

Weld County Oil & Gas Update August 2017

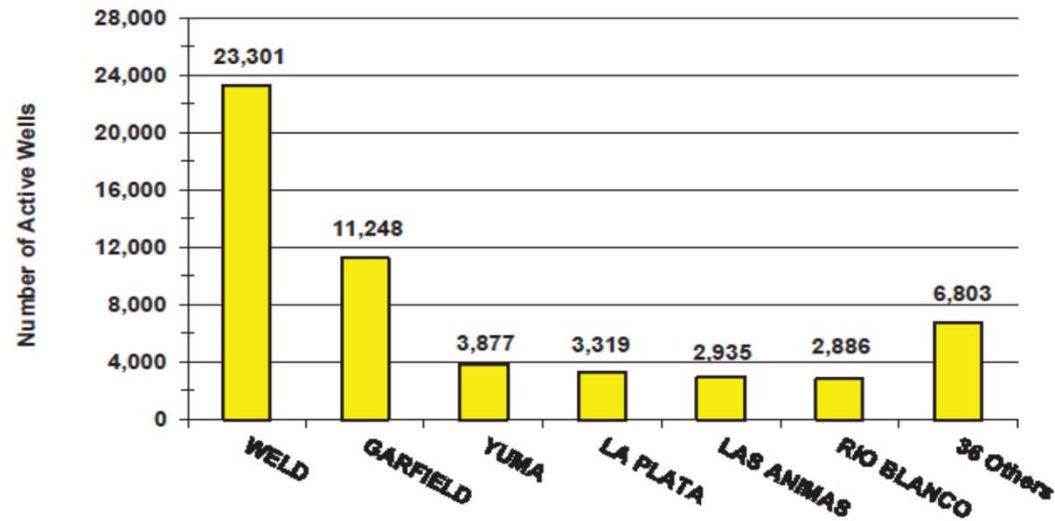
Active Wells, Drilling Permits,
Production, Rig Count, Trends

WELD COUNTY

23,469 Active Wells (AS OF 7/3/2017)

NUMBER OF ACTIVE COLORADO OIL AND GAS WELLS BY COUNTY

87% of Colorado's 54,369 active wells are located in these 6 counties
6-1-2017



CRUDE OIL PRODUCTION

**Weld County #1 Oil Producing County
with over 89% of Colorado's Production!**

2016 Colorado Oil Production = ~116 Million Barrels (BBLs)
with **over 89% produced in Weld County (~103.6 Million BBLs)**

2015 Oil Production = 127.4 Million BBLs with
~ 90% produced in Weld County (114 Million BBLs).

2014 Oil Production = 95 Million BBLs
with **~86% produced in Weld County (81 Million BBLs).**

NATURAL GAS PRODUCTION

**Weld County #1 Natural Gas Producing County in Colorado.
Weld operators produced ~640 Billion Cubic Feet in 2016.**

2016 Colorado Gas Production ~1.7 Trillion Cubic Feet
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 2016 WELD PRODUCTION (~IN ORDER OF PRODUCTION)

Operator
ANADARKO/KERR MCGEE ONSHORE LLC
NOBLE ENERGY INC
PDC ENERGY INC
EXTRACTION OIL & GAS LLC
BONANZA CREEK ENERGY OPERATING CO LLC
ENCANA OIL & GAS (USA) INC
BILL BARRETT CORPORATION
WHITING OIL & GAS CORPORATION
GREAT WESTERN OPERATING COMPANY LLC
BAYSWATER EXPLORATION AND PRODUCTION
SYNERGY RESOURCES CORPORATION
CRESTONE PEAK RESOURCES OPERATING LLC
CARRIZO NIOBRARA LLC

WELD DRILLING ACTIVITY = 26 Rigs

-vs- ~15 Rigs Aug 2016, ~29 Rigs Aug 2015

WELD COUNTY DRILLING ACTIVITY:

2017 **72%** of Colorado's well starts (665 of 921 through 7/3/2017)

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 = 4

Extraction = 3

Noble Energy = 2

Bill Barrett = 2

SRC Energy = 2

Crestone Peak = 2

Great Western = 1

Cub Creek = 1

Verdad = 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 (through July 3, 2017)
= 1216 (**64%** of 1896 in CO through July 3, 2017)

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 foot print and over-all 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 ~\$48.88/BBL (EIA Forecast)

Operators have been drilling wells but delaying completions (frac). There are many wells awaiting completion and having their production brought on line. This delay in completion reduced the immediate need for frac crews and production facilities which has impacted oil and gas employment. These drilled wells awaiting completion and production can allow operators to bring new production on line quickly when they deem it necessary. As the rig count declined the number of drilling, completions, and field construction/support jobs declined. Have seen fewer rigs, faster drilling times, longer laterals and lower production costs. The rig count decline stabilized the Summer of 2016 and has been slowly increasing.

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

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

Questions?

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