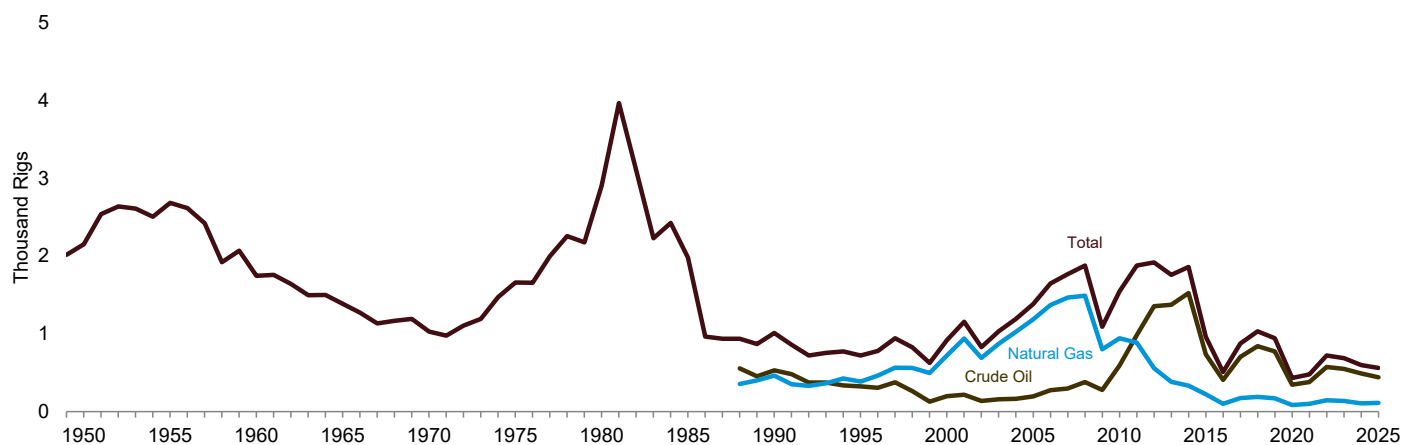


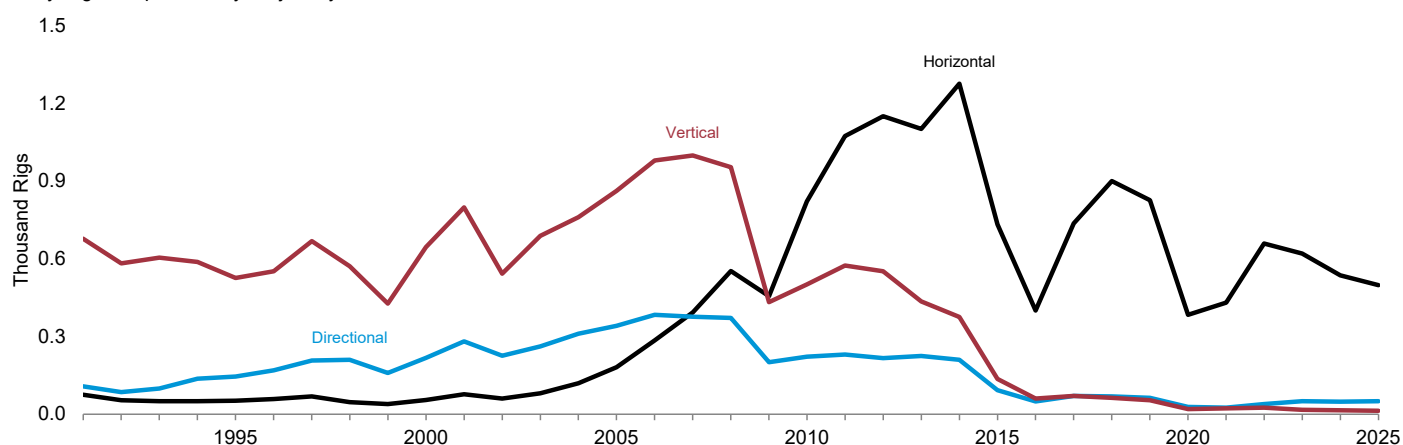
5. Crude Oil and Natural Gas Resource Development

Figure 5.1 Crude Oil and Natural Gas Drilling Activity Measurements

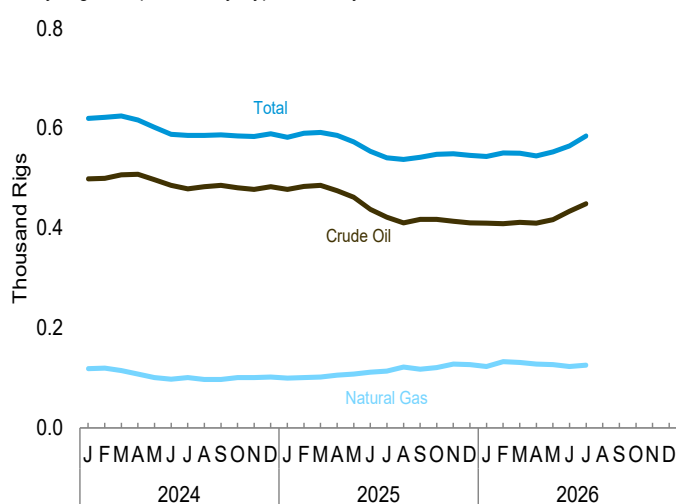
Rotary Rigs in Operation by Type, 1949–2025



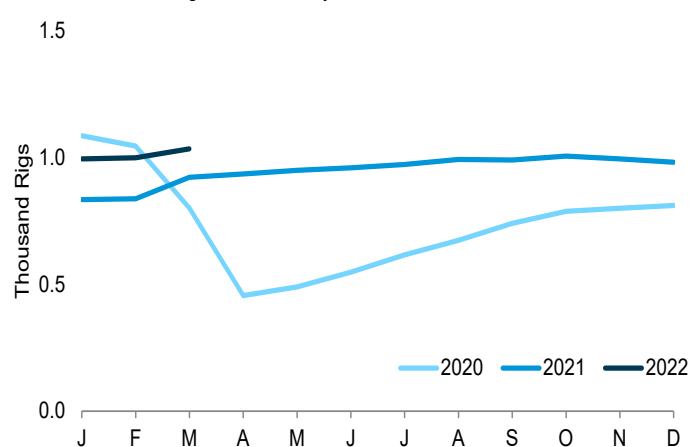
Rotary Rigs in Operation by Trajectory, 1991–2025



Rotary Rigs in Operation by Type, Monthly



Active Well Service Rig Count, Monthly



Web Page: <http://www.eia.gov/totalenergy/data/monthly/#crude>.

Sources: Table 5.1.

Table 5.1 Crude Oil and Natural Gas Drilling Activity Measurements
(Number of Rigs)

	Rotary Rigs in Operation ^{a,b}								Active Well Service Rig Count ^d
	By Location ^c		By Type ^c		By Trajectory ^c			Total ^c	
	Onshore	Offshore	Crude Oil	Natural Gas	Horizontal	Directional	Vertical		
1950 Average	NA	NA	NA	NA	NA	NA	NA	2,154	NA
1955 Average	NA	NA	NA	NA	NA	NA	NA	2,686	NA
1960 Average	NA	NA	NA	NA	NA	NA	NA	1,748	NA
1965 Average	NA	NA	NA	NA	NA	NA	NA	1,388	NA
1970 Average	NA	NA	NA	NA	NA	NA	NA	1,028	NA
1975 Average	1,554	106	NA	NA	NA	NA	NA	1,660	2,486
1980 Average	2,678	231	NA	NA	NA	NA	NA	2,909	4,089
1985 Average	1,774	206	NA	NA	NA	NA	NA	1,980	4,716
1990 Average	902	108	532	464	NA	NA	NA	1,010	3,658
1995 Average	622	101	323	385	52	145	526	723	3,041
2000 Average	778	140	197	720	55	217	645	918	2,692
2005 Average	1,290	93	194	1,186	181	341	862	1,383	2,222
2010 Average	1,514	31	591	943	822	222	501	1,546	1,854
2011 Average	1,846	32	984	887	1,074	230	574	1,879	2,075
2012 Average	1,871	48	1,357	558	1,151	216	552	1,919	2,113
2013 Average	1,705	56	1,373	383	1,102	225	435	1,761	2,064
2014 Average	1,804	57	1,526	333	1,276	210	375	1,861	2,024
2015 Average	927	35	736	224	733	93	136	962	1,481
2016 Average	486	23	408	100	400	49	60	509	1,061
2017 Average	856	20	703	172	737	70	70	876	1,187
2018 Average	1,013	19	841	190	900	69	63	1,032	1,292
2019 Average	920	23	774	169	826	63	54	943	1,253
2020 Average	417	15	345	85	384	28	20	433	738
2021 Average	464	14	380	98	431	25	22	478	949
2022 Average	708	15	574	147	659	39	25	723	NA
2023 Average	669	19	549	135	620	50	17	687	NA
2024 January	601	20	499	119	561	48	12	620	NA
February	603	20	500	120	560	50	13	622	NA
March	603	22	507	115	559	53	13	625	NA
April	598	19	508	108	555	50	13	617	NA
May	582	20	497	101	544	42	17	602	NA
June	567	21	486	98	525	44	19	588	NA
July	564	22	479	101	519	49	18	586	NA
August	566	19	483	97	521	48	16	586	NA
September	567	20	486	97	522	50	15	587	NA
October	568	18	481	101	517	53	15	585	NA
November	570	14	478	101	520	48	16	584	NA
December	575	14	483	102	526	49	14	589	NA
Average	580	19	491	105	536	48	15	599	NA
2025 January	568	14	478	100	519	50	13	582	NA
February	576	14	484	101	528	50	13	590	NA
March	578	14	486	102	531	50	12	592	NA
April	573	13	475	106	527	46	14	586	NA
May	561	12	462	108	517	42	14	573	NA
June	542	12	438	112	501	40	13	554	NA
July	528	13	422	114	482	45	15	541	NA
August	525	13	411	122	470	54	14	538	NA
September	529	13	418	118	473	56	13	542	NA
October	531	17	418	121	482	55	12	548	NA
November	530	19	414	128	478	60	11	549	NA
December	529	17	411	127	475	56	15	546	NA
Average	547	14	442	113	498	50	13	561	NA
2026 January	529	15	410	123	476	55	13	544	NA
February	534	17	409	133	483	56	13	551	NA
March	537	13	412	131	485	53	12	550	NA
April	533	12	410	128	484	49	13	545	NA
May	535	18	417	127	482	59	12	553	NA
June	556	9	434	123	481	73	12	565	NA
July	572	13	449	126	522	51	12	585	NA
7-Month Average	543	14	421	127	488	56	12	557	NA
2025 7-Month Average	561	13	464	106	515	46	13	574	NA
2024 7-Month Average	589	21	497	109	546	48	15	609	NA

^a Data are for rigs drilling for crude oil, rigs drilling for natural gas, and other rigs (not shown separately) drilling for miscellaneous purposes, such as service wells, injection wells, and stratigraphic tests.

^b Rotary rigs in operation are reported weekly on Fridays. Monthly data are averages of 4- or 5-week reporting periods. Multi-month data are averages of the reported weekly data over the covered months. Annual data are averages of 52- or 53-week reporting periods. Published data are rounded to the nearest whole number.

^c Not shown under "By Type" are other rigs drilling for miscellaneous purposes, such as service wells, injection wells, and stratigraphic tests. Therefore, the sum of "Crude Oil" and "Natural Gas" may not equal "Total" values. In addition, for "By Location," "By Type," and "By Trajectory," the sum of the components in each category may not equal "Total" values due to independent rounding.

^d The number of rigs doing true workovers (where tubing is pulled from the well), or doing rod string and pump repair operations, and that are, on average, crewed and working every day of the month.

NA=Not available.

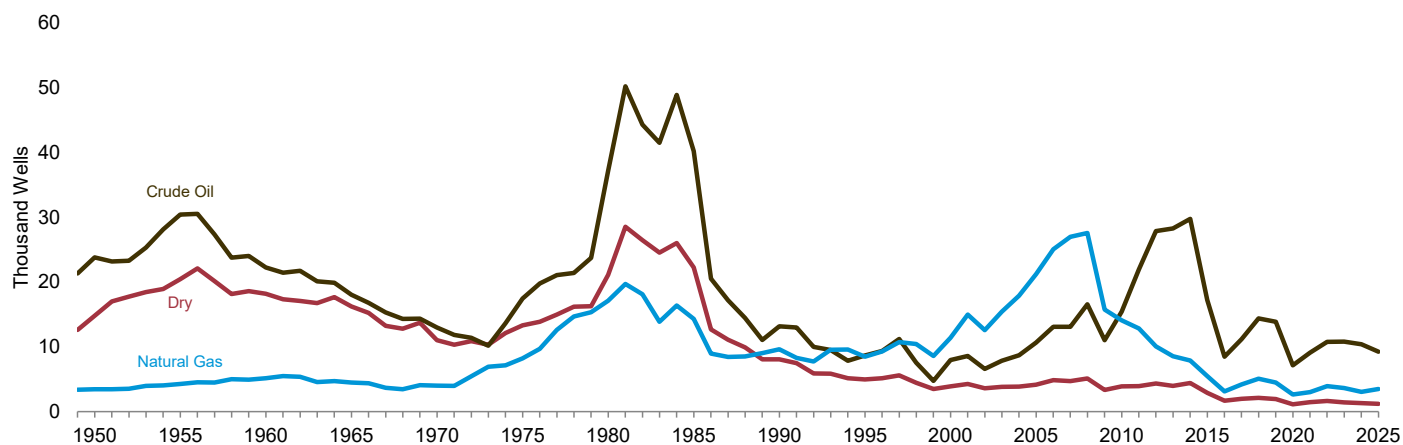
Note: Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#crude> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

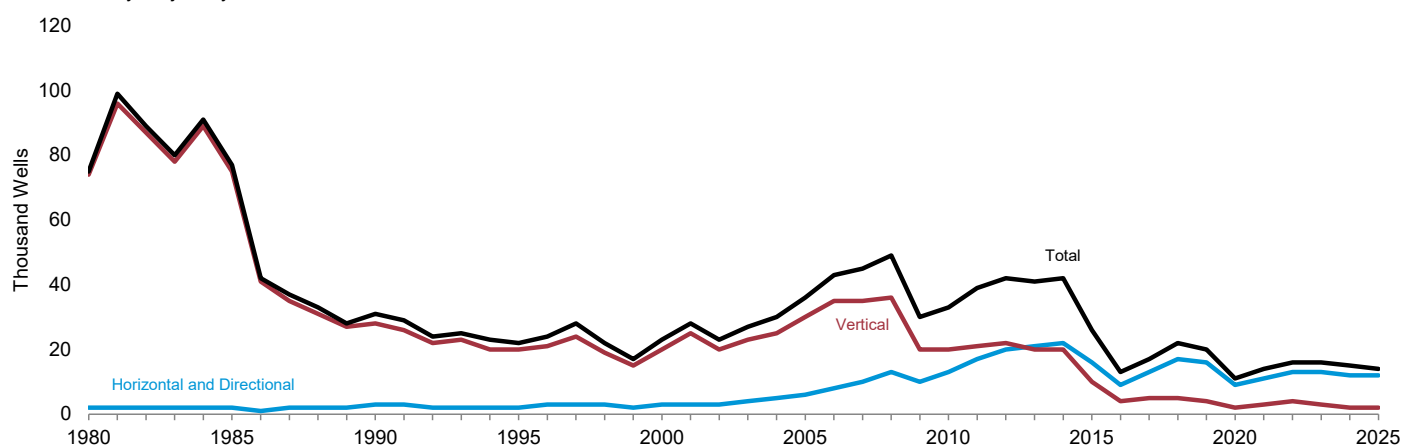
Sources: • **Rotary Rigs in Operation:** Baker Hughes, Inc., Houston, TX, "North America Rig Count," used with permission. See <http://phx.corporate-ir.net/phoenix.zhtml?c=79687&p=irol-reports> other. • **Active Well Service Rig Count:** Energy Workforce & Technology Council, Houston, TX.

Figure 5.2 Crude Oil and Natural Gas Wells and Footage Drilled

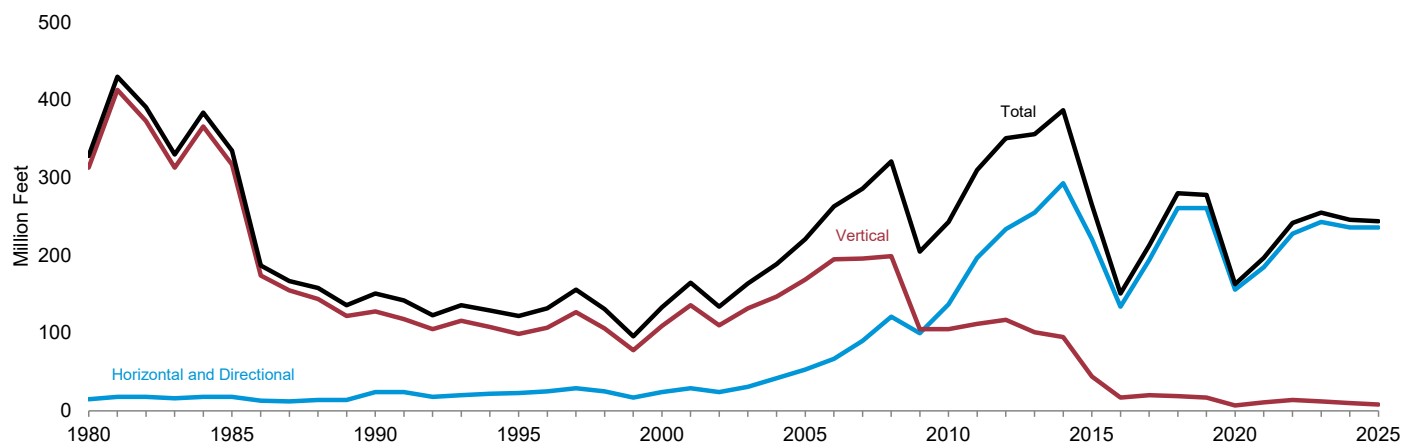
Wells Drilled by Type, 1949–2025



Wells Drilled by Trajectory, 1980–2025



Footage Drilled by Trajectory, 1980–2025



Web Page: <http://www.eia.gov/totalenergy/data/monthly/#crude>.

Sources: Table 5.2.

Table 5.2 Crude Oil and Natural Gas Wells and Footage Drilled

	Wells Drilled						Footage Drilled					
	By Type			By Trajectory		Total	By Type			By Trajectory		Total
	Crude Oil	Natural Gas	Dry	Horizontal and Directional	Vertical		Crude Oil	Natural Gas	Dry	Horizontal and Directional	Vertical	
	Number						Thousand Feet					
1950 Total	23,812	3,439	14,799	NA	NA	42,050	NA	NA	NA	NA	NA	157,358
1955 Total	30,432	4,266	20,452	NA	NA	55,150	NA	NA	NA	NA	NA	226,182
1960 Total	22,258	5,149	18,212	NA	NA	45,619	NA	NA	NA	NA	NA	192,176
1965 Total	18,065	4,482	16,226	NA	NA	38,773	NA	NA	NA	NA	NA	174,882
1970 Total	12,968	4,011	11,031	NA	NA	28,010	NA	NA	NA	NA	NA	138,556
1975 Total	17,449	8,200	13,321	NA	NA	38,970	NA	NA	NA	NA	NA	182,199
1980 Total	37,209	17,108	21,125	1,677	73,765	75,442	137,273	92,649	98,054	14,607	313,369	327,976
1985 Total	40,217	14,309	22,270	2,184	74,612	76,796	152,575	77,699	104,791	17,944	317,122	335,066
1990 Total	13,169	9,603	8,054	2,839	27,987	30,826	57,153	52,870	41,360	23,619	127,764	151,383
1995 Total	R 8,653	R 8,474	R 4,951	R 2,495	R 19,583	R 22,078	R 41,930	R 53,637	R 26,714	R 23,034	R 99,247	R 122,281
2000 Total	R 7,963	R 11,377	R 3,900	R 2,915	R 20,325	R 23,240	R 34,903	R 75,329	R 22,786	R 24,182	R 108,836	R 133,018
2005 Total	10,665	21,227	4,163	5,997	30,058	36,055	49,661	148,827	22,978	52,902	168,564	221,466
2010 Total	15,440	R 14,093	3,873	R 12,930	20,476	33,406	93,192	R 130,380	R 19,138	R 137,368	105,341	242,709
2011 Total	R 21,954	R 12,829	R 3,930	R 17,231	21,482	38,713	R 154,738	R 135,957	R 18,931	R 197,401	R 112,225	R 309,626
2012 Total	R 27,871	R 10,046	4,348	R 19,814	22,451	42,265	R 218,208	111,813	R 20,674	R 233,974	R 116,721	R 350,695
2013 Total	R 28,284	R 8,550	R 3,953	R 20,513	R 20,274	40,787	R 235,051	R 100,969	R 19,980	R 254,950	R 101,050	R 356,000
2014 Total	R 29,755	R 7,898	4,405	R 22,413	R 19,645	42,058	R 266,750	R 97,274	R 23,332	R 292,759	R 94,597	R 387,356
2015 Total	R 17,246	R 5,463	2,877	16,038	R 9,548	25,586	R 175,977	R 72,315	R 16,783	R 221,386	R 43,690	R 265,076
2016 Total	R 8,491	R 3,113	R 1,664	R 9,066	4,202	13,268	R 97,684	44,202	R 9,459	R 134,017	R 17,328	R 151,345
2017 Total	R 11,181	R 4,199	1,980	R 12,658	4,702	17,360	R 136,825	63,411	12,992	R 193,526	R 19,701	R 213,227
2018 Total	R 14,387	R 5,058	2,133	R 16,571	5,007	21,578	R 185,659	80,381	R 14,342	R 261,097	R 19,284	R 280,381
2019 Total	R 13,879	R 4,463	R 1,943	R 15,949	R 4,336	20,285	R 188,901	R 74,985	R 13,996	R 260,796	R 17,086	R 277,882
2020 Total	R 7,154	2,642	1,119	R 8,941	R 1,974	10,915	106,187	48,260	R 8,515	155,645	R 7,317	162,962
2021 Total	R 9,111	R 3,010	R 1,437	10,502	R 3,056	13,558	R 131,690	R 55,399	R 9,427	R 185,265	R 11,250	R 196,515
2022 Total	R 10,749	R 3,945	R 1,631	R 12,553	R 3,772	16,325	R 158,649	R 71,895	R 11,907	R 228,332	R 14,120	R 242,451
2023 Total	R 10,794	R 3,635	R 1,415	R 12,892	R 2,952	15,844	R 174,829	R 69,349	R 10,514	R 243,055	R 11,638	R 254,693
2024 January	R 835	R 259	R 106	R 1,020	R 180	R 1,200	R 13,907	R 5,093	R 862	R 19,095	R 767	R 19,862
February	R 847	285	108	R 1,070	R 170	R 1,240	R 14,850	R 5,572	R 869	R 20,627	R 664	R 21,292
March	R 848	R 251	R 107	R 1,012	R 194	R 1,206	R 14,575	R 4,809	1,111	R 19,711	R 783	R 20,494
April	R 947	R 235	113	R 1,079	R 216	R 1,295	R 16,157	R 4,760	R 799	R 20,873	R 844	R 21,717
May	R 831	279	104	R 994	R 220	R 1,214	R 13,834	5,594	R 867	R 19,435	R 860	R 20,295
June	R 833	R 255	R 103	945	R 246	R 1,191	R 13,795	R 5,184	R 736	R 18,753	R 961	R 19,715
July	R 978	225	R 118	R 1,063	R 258	R 1,321	R 15,906	R 4,672	R 978	R 20,548	1,008	R 21,556
August	R 892	R 234	109	R 1,023	212	R 1,235	R 15,139	R 4,609	818	R 19,737	R 828	R 20,566
September	R 812	296	105	R 1,019	R 194	R 1,213	R 13,806	6,124	768	R 19,939	R 758	R 20,697
October	953	R 262	117	R 1,110	R 222	R 1,332	16,326	R 5,202	R 825	R 21,487	867	R 22,354
November	R 813	R 223	R 102	R 928	R 210	R 1,138	R 13,241	R 4,287	R 795	R 17,497	R 826	R 18,323
December	R 811	R 224	R 102	R 961	R 176	R 1,137	R 13,468	R 4,389	R 821	R 17,990	R 688	R 18,678
Total	R 10,400	R 3,028	R 1,294	R 12,224	R 2,498	R 14,722	R 175,004	R 60,294	R 10,248	R 235,692	R 9,855	R 245,547
2025 January	R 800	R 290	100	R 1,014	R 176	R 1,190	R 13,211	R 5,803	R 839	R 19,165	R 688	R 19,853
February	R 809	R 255	R 101	R 993	172	R 1,165	R 13,309	R 5,209	R 742	R 18,589	R 672	R 19,261
March	R 813	257	103	R 1,008	R 165	R 1,173	R 14,840	R 5,526	R 728	R 20,450	R 645	R 21,095
April	R 808	R 279	R 102	R 1,008	R 181	R 1,189	R 14,133	R 5,818	894	R 20,137	R 707	R 20,844
May	R 869	R 262	R 108	R 1,057	R 182	R 1,239	R 16,250	R 5,386	R 768	R 21,694	R 711	R 22,405
June	R 783	R 246	R 98	R 967	R 160	R 1,127	R 14,533	R 4,984	R 692	R 19,583	R 625	R 20,209
July	R 777	327	R 105	R 1,024	R 185	R 1,209	R 13,917	R 6,774	R 749	R 20,718	R 723	R 21,440
August	R 783	R 307	105	R 1,021	R 174	R 1,195	R 13,903	R 6,529	R 799	R 20,551	R 680	R 21,231
September	724	R 306	98	R 968	R 160	R 1,128	R 13,316	6,041	R 695	R 19,427	R 625	R 20,052
October	R 700	R 283	R 94	R 927	R 150	R 1,077	R 12,365	R 5,659	R 735	R 18,172	R 586	R 18,758
November	R 693	R 382	R 96	R 1,021	R 150	R 1,171	R 12,178	R 7,597	R 678	R 19,867	R 586	R 20,453
December	R 690	R 278	R 93	R 869	R 192	R 1,061	R 11,660	R 5,688	R 667	R 17,265	R 750	R 18,015
Total	R 9,249	R 3,472	R 1,203	R 11,877	R 2,047	R 13,924	R 163,614	R 71,015	R 8,987	R 235,618	R 7,998	R 243,616
2026 January	R 687	R 270	R 93	R 882	R 168	R 1,050	R 11,482	R 5,173	R 845	R 16,831	R 669	R 17,500
February	R 684	R 289	R 94	R 900	R 167	R 1,067	R 12,214	R 5,537	R 663	R 17,727	R 687	R 18,413
March	R 688	R 285	R 94	R 912	R 155	R 1,067	R 12,391	R 5,546	R 669	R 18,000	R 606	R 18,606
April	R 685	R 279	R 93	R 888	R 169	R 1,057	R 11,225	R 5,397	R 662	R 16,624	R 660	R 17,284
May	R 698	R 278	R 94	R 912	R 158	R 1,070	R 11,543	R 5,427	R 720	R 17,073	R 617	R 17,690
June	R 726	R 268	R 97	R 939	R 152	R 1,091	R 12,165	R 5,301	R 706	R 17,578	R 594	R 18,172
July	752	277	100	965	164	1,129	12,532	5,450	724	18,065	641	18,706
7-Month Total	4,920	1,946	665	6,398	1,133	7,531	83,551	37,831	4,989	121,898	4,473	126,371
2025 7-Month Total	5,659	1,916	717	7,071	1,221	8,292	100,193	39,501	5,413	140,336	4,771	145,107
2024 7-Month Total	6,119	1,789	759	7,183	1,484	8,667	103,024	35,683	6,222	139,042	5,887	144,929

R=Revised. NA=Not available.

Notes: • Data are estimates. • For 1960–1969, data are for well completion reports received by the American Petroleum Institute during the reporting year; for all other years, data are for well completions in a given year. • Through 1989, these well counts include only the original drilling of a hole intended to discover or further develop already discovered crude oil or natural gas resources. Other drilling activities, such as drilling an old well deeper, drilling of laterals from the original well, drilling of service and injection wells, and drilling for resources other than crude oil or natural gas are excluded. Due to the methodology used to estimate ultimate well counts from the available partially reported data, the counts shown on this page are frequently revised. See Note, "Crude Oil and Natural Gas Wells," at

end of section. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#crude> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **1949–1965:** Gulf Publishing Company, *World Oil*, "Forecast-Review" issue. • **1966–1969:** American Petroleum Institute (API), *Quarterly Review of Drilling Statistics for the United States*, annual summaries and monthly reports. • **1970–1989:** U.S. Energy Information Administration (EIA) computations based on well reports submitted to the API. • **1990 forward:** EIA computations based on well reports submitted to S&P Global.

Crude Oil and Natural Gas Resource Development

Note. Crude Oil and Natural Gas Wells. The U.S. Energy Information Administration (EIA) considers six well types in the *Monthly Energy Review* (MER): “completed for crude oil,” “completed for natural gas,” “dry hole,” “vertical,” “horizontal and directional,” and “total.” Wells that produce both crude oil and natural gas are categorized by the state. EIA includes both developmental wells and exploratory wells in the six well types, but excludes all other classes of wells drilled in connection with the search for producible hydrocarbons. If a lateral well (such as a service well, stratigraphic test well, observation well, etc.) is drilled at the same time as the original hole, EIA does not separately count the lateral well. However, EIA includes all of the well footage. EIA counts only horizontal wells after the first lateral is drilled and does not count pilot holes.

Prior to the March 1985 MER, drilling statistics consisted of completion data for crude oil, natural gas, and dry wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported well completions were an inaccurate indicator of drilling activity. For example, in 1982, as-reported well completions increased, while the number of actual completions decreased. As a result, for 1973 forward, the data shown in this section are revised estimates based on the partial data available from S&P Global. EIA continuously revises these estimates as new data become available. Each month, EIA estimates the latest 36 months of wells using the rig count and a 3-month average wells per rig ratio. EIA applies three conditions to the result: 1) if the model result is less than the actual reported value, then EIA uses the reported value, and 2) the published total well count is the maximum of the modeled total, or the sum of modeled oil, gas, and dry, or the sum of modeled horizontal and vertical well counts, and 3) the modeled component well counts are prorated so that they add exactly to the total published well count. EIA uses a similar process to estimate drilled footage using a 6-month average footage-per-well ratio. Because there is no reported dry rig count data, EIA estimates the number of dry wells using a 6-month average dry-wells-to-total-wells ratio, which EIA then applies to the modeled total wells. In general, the most recent 12 months of estimated well counts will have the highest errors because they are the farthest from the average well-per-rig ratio used in the model (at least 25 months).