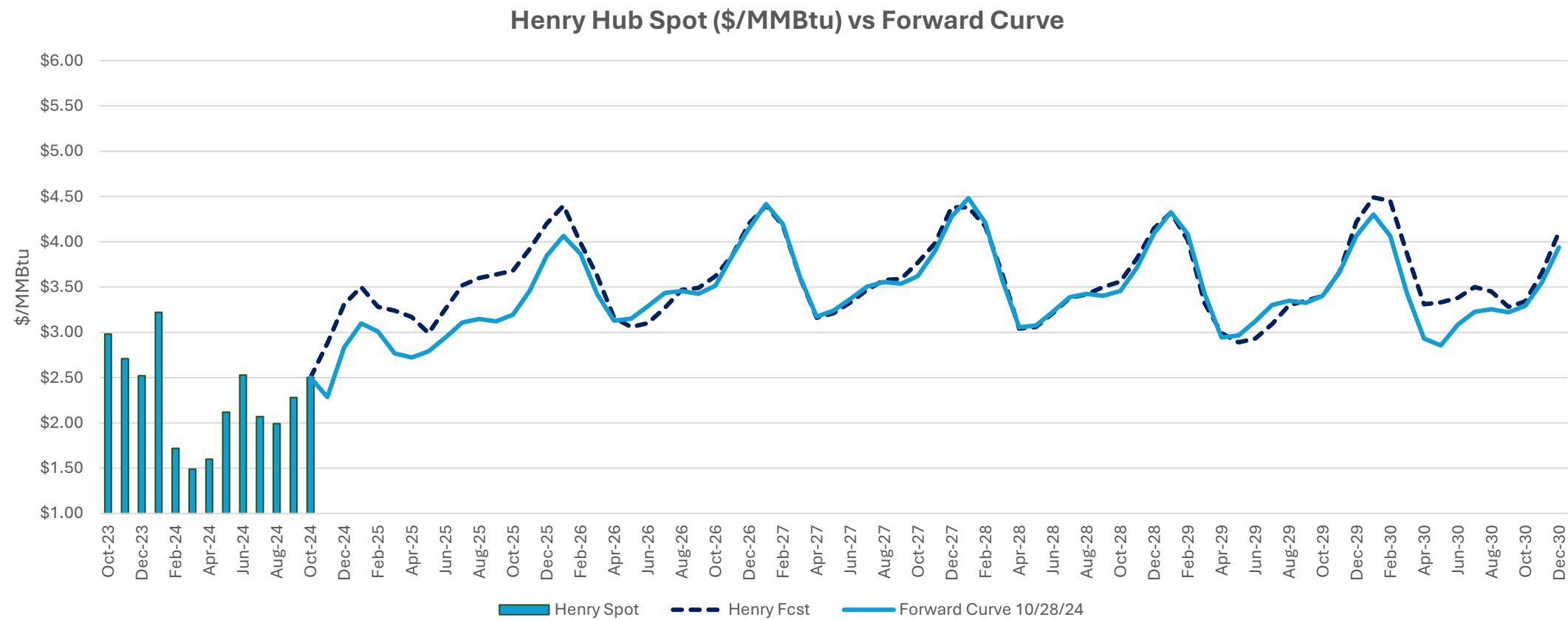


Liquid Production Volumes



Basin ANADARKO APPALACHIA ARKATEX ARKOMA BAKKEN BARNETT BIG HORN DENVER JULESB... EAGLE FORD GREEN RIVER PERMIAN PICEANCE POWDER RIVER SAN JUAN UTA WIND RIVER

Henry Hub Spot Forecast

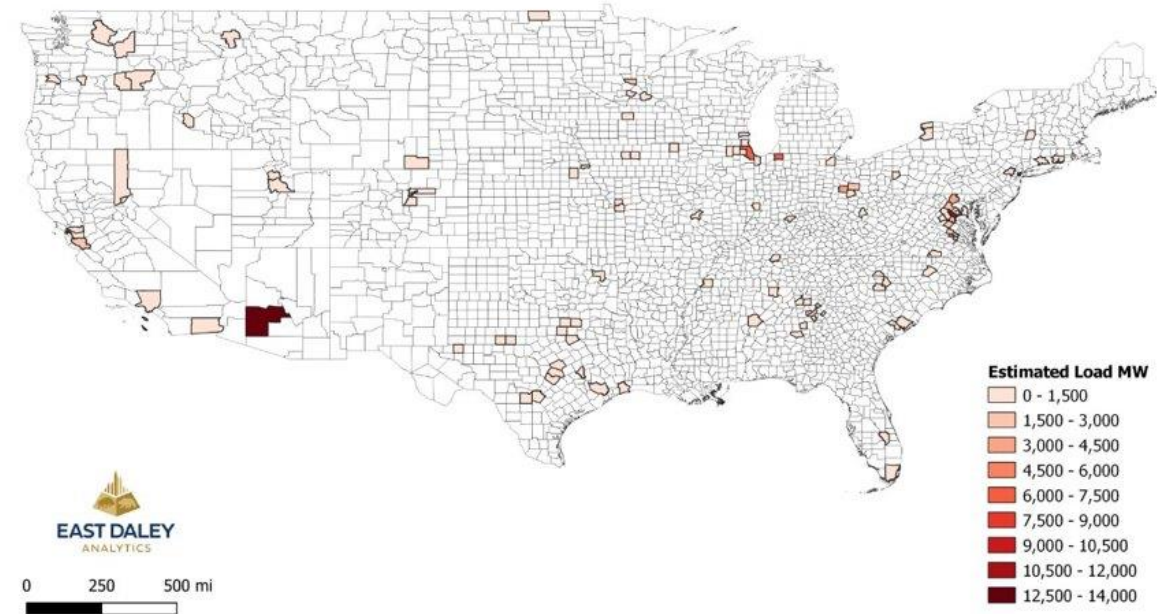


Growth Drivers

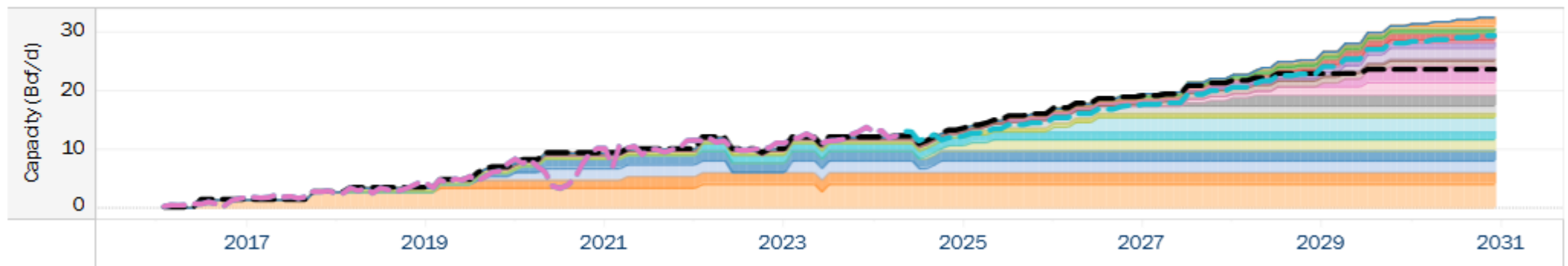
Higher demand

- LNG and Data Centers
- Gas driven basins including ArkLaTex and Tier 2 basins like Green River, Piceance and Barnett are expected to ramp up.

Data Centers Projects
Estimated Load Heat Map



LNG Forecast

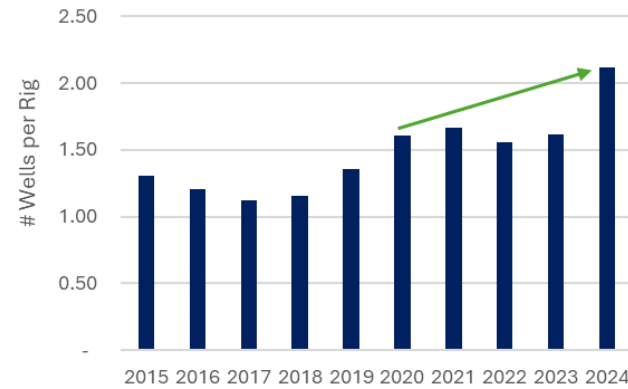


Growth Drivers

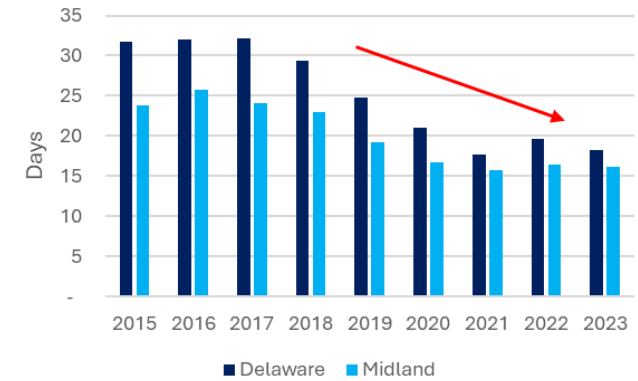
Drilling Efficiencies

- Longer Laterals
- Multi-Well Pads

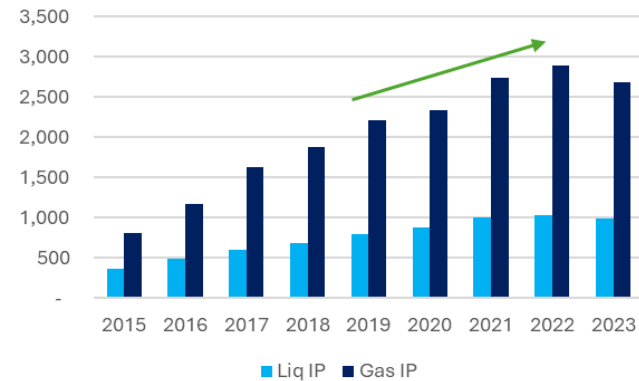
Drilling Efficiency
wells per rig per year



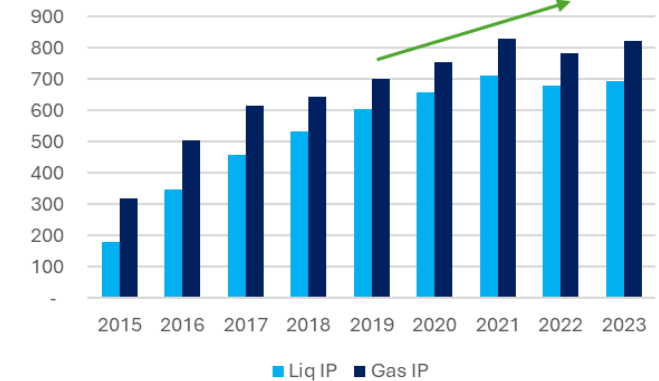
Spud-to-Spud Rate
by sub-basin



Delaware Sub Basin
IP Rates



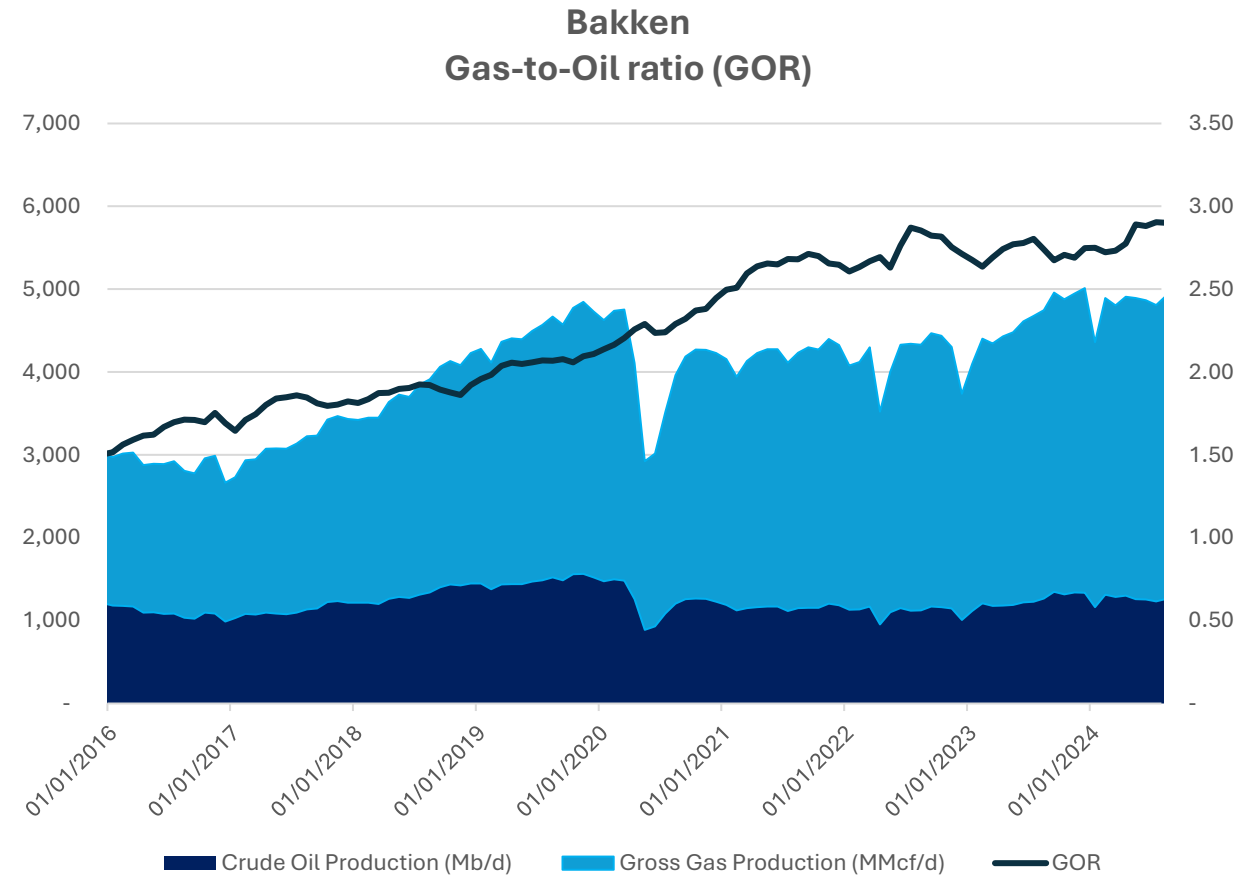
Midland Sub Basin
IP Rates



Growth Drivers

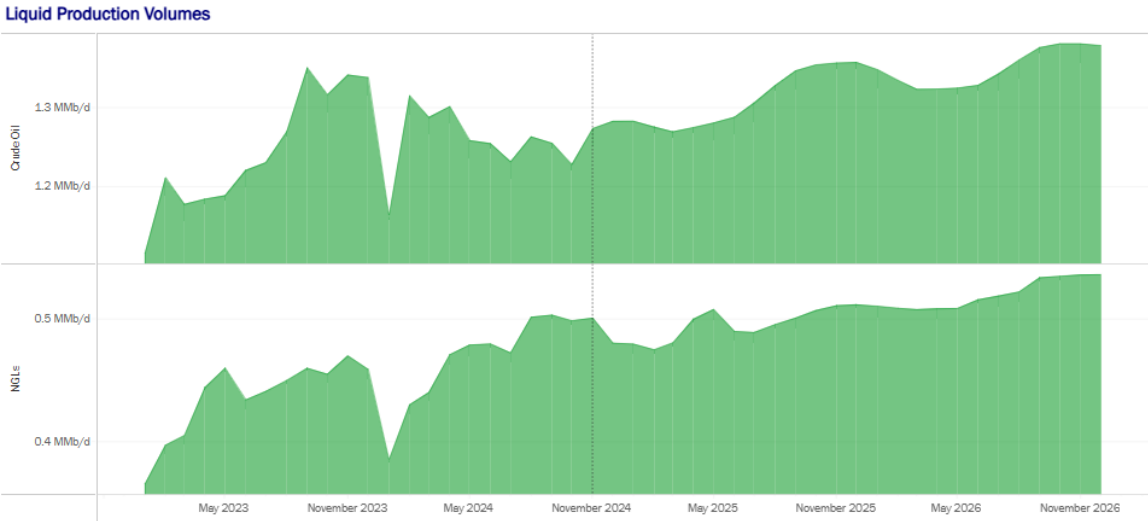
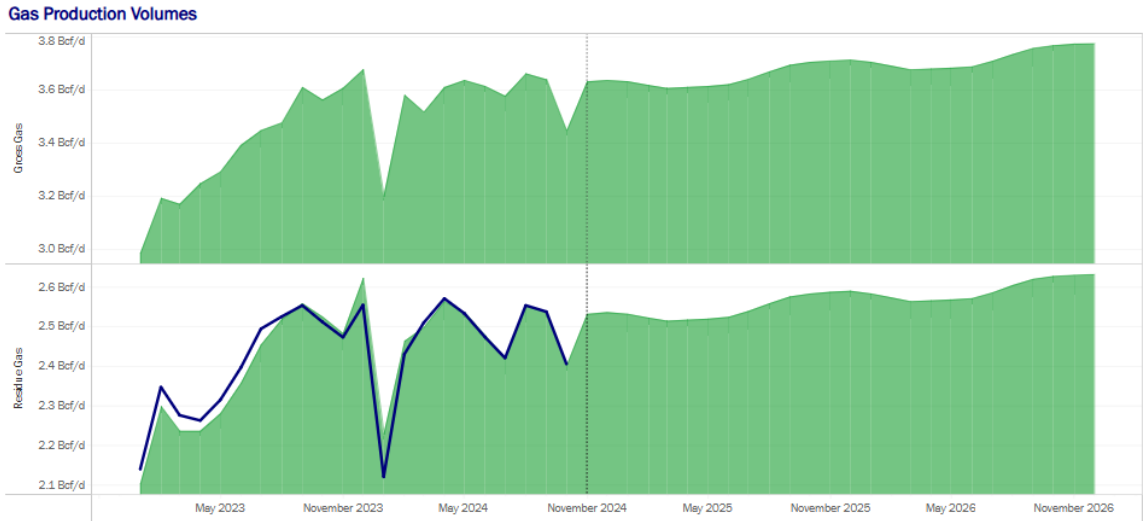
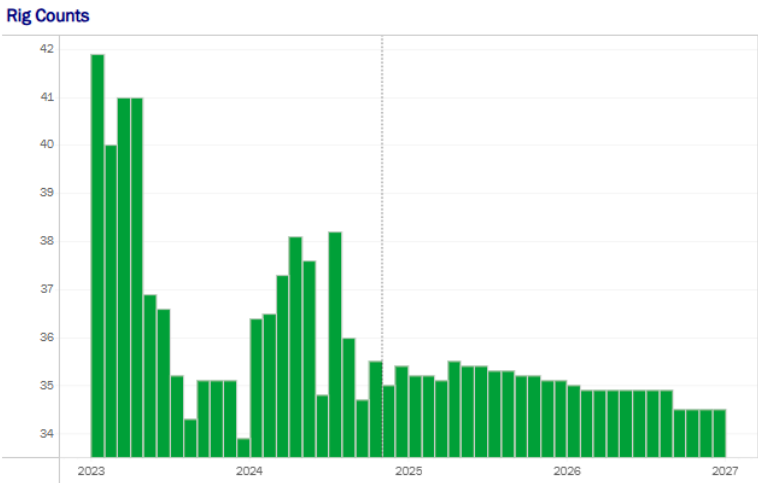
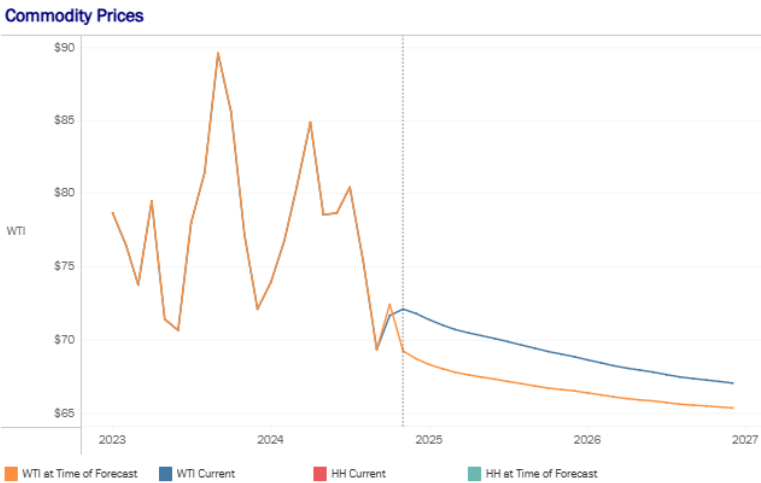
Higher GORs

- Bakken
 - Gas output tends to hold more steady than liquids as Bakken wells mature, resulting in a flatter decline curve for gas.



Bakken Production

Basin:	Bakken		
	2023	2024	2025
Gross Gas (Bcf/d)	3.39	3.56	3.65
Residue Gas (Bcf/d)	2.39	2.48	2.55
Crude (MMb/d)	1.24	1.26	1.31
NGLs (MMb/d)	0.44	0.47	0.50

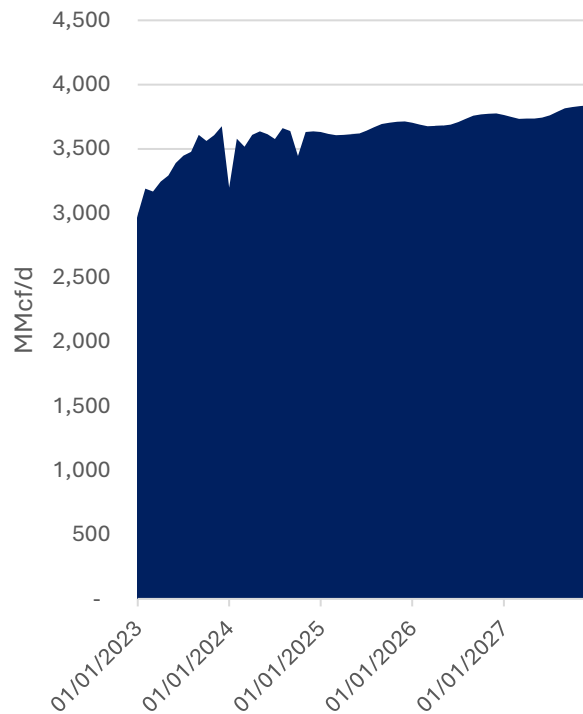


Basin

Bakken

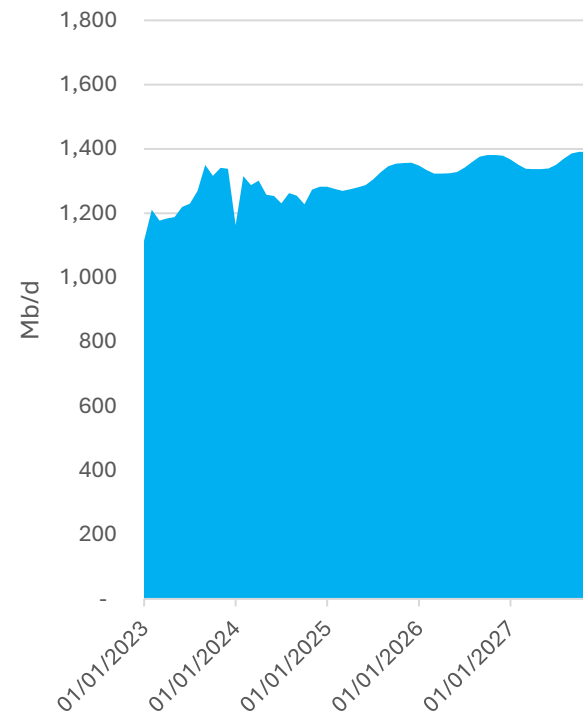
2025 Bakken Outlook

**Gross Gas Production
(MMcf/d)**



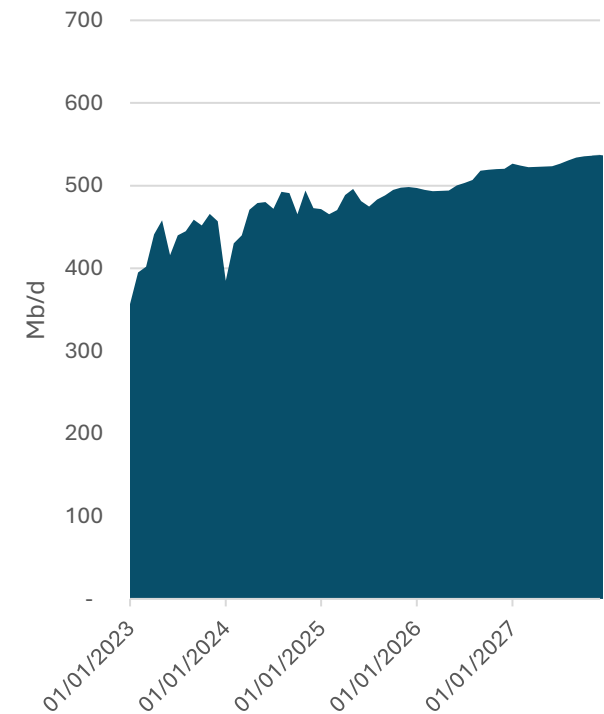
2024 Average: 3,562
2025 Average: 3,653

**Crude Oil Production
(Mb/d)**



2024 Average: 1,259
2025 Average: 1,310

**Natural Gas Liquids Production
(Mb/d)**



2024 Average: 470
2025 Average: 500

Average growth across commodities of 3.6%

Producer Guidance



Chord Energy (+ Enerplus):

- 3-mile laterals improving returns, upside with 4-mile laterals
- Lowering downtime, improving base performance



Hess Midstream (+ Chevron):

- Annualized growth in gas volumes of ~10% from 2024 through 2026 and continued growth in oil volumes of ~10% in 2025 and ~5% in 2026 as implied in its already-established MVC for 2026.



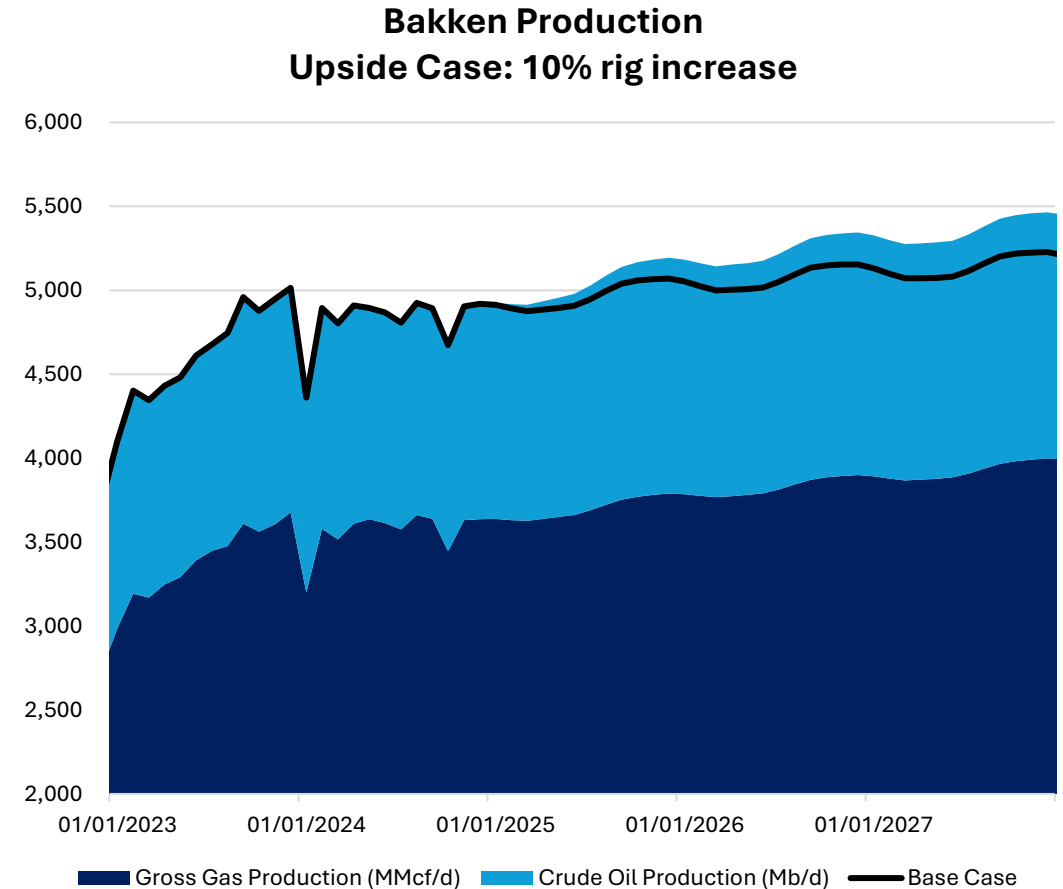
Devon Energy (+ Grayson Mill):

- Raised by 3% oil volume guidance for 2024, from 315 to 324 Mb/d. With the Grayson Mill acquisition expect total volumes to be ~380 Mb/d

CHRD, HESM, DVN account for 44% of the total Bakken production

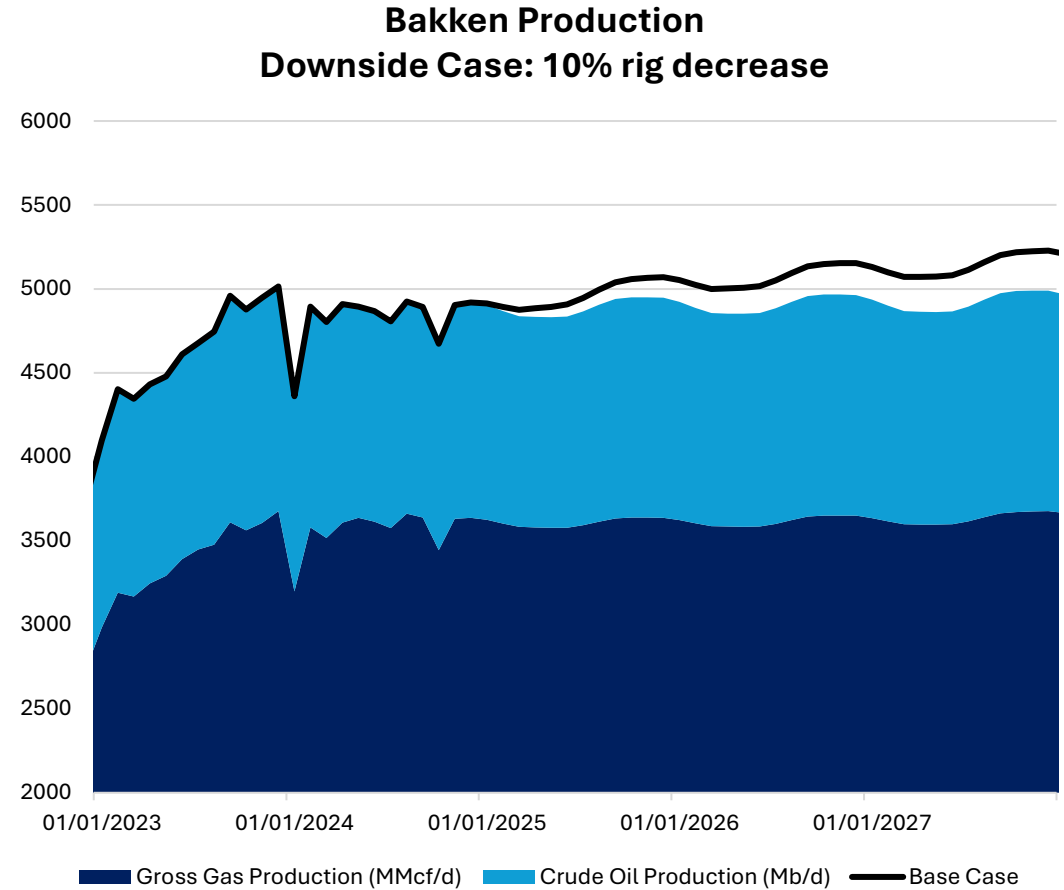
The outlook upside

- **Increased Gas IP rates**
 - With an increase in drilling technologies efficiencies, we could start seeing higher initial production on new wells.
- **Increased GOR**
 - GOR typically increases due to declining reservoir pressure and the production of oil and natural gas
- **Market Dynamic**
 - With opening markets like the West Coast via the Bison Express reversal and in addition to premium/ favorable prices we could see an incentive for additional production



The outlook downside

- **Lower Rig Count**
 - M&A
 - WTI price drop
 - Low risk as main operators on the basin are hedged
 - Commodities are interconnected, not only drilling for one
- **Weather Hazards**
 - Freeze-offs: longer winters
 - Fires: warmer and drier summer
- **Pipeline Maintenance**
 - Egress constraints could lead to lower production



Don't Balk at the Bakken

Crude – Wellhead to Demand
With Gage Dwan and Ajay Bakshani



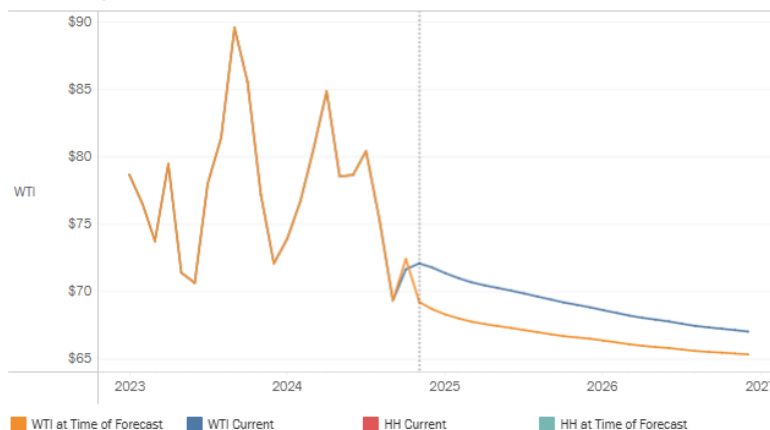
Bakken Crude Outlook

Crude

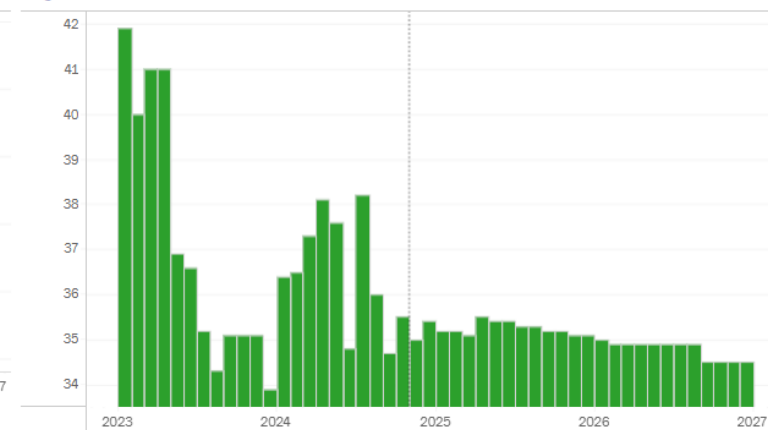
Basin:

	2023	2024	2025
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Crude (MMb/d)	1.24	1.26	1.31
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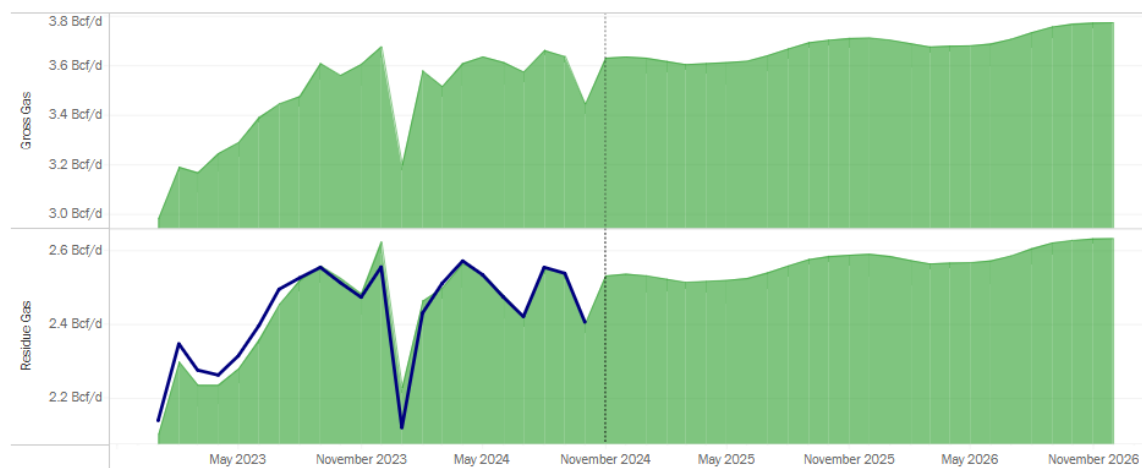
Commodity Prices



Rig Counts

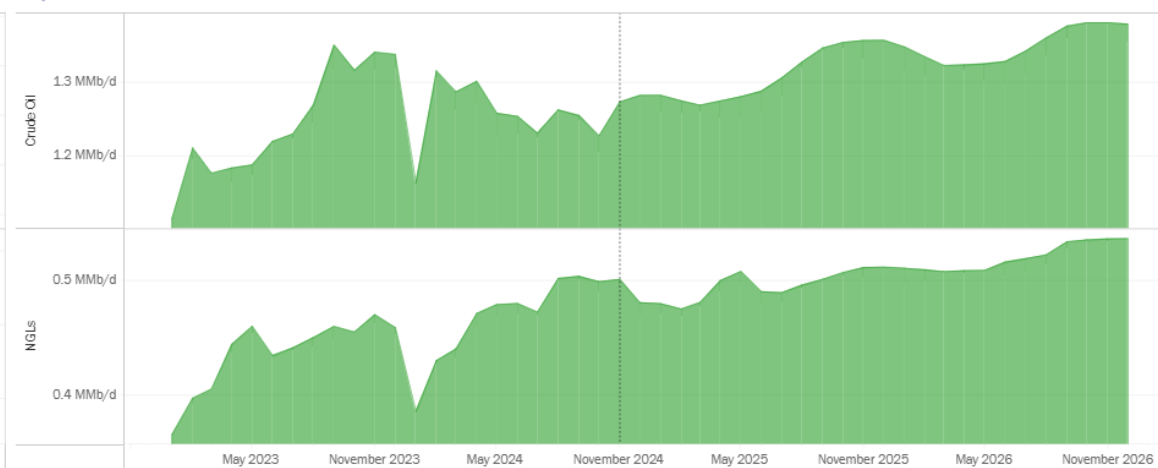


Gas Production Volumes



Basin: ☒ BAKKEN

Liquid Production Volumes



Producer vs Producer

Crude

Operator

(All)

CHORD ENERGY
337,384 BOE/D

HESS CORPORATION
195,158 BOE/D

MARATHON OIL COMPANY
125,478 BOE/D

Devon Energy
Corporation
88,991 BOE/D

KRAKEN
RESOURCES
71,441 BOE/D

SLAWSON

CONTINENTAL RESOURCES
331,425 BOE/D

Operator

(All)

CHORD ENERGY
337,384 BOE/D

HESS CORPORATION
195,158 BOE/D

MARATHON OIL COMPANY
125,478 BOE/D

Devon Energy
Corporation
88,991 BOE/D

KRAKEN
RESOURCES
71,441 BOE/D

SLAWSON

CONTINENTAL RESOURCES
331,425 BOE/D

GRANSON MILL OPERATING
LLC
157,427 BOE/D

EXXON
125,085 BOE/D

NEPTUNE
OPERATING LLC
53,947 BOE/D

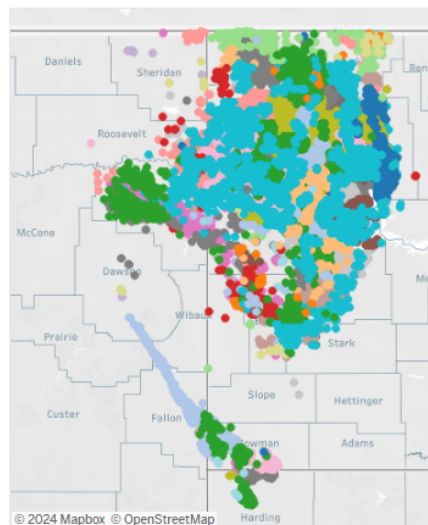
LIME
ROCK
27,917 BOE/D

CONOCO PHILLIPS COMPANY
122,581 BOE/D

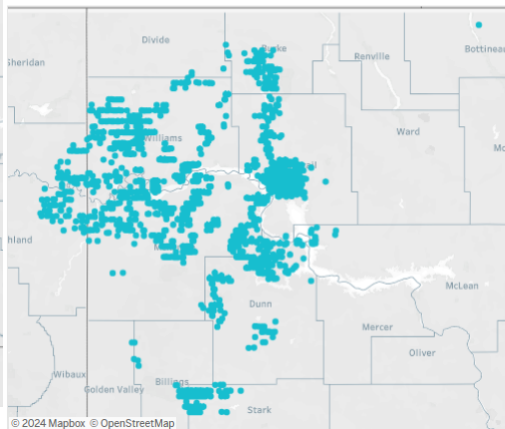
PETRO-HUNT
50,820 BOE/D

EDG RESOURCES,
INC.

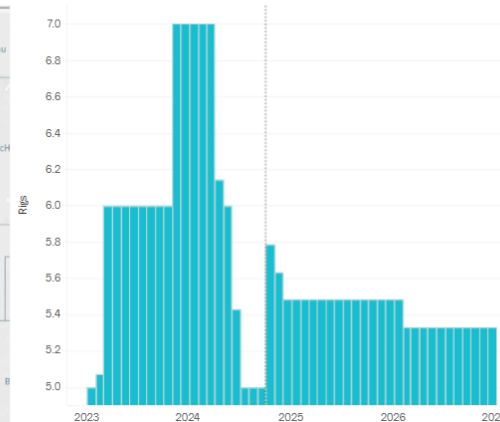
Wells



Wells

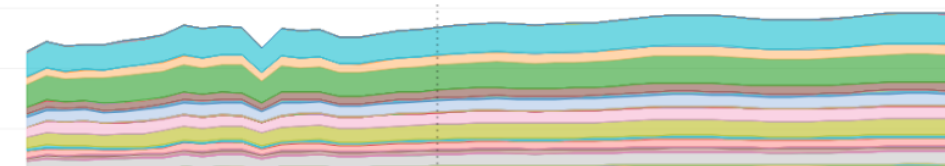


Rigs



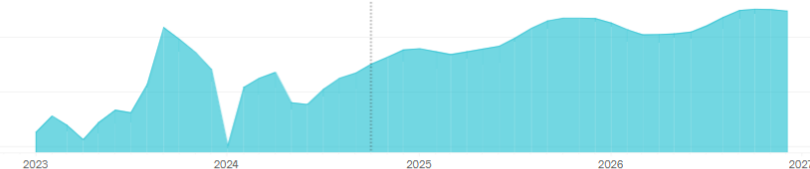
Crude Oil

Crude (b/d)



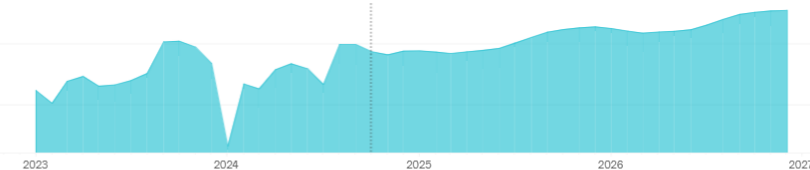
Crude Oil

Crude (b/d)



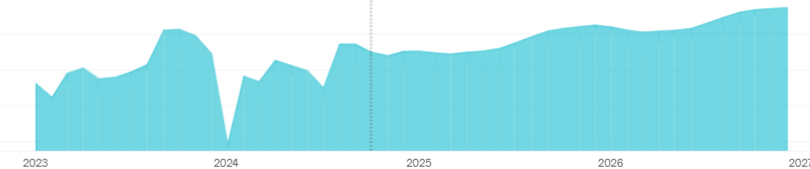
Gross Gas

Gross Gas (Mc/d)



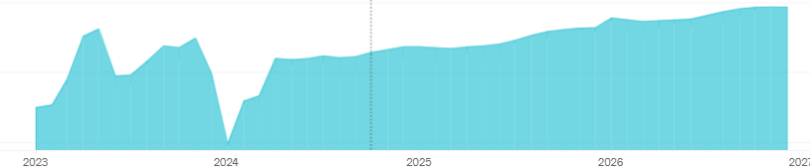
Residue Gas

Residue Gas (Mc/d)



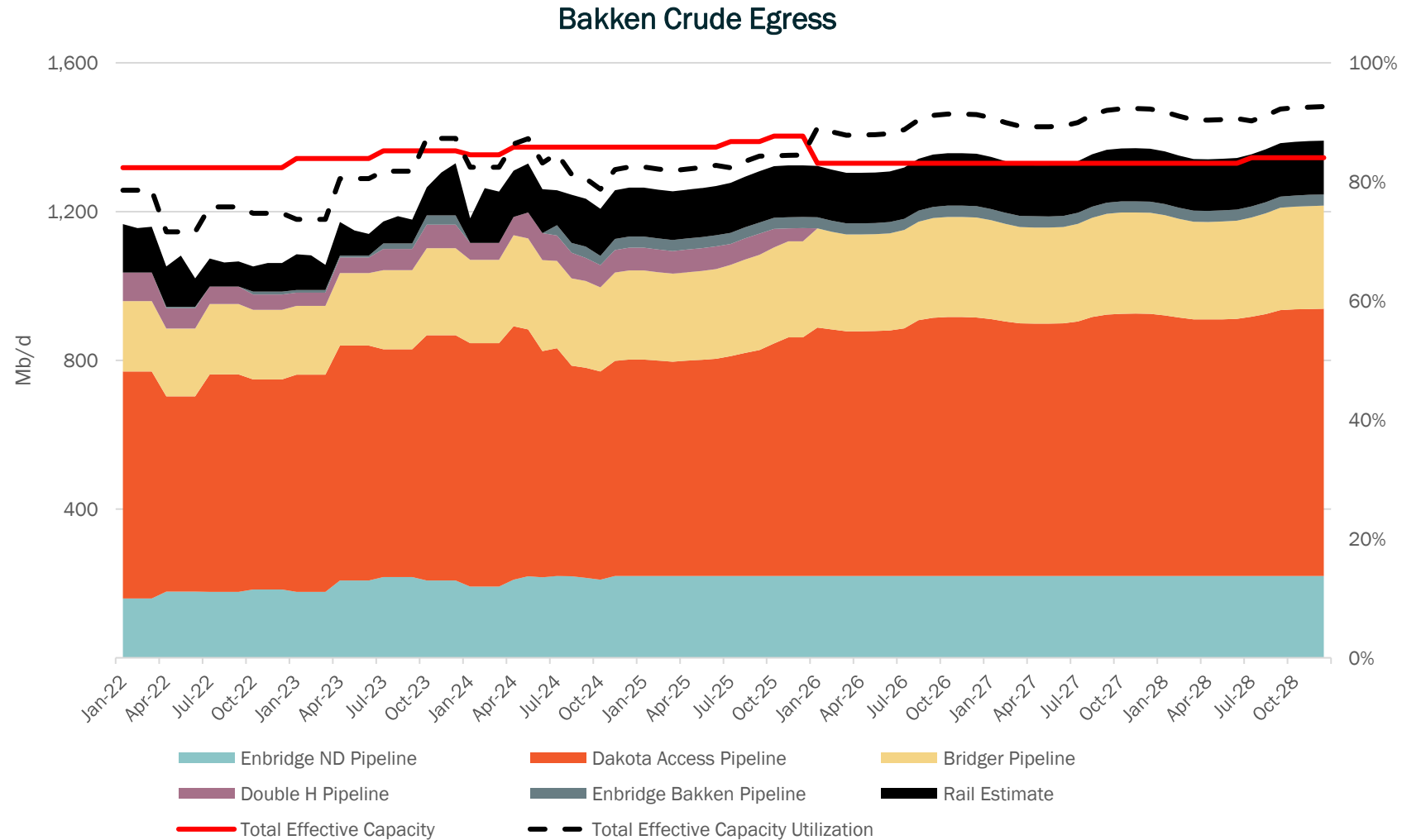
NGL

NGL (b/d)



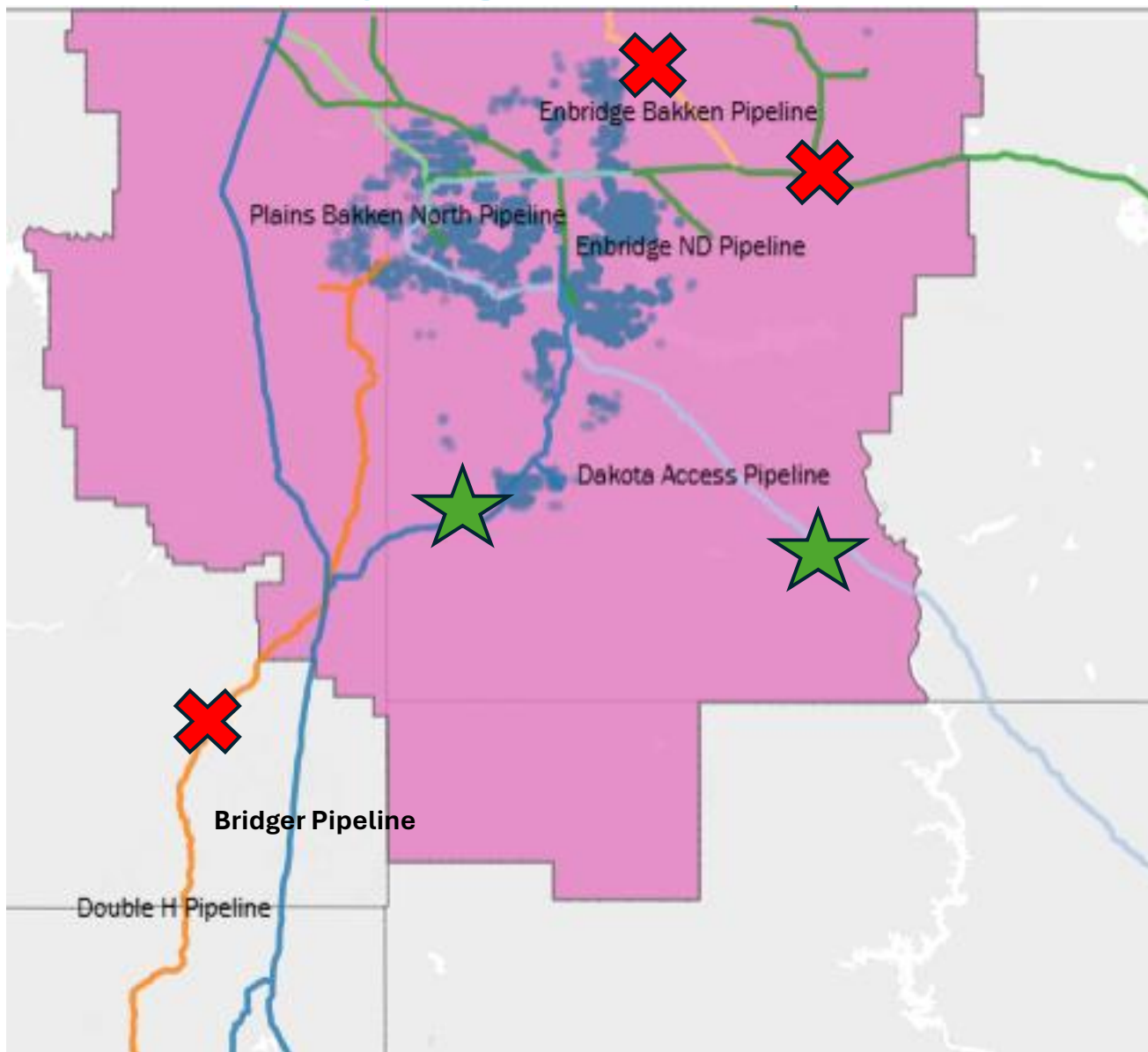
Takeaway Capacity Will Still Get Tight

Crude



Jockeying for Position - Commodity

Crude



Commodity
Decision

Equity
Decision

✖ NDPL
Volume: 219 Mb/d
Capacity: 220 Mb/d

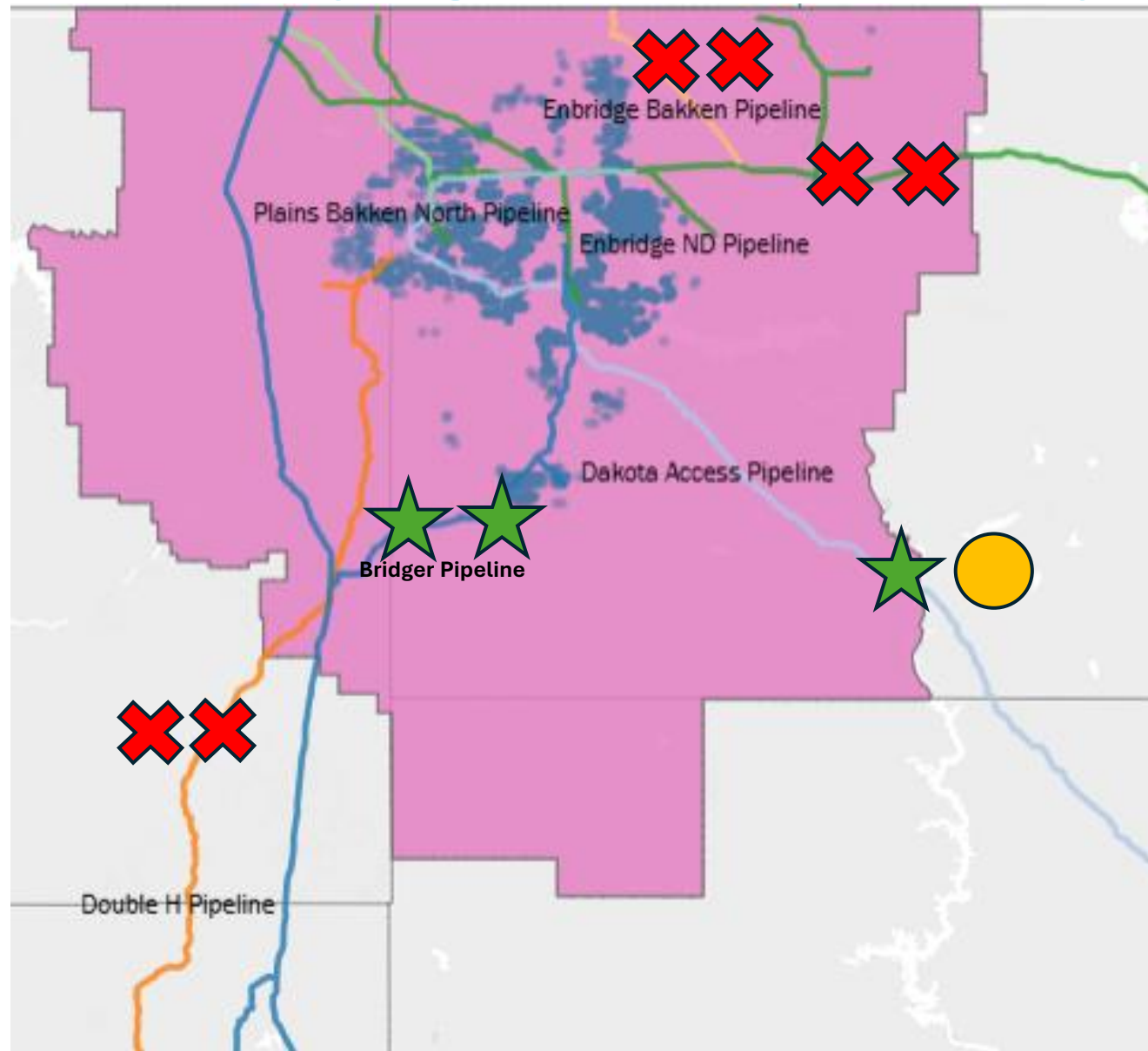
★ DAPL
Volume: 567 Mb/d
Capacity: 750 Mb/d

✖ Double H
Volume: 68 Mb/d
Capacity: 88 Mb/d

✖ Bakken Pipeline
Volume: 30 Mb/d
Capacity: 149 Mb/d

★ Bridger Pipeline
Volume: 245 Mb/d
Capacity: 285 Mb/d

Jockeying for Position - Equity



Commodity
Decision

Equity
Decision

✗	NDPL Volume: 219 Mb/d Capacity: 220 Mb/d	✗
★	DAPL Volume: 567 Mb/d Capacity: 750 Mb/d	●
✗	Double H Volume: 68 Mb/d Capacity: 88 Mb/d	✗
✗	Bakken Pipeline Volume: 30 Mb/d Capacity: 149 Mb/d	✗
★	Bridger Pipeline Volume: 245 Mb/d Capacity: 285 Mb/d	★

Weighted Average Implied Rate : \$5.59

Don't Balk at the Bakken

NGL – Wellhead to Demand

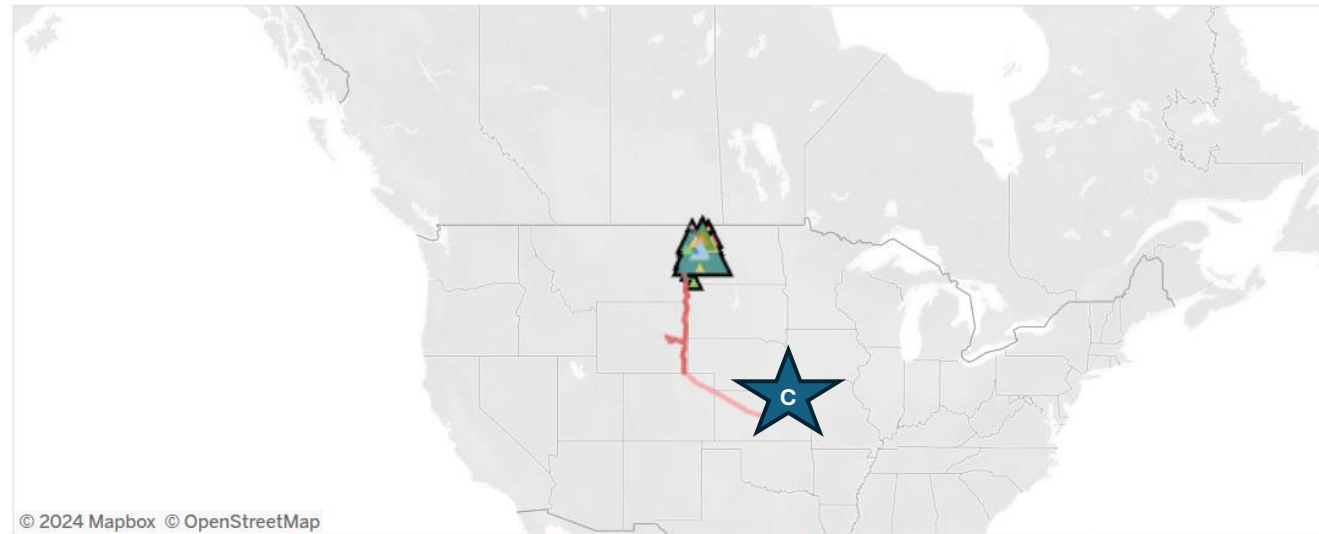
With Rob Wilson and Ajay Bakshani



Bakken NGL Outlook

NGL

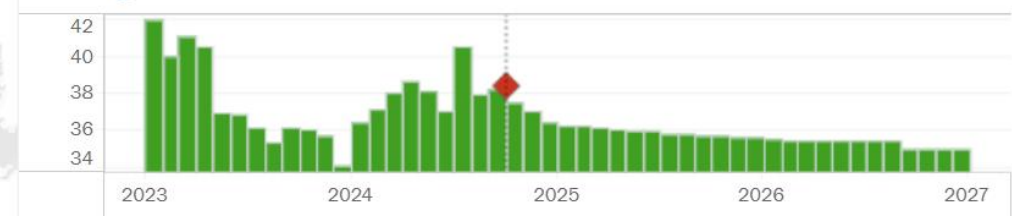
Commod... NGL



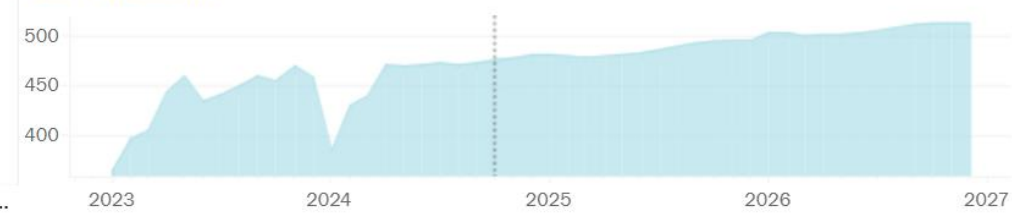
© 2024 Mapbox © OpenStreetMap
KMI Watford City Plant frac MPLX Bakken frac OKE Bakken (South) OKE Elk Creek (South) Pembina Vantage Pipelin...

	2023	2024	2025	2026
NGL (Mb/d)	437	460	487	507

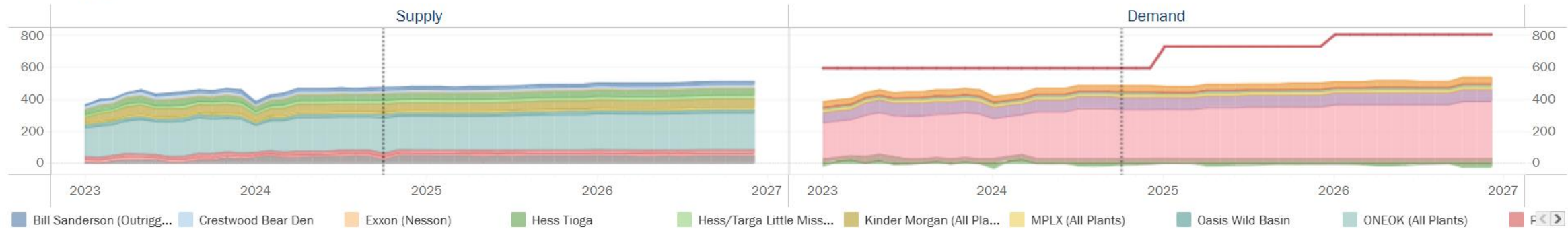
Basin Rig Counts



Basin Production



Basin Supply & Demand



An Itch to Scratch – NGL Equity Call

Question: Why put a Medford Frac at Conway?

1. The economics are good, even if you're running a conservative case
2. Direct route to incremental demand in the Mid-Continent (instead of Conway to Belvieu as y-grade, back up to the Mid-Con as purity product)
3. Fractionate more NGLs in Conway, put it on Sterling – which has plenty 'o
★ capacity – freeing up space for more y-grade on Arbuckle from Conway to Mt. Belvieu

→ “Accommodates volume growth from the Permian, Bakken and Mid-Continent”

Equity Picks Optionality



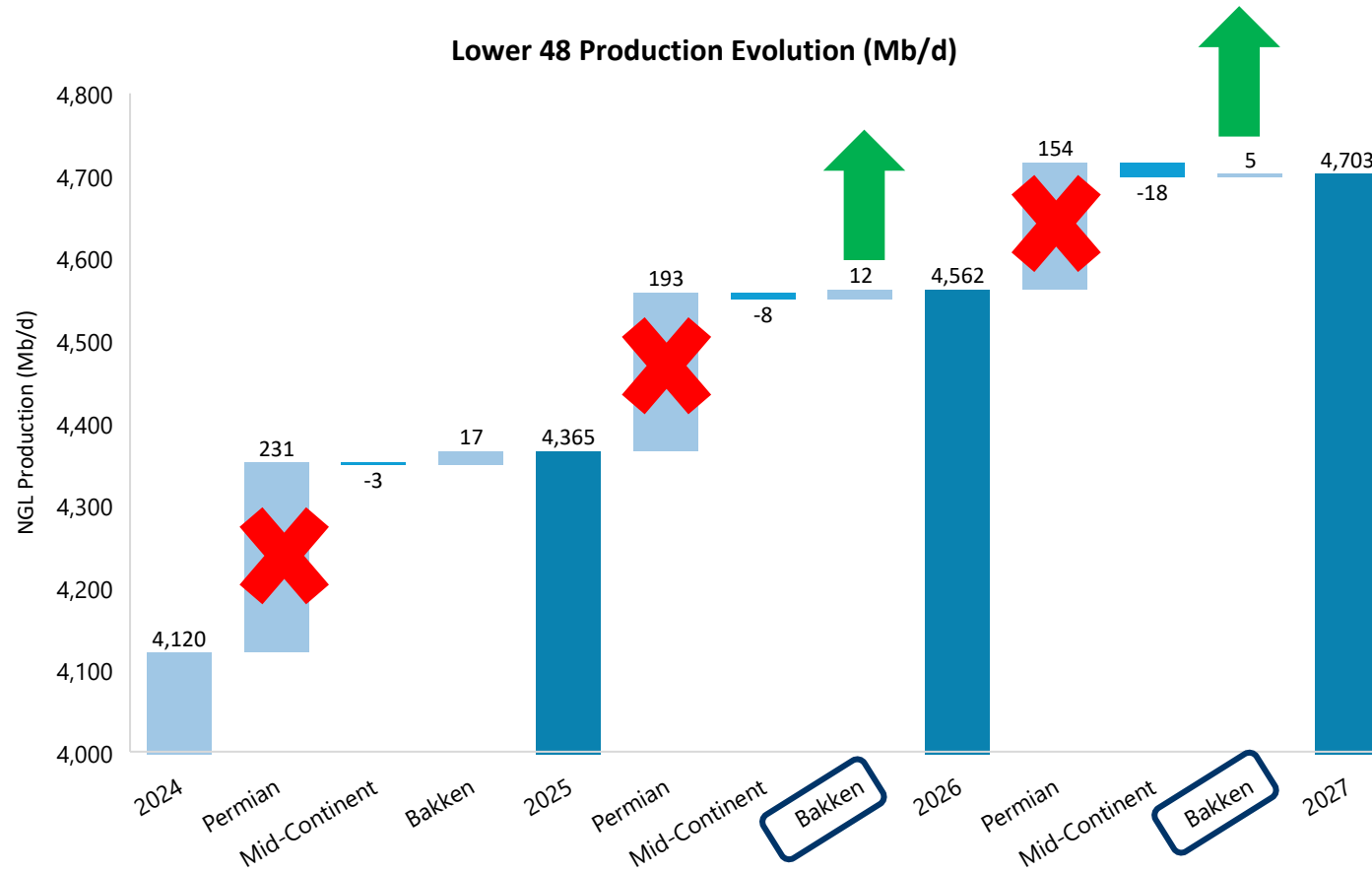
- 1 • Arbuckle is highly utilized, ~85% over the TTM 3/31/24
- 2 • Sterling is underutilized, ~36% over the TTM 3/31/24

Putting the 210 Mb/d Medford fractionator in Conway, KS allows OKE to

- make more purity product for delivery into Mt. Belvieu on Sterling
- Create needed space on Arbuckle from NGL growth in the Permian, MidCon, and the Bakken

Medford - Ethane Please

NGL



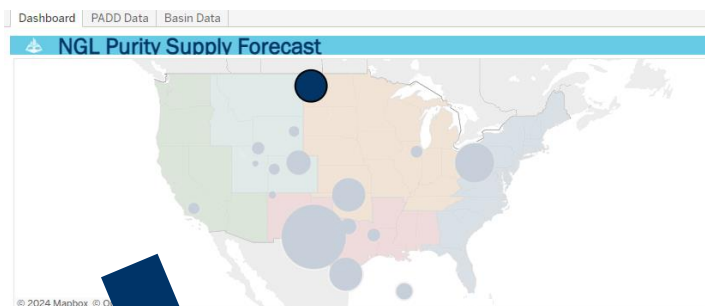
2024-2027 Growth → 582 Mb/d

- ✗ Permian = 578 Mb/d
- Mid-Continent = (29) Mb/d
- ↑ Bakken = 33 Mb/d

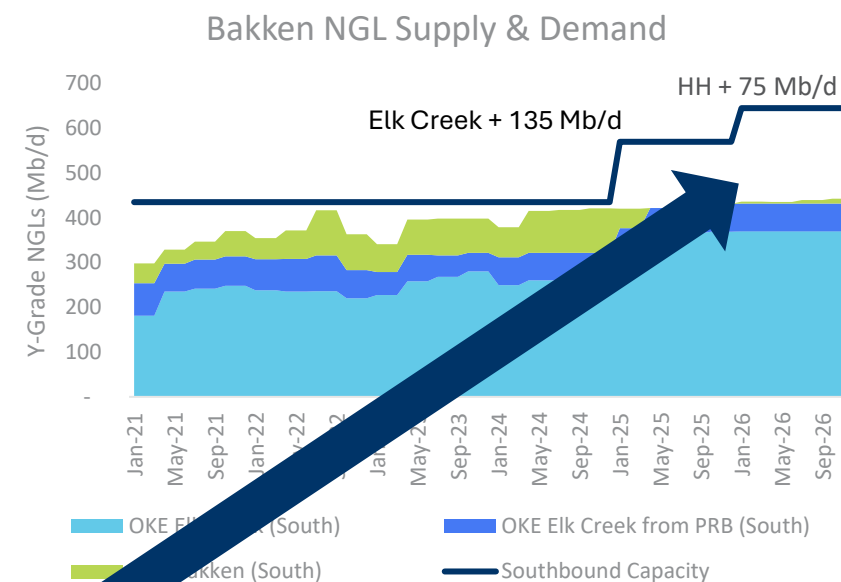
Bottom Line: Upside to EDA's Bakken NGL forecast

Reject or Recover – What's the price

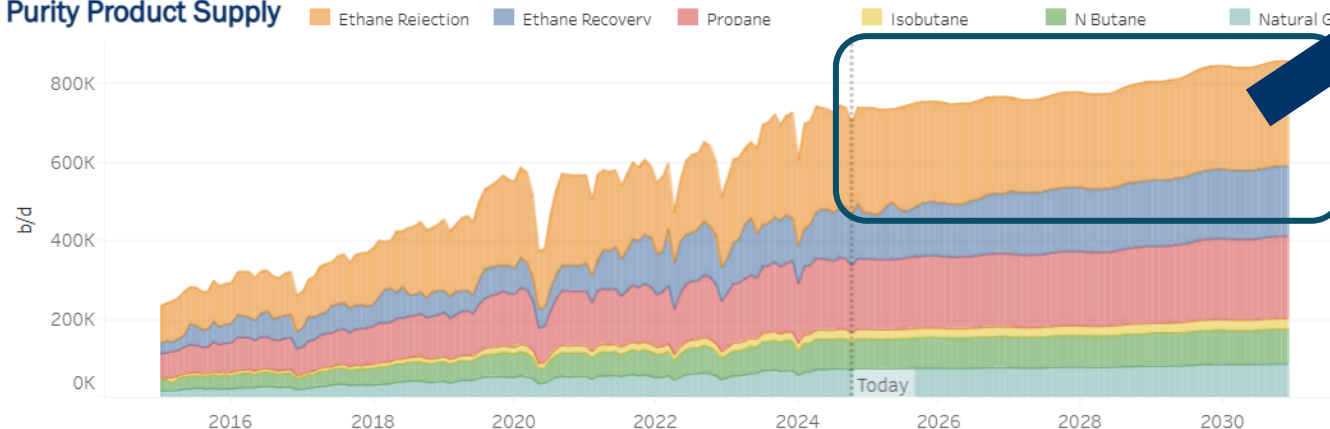
NGL



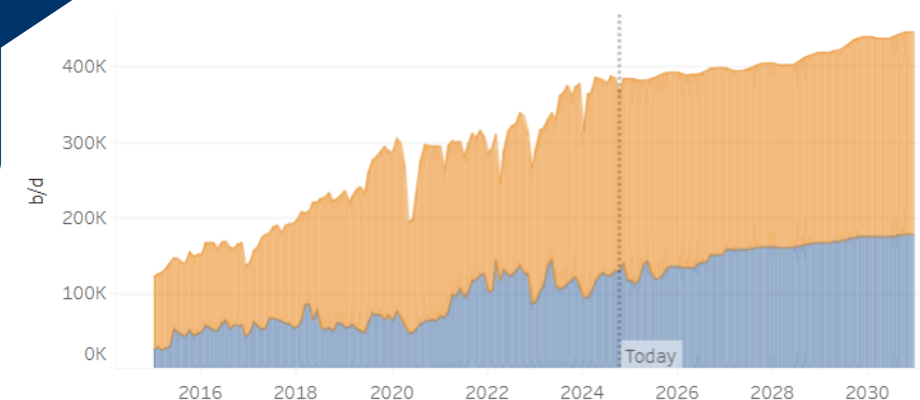
- OKE extracts more ethane in the Bakken & ships it to Conway where it can
 - 1) fractionate y-grade in Conway (Medford) and send it to Mt. Belvieu or
 - 2) ship y-grade to Mt. Belvieu
- Use volumes to *underpin LPG or ethane export facility* in the GoM while *growing fee-based EBITDA* at the same time



Purity Product Supply

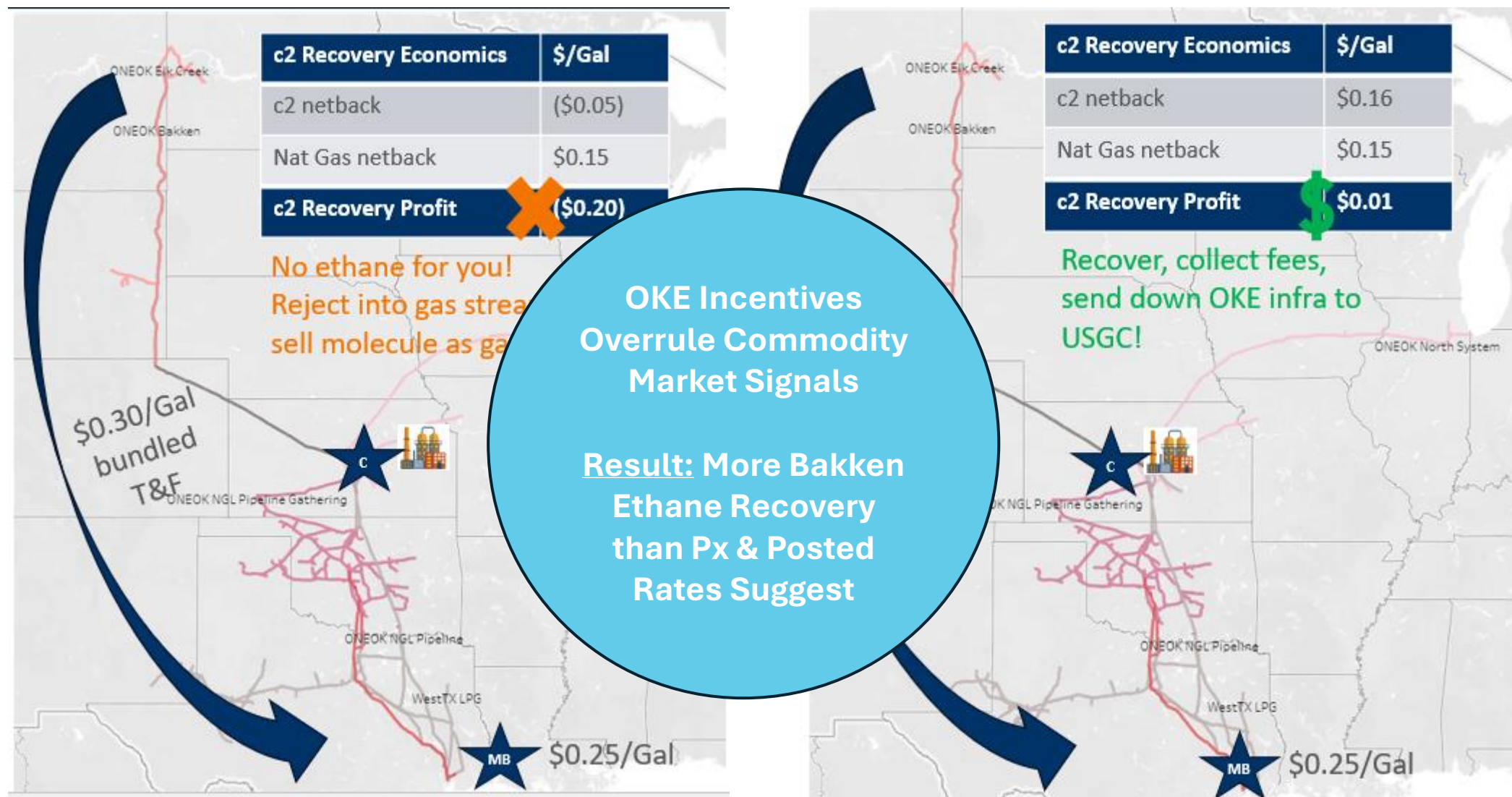


Recovered vs Rejected Ethane

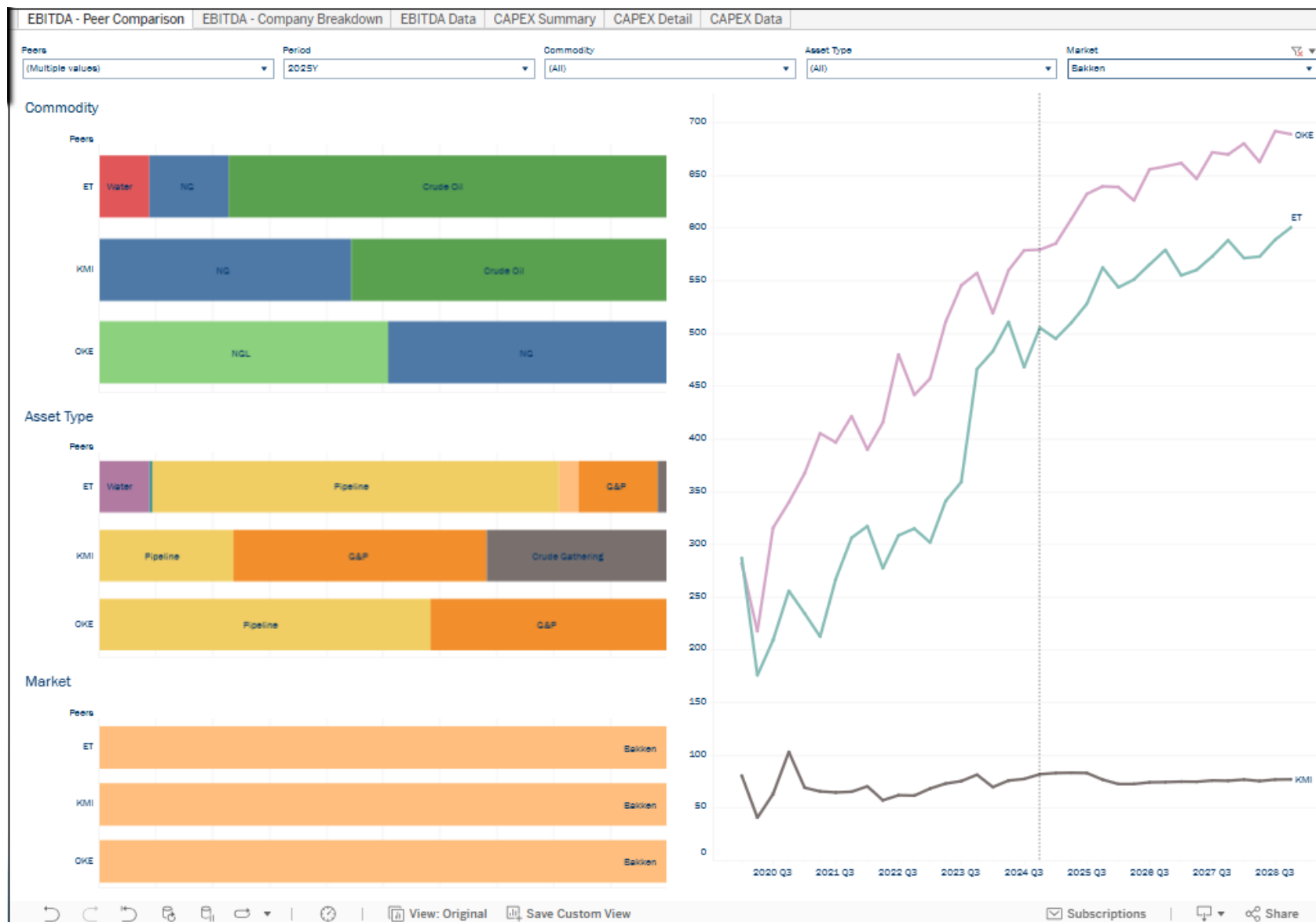


Optionality Creates a Hedge

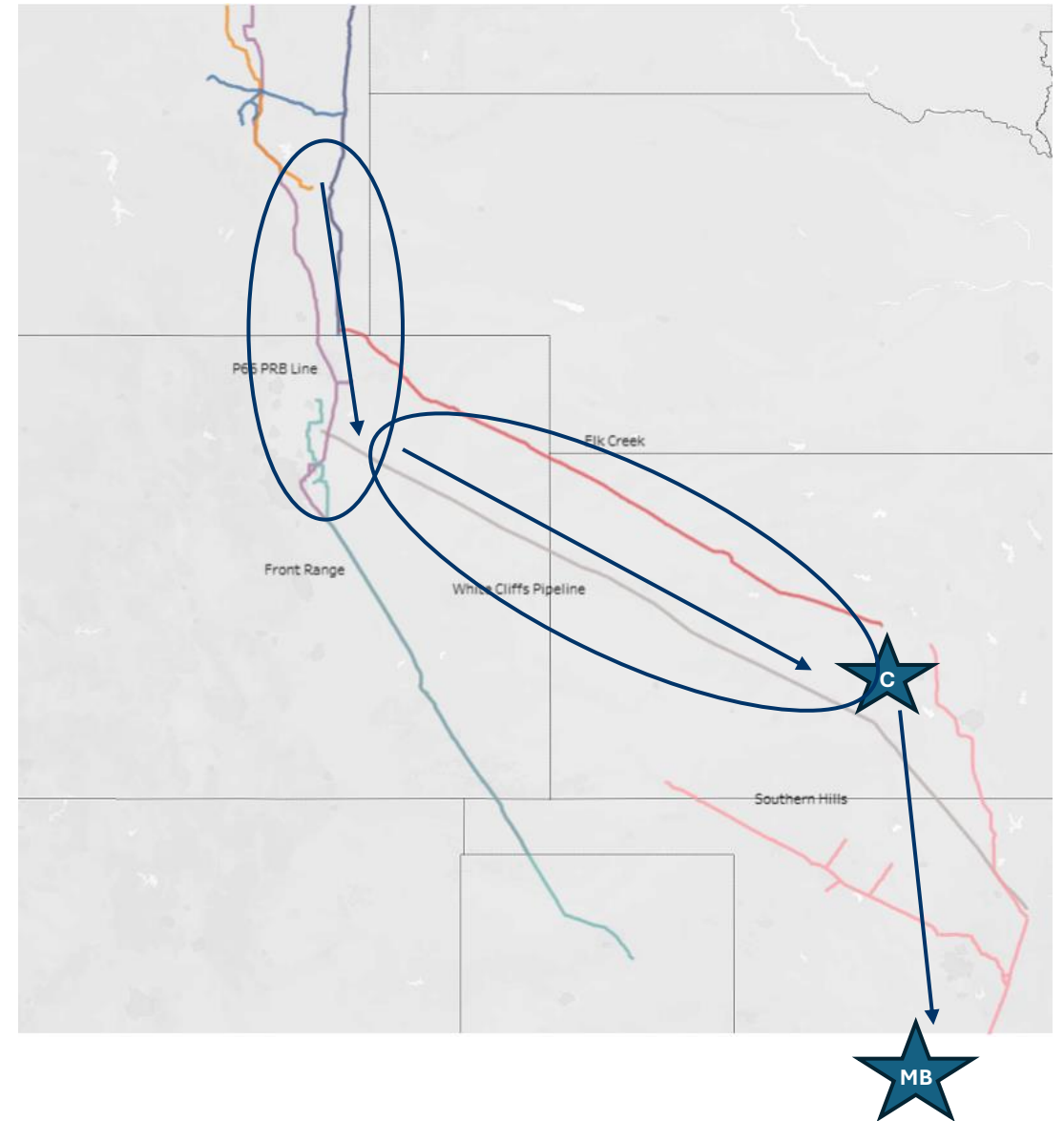
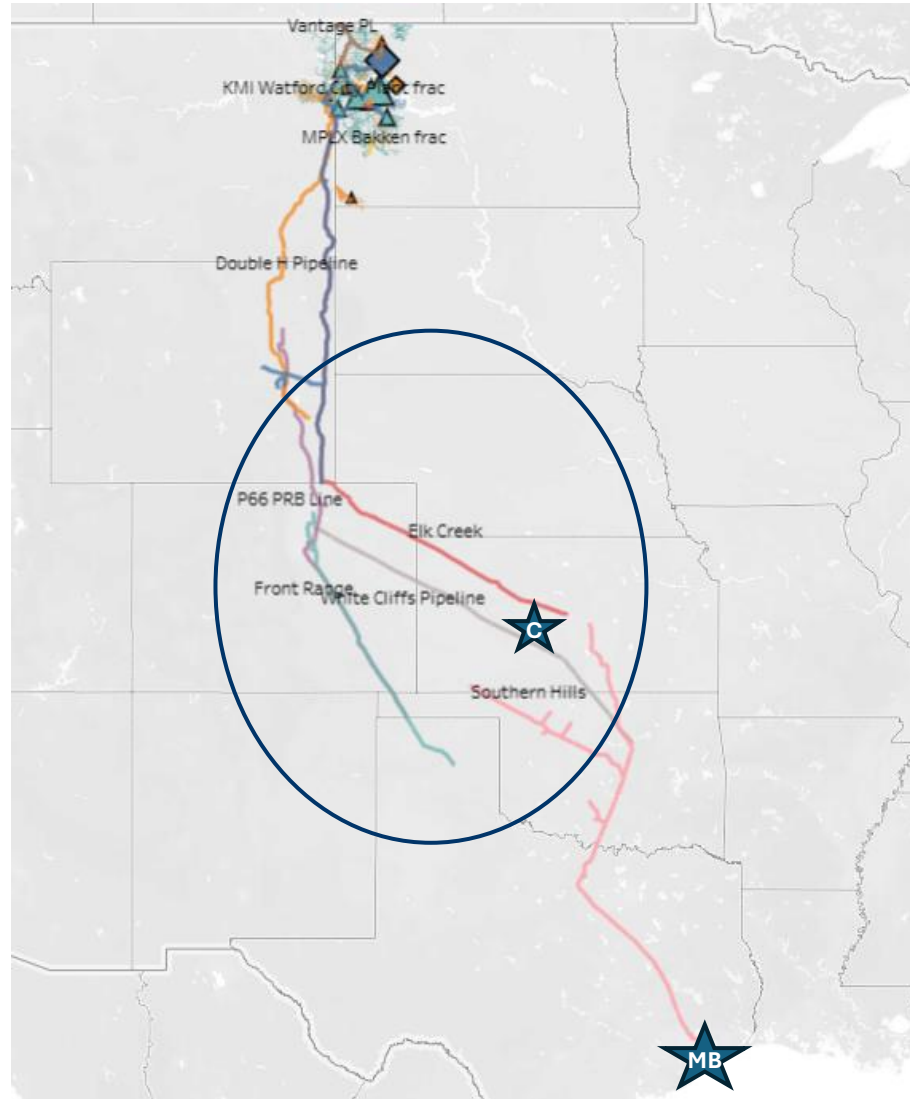
NGL



The Game is Afoot - Midstream



Future Optionality – Energy Transfer





Coming Soon: Cross Commodity Bakken Product

Scan the QR Code or [Click Here](#) to Request More Information on The Bakken Product



DLS 2025 Part 2: Take Me To The Gulf

Dec 4 | 10 AM MST | Online Webinar

Scan the QR Code or [Click Here](#) to RSVP to Part 2 of the DLS 2-Part Webinar Series

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Upcoming Webinar:
December 4: Take me to the Gulf



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