

Pioneer Energy, Inc.
190 S Union Blvd. Lakewood, CO 80228 USA
www.PioneerEnergy.com
+1-720-484-3131

Investor Presentation
Rev 4/10/2023
CONFIDENTIAL

Inquiries:
Eyal Aronoff
eyal@pioneerenergy.com



PIONEERENERGY

Decarbonizing Oil Production

EMISSION CONTROL TREATER

BREAKTHROUGH TECHNOLOGY FOR
ZERO EMISSIONS OIL PRODUCTION EQUIPMENT

Background on Pioneer Energy

Technology developer and equipment manufacturer.

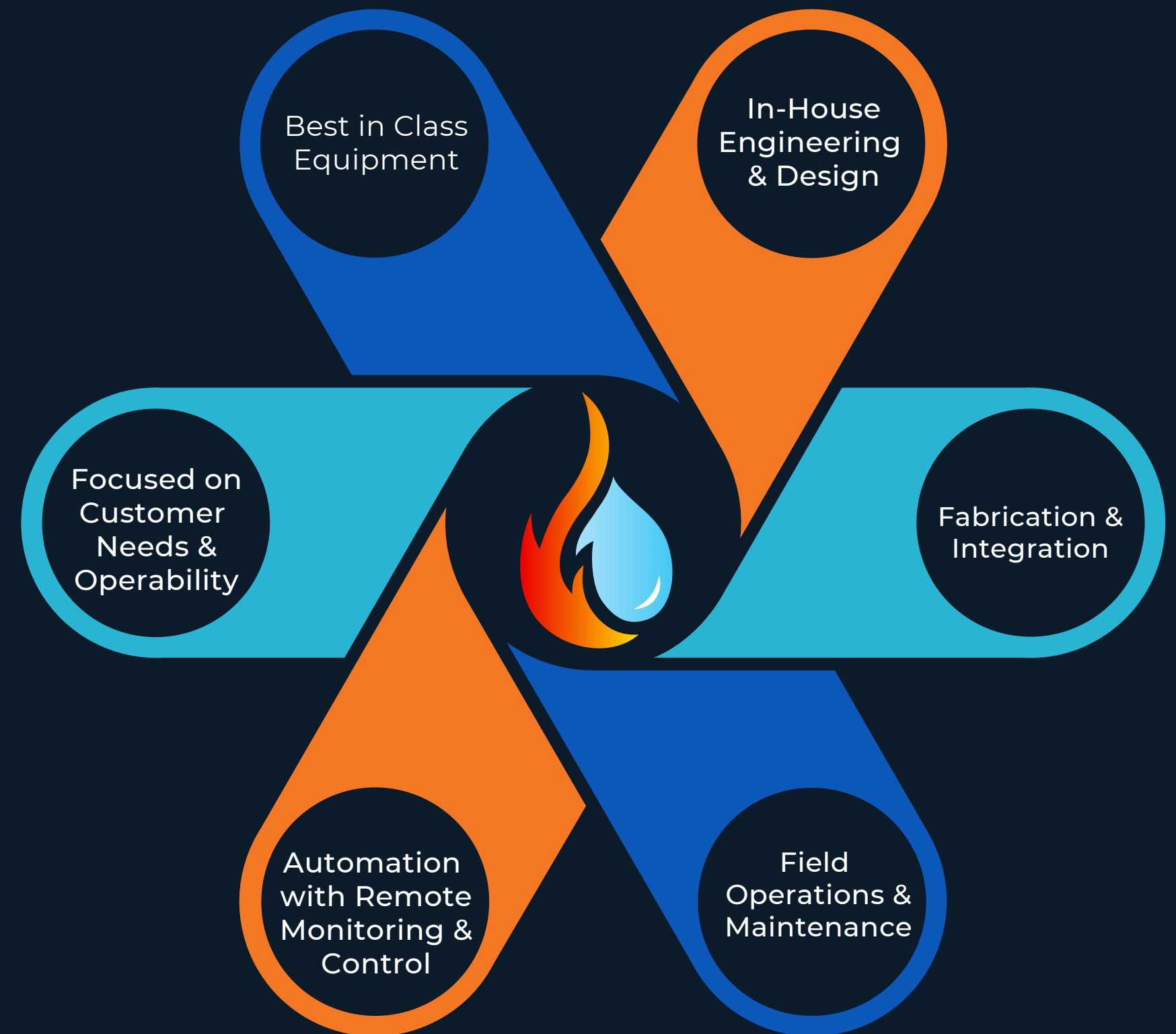
Provider of systems that convert emissions into products:

- Zero emission oil production facilities
- Gas processing & fractionation plants
- Flare & tank vapor capture
- Field gas fuel conditioning

Equipment is skid mounted, modular and scalable.
Systems are autonomous with remote operations.

Provider of bid packages, FEED studies, full plant design,
procurement and OEM fabrication.

HQ facility includes 45,000 sq ft state of the art design lab,
fabrication shop & remote diagnostic center.



Pioneer Energy Expertise

REFRIGERATION UNITS (MRUs)



DEHYDRATION



FRACTIONATION



DEW POINT SUPPRESSION



TANK VAPOR CAPTURE



PORTABLE FUEL CONDITIONING



The Team: World Class Expertise



Eyal Aronoff
CEO

Co-founded Quest Software, sold to Dell for \$2.4 billion.



Joseph Palaia
VP of Business Dev

Former COO of Earthrise Space.
Holds a masters degree in Nuclear Engineering from MIT.



Nicole Lane
Corporate Relations

Former corporate relations roles with Clabber Girl and Swagelok.



Anthony Maltese
Director of Ops

Former Fracturing and Stimulation Field Service Manager and New Product Deployment Manager for Schlumberger.



Max Rose
Advisor

Former U.S. Representative for New York's 11th congressional district.

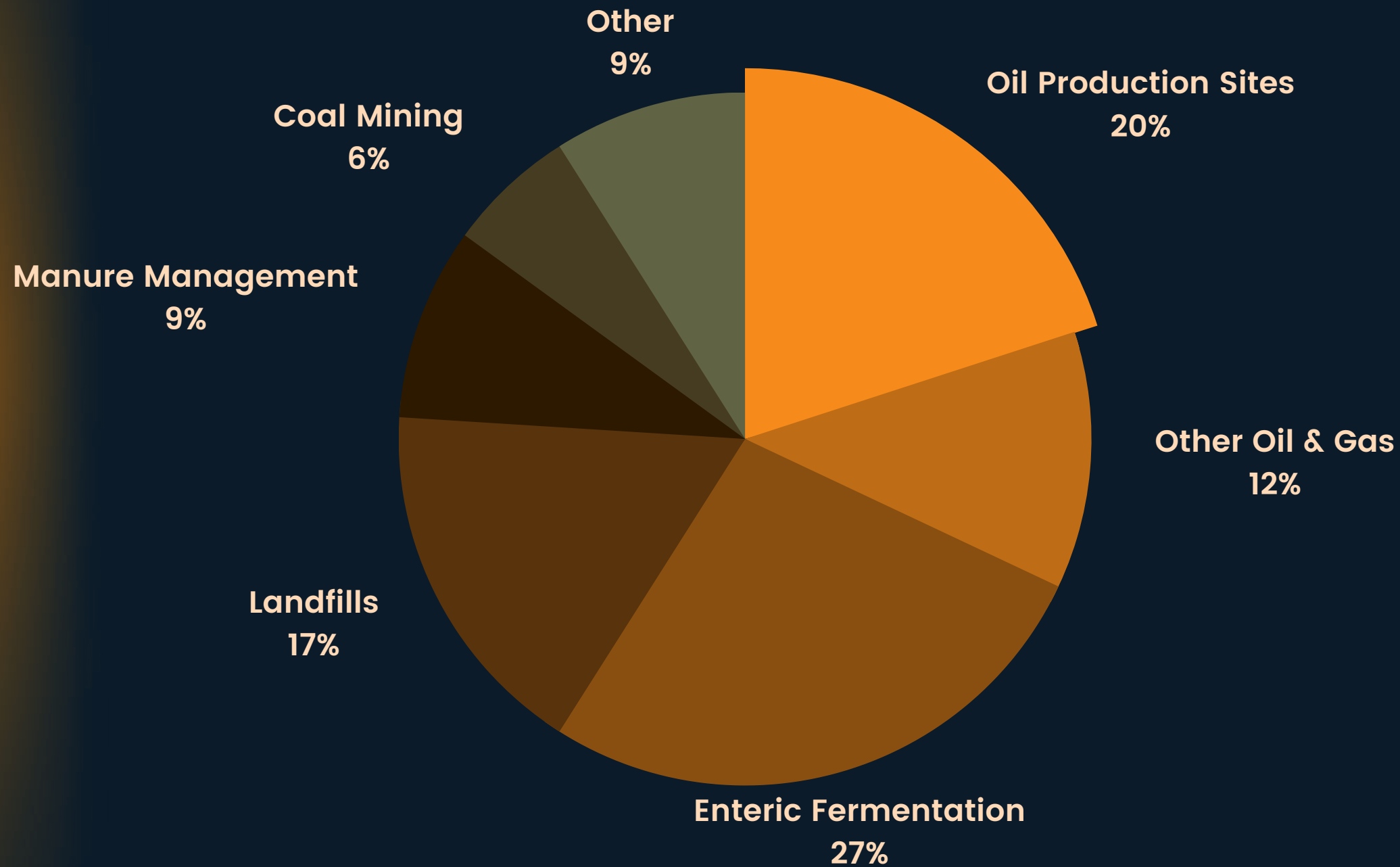


Rich Frommer
Advisor

Former CEO of Great Western Petroleum which was merged in PDC Energy, Inc for \$1.4 billion.

Methane Emissions By the Numbers

2020 U.S. Methane Emissions, by Source

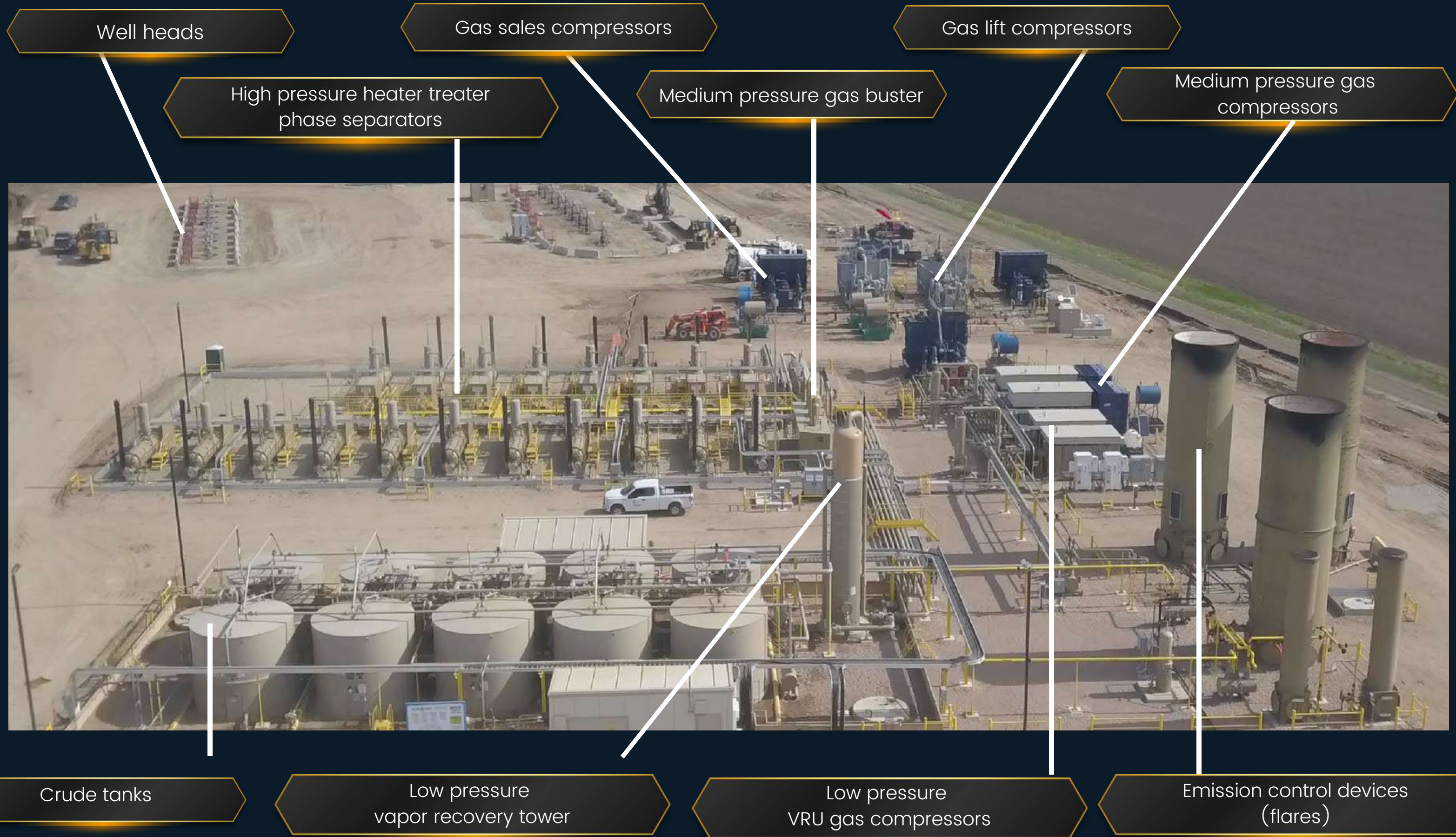


Oil & gas is the largest contributor to methane emissions:

- 5.2 gigaton CO₂ equivalent a year
- Representing 15% of total energy sector greenhouse gas emissions
- 32% of all methane emissions sources are from oil and gas
- 20% of all methane emissions occur on oil production sites

<https://www.iea.org/reports/methane-tracker-2020/methane-from-oil-gas>
<https://www.epa.gov/ghgemissions/overview-greenhouse-gases>

The Challenge - Hundreds of Point Sources of Emissions



Emission Control Treater

Zero Emission Oil Production Facility

Integrated, skid-mounted replacement for nearly all well pad surface processing infrastructure

Processes wellhead fluid at pressure, producing:

- Stabilized crude oil
- High pressure residue gas
- Optional NGLs for lift or EOR

Scalable from 500 BPD to 5,000 BPD. More with paralleling

Increases crude volume by 5% to 10% or more

Tankless - eliminates need for crude storage tanks

Small footprint

Eliminates methane and other emissions

Zero routine flaring

Compliant with new EPA 0000b/0000c rules & midstream agreements. Simplifies permitting





PIONEER ENERGY

Decarbonizing Oil Production



**Zero
Emissions**



**Increased
Production**



EMISSION CONTROL TREATER

Benefits to the Producer

Maximizes hydrocarbon revenues

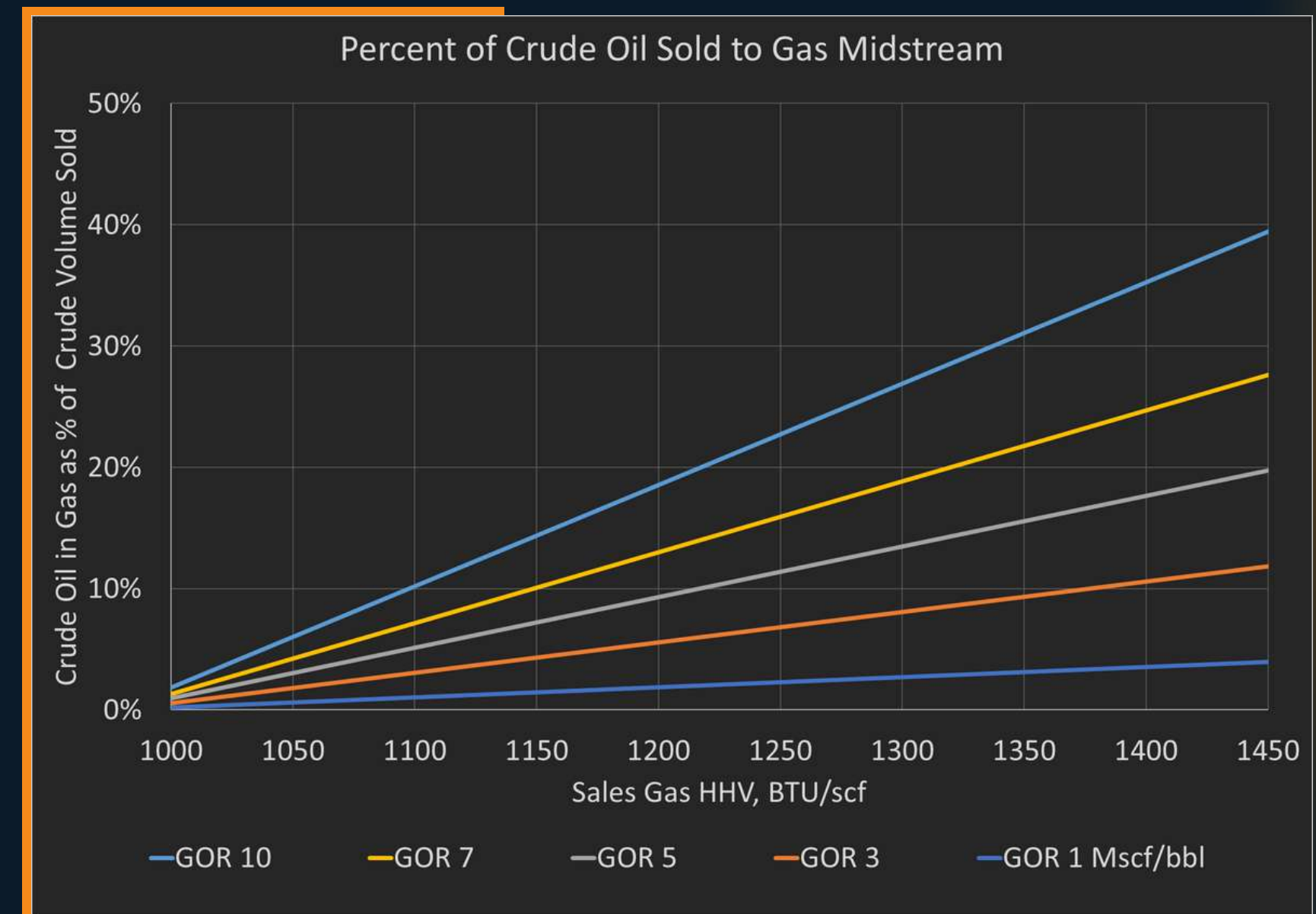
- Leaning the gas and increasing crude volume maximizes revenues from sales of NGLs as crude.
- Typically results in a 5 to 10% increase in crude volume from the currently produced molecules.

Reduces leasehold operating expenses

- Smaller footprint
- Faster installation time
- Less components, less downtime and less maintenance
- Reduces or eliminates the costs with onsite compressors
- High degree of automation requires less field personal

Simplify permitting

- Entire pad could be permitted as a minor source for Clean Air Act purposes



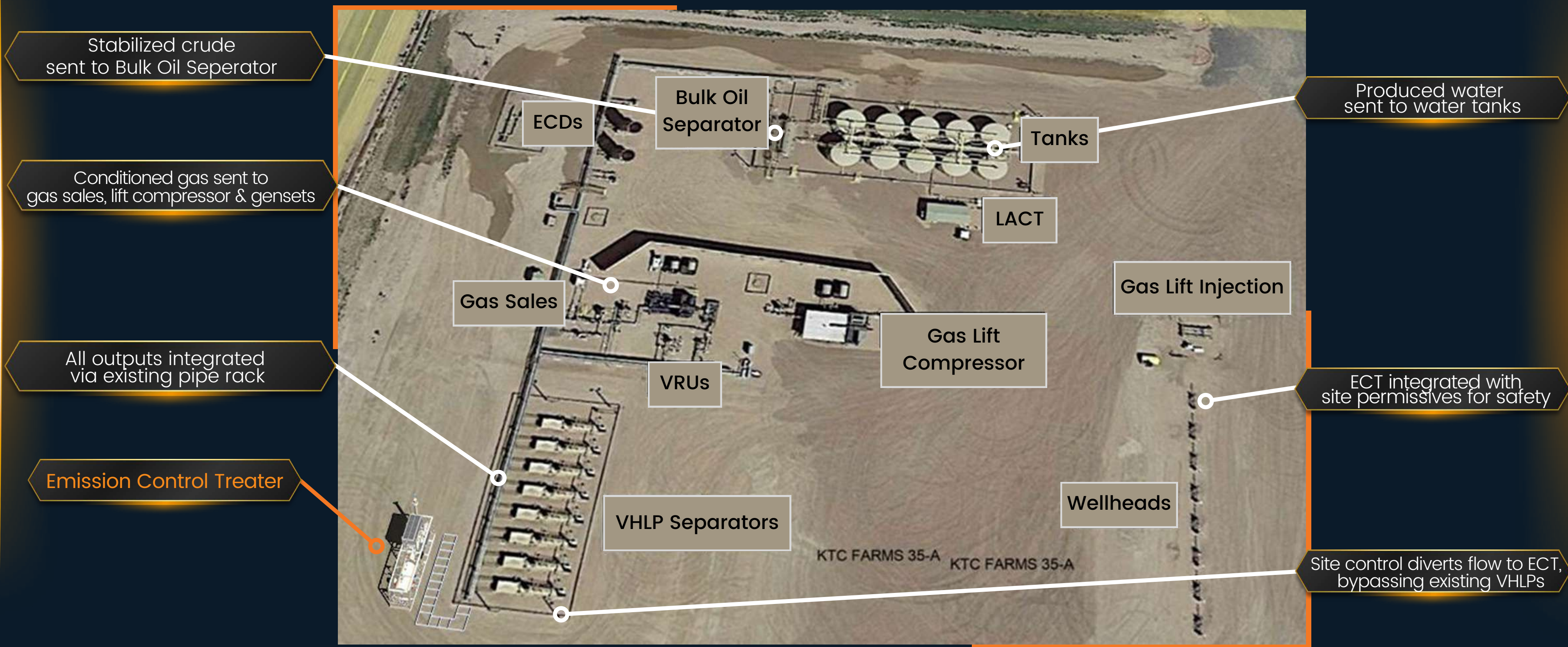


ECT Pilot

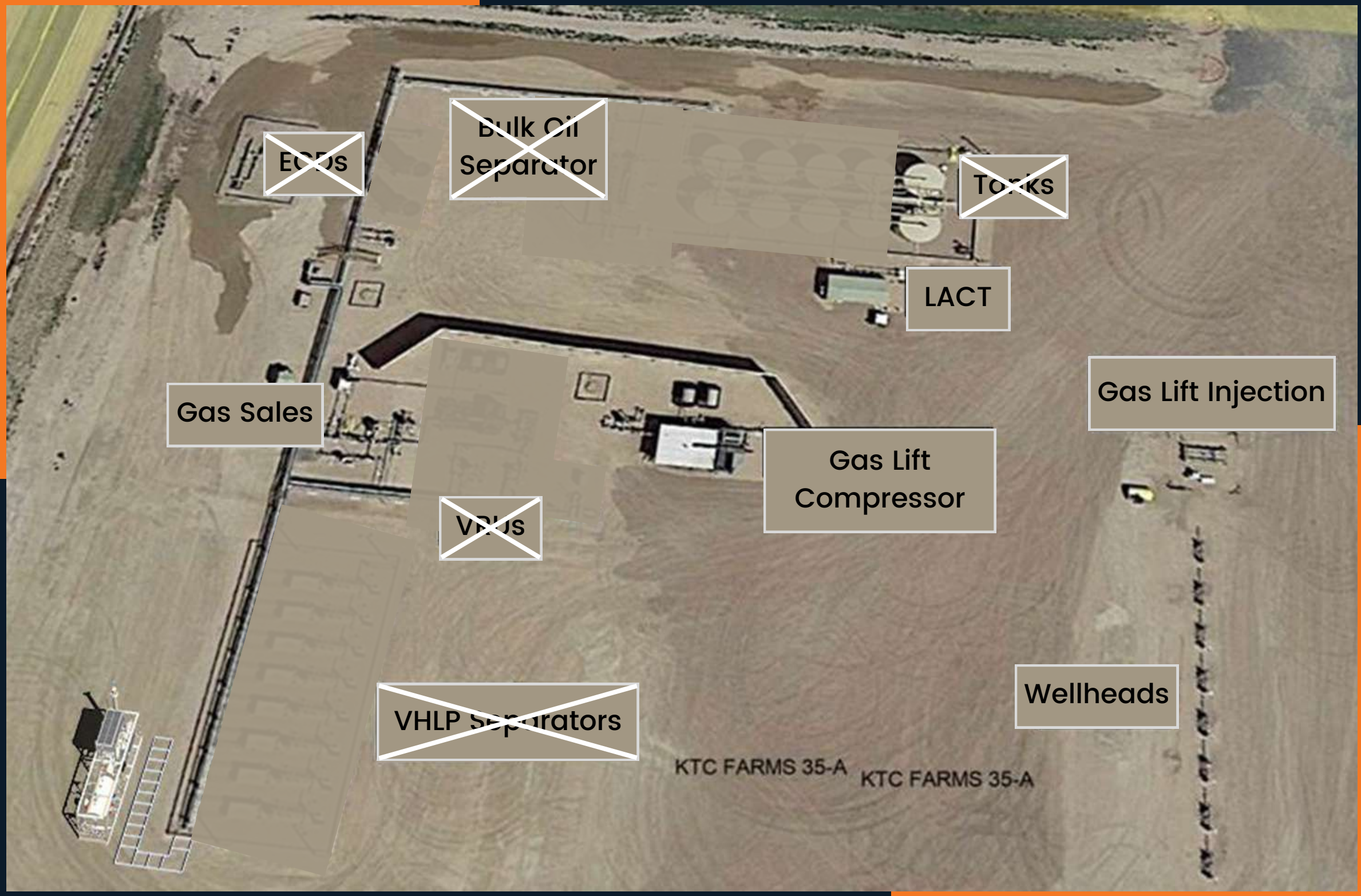
Three year old pad
Currently producing ~250 BPD



Integration Points for Side-by-Side Operation



Equipment & Sources of Emissions That Will Be Replaced



Pilot Results

Increased crude yield by 5% to 10%

- Partially due to better stabiliation
- Partially by improved uptime of the pad

Eliminated all emission sources

- Fully stabilized crude (no outgassing in tanks)
- Eliminated fired heaters
- Eliminated need for VRU compressors
- Zero routine flaring

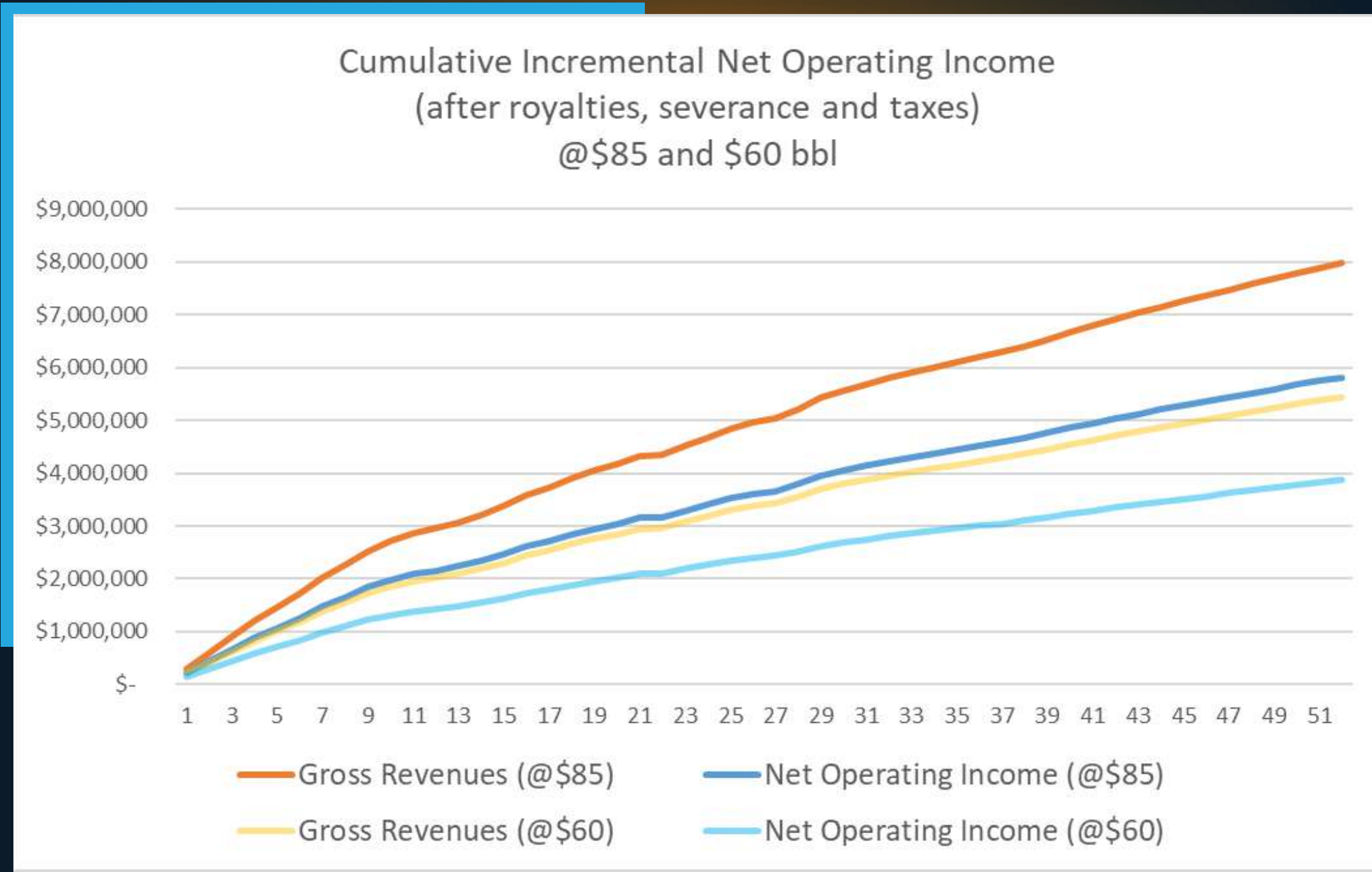
Increased pad up time and production stability

- Improved operation of gas lift compressor
- Improved pad uptime, even during sub-zero temps
- Reduced leasehold operating expenses



Predictive Pad Economics

Initial Production 3,000 BPD



Reference Pad

Pad lifetime production: ~ 1,350,000 bbls
Incremental production: ~ 150,000 bbls

(+11%)

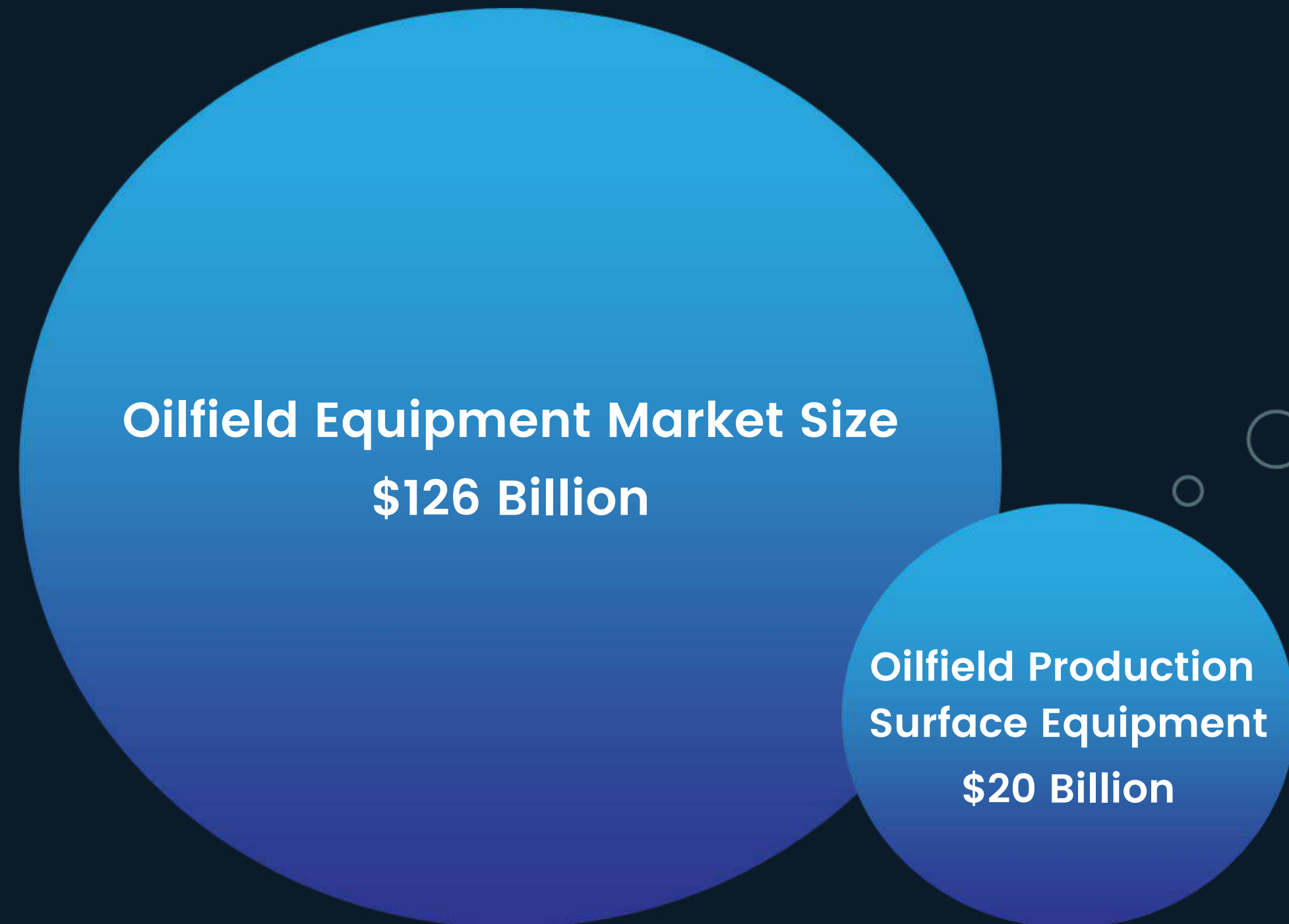
Assumptions

- WTI @ \$85/\$60 per bbl
- NGLs sold @ 66% discount to WTI
- Crude sold @ \$5 discount to WTI
- Royalties @ 20%
- Severance & Ad val taxes @ 9%

CAPEX

- Current CAPEX: > \$1 mil / well
- New CAPEX: ~ \$500k / well

Market Size and Opportunity



Emission reduction equipment is expected to have the highest growth rate in the category

5% Market Penetration in 5 Years
\$1 Billion



Source: Dun & Bradstreet

Pioneer Financial Projections

	TOTAL	Year 1	Year 2	Year 3	Year 4	Year 5
Demonstration units						
CAPEX for 4 additional 1000 BPD ECTs for pilots		(\$3,465)				
Rent for 5 pilot systems \$50,000 / mo with declining utilization		\$900	\$2,700	\$2,400	\$2,100	\$1,800
ECTs unit count	124	2	10	21	37	54
COGS for sale	(\$304,025)	(\$4,620)	(\$21,560)	(\$51,355)	(\$90,845)	(\$135,645)
Revenues (Utilization declining 10% a year)	\$662,360	\$8,120	\$52,200	\$120,640	\$203,000	\$278,400
Gross Profit	\$371,700	\$7,865	\$33,340	\$71,685	\$114,255	\$144,555
Field and Refurb (7 %)	(\$26,019)	(\$551)	(\$2,334)	(\$5,018)	(\$7,998)	(\$10,119)
Overhead	(\$38,869)	(\$4,500)	(\$5,500)	(\$6,265)	(\$9,173)	(\$13,430)
NET PROFIT	\$313,247	\$249	\$28,206	\$62,802	\$99,184	\$122,806

* all dollar amounts are in '000



Product Development Status

500 BPD pilot system deployed in October

Pilot completed end of Q1

Excellent results – emissions eliminated, crude volume increased

Patent allowance notice received

Production Engineering

Pilot Construction

Pilot Deployment & Operation

Initial Scale Unit Orders
Full Scale Unit Engineering

Unit Construction
Order Fulfillment
& Full Scale Unit

Q1 2022

Q2-Q3 2022

Q4 2022
- Q1 2023

Q2-Q3 2023

Q3-Q4 2023