

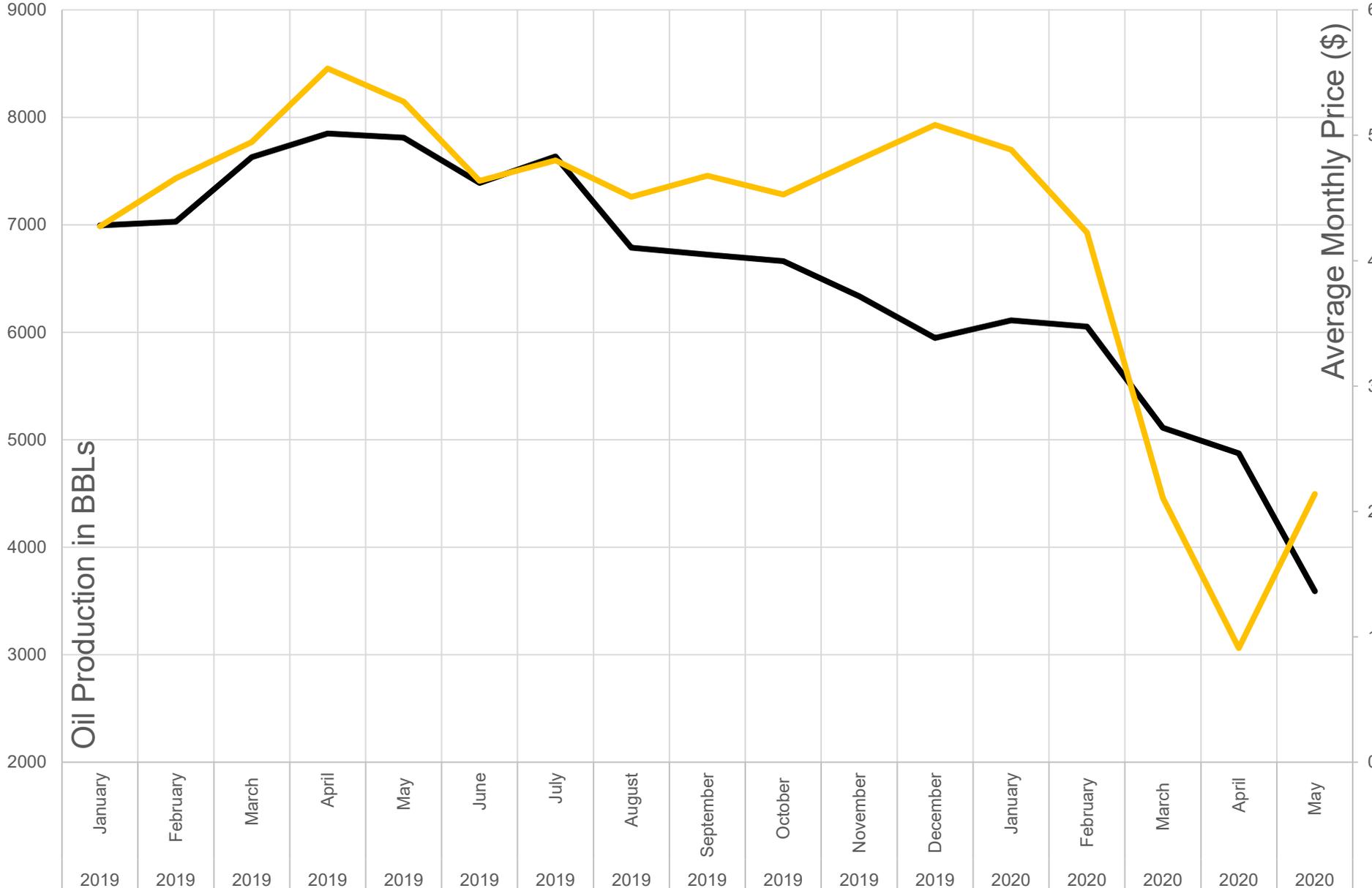
2019-2020 Annual Report on Oil and Gas Activities

State Oil and Gas Council Meeting – July 15, 2020

Aaron Szapa
Missouri Geological Survey



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Oil Production in 2019

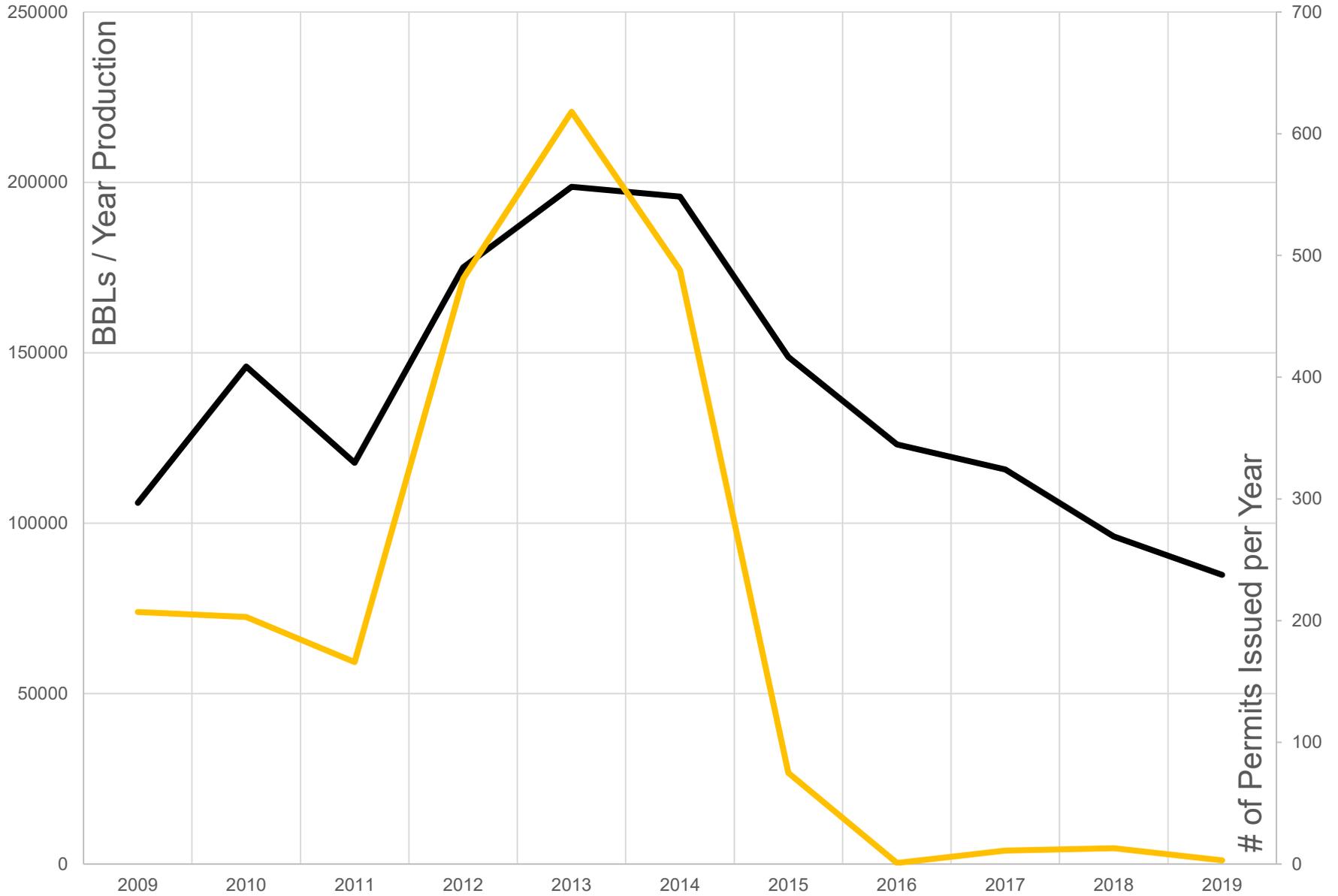
- 441 active producing oil wells
- 84,802 barrels of oil produced
- Valued at about ~\$4.08 million
- Currently produced in 5 counties
- 21 licensed operators
- 11 companies reported production

5-year Average Price for Missouri Oil

- Average price per barrel in 2019 – \$48.16
– (↓18%) (ranging from \$24.45 to \$59.94)
- Average price per barrel in 2018 – \$56.85
– (↑35%) (ranging from \$32.00 to \$63.70)
- Average price per barrel in 2017 – \$41.48
– (↑26%) (ranging from \$31.95 to \$52.24)
- Average price per barrel in 2016 – \$32.77
– (↓14%) (ranging from \$17.13 to \$48.14)
- Average price per barrel in 2015 – \$38.71
– (↓47%) (ranging from \$24.00 to \$53.30)



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2019 Permits Issued

Application Type	Permit Number	API Number
Injection Well	201811003	037-20066
Injection Well	201811004	037-20063
Oil Well	201908001	037-20066

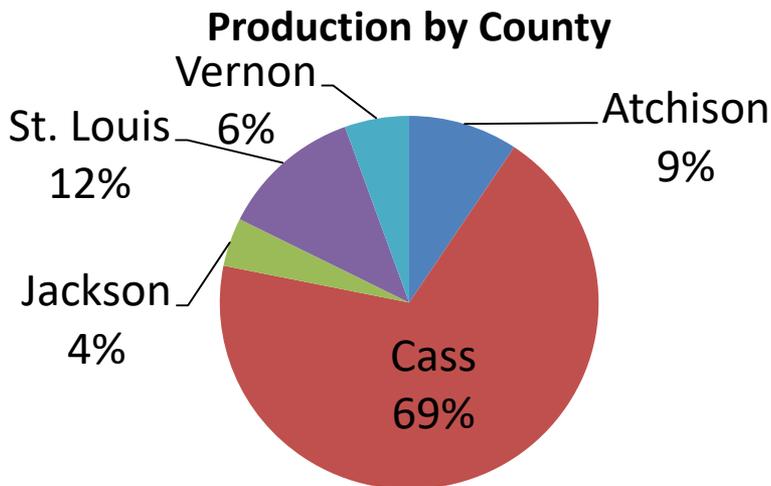
2019 Crude Oil Production by Operator

Operator	Oil Production (BBLs)	% of Total
KANSAS RESOURCE EXPLORATION AND DEVELOPMENT	50638	59.71
INVESTMENT EQUIPMENT LLC	7928	9.35
S&B OPERATING LLC	7349	8.67
Spire Missouri Inc.	6768	7.98
RUNNING FOXES PETROLEUM INC.	4534	5.35
Spire Oil Services LLC	3518	4.15
BAUER OIL INVESTMENT LLC	2098	2.47
LT OIL CO	1339	1.58
BRANT ENERGY LLC	224	0.26
BEASLEY, MELISSA	166	0.20
PALUCA PETROLEUM INC.	165	0.19
BARBARAA GIBLIN REVOCABLE TRUST	76	0.09
WARRIOR OPERATING COMPANY INC.	0	0.00
Sum	84802.62	100.00



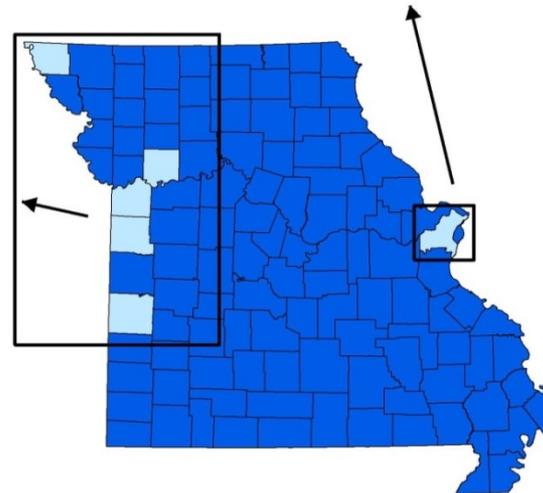
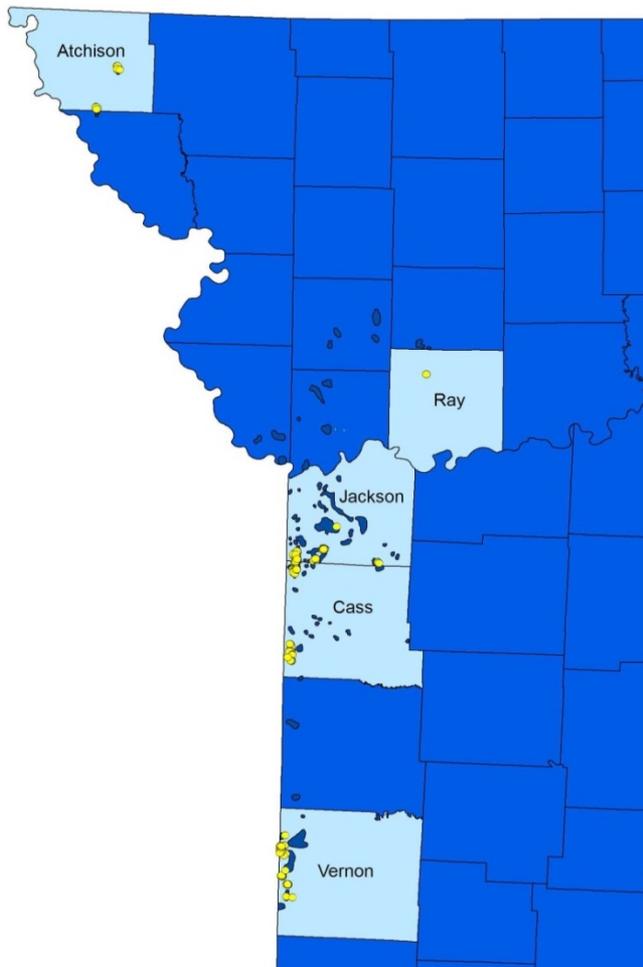
2019 Oil Producing Counties

County	BBL's of Oil	Production Value
Atchison	7927	367744
Cass	58362	2820866
Clinton	0	0
Jackson	3559	173158
Ray	0	0
St. Louis	10286	516012
Vernon	4699	231265

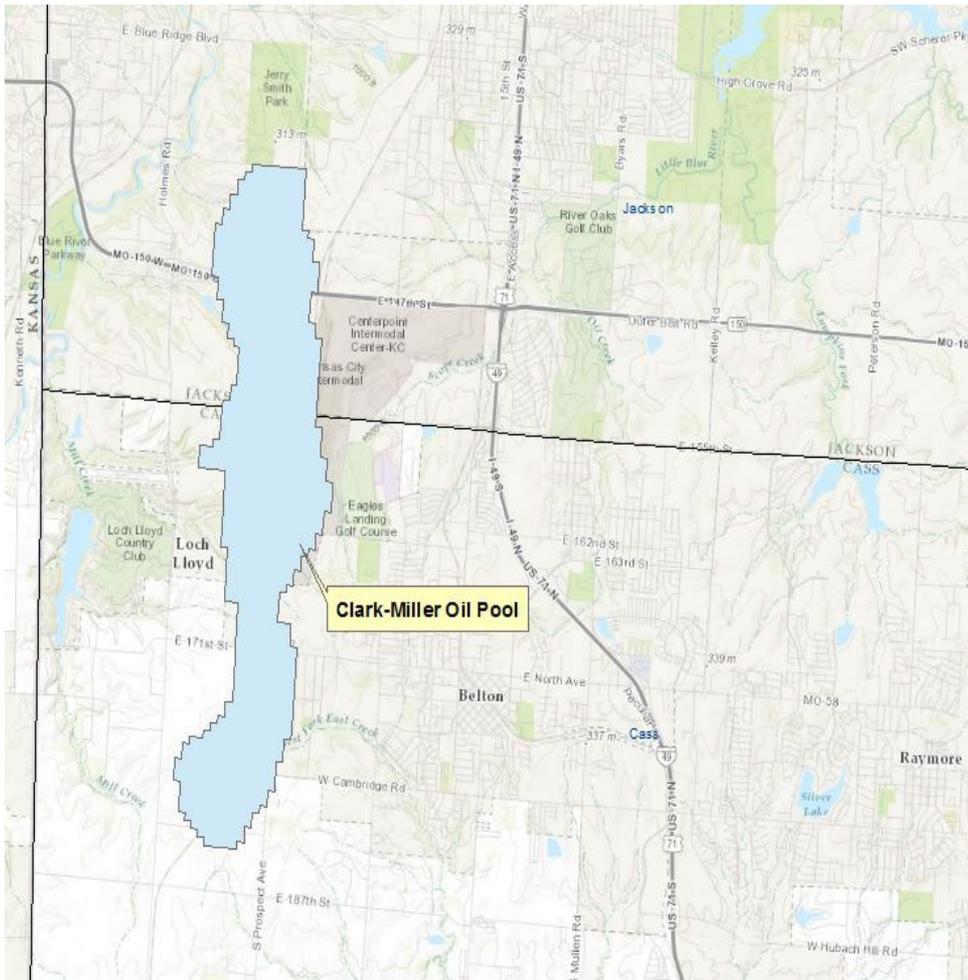


Total Production 96,147 bbls
Total Value \$5.46 Million

Oil Producing Counties and Known Fields



Top Producing County and Pool



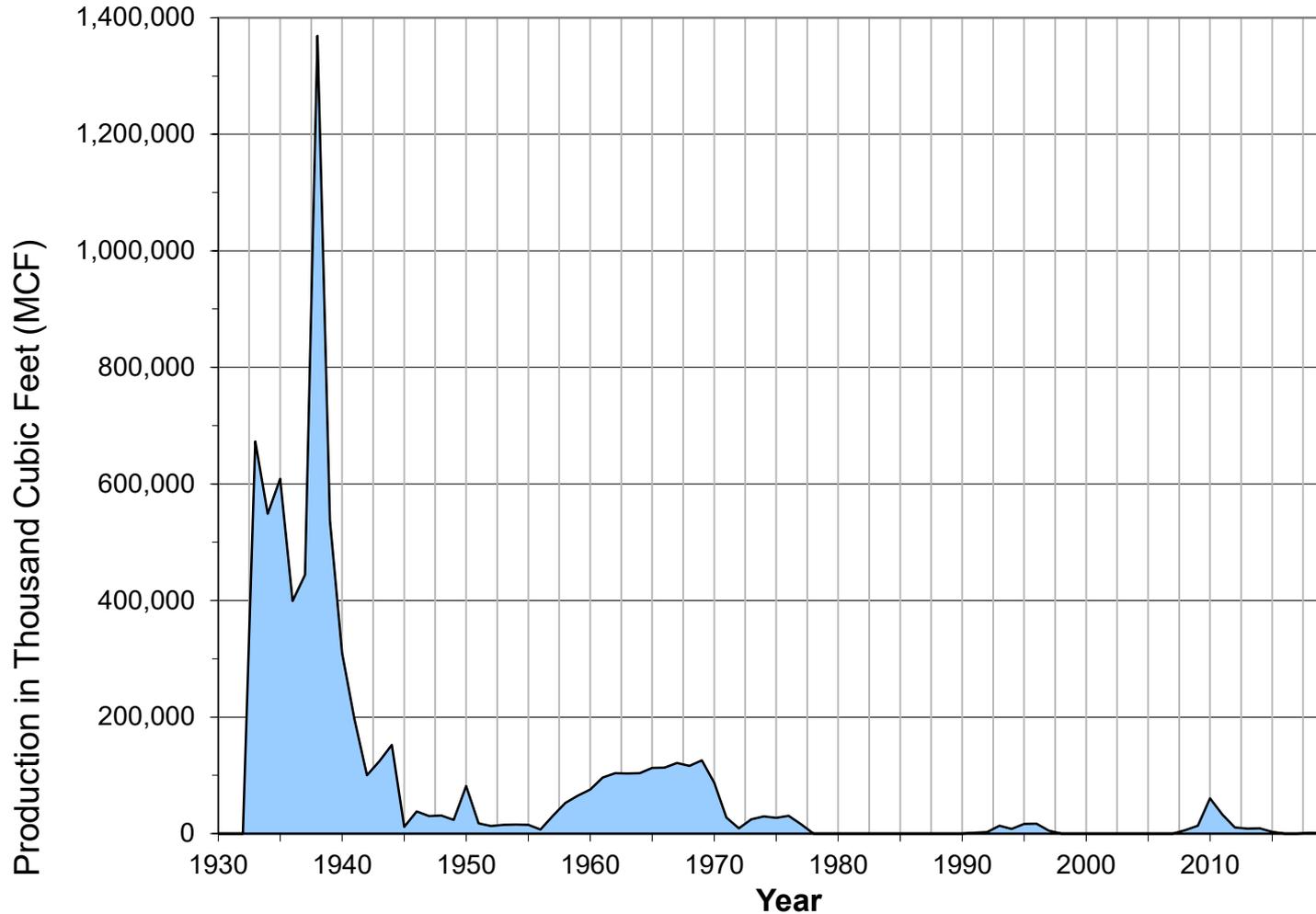
Top Oil Producing County
- Cass County
58,362 bbls
69 percent of total oil
produced in Missouri

Top Oil Producing Pool
Clark-Miller Oil Pool
54,911 bbls
65 percent of total oil
produced in Missouri

2019 Commercial Gas Production

- 1 Active Company
- 14 active producing commercial gas wells
- Gas Production = 596 MCF
- Commercial Value = \$0 (none sold)
- Price per MCF average – \$0
- All 14 wells are in Clinton County

Historic Commercial Gas Production



Missouri's Private Gas Wells

- 439 Private gas wells
 - 49 are known active
 - 390 abandoned status
- Five counties have active private gas wells
 - Cass, Caldwell, Clay, Clinton and Jackson
- Production reporting is exempted



Class II Injection Wells

- Wells that inject fluids in connection with oil/gas production
 - Disposal of produced salt water
 - Injection of fluids for enhanced recovery
- Missouri has 358 active Class II Wells
 - Saline Water Disposal – 8
 - Enhanced Oil Recovery – 350
- Abandoned Class II wells – 65

Wells Plugged

Includes oil, gas, injection, stratigraphic test

- 2013 – Wells Plugged = 348
- 2014 – Wells Plugged = 354
- 2015 – Wells Plugged = 139
- 2016 – Wells Plugged = 129
- 2017 – Wells Plugged = 31
- 2018 – Wells Plugged = 64
- 2019 – Wells Plugged = 7



Missouri Total Open Wells

Item	Well Type	Number of Wells
Total Open Wells		5,933
	Post-Law Wells	1,326
	Pre-Law Well	4,607
Abandoned Wells		4,843
	Post-Law Commercial	348
	Post-Law Private Gas	8
	Pre-Law Commercial	4,091
	Pre-Law Private Gas	396
82 percent of all open wells are abandoned		
85 percent of all abandoned wells are commercial wells		

Fund and Bonding Balances

- Oil and Gas Remedial Fund balance as of June, 2020
 - \$8,777
- Oil and Gas Resource Fund balance as of June, 2020
 - \$239,165
- Total Bonding held as of July, 2020
 - \$878,353



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Questions?

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