



Adam Bedard, CEO ARB Midstream, LLC

Midstream View on Rail

June 2, 2015



ARB Midstream Overview

- Growth oriented, infrastructure development company focused on early stage, organic development projects
- Provide marketing and logistics services to producers and refiners
- Quantitative analytics drive development strategy
- Current Projects
 - DJ Basin Energy Hub: Niobrara Connector (“**NiCon**”)
 - Midland Basin (Big Spring) Energy Hub: Gateway Project

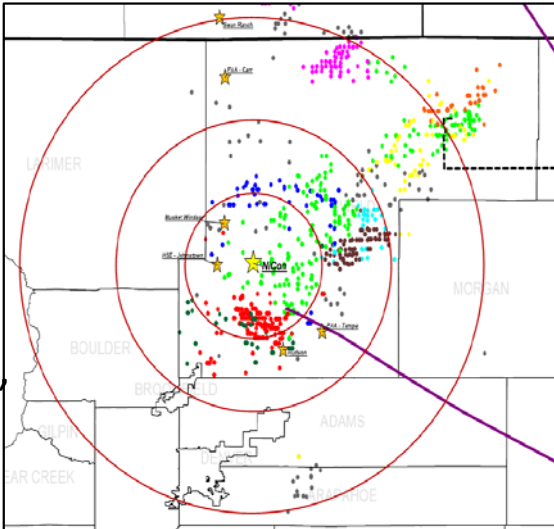


Projects – Energy Rail Hubs



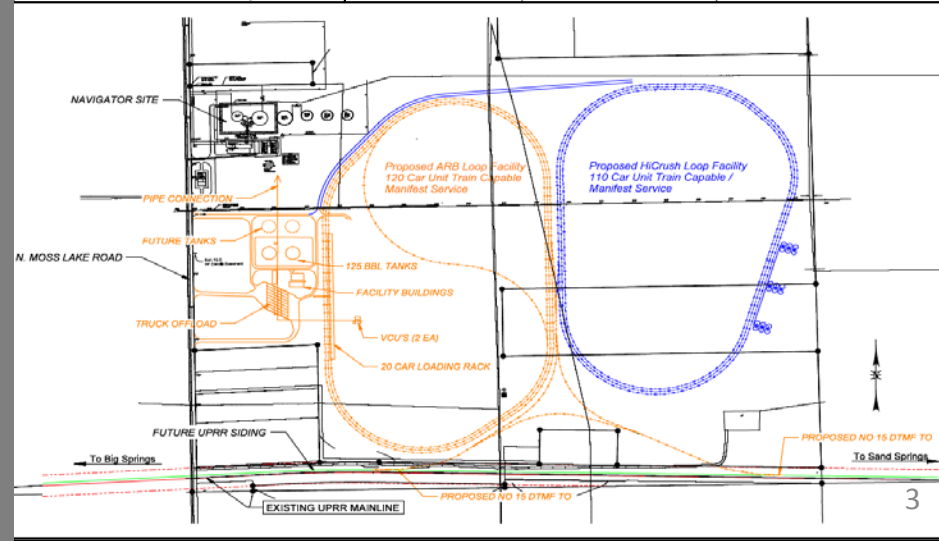
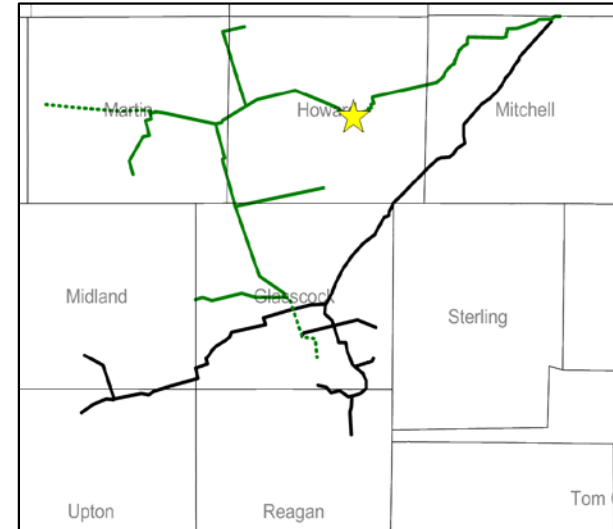
Niobrara Connector

Heart of DJ
 225 Acres
 ISD: Q4 '15
 79,000 b/d
 Storage: 200 Mbbl
 Partnership with
 Hi-Crush (Sand In,
 Crude Out)



Permian Gateway

Howard
 County
 300 acres
 ISD: Q1 '16
 Pipe Con.
 Partnership
 with Hi-Crush
 (Sand In,
 Crude Out)



Market Observations



- Uncertainty about future crude oil production adds substantial risk to new midstream projects
 - Rail provides a Just-In-Time solution
 - Flips from “producer push” to a “refiner pull”
- Compression of diffs is changing CBR movement patterns
- Rail and Pipe netbacks trending to parity
- Quality deducts, pipe specs drive value of segregation
- Pipe commitments have a 10x capital need from producers compared to rail

Uncertainty

What is production going to do? It depends on flat price, reduced drilling costs, improved break evens, drilled – uncompleted wells, drilling efficiencies, contracts, crude quality, CapEx, OPEC, etc., etc., etc.,



What will production do?

• Upside

- High grading
- Increased drilling efficiencies
- Improving Breakevens
- Decreased completion costs
 - Rig rates have fallen 20-30%
- Improving price
 - WTI has closed above \$50 since Feb 3
- Producers bringing rigs back
- Drilled Uncompleted (DUCs)

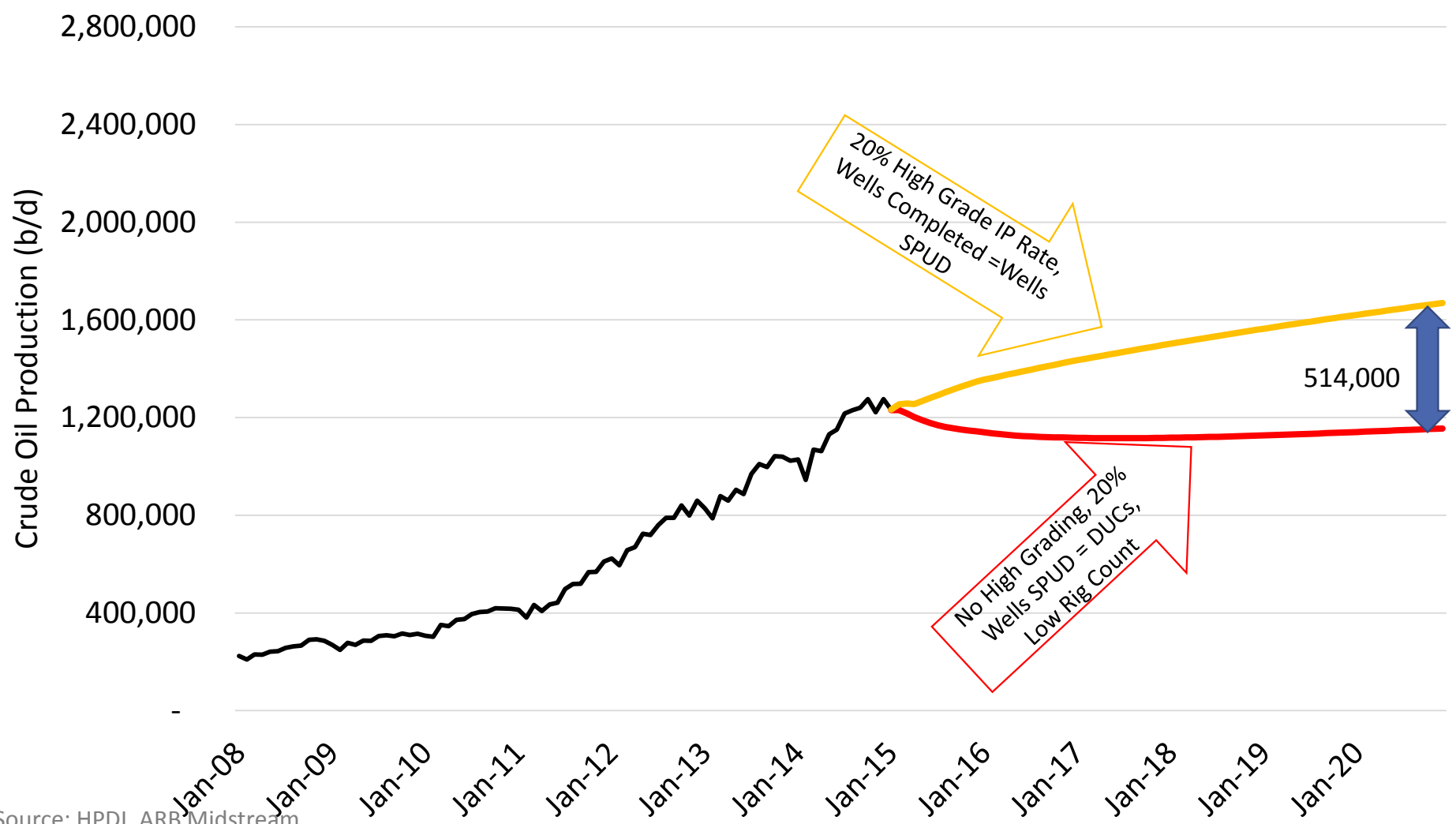
• Downside

- Flat price downside
- Declining rig count
- Drilled Uncompleted (DUCs)
- OPEC production
- Iran deal
- Iraq increasing exports

Williston Basin: Crude oil production forecast swings by 500,000 b/d over next 5 years depending on model assumptions



Williston Basin - Crude Oil Production Forecast

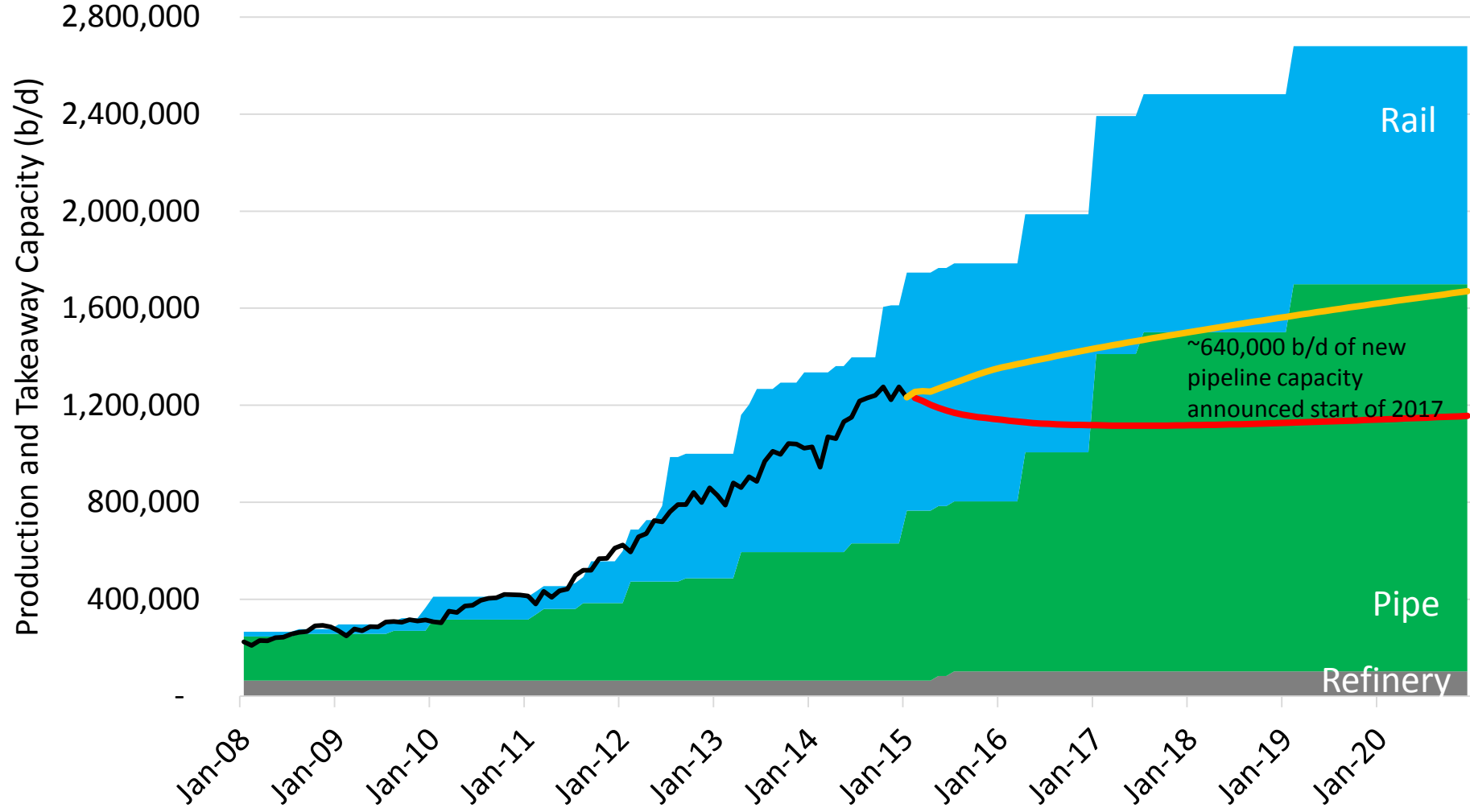


Source: HPDI, ARB Midstream

Uncertainty in production is the difference in some pipes not being full



Williston Basin: Production and Takeaway Capacity

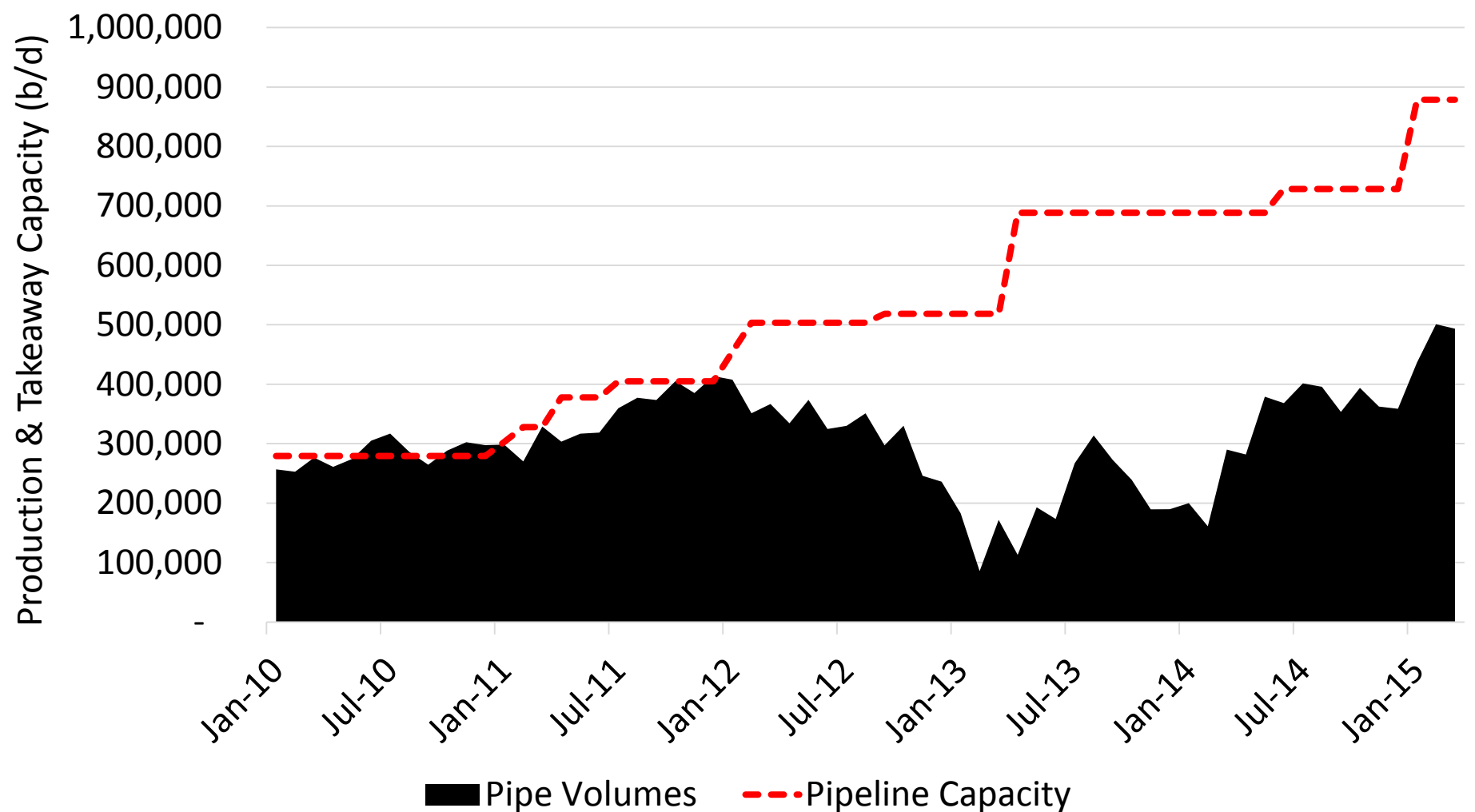


Source: HPDI, ARB Midstream, Company Presentations

Pipelines out of the Williston have not been full. The “stacked S/D chart” is overly simply.



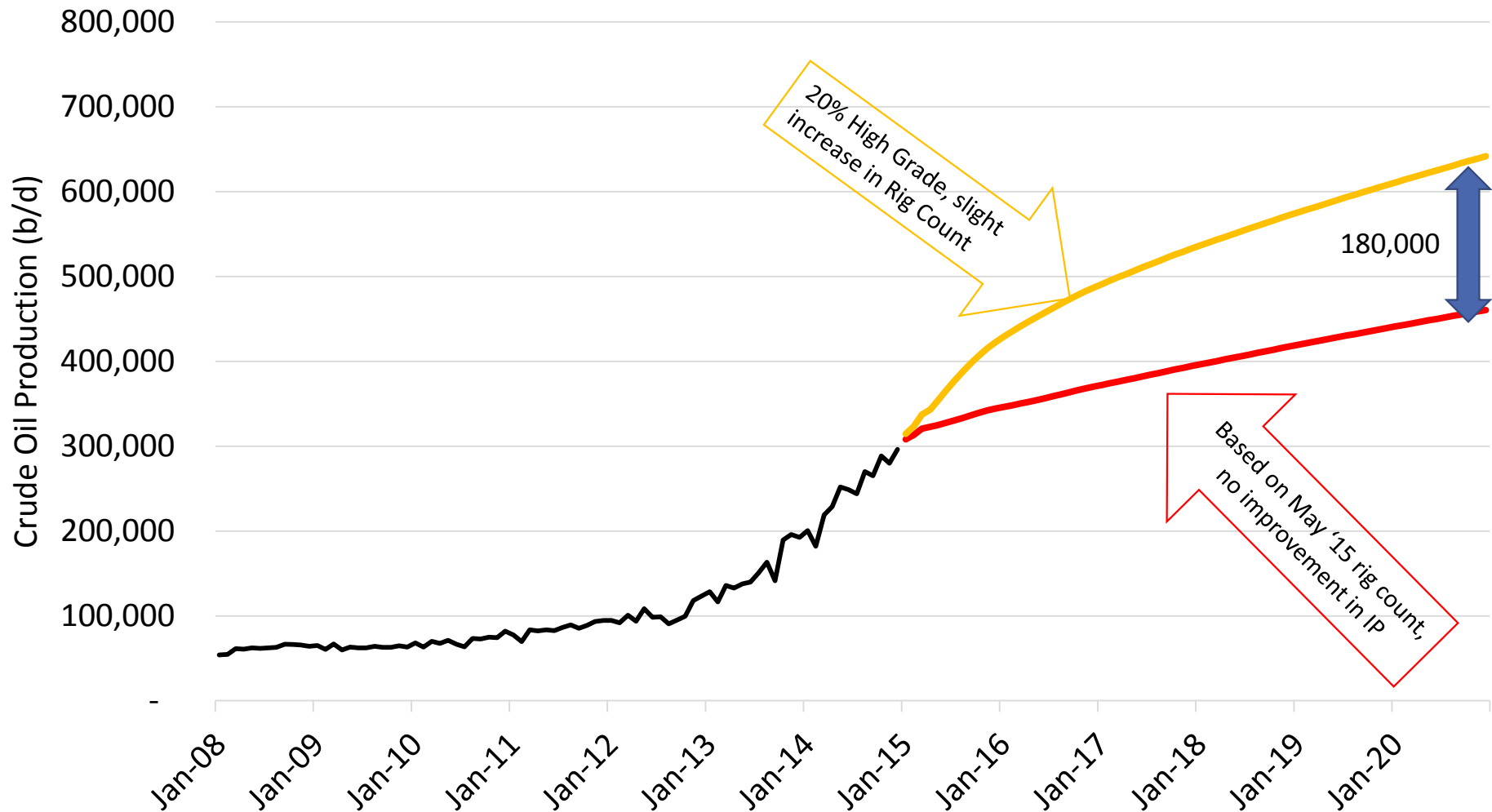
Williston Basin: Pipeline Capacity and Flows



DJ Basin: Crude oil production forecast swings by 180,000 b/d over next 5 years depending on model assumptions



DJ Basin – Crude Oil Production Forecast

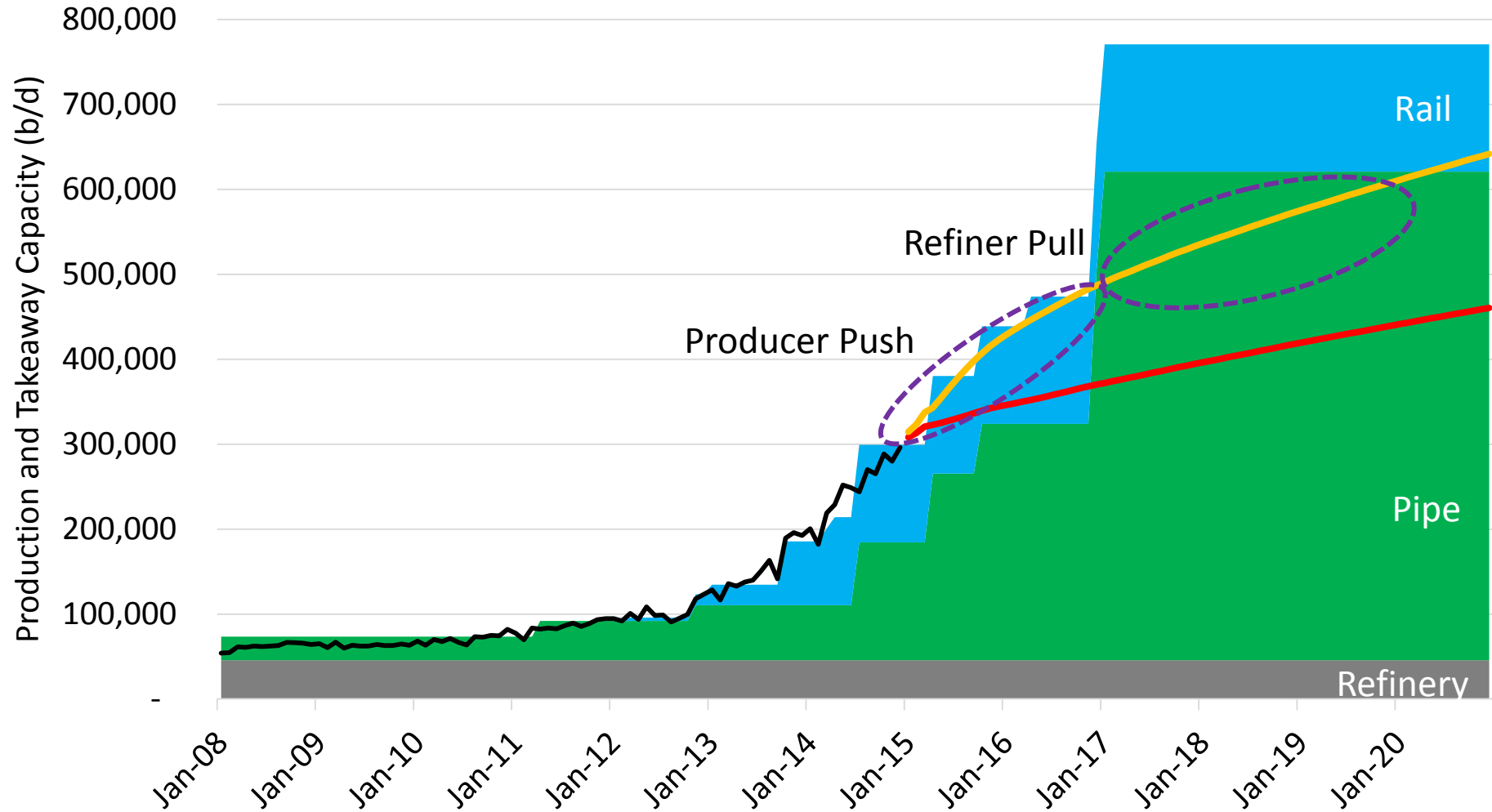


Source: HPDI, ARB Midstream, Company Presentations

That production swing has huge impact on utilization of infrastructure



DJ Basin: Production and Takeaway Capacity



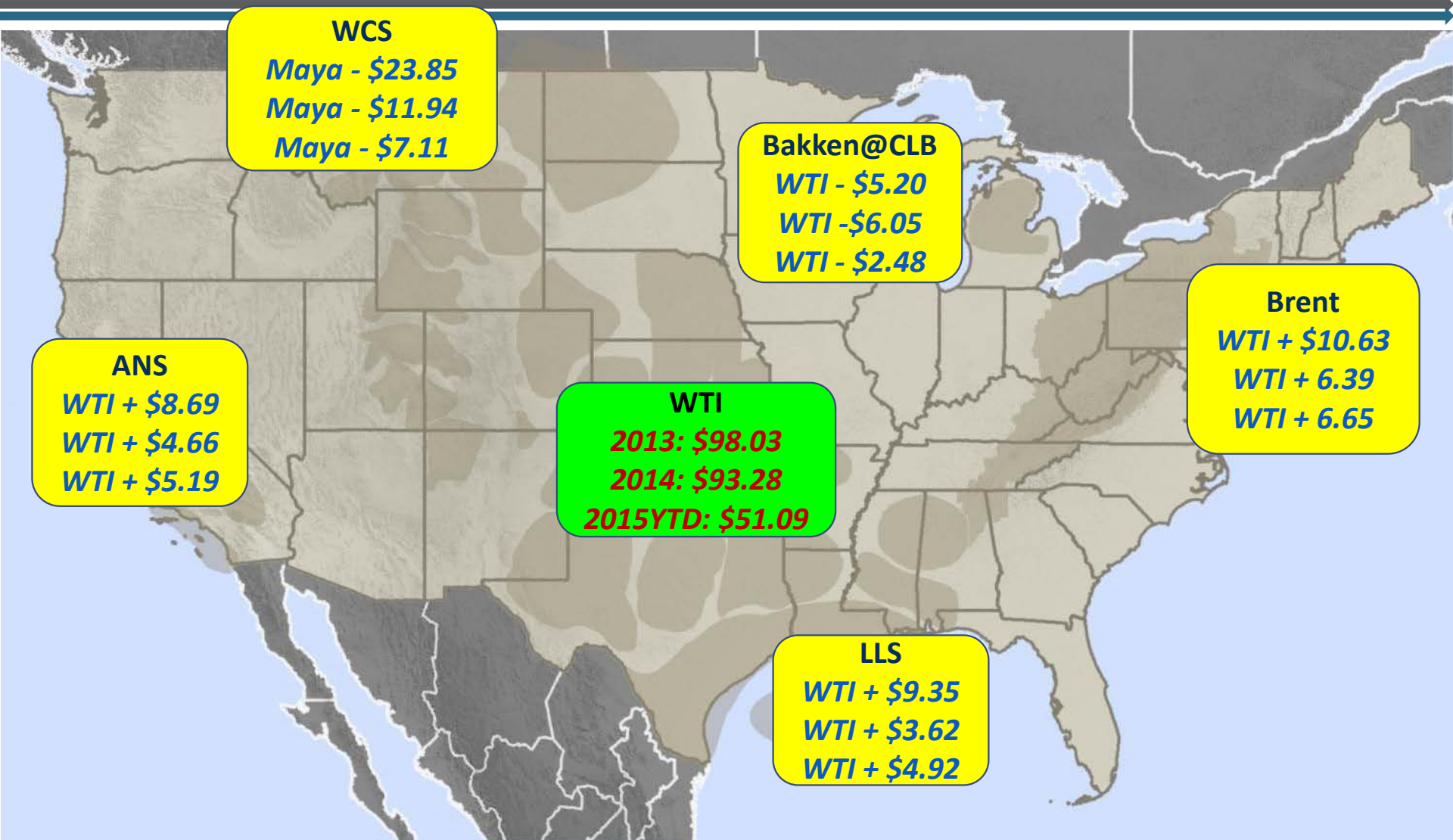
Source: HPDI, ARB Midstream, Company Presentations

Differentials

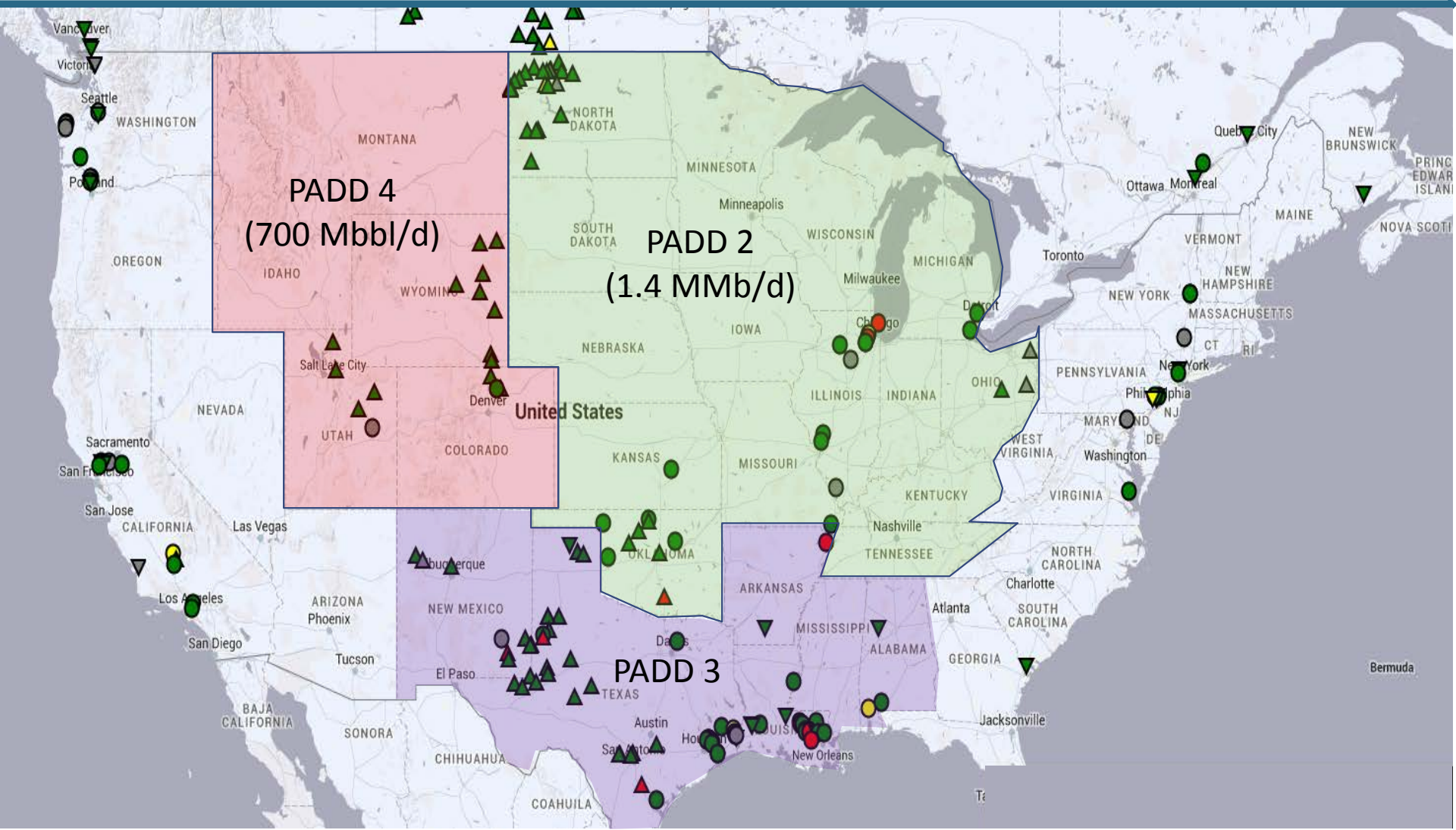
Differentials are an incentive, and a risk, for CBR



Diffs in 2015YTD have come in drastically for WCS and Bakken, but have increased to the East and West Coasts over 2014



Rockies (P4) has ~ half of the loading capacity as Williston (P2).

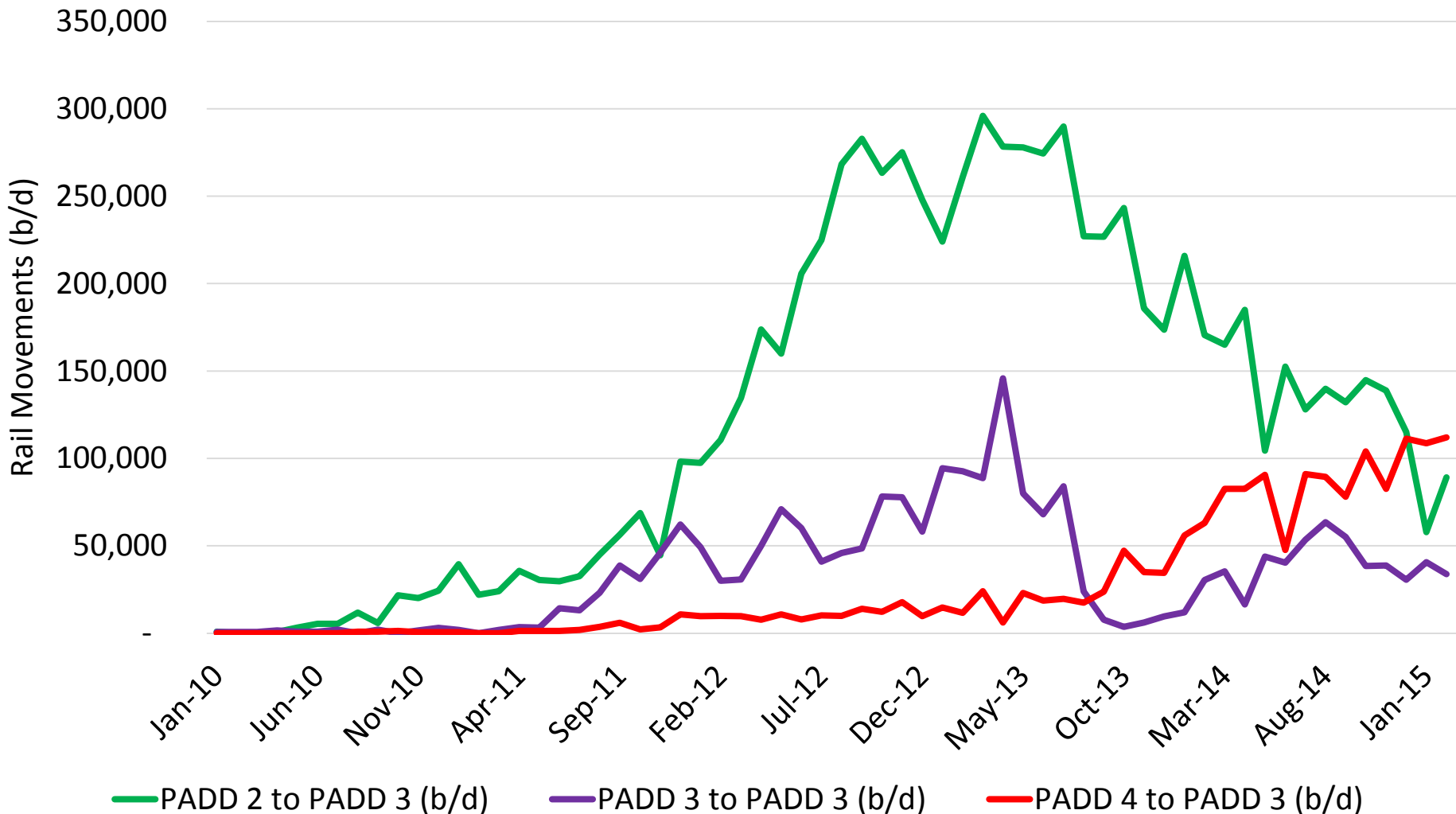


Source: Various Industry Sources

Volumes railed from PADD 4 to PADD 3 now exceed volumes from PADD 2 (Williston) to PADD 3

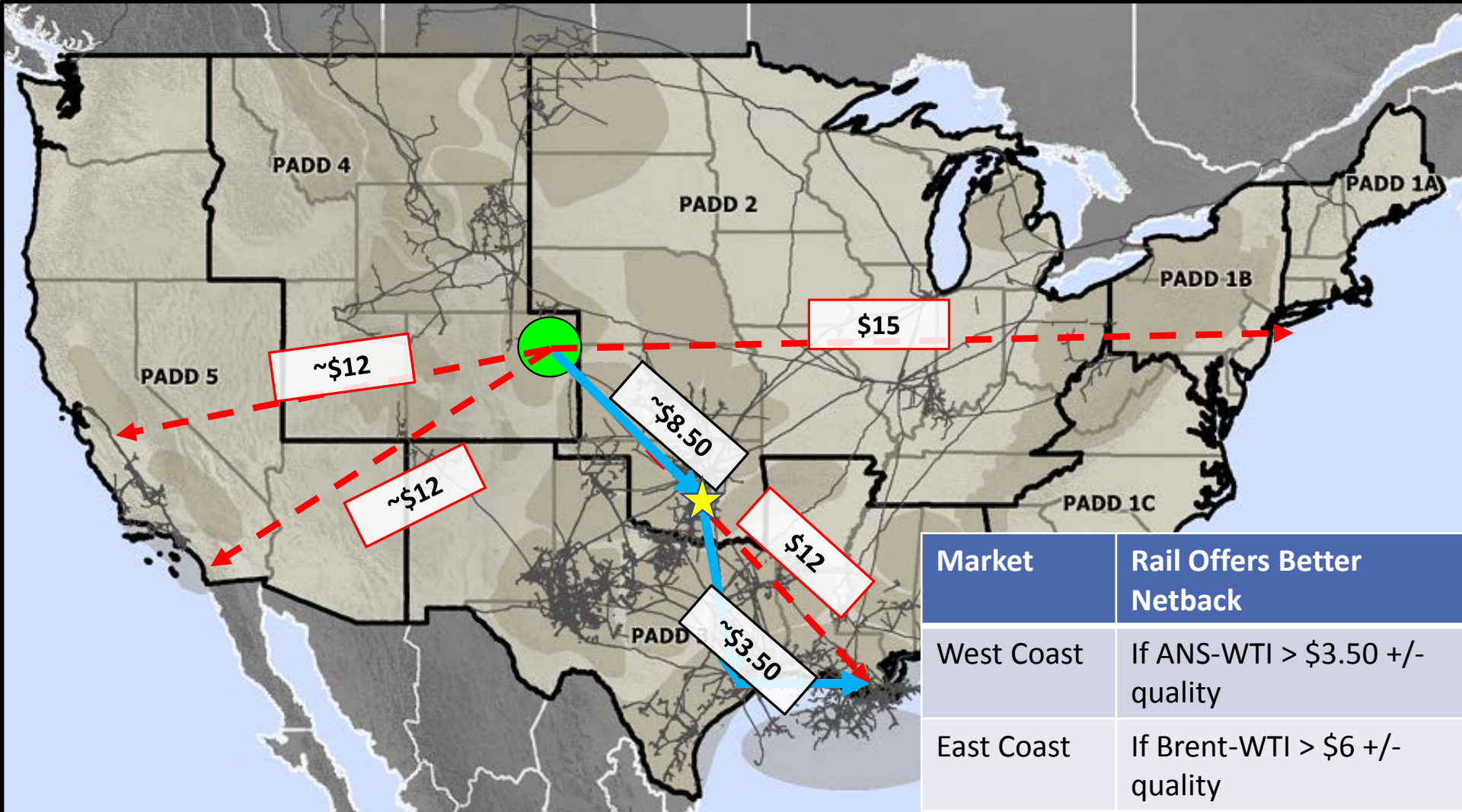


PADD to PADD Rail Movements



Source: EIA

Rail can compete with pipeline econs



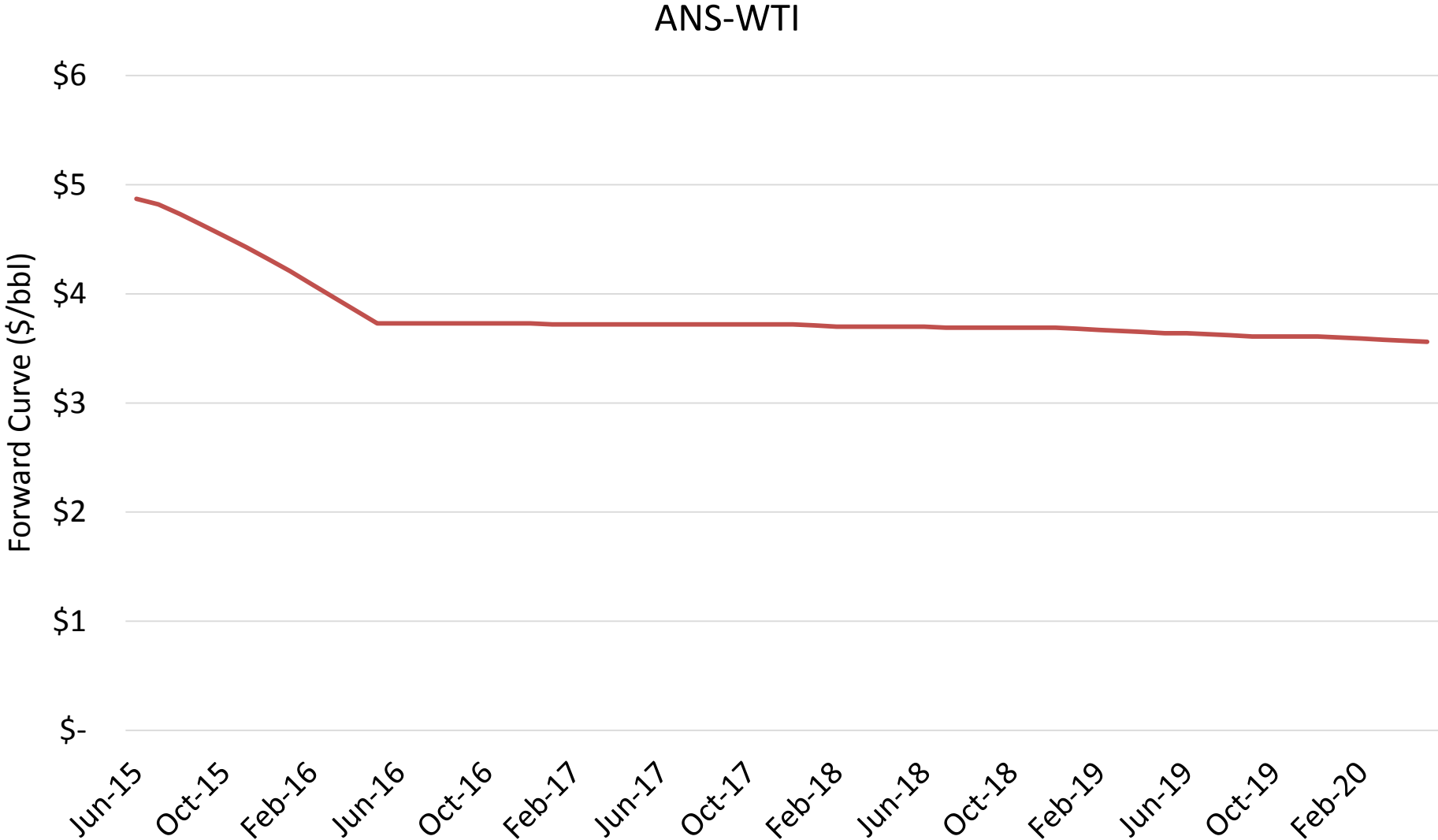
Market	Rail Offers Better Netback
West Coast	If ANS-WTI > \$3.50 +/- quality
East Coast	If Brent-WTI > \$6 +/- quality
Gulf Coast	Parity +/- quality

Cost Includes Trucking, Transload, Rail Car Cost, Freight Rate, PLA, and FSC

Rail to West Coast can provide higher netbacks that pipe to Cushing, but diffs are converging



Forward Curve for ANS-WTI suggests \$3.56/bbl, which is nearly parity between rail and pipe



Quality

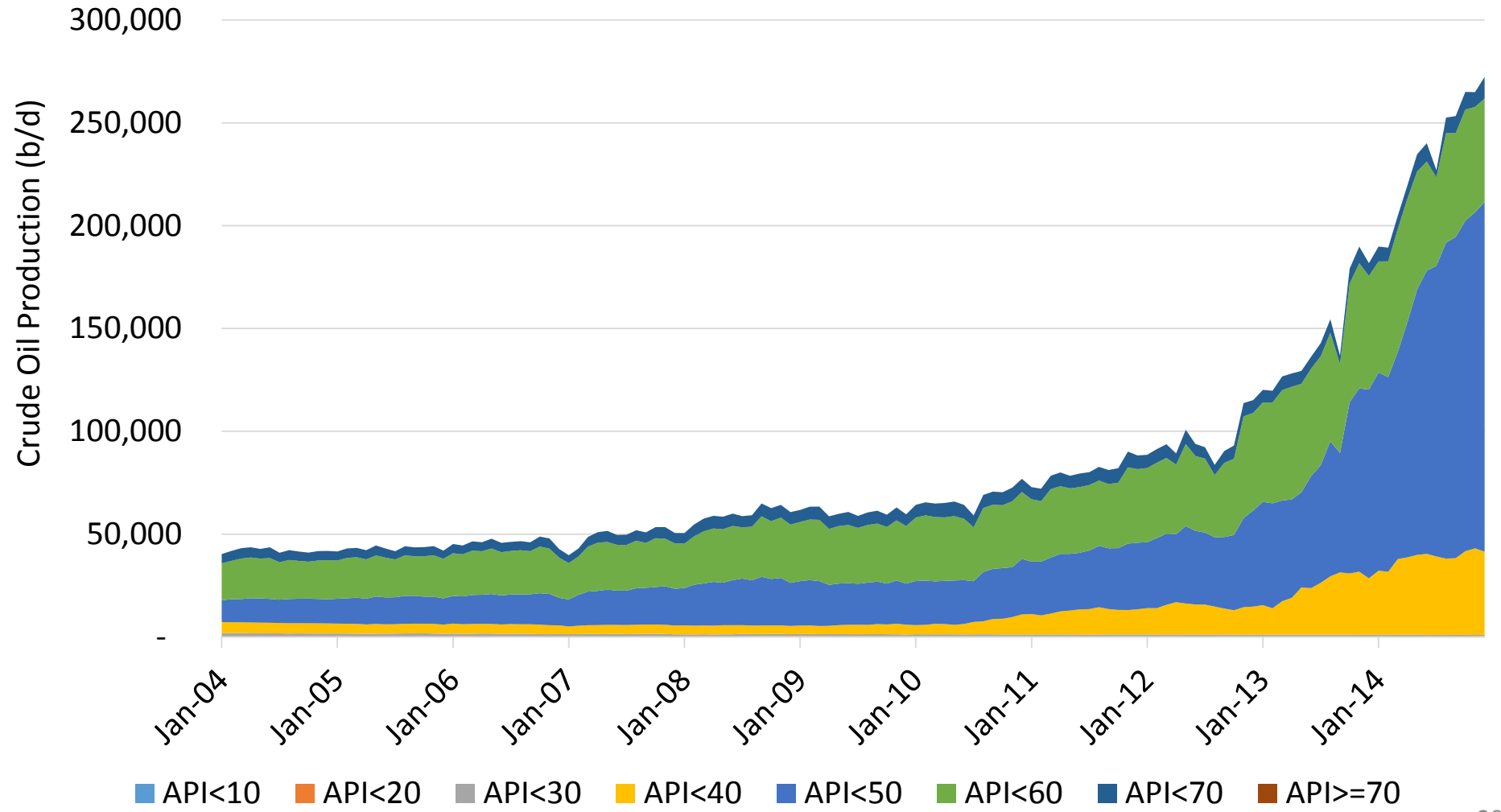
Rail enables refiners to pull the barrels they want



Most of DJ Production growth is API>40



DJ Basin Colorado - Production By API

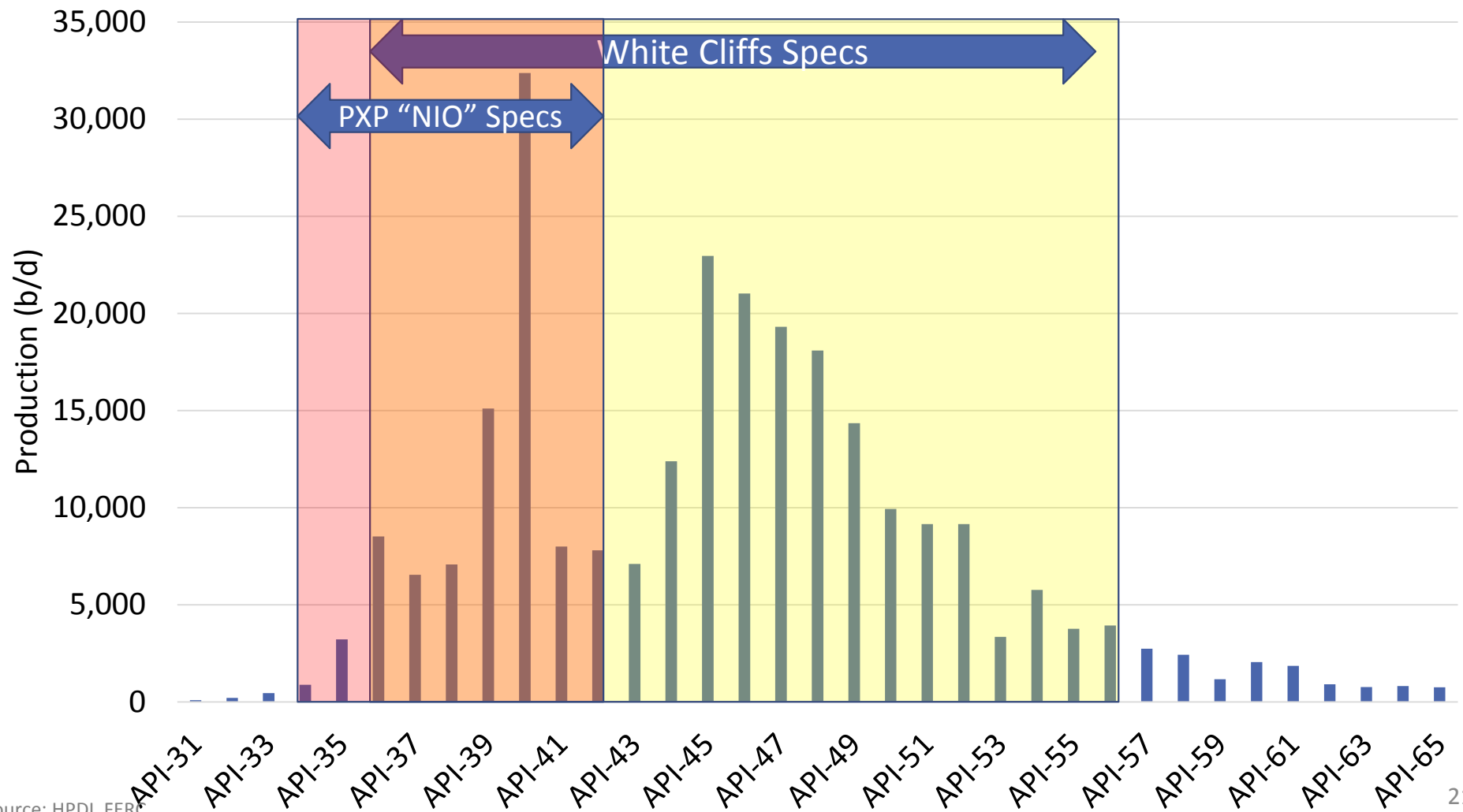


Source: HPDI

Pipeline specs leave barrels in the market



DJ Basin: Production By API

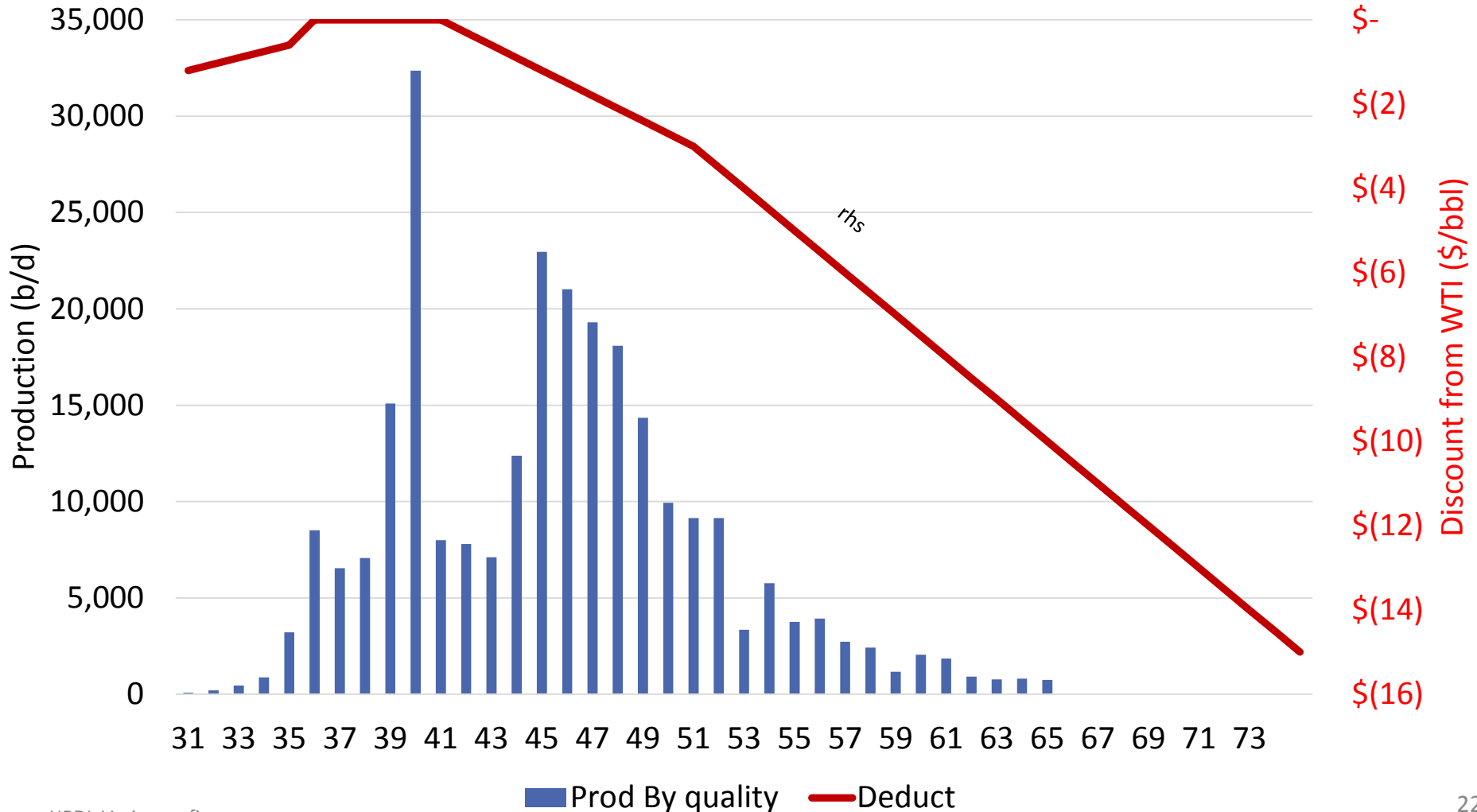


Source: HPDI, FERC

Quality Matters: Deduct from posted price -\$5 for 60 degree API in Cush



DJ Production By API & Gravity Deduct



Capital Requirement

Producers are in capital conservation mode, and are less eager to make long term commitments



Pipe vs. Rail

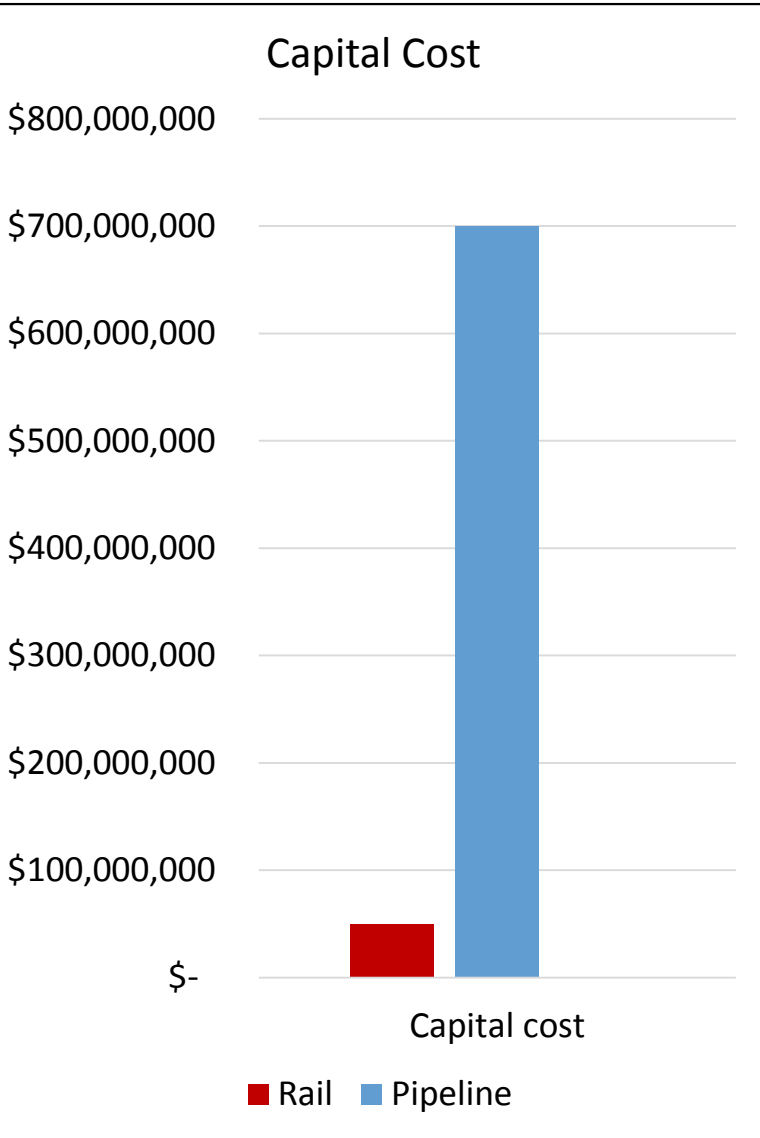
- Rail

- Lower capital cost
- Fast to market (Site permitting, construction much faster)
- Scalable
- Neat barrel
- Shorter contracts (2-3 year commitments vs. 10 years for pipeline)
- Faster transit times which reduces inventory risk
- Access to coastal areas not connected via pipe
- O/D flexibility
- Can capitalize on arbitrage
- Longer-term opportunities
 - Future exports of crude
- Public perception & Safety concerns

- Pipeline

- Longer lead time
- Higher capital cost
- Lower variable costs

Pipe vs. Rail – Producers have to commit 10X Capital for Pipe



Producer Commitment:

Rail: \$29,200,000

Pipe: \$292,000,000

Cost of Fill: 13,540,000

Assumptions:

- Pipeline Capacity: 100,000 b/d
- Pipeline Length: 550 miles
- Pipeline Diameter: 20"
- Producer Throughput: 20,000 b/d
- Oil Price: \$60/bbl

Term:

- Rail: 2 Years
- Pipe: 10 Years

Tariff:

- Rail: \$2/bbl
- Pipe: \$4/bbl

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End

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