



Testimony of Lynn D. Helms Director, North Dakota Industrial Commission Department of Mineral Resources April 3, 2023

Senate Appropriations - Education and Environment Division HB 1014 - SB 2089

January 2023 statewide Production

32,881,946

BO produced

87,871,026

MCF produced

4,786,739

MCF flared

17,269 wells

61 BOPD per well

164 MCFD per well

2,672 Gas Oil Ratio

40 CTB tank vapor capture projects (\$3 million / \$75,000 state share per installation)

NDDEQ 2011 Emissions Permitting Guide

2,900 CTB

17,269 wells

6.0 wells per CTB

370 **BOPD** per CTB

40 MCFD tank vapors per CTB

1,600 MCFD tank vapors captured

600 **BOPD** incremental production

\$150,000 CAPEX (\$75,000 state share per installation)

437,074

BO per Biennium

= \$2,884,686 GPT+OET

1,168,000

MCF per Biennium

= \$105,704 GPT

= \$2,990,390 GPT+OET

Statewide +4.1% gas capture

24 well pad gas storage projects (\$3 million / \$125,000 state share per installation)

Based on case 29069

6.0 wells/pad

BOPD/pad 307

820 MCFD/pad

570 CFM/pad

1,500 psi = 166 HP

\$250,000 CAPEX (\$125,000 state share per installation)

7% midstream downtime, but wells not shut in

448,440 BO per Biennium

= \$2,959,704 GPT+OET

994,694 MCF per Biennium =

\$90,020 GPT

= \$3,049,724 GPT+OET

Statewide +5.8% gas capture

Thank you for your time and consideration,

Lynn D. Helms, PhD

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