Bakken/Three Forks Connectivity Study
- Mathistad & Bice Spacing Units
McKenzie County, North Dakota
Daily Production—Mathistad #1

Mathistad 1-35

#1-5 Day FBHP Test

Shut in 5-8-09 w/BHP gauges while Mathistad #2

Both wells back
Map View—Mathistad 1 & 2
Wellbore Profile—Mathistad 1 & 2

Mathistad 1-35H TFS
Mathistad 2-35H MB
Newly drilled well
Mathistad 1-35H TFS
Ladder Plot—Mathistad 1 & 2
Daily Production—Mathistad #2

[Graph showing production data with labels for oil production, gas production, and water production. Key events marked as BHP Buildup and #1 POP 8/7.]
Mathistad 1 & 2 Normalized Oil Production

Cum oil, bbls

Days

0 20 40 60 80 100 120

0 10,000 20,000 30,000 40,000 50,000 60,000 80,000

Mathistad 1-35H
Mathistad 2-35H
Pressure Response—Mathistad 1

Pressure and Temperature vs Delta Time

Company: Continental Resources
Location: Mathistad #1-35H
Date: May 30, 2009 - July 09, 2009
Serial# 90445
Max. Pressure: 8780.485 Max. Temperature: 264.540

Graph showing pressure and temperature over time with two lines representing Pressure (PSIA) and Initial Temperature (F).
Daily Production—Mathistad 1 & 2

Total Mathistad Production

- Oil Prod
- Gas Prod
- Water Prod

Continental Resources
Daily Production—Bice #2

Bice 2-29H

Graph showing daily production of oil, gas, and water from December 2009 to May 2010.
Bice #1 Pressure Response
Bice #1 Pressure Response
Daily Production—Bice #1

Bice 1-29H

- Green line: Oil
- Red line: Gas
- Blue line: Water

Production data from May 2009 to May 2010.
Xlinked Gel @ 40 BPM
Max Net pressure = 730 PSI
End of Job

From SPE 124686
Fracture Profile—End of Job

Xlinked Gel @ 40 BPM
After Closure
Neither zone can be adequately drained by completion in another zone

Limited connectivity will require wells in both zones to adequately harvest the reserves

Reserves from MB and TFS are similar in magnitude
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