Chord Energy

October 13, 2025

Large-Scale Hydrocarbon Gas Injection EOR Pilot to Inform Future CO_2 EOR in the Bakken

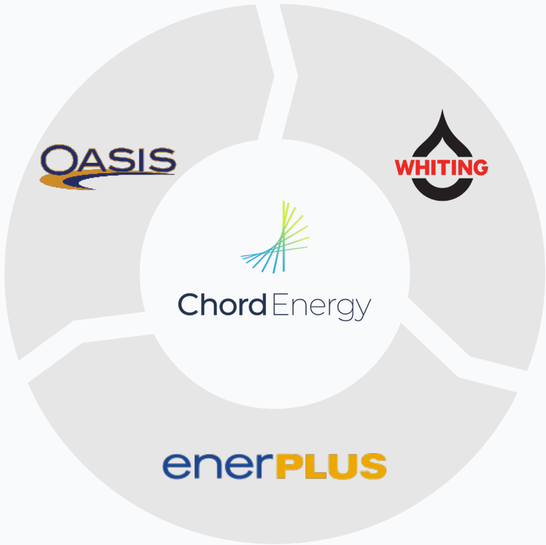
Summary

- Chord Energy and EERC are seeking incremental funding ($14MM) through the NDIC-OGRP Enhanced Oil Recovery Grant Program
- In Sept 2024, the U.S. Dept of Energy awarded Chord and EERC partial funds for a CO2 injection pilot to test enhanced oil recovery
- Due to the shortfall in CO_2 availability, the EOR pilot needs to incorporate hydrocarbon-based fluids as a partial component of the injection stream.
- Funds from the OGRP Enhanced Oil Recovery Grant would also be used to offset increased costs associated with planning, construction, and operational activities of the pilot using a combined CO_2 & hydrocarbon gas stream.
- **Chord and EERC's proposed pilot is the first to comprehensively address ALL technical and operational challenges that limited previous North Dakota EOR pilots**
- **This pilot CAN help accelerate economic EOR success in North Dakota**
- **Cracking the EOR code BENEFITS North Dakotans, E&P operators and the nation.**

Chord Background

Highlights

- Series of transactions created largest Williston Basin E&P
- Enhanced scale, operational capability and subsurface expertise



QEP Asset Acquisition
- Closed October ’21
- Cash transaction
- $745MM purchase price

Whiting Merger
- Closed July ’22
- Stock and cash transaction
- ~23MM CHRD shares
- ~$245MM cash

XTO Asset Acquisition
- Closed June ‘23
- Cash transaction
- $375MM purchase price

Enerplus Merger
- Closed May ‘24
- Stock and cash transaction
- ~21MM CHRD shares
- ~$376MM cash

2021 2022 2023 2024

Permian Basin Divestiture
- Closed June ’21
- Cash transaction
- $450MM cash proceeds

OMP/Crestwood Merger
- Closed February ’22
- Stock and cash transaction
- ~21MM units
- ~$160MM cash proceeds

Non-core asset sales
- Series of transactions in 2023
- ~$40MM cash proceeds

Disciplined, Oil-Focused Williston Operator Delivering Strong Returns

Premier Williston Operator

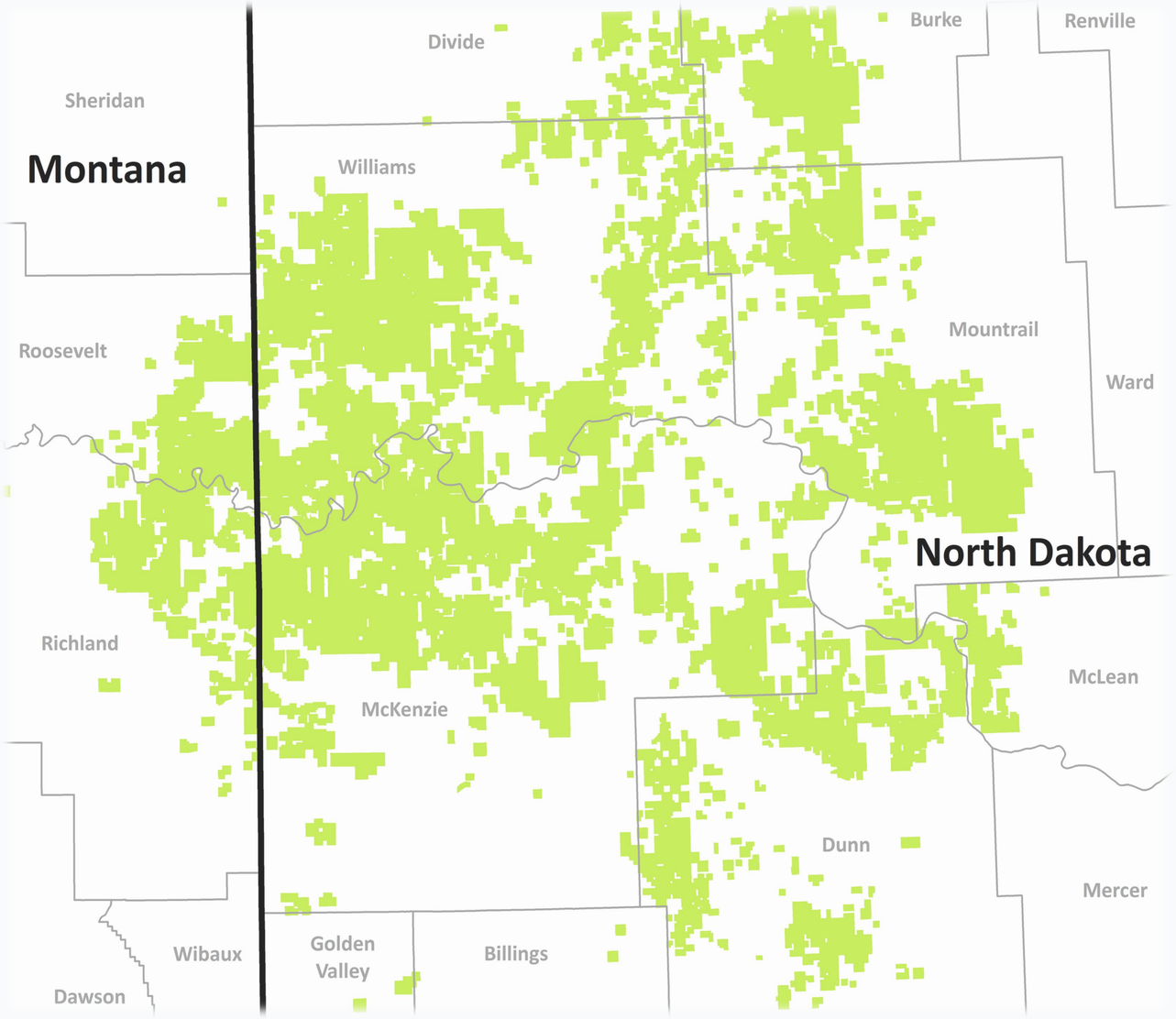
- Size & scale with high quality assets
- ~1.3MM net acres
- ~275 MBoepd (~56% oil)[1]
- ~10 years of low-breakeven oil inventory[2]

EOR Focus

- Corporate strategic priority
- Operational Capabilities
- Subsurface Expertise
- Current footprint uniquely favorable to scaling up commercial EOR

Oil By Operator (Mbopd)	
CHORD	231
CONOCOPHILLIPS	198
CONTINENTAL	160
DEVON	143
HESS	122

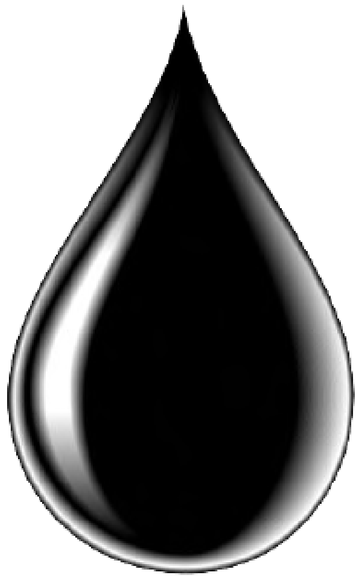
Producing Wells By Operator	
CHORD	4305
CONTINENTAL	2550
DEVON	1932
CONOCOPHILLIPS	1801
HESS	1671



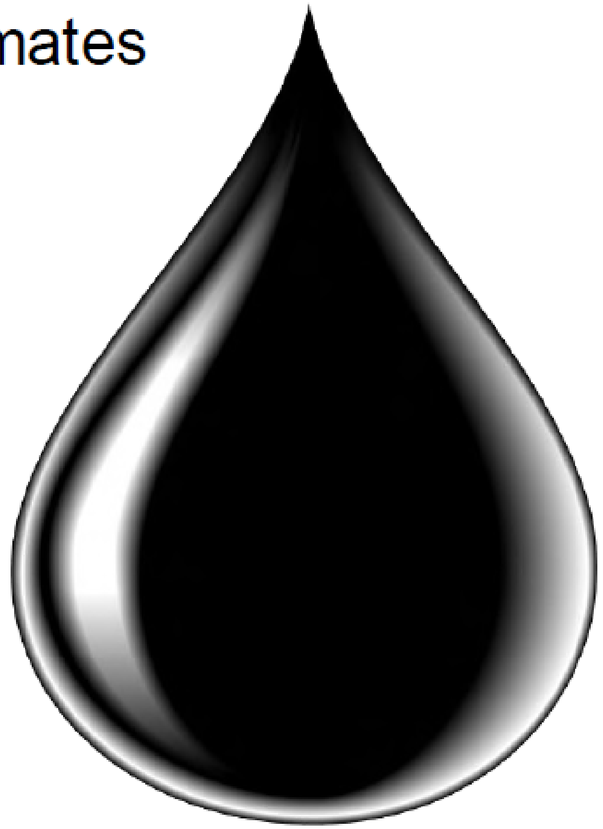
(1) Reflects FY25 midpoint guidance; (2) Mgmt estimate, based on 2025 operated activity; (3) Net leverage as of 6/30/25 based on LTM EBITDA

Bakken EOR – Size of the prize

OOIP Estimates



300 Bbbl
(Flannery and Kraus, 2006)



900 Bbbl
(Continental Resources, 2011)

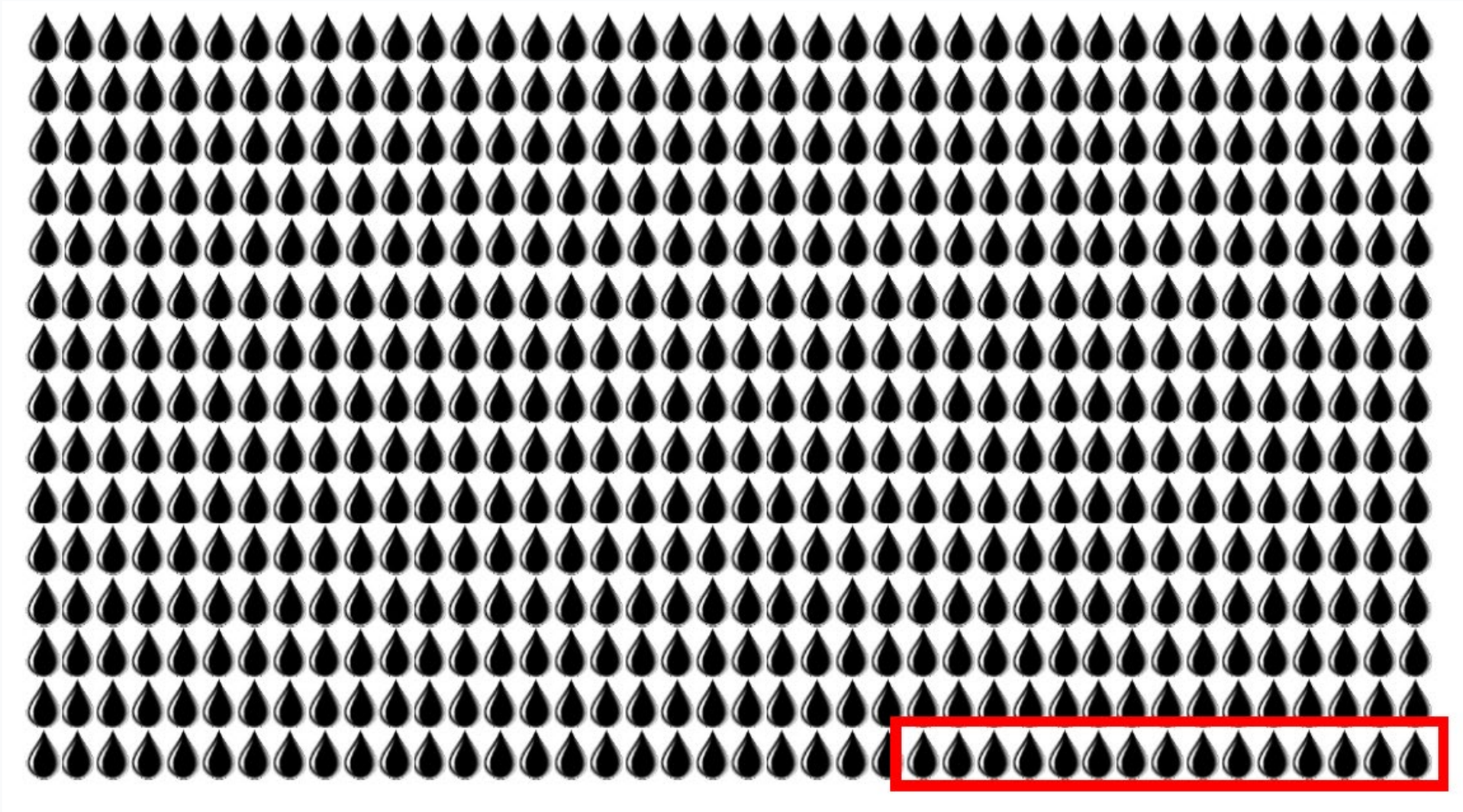
Technically Recoverable Reserve Estimates

7.4 Bbbl
(USGS, 2013)

24 Bbbl
(Continental Resource, 2011)

Business as usual gets about 15 billion barrels

Remaining Oil



What is the Chord+EERC EOR Pilot testing?

Purpose

- Production response is meaningful, improves recovery
- Gas injection can be controlled and conformance maintained (On unit)
- Consistent injection and operations (Facilities and Infrastructure)
- Reservoir pressure builds above Minimum Miscibility Pressure

Success Criteria

Technical Challenge	Why It Matters
Injectivity in Tight Rock	Prove gas injects into low-perm matrix at meaningful rates
Pressure Management	Prevent gas from short circuiting to neighboring wells
Phase Behavior Validation	Achieve miscibility and prove oil gets lighter and gas gets richer
Reservoir Pressure	Raise reservoir pressure
Cycle Design Optimization	Tune injection/soak/production cycles for better recovery
Facility and Operations	Show we can build/operate a functional EOR site
Scalability Proof	Create the optionality for EOR at scale

DOE Grant Stipulations

18 mo of CO2 injection into reservoir
Can be any amount of CO2 so long as it is consistent (e.g., 1 truck per month, or as a constituent of the hydrocarbon gas stream)
Monitor reservoir response before, during and after injection
Generate data on CO2 interactions with rock and in-situ fluids
Advance the state of knowledge on CO2 storage and EOR

Key learnings from prior ND / MT EOR pilots

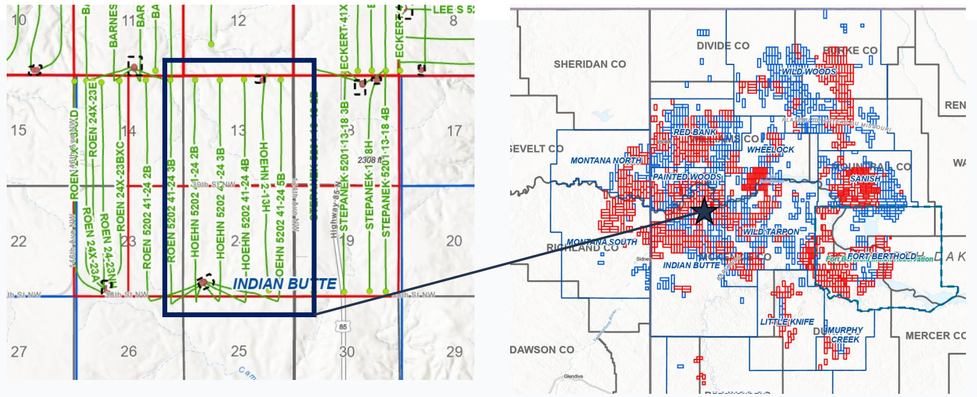
No pilot has met all success criteria.
Critical gaps in well spacing (conformance), completion vintage (reservoir contact area), and injectant volume/pressure

	EOG Waterflood	EOG RG Flood	WLL CO2 Flood	Liberty HnP #1	Liberty HnP #2	HESS HnP	HnP
Year	2012	2014	2014	2018	2021	Ongoing	Ongoing
Injectant	Water	Rich Gas	CO2	Rich Gas	Rich Gas & Water w Surfactant	Rich Gas	Methane
Wellbore	Horizontal	Horizontal	Vertical	Horizontal	Horizontal	Horizontal	Horizontal
Operational Method	HnP	Flooding	Flooding	Multi-well HnP	Single-well HnP	Multi-well HnP	Multi-well HnP
Success Criteria							
Ideal Injectant	✗ No	✓ Yes	✓ Yes	✓ Yes	✓ Yes	✓ Yes	✗ No
Injectant Volume	✗ Low	✗ Low	✗ Low	✗ Low 1-2 MMcfd	✗ Low 1-2 MMcfd	✗ Low comp. issues	✓ High Pressured out
Wide Spacing for Conformance	✗ No	✓ Yes	✓ Yes	✗ No 400ft	✗ No 600ft		✓ Moderate 850ft
High Completed Surface Area	✗ Very low	✗ Very low	✗ Very low	✗ Moderate ‘12-16 vintage	✗ Moderate ‘12-13 vintage	✗ Moderate ‘12-13 vintage	✗ Moderate ‘12
High Res Press (Low Voidage)	✗ No	✗ No	✗ No	✗ No	✗ No	✗ No	✗ No
Built Pressure	✗ No	✗ No	✗ Partial	✗ No	✓ Yes	✓ Yes	✓ Yes

12 total attempts at EOR have been conducted in ND / MT since 1994

Chord+EERC Pilot Designed to Address ALL legacy challenges

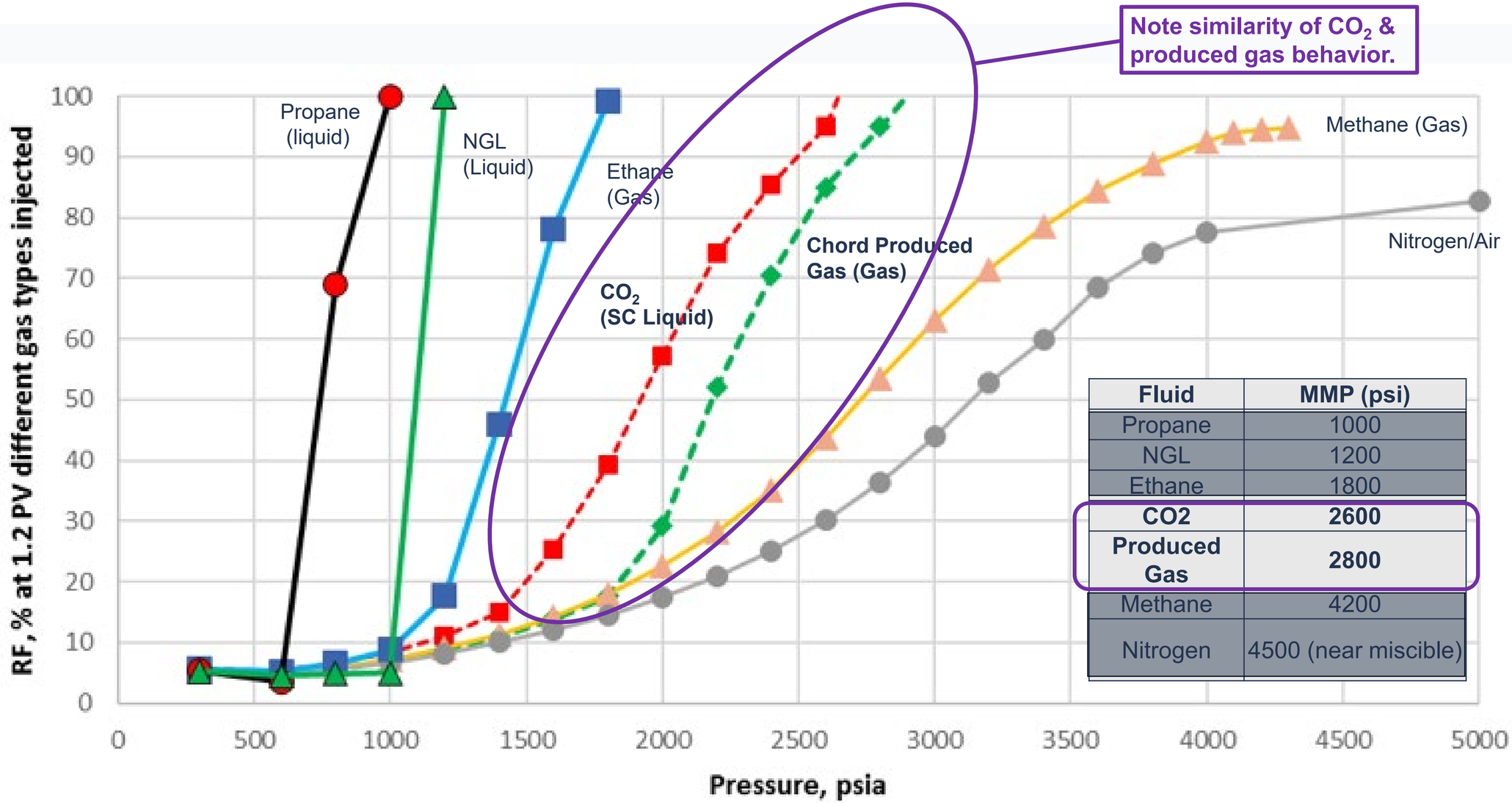
- Meets all core pilot criteria – checks every operational and technical box
- Gives the pilot the best chance to prove material EUR uplift and commercial scale potential



Technical Challenge	Why It Matters		Hoen DSU
Modern Completion	Maximize reservoir contact → better injectivity and residual oil contact volume	✓	2025 frac 1,000 ppf / 25 bpf
Wide Well Spacing	Minimize short-circuit conformance losses; pressure control	✓	4.5 WPS 1,150 ft spacing
High Reservoir Pressure	Easier miscibility, better recoveries	✓	Will be 1-2 years into production at injection
Low GOR	Better response: delayed gas breakout, more heavy-ends for recovery	✓	<1,000 scf/stb, reservoir not depleted
Access to Source Gas	Need volume + pressure to see meaningful recovery	✓	High pressure dehy field gas from Hiland
No JOA	Avoids “producing in paying quantities” roadblock	✓	No JOA
High Working Interest	Reduces our exposure to carry risk	✓	79.2% WI

DOE Pilot - Transition to Mostly Hydrocarbon Gas Injectant

- **Miscibility Well Understood**
- **Managing:**
  - Cost
  - Availability
  - Volumes
  - Delivery Pressure
  - Pump or Compression
- **Wet Gas is best near term option**
- **CO_2 is most scalable long-term as infrastructure emerges**
  - Largest current ND source is sour and tied to Canadian delivery

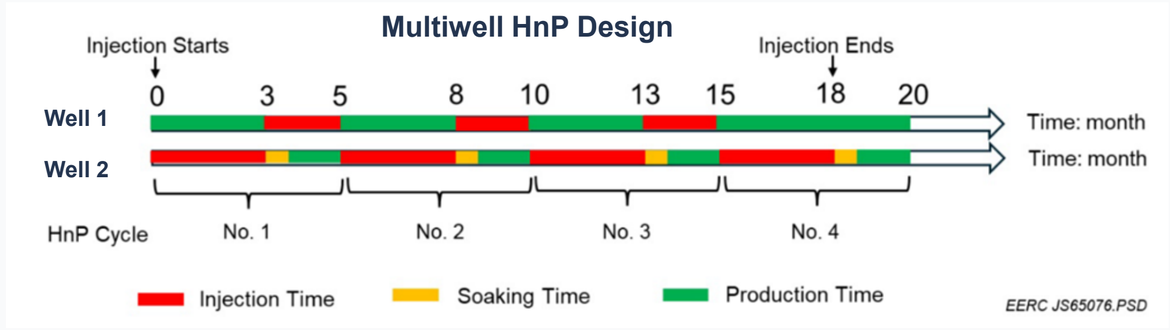


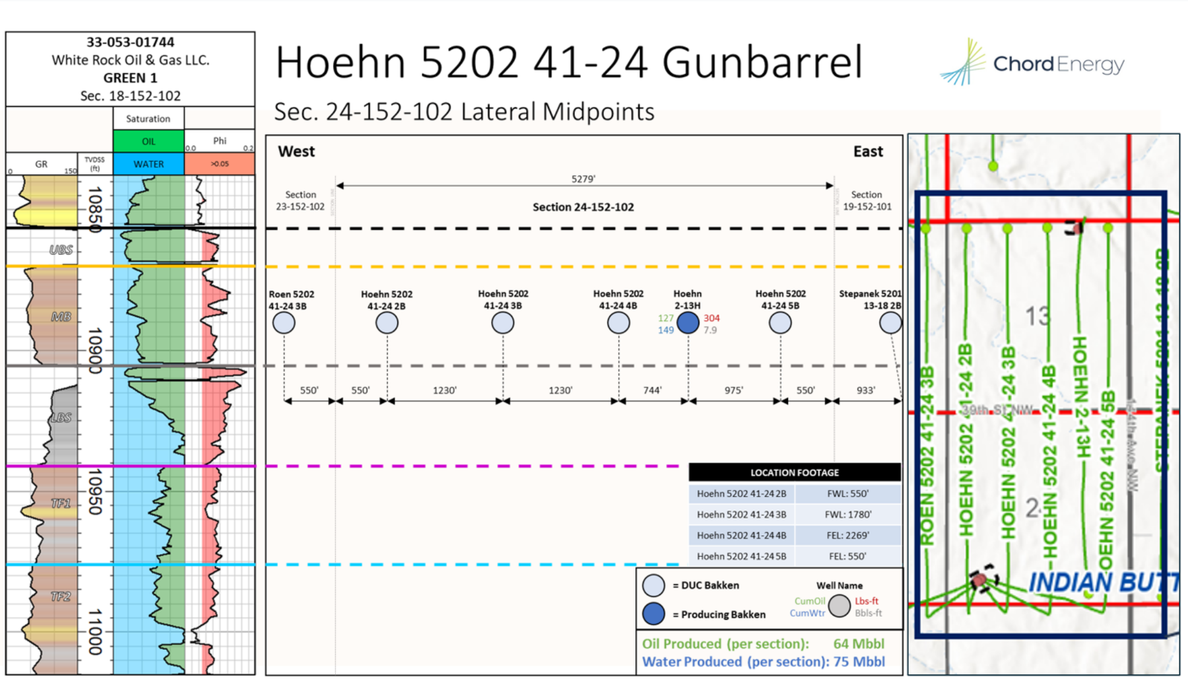
Fluid	MMP (psi)
Propane	1000
NGL	1200
Ethane	1800
CO2	**2600**
Produced Gas	**2800**
Methane	4200
Nitrogen	4500 (near miscible)

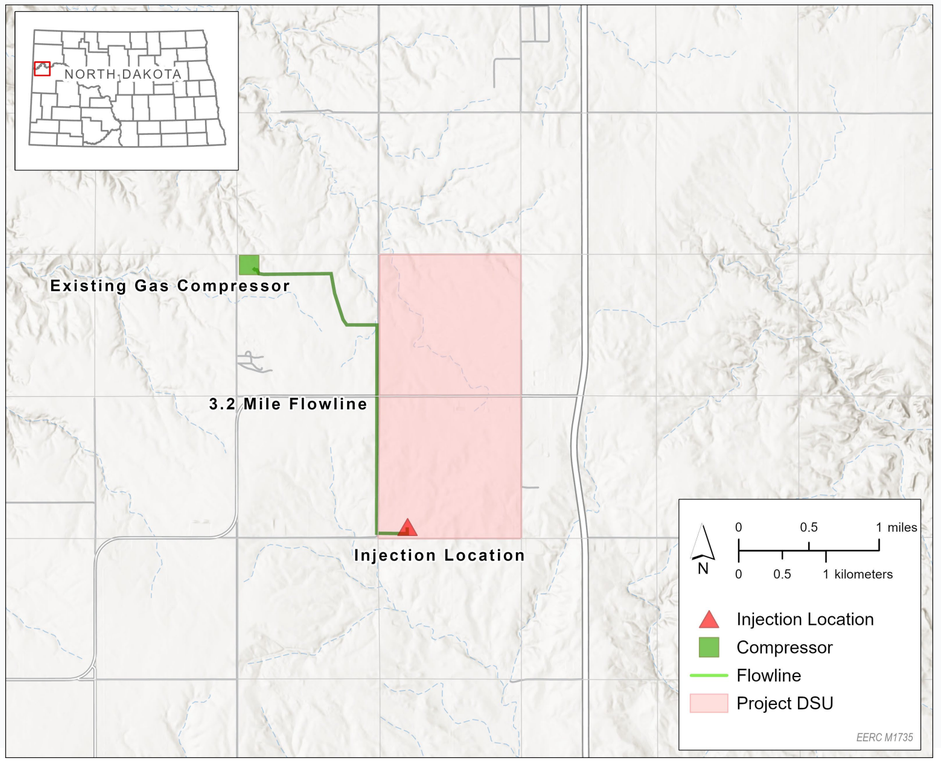
*This is compositional and ignores downhole/petrophysical effects

Pilot Location, Gas Source, and Scheme Details

- Field gas to be sourced from nearby Gas Compressor Station.
- Multiwell huff-n-puff (HnP) design
  - Planned 18-month total injection period alternating between two wells.
  - 12 MMcfd injection rate.
- Project DSU consists of 1 parent Bakken well and 4 modern completion Bakken infill wells.







Estimated Project Costs inclusive of DOE Grant
"Bakken CO_2 EOR and Storage Field Laboratory" Awarded to EERC & Chord 2024

- **Estimated Project Cost:** **$38.6 MM**
- **DOE Grant:** **$5.8 MM**
- **Remaining to Fund:** **$32.8 MM**
- **OGRP Request:** **$14.0 MM**
- **Balance to Fund:** **$18.8 MM**

OGRP Funds Utilized to Support

- EOR Injectate Costs and Well Prep: $4.9 MM
- Compression Facilities: $4.8 MM
- Dehydrator $1.5 MM
- Other facility upgrades: $1.3 MM
- EERC $1.5 MM

Key Takeaway Points

- This EOR pilot is the fastest and surest path to economic EOR success for North Dakota.
    - — Injection operations are planned to begin in Q3 2026.
    - — Chord is the largest operator in Bakken, which facilitates quicker application of learnings on existing wells
- Published lab studies indicate typical Bakken rich gas and CO_2 are similar enough for EOR to allow result from a hydrocarbon-based EOR pilot to be calibrated to predict the effects of CO_2 under the same reservoir conditions.
- **Expected Results:** This pilot and the attendant lab, modeling, and reservoir monitoring results will help demonstrate a pathway towards commercial-scale deployment of Bakken EOR for hydrocarbon and CO_2 injectates.
- **Total Cost:** The total value of the project is $38.6MM. The request to OGRP is for a minimum of $14MM.
    - — Chord will provide cost-share commitments.

Questions

DOE Pilot Cost Variances - Examples

- As our understanding of the technical needs of the pilot has evolved so has the design/scope of the project. This has led to a number of changes/additions that have increased the cost significantly
- **Current Funding Breakout**
  - Total DOE Grant = 11.6MM
    - DOE funding to CHRD = $5.8MM
  - CHRD contributing $38.6 MM Net
  - Grant minimum was $1MM

CO_2 to Hydrocarbon Injectant

Variance ($3.28 MM)

- **CO_2**
  - 6566 MMscf x $1.50/Mcf = $9.85 MM
- **Hydrocarbon Gas**
  - 6566 MMscf x $2.00/Mcf = $13.13 MM

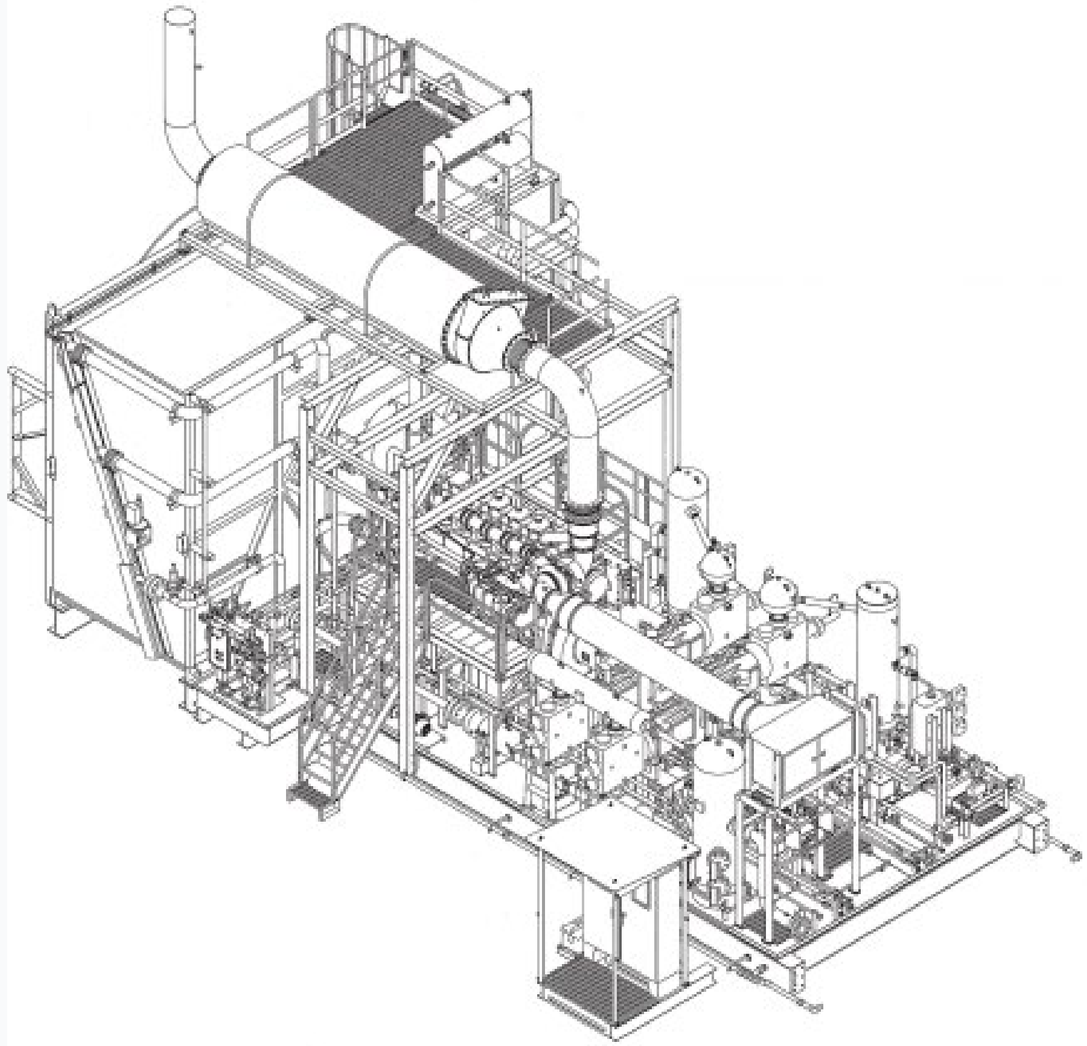
Examples – Surface Facilities Variance

FEED Study and Install ($5.25MM) - OE ($.47MM)

Variance ($4.78 MM)

- **Engineering Requirements**
  - Dehydration System (dependent), Off skid Controls, Off Skid Piping including Pipe Specs, Relief/Blowdown System, & PHA
- **Estimated Cost**
  - Engineering: $250,000
  - Installation: $5MM

- Automated Well Manifold - Variance ($550 M)
- HP Production Separator - Variance ($150M)
- SCADA/I&E - Variance ($100M)



DOE-Funded Enhanced Oil Recovery Pilot
"Bakken CO_2 EOR and Storage Field Laboratory" Awarded to EERC & Chord 2024

- **Create Significant Economic Opportunity through EOR for North Dakota and Oil and Gas Operators.**
  - Original plan called for 18 months of CO_2 injection into a DSU for EOR
  - This pilot will move the ball towards commerciality, demonstrating the viability of CO_2 as an EOR working fluid
- **Primary Goal**
  - Evaluate EOR potential in Bakken to meaningfully increase EUR's through Huff and Puff operations
  - Execute laboratory work and field studies resulting in a pilot test (Partnered w/ the EERC) – Push current understanding
- **Strategic Value**
  - Best Technical Design of a Pilot so far (High Rate, High Pressure, Good frac and acreage) – Do it right
  - Understand technical and economic drivers of the process
  - Refine Surface Equipment, Huff & Puff Operations
  - Understand the path to commercialization

Prior ND / MT EOR Pilot Test Locations