Weld County Oil & Gas Update
February 2018

Active Wells, Drilling Permits, Production, Rig Count, Trends
WELD COUNTY
23,753 Active Wells (AS OF 1/2/2018)
CRUDE OIL PRODUCTION

Weld County #1 Oil Producing County with over 90% of Colorado’s Oil Production!

Through end of 3rd Quarter 2017 Colorado Oil Production = ~91.1 Million Barrels (BBL) with 90.4% Produced in Weld County (~82.3 Million BBL)
NOTE: Final 2017 production reporting available in April.

2016 Colorado Oil Production = ~116.6 Million BBLS with >89% produced in Weld County (~104.1 Million BBLS)

2015 Oil Production = 122.8 Million BBLS with >89% produced in Weld County (109.5 Million BBLS).

2014 Oil Production = 95.5 Million BBLS with ~86% produced in Weld County (81.6 Million BBLS).
NATURAL GAS PRODUCTION

Weld County #1 Natural Gas Producing County in Colorado.

Through end 3rd Quarter 2017 Colorado Natural Gas Production ~1.3 Trillion Cubic Feet with ~39% produced in Weld County (~495 Billion Cubic Feet) and 47% of Conventional Natural Gas

NOTE: 2017 production reporting available in April.

2016 Colorado Gas Production ~1.7 Trillion Cubic Ft.
38% Weld County (47% of Conventional Natural Gas)

2015 Colorado Gas Production ~1.7 Trillion Cubic Feet
34% Weld County (42% of Conventional Natural Gas)

2014 Colorado Gas Production ~1.6 Trillion Cubic Feet
24% Weld County (31% of Conventional Natural Gas)

Total Colorado Gas Production includes both Coal Bed Methane (not produced in Weld) and Conventional Natural Gas from COGCC Production Data.
# TOP PRODUCERS

BASED ON 2017 WELD PRODUCTION  (~IN ORDER OF PRODUCTION)

<table>
<thead>
<tr>
<th>Operator</th>
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<tr>
<td>ANADARKO/KERR MCGEE ONSHORE LLC</td>
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<tr>
<td>NOBLE ENERGY INC</td>
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<tr>
<td>PDC ENERGY INC</td>
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<tr>
<td>EXTRACTION OIL &amp; GAS LLC</td>
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<td>SRC ENERGY INC</td>
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<tr>
<td>CRESTONE PEAK RESOURCES OPERATING LLC</td>
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<td>BILL BARRETT CORPORATION</td>
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<td>WHITING OIL &amp; GAS CORPORATION</td>
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<td>GREAT WESTERN OPERATING COMPANY LLC</td>
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<td>BONANZA CREEK ENERGY OPERATING COMPANY LLC</td>
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<td>CUB CREEK ENERGY</td>
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<td>CARRIZO NIOBRARA LLC</td>
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<td>FIFTH CREEK ENERGY OPERATING CORPORATION</td>
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WELD DRILLING ACTIVITY = 21 Rigs
-vs- ~22 Rigs Feb 2017, ~18 Rigs Feb 2016

WELD COUNTY DRILLING ACTIVITY:
2017 = 1267 (68% of 1857 Colorado well starts)
2016 = 731 (76% of 968 Colorado well starts)
2015 = 1084 (75% of 1437 Colorado well starts)
2014 = 1560 (70% of 2239 Colorado well starts)

Current Drilling Rigs Leased by Company Operating in Weld County:

- Anadarko/Kerr McGee = 6
- PDC Energy = 3
- Extraction = 3
- Bill Barrett = 2
- SRC Energy = 2
- Noble Energy = 1
- Crestone Peak = 1
- Great Western = 1
- Bayswater = 1
- Bonanza Creek = 1

Reflects near term changes (Data gathered from Form 42’s and O&G producers). Surface and Work Over Rigs excluded.
DRILLING PERMITS

2017 Drilling Permits Issued in Weld
   = **2466** (63% of 3909 in CO)

2016 Drilling Permits Issued in Weld
   = 1704 (60% of 2835 in CO)

2015 Drilling Permits Issued in Weld
   = 1841 (62% of 2568 in CO)

2014 Drilling Permits Issued in Weld
   = 2303 (55% of 4190 in CO)

**Permitting Trends:** Horizontal drilling in Weld with longer laterals - permitting of 2 & 2.5 mile laterals becoming more common. Fresh water for completions transported via temporary surface pipelines from source to point of use. Increased instances of moving crude oil from production facilities via pipeline instead of truck. The grouping of horizontal wells on multi-well pads and combining production facilities results in less overall surface impact, albeit with larger individual tank battery locations. Operators are also building and permitting these locations with fewer on-site storage tanks, which decreases the footprint and overall size (appearance).
Predictions

Activity dependent on price of crude (WTI) and producers response

https://www.eia.gov/forecasts/steo/report/prices.cfm

2014 Ave Crude Oil Price ~$93/BBL
2015 Ave Crude Oil Price ~$49/BBL
2016 Ave Crude Oil Price ~$43/BBL
2017 Ave Crude Oil Price ~$51/BBL
2018 Crude Oil Price $58.28/BBL (Current EIA Forecast 2/6/2018)

U.S. Energy Information Administration’s (EIA) Colorado Energy Profile:

https://www.eia.gov/state/analysis.cfm?sid=CO
Questions?

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