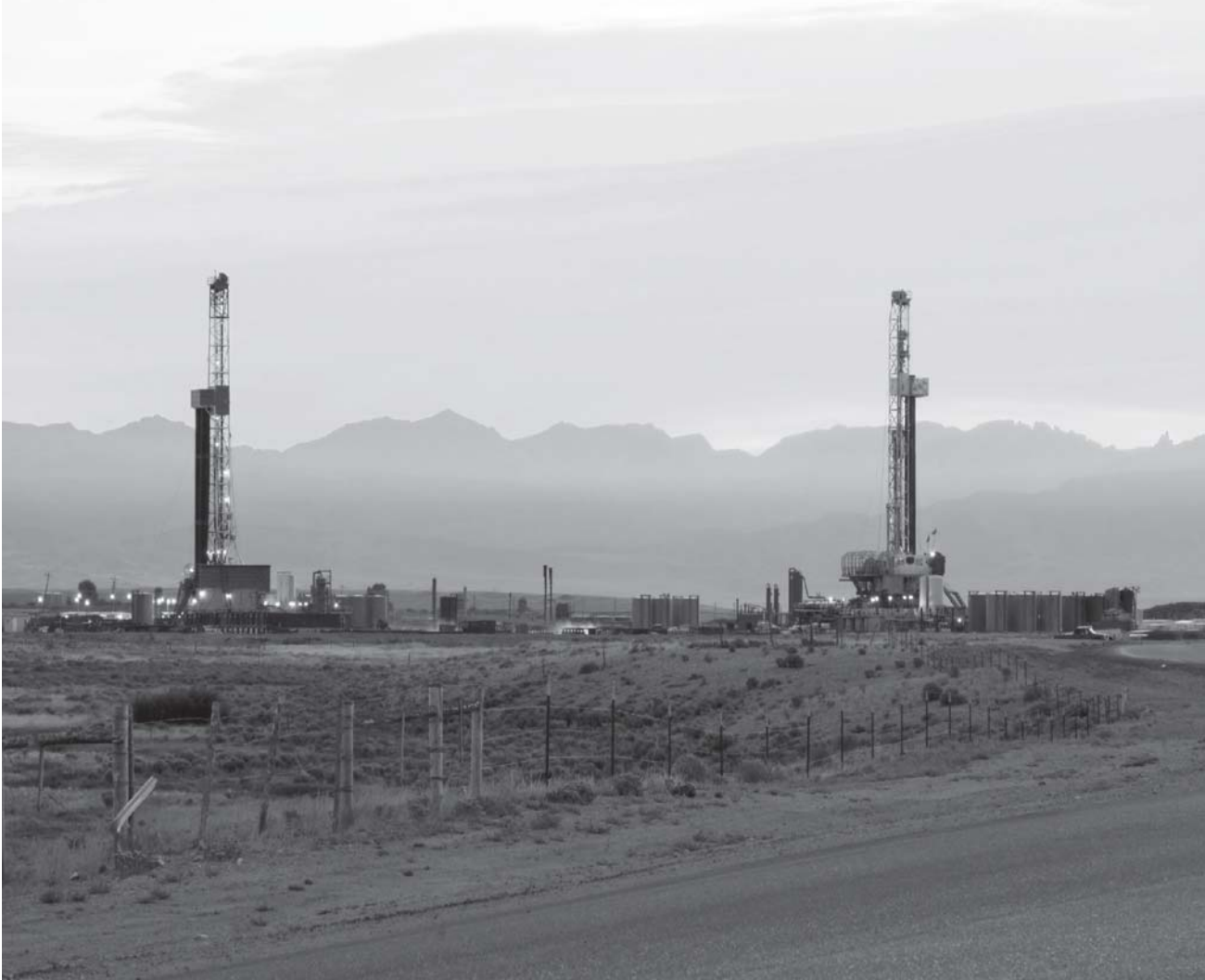


# 5

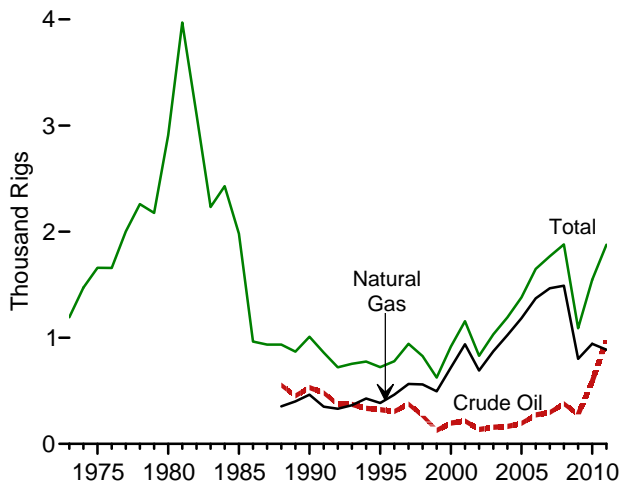
## Crude Oil and Natural Gas Resource Development



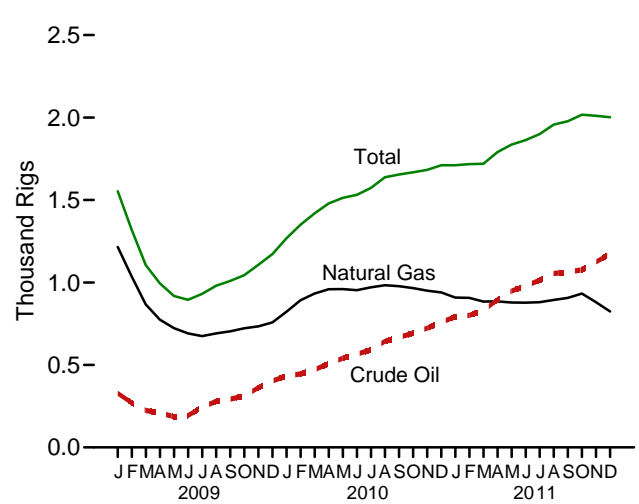
New oil and gas drilling activity in Wyoming. Source: Dreamstime Stock Photos.

**Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators**

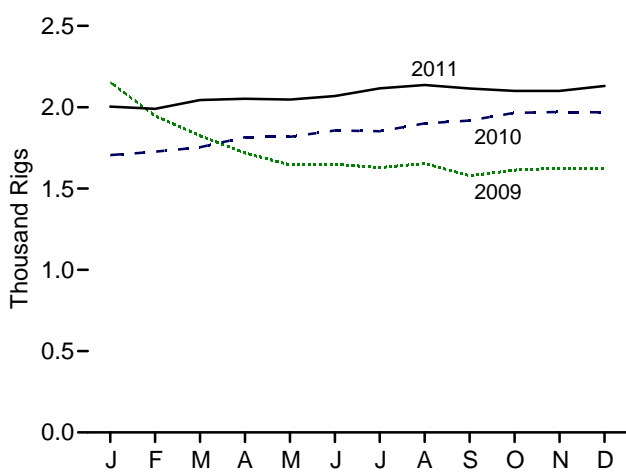
Rotary Rigs in Operation by Type, 1973-2011



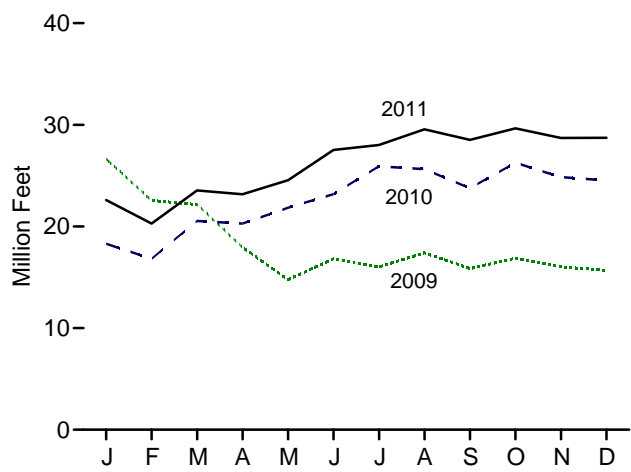
Rotary Rigs in Operation by Type, Monthly



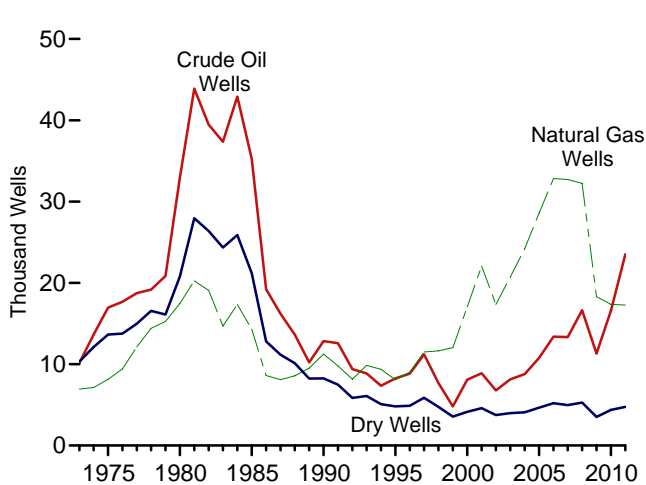
Active Well Service Rig Count, Monthly



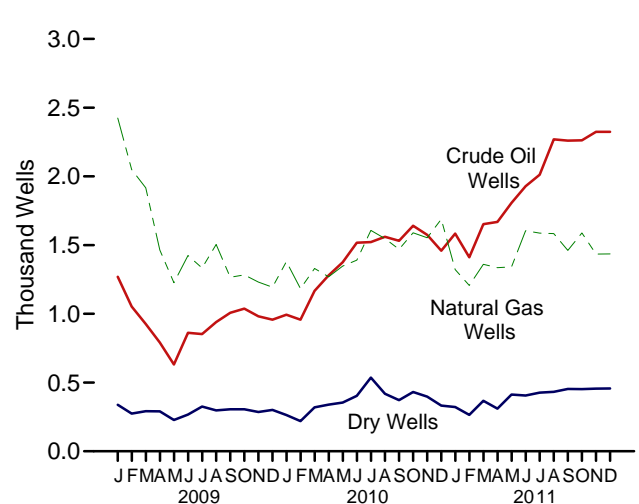
Footage Drilled, Monthly



Total Wells Drilled by Type, 1973-2011



Total Wells Drilled by Type, Monthly



Web Page: <http://www.eia.gov/totalenergy/data/monthly/#crude>.  
Sources: Tables 5.1 and 5.2.

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

	Rotary Rigs in Operation <sup>a</sup>					Active Well Service Rig Count <sup>c</sup>
	By Site		By Type		Total <sup>b</sup>	
	Onshore	Offshore	Crude Oil	Natural Gas		
<b>1973 Average</b> .....	1,110	84	NA	NA	1,194	2,008
<b>1975 Average</b> .....	1,554	106	NA	NA	1,660	2,486
<b>1980 Average</b> .....	2,678	231	NA	NA	2,909	4,089
<b>1985 Average</b> .....	1,774	206	NA	NA	1,980	4,716
<b>1990 Average</b> .....	902	108	532	464	1,010	3,658
<b>1995 Average</b> .....	622	101	323	385	723	3,041
<b>1996 Average</b> .....	671	108	306	464	779	3,445
<b>1997 Average</b> .....	821	122	376	564	943	3,499
<b>1998 Average</b> .....	703	123	264	560	827	3,014
<b>1999 Average</b> .....	519	106	128	496	625	2,232
<b>2000 Average</b> .....	778	140	197	720	918	2,692
<b>2001 Average</b> .....	1,003	153	217	939	1,156	2,267
<b>2002 Average</b> .....	717	113	137	691	830	1,830
<b>2003 Average</b> .....	924	108	157	872	1,032	1,967
<b>2004 Average</b> .....	1,095	97	165	1,025	1,192	2,064
<b>2005 Average</b> .....	1,287	94	194	1,184	1,381	2,222
<b>2006 Average</b> .....	1,559	90	274	1,372	1,649	2,364
<b>2007 Average</b> .....	1,695	72	297	1,466	1,768	2,388
<b>2008 Average</b> .....	1,814	65	379	1,491	1,879	2,515
<b>2009</b> January .....	1,487	66	328	1,215	1,553	2,152
February .....	1,263	57	271	1,037	1,320	1,947
March .....	1,059	46	225	867	1,105	1,825
April .....	947	48	209	775	995	1,718
May .....	864	54	187	723	918	1,646
June .....	848	47	194	691	895	1,648
July .....	893	38	245	675	931	1,629
August .....	949	31	279	691	980	1,653
September .....	976	33	293	704	1,009	1,579
October .....	1,011	33	312	722	1,044	1,613
November .....	1,071	36	362	734	1,107	1,625
December .....	1,136	37	404	758	1,172	1,625
<b>Average</b> .....	<b>1,046</b>	<b>44</b>	<b>278</b>	<b>801</b>	<b>1,089</b>	<b>1,722</b>
<b>2010</b> January .....	1,225	42	433	822	1,267	1,706
February .....	1,305	45	446	892	1,350	1,726
March .....	1,368	51	471	933	1,419	1,754
April .....	1,426	53	508	959	1,479	1,816
May .....	1,464	49	541	960	1,513	1,818
June .....	1,511	20	566	953	1,531	1,857
July .....	1,558	15	591	971	1,573	1,852
August .....	1,619	20	644	983	1,638	1,900
September .....	1,635	19	668	977	1,655	1,918
October .....	1,647	21	693	966	1,668	1,965
November .....	1,662	22	723	950	1,683	1,971
December .....	1,687	24	759	940	1,711	1,968
<b>Average</b> .....	<b>1,514</b>	<b>31</b>	<b>591</b>	<b>943</b>	<b>1,546</b>	<b>1,854</b>
<b>2011</b> January .....	1,686	26	793	909	1,711	2,004
February .....	1,692	26	801	907	1,718	1,990
March .....	1,694	26	830	884	1,720	2,044
April .....	1,762	28	896	885	1,790	2,052
May .....	1,804	32	948	878	1,836	2,047
June .....	1,829	35	979	877	1,863	2,069
July .....	1,865	34	1,014	880	1,900	2,116
August .....	1,923	35	1,055	894	1,957	2,136
September .....	1,946	32	1,063	907	1,978	2,115
October .....	1,982	35	1,077	933	2,017	2,100
November .....	1,974	37	1,125	880	2,011	2,100
December .....	1,960	42	1,173	824	2,002	2,131
<b>Average</b> .....	<b>1,844</b>	<b>32</b>	<b>980</b>	<b>888</b>	<b>1,876</b>	<b>2,075</b>

<sup>a</sup> Rotary rigs in operation are reported weekly. Monthly data are averages of 4- or 5-week reporting periods, not calendar months. Multi-month data are averages of the reported data over the covered months, not averages of the weekly data. Annual data are averages over 52 or 53 weeks, not calendar years. Published data are rounded to the nearest whole number.

<sup>b</sup> Sum of rigs drilling for crude oil, rigs drilling for natural gas, and other rigs (not shown) drilling for miscellaneous purposes, such as service wells, injection wells, and stratigraphic tests.

<sup>c</sup> 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> for all available data beginning in 1973.

Sources: • **Rotary Rigs in Operation: By Site**—Baker Hughes, Inc., Houston, Texas, *Rotary Rigs Running—by State*. • **By Type**—Baker Hughes, Inc., Houston, Texas, weekly phone recording. • **Active Well Service Rig Count**: Cameron International Corporation, Houston, Texas. See <http://www.c-a-m.com/Forms/Product.aspx?prodID=cdc209c4-79a3-47e5-99c2-fdeda6d4aad6>.

**Table 5.2 Crude Oil and Natural Gas Exploratory and Development Wells**

	Wells Drilled												Total Footage Drilled Thousand Feet
	Exploratory				Development				Total				
	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	
	Number												
<b>1973 Total</b> .....	642	1,067	5,952	7,661	9,525	5,866	4,368	19,759	10,167	6,933	10,320	27,420	138,223
<b>1975 Total</b> .....	982	1,248	7,129	9,359	15,966	6,879	6,517	29,362	16,948	8,127	13,646	38,721	180,494
<b>1980 Total</b> .....	1,777	2,099	9,081	12,957	31,182	15,362	11,704	58,248	32,959	17,461	20,785	71,205	316,943
<b>1985 Total</b> .....	1,680	1,200	8,954	11,834	33,581	13,124	12,257	58,962	35,261	14,324	21,211	70,796	314,409
<b>1990 Total</b> .....	778	811	3,652	5,241	12,061	10,435	4,593	27,089	12,839	11,246	8,245	32,330	156,106
<b>1995 Total</b> .....	570	558	2,024	3,152	7,678	7,524	2,790	17,992	8,248	8,082	4,814	21,144	117,202
<b>1996 Total</b> .....	489	576	1,956	3,021	8,347	8,451	2,934	19,732	8,836	9,027	4,890	22,753	126,444
<b>1997 Total</b> .....	491	562	2,113	3,166	10,715	10,936	3,761	25,412	11,206	11,498	5,874	28,578	161,460
<b>1998 Total</b> .....	327	566	1,590	2,483	7,355	11,073	3,171	21,599	7,682	11,639	4,761	24,082	137,334
<b>1999 Total</b> .....	197	570	1,157	1,924	4,608	11,457	2,393	18,458	4,805	12,027	3,550	20,382	102,865
<b>2000 Total</b> .....	288	657	1,341	2,286	7,802	16,394	2,805	27,001	8,090	17,051	4,146	29,287	144,526
<b>2001 Total</b> .....	357	1,052	1,733	3,142	8,531	21,020	2,865	32,416	8,888	22,072	4,598	35,558	180,152
<b>2002 Total</b> .....	258	844	1,282	2,384	6,517	16,498	2,472	25,487	6,775	17,342	3,754	27,871	145,217
<b>2003 Total</b> .....	350	997	1,297	2,644	7,779	19,725	2,685	30,189	8,129	20,722	3,982	32,833	177,392
<b>2004 Total</b> .....	383	1,671	1,350	3,404	8,406	22,515	2,732	33,653	8,789	24,186	4,082	37,057	204,334
<b>2005 Total</b> .....	539	2,141	1,462	4,142	10,240	26,449	3,191	39,880	10,779	28,590	4,653	44,022	204,525
<b>2006 Total</b> .....	R 646	R 2,456	R 1,547	R 4,649	R 12,739	R 30,382	R 3,659	R 46,780	R 13,385	R 32,838	R 5,206	R 51,429	282,921
<b>2007 Total</b> .....	R 808	R 2,794	R 1,582	R 5,184	R 12,522	R 29,925	R 3,396	R 45,843	R 13,330	R 32,719	R 4,978	R 51,027	301,564
<b>2008 Total</b> .....	R 897	R 2,345	R 1,715	R 4,957	R 15,736	R 29,901	R 3,569	R 49,206	R 16,633	R 32,246	R 5,284	R 54,163	334,008
<b>2009 January</b> .....	R 80	R 171	R 99	R 350	R 1,189	R 2,253	R 239	R 3,681	R 1,269	R 2,424	R 338	R 4,031	R 26,636
February .....	62	R 125	R 88	R 275	R 991	R 1,925	R 186	R 3,102	R 1,053	R 2,050	R 274	R 3,377	R 22,548
March .....	59	R 146	R 88	R 293	R 867	R 1,771	R 204	R 2,842	R 926	R 1,917	R 292	R 3,135	R 22,160
April .....	R 36	R 68	R 93	R 197	R 755	R 1,396	R 197	R 2,348	R 791	R 1,464	R 290	R 2,545	R 17,938
May .....	R 47	R 90	R 80	R 217	R 584	R 1,136	R 148	R 1,868	R 631	R 1,226	R 228	R 2,085	R 14,759
June .....	R 44	R 91	75	R 210	R 818	R 1,333	R 192	R 2,343	R 862	R 1,424	R 267	R 2,553	R 16,823
July .....	R 40	R 100	105	R 245	R 813	1,234	R 220	R 2,267	R 853	R 1,334	R 325	R 2,512	R 16,011
August .....	49	R 84	88	R 221	R 891	R 1,421	R 210	R 2,522	R 940	R 1,505	R 298	R 2,743	R 17,401
September .....	62	R 74	98	R 234	945	1,192	208	2,345	1,007	R 1,266	306	R 2,579	R 15,863
October .....	R 56	R 83	80	R 219	R 982	R 1,200	R 226	R 2,408	R 1,038	R 1,283	R 306	R 2,627	R 16,871
November .....	R 38	R 83	R 84	R 205	R 944	R 1,148	R 202	R 2,294	R 982	R 1,231	R 286	R 2,499	R 16,034
December .....	R 34	101	89	R 224	924	1,093	R 212	R 2,229	R 958	1,194	R 301	R 2,453	R 15,649
<b>Total</b> .....	R 607	R 1,216	R 1,067	R 2,890	R 10,703	R 17,102	R 2,444	R 30,249	R 11,310	R 18,318	R 3,511	R 33,139	R 218,693
<b>2010 January</b> .....	R 53	96	86	R 235	R 941	1,284	178	R 2,403	R 994	1,380	264	R 2,638	R 18,302
February .....	R 44	71	69	R 184	913	R 1,112	R 151	R 2,176	R 957	R 1,183	R 220	R 2,360	R 16,825
March .....	R 58	R 85	R 93	R 236	1,109	1,245	226	2,580	R 1,167	R 1,330	R 319	R 2,816	R 20,537
April .....	R 49	R 80	81	R 210	1,231	1,189	R 258	R 2,678	R 1,280	R 1,269	R 339	R 2,888	R 20,283
May .....	R 50	R 107	91	R 248	R 1,325	1,241	264	R 2,830	R 1,375	R 1,348	355	R 3,078	R 21,839
June .....	61	110	R 94	R 265	1,457	R 1,280	309	R 3,046	R 1,518	R 1,390	R 403	R 3,311	R 23,178
July .....	R 46	103	116	R 265	1,476	1,504	420	3,400	R 1,522	1,607	536	R 3,665	R 25,921
August .....	59	114	97	270	1,501	1,434	R 321	R 3,256	1,560	1,548	R 418	R 3,526	R 25,642
September .....	R 60	83	93	R 236	1,471	1,387	R 279	R 3,137	R 1,531	1,470	R 372	R 3,373	R 23,758
October .....	77	87	R 123	R 287	1,564	1,503	308	3,375	1,641	1,590	R 431	R 3,662	R 26,271
November .....	R 65	R 114	109	R 288	1,510	1,439	288	3,237	R 1,575	R 1,553	397	R 3,525	R 24,843
December .....	57	92	74	223	1,402	1,597	258	3,257	1,459	1,689	332	R 3,480	R 24,513
<b>Total</b> .....	R 679	R 1,142	R 1,126	R 2,947	R 15,900	16,215	R 3,260	R 35,375	R 16,579	R 17,357	R 4,386	R 38,322	R 271,912
<b>2011 January</b> .....	70	83	87	240	1,514	1,239	235	2,988	1,584	1,322	322	3,228	22,604
February .....	64	64	64	192	1,347	1,143	201	2,691	1,411	1,207	265	2,883	20,290
March .....	71	75	70	216	1,581	1,285	297	3,163	1,652	1,360	367	3,379	23,548
April .....	76	83	62	221	1,593	1,253	248	3,094	1,669	1,336	310	3,315	23,161
May .....	87	R 98	90	R 275	1,720	1,244	323	3,287	1,807	R 1,342	413	R 3,562	R 24,554
June .....	89	R 102	82	R 273	1,839	1,503	324	3,666	1,928	R 1,605	406	R 3,939	R 27,532
July .....	94	78	97	269	1,918	1,509	330	3,757	2,012	1,587	427	4,026	28,015
August .....	111	87	98	296	2,158	1,497	334	3,989	2,269	1,584	432	4,285	29,554
September .....	101	91	110	302	2,159	1,371	344	3,874	2,260	1,462	454	4,176	28,519
October .....	103	96	110	309	2,160	1,493	342	3,995	2,263	1,589	452	4,304	29,643
November .....	109	81	118	308	2,215	1,354	338	3,907	2,324	1,435	456	4,215	28,703
December .....	109	82	119	310	2,215	1,354	338	3,907	2,324	1,436	457	4,217	28,717
<b>Total</b> .....	1,084	1,020	1,107	3,211	22,419	16,245	3,654	42,318	23,503	17,265	4,761	45,529	314,840

R=Revised.

Notes: • Prior to 1990, 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. After 1990, a new well is defined as the first hole in the ground whether it is lateral or not. 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 Exploratory and Development 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> for all available data beginning in 1973.

Sources: • 1973-1989: U.S. Energy Information Administration (EIA) computations based on well reports submitted to the American Petroleum Institute.

• 1990 forward: EIA computations based on well reports submitted to IHS, Inc., Denver, CO.

## Crude Oil and Natural Gas Resource Development

**Note. Crude Oil and Natural Gas Exploratory and Development Wells.** Three well types are considered in the *Monthly Energy Review (MER)* drilling statistics: “completed for crude oil,” “completed for natural gas,” and “dry hole.” Wells that productively encounter both crude oil and natural gas are categorized as “completed for crude oil.” Both development wells and exploratory wells (new field wildcats, new pool tests, and extension tests) are included in the statistics. All other classes of wells drilled in connection with the search for producible hydrocarbons are excluded. If a lateral is drilled at the same time as the original hole it is not counted separately, but its footage is included.

Prior to the March 1985 MER, drilling statistics consisted of

completion data for the above types and classes of 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 proved to be an inaccurate indicator of drilling activity. During 1982, for example, as-reported well completions rose, while the number of actual completions fell. Consequently, the drilling statistics published since the March 1985 MER are U.S. Energy Information Administration (EIA) estimates produced by statistically imputing well counts and footage based on the partial data available from the API. These estimates are subject to continuous revision as new data, some of which pertain to earlier months and years, become available. Additional information about the EIA estimation methodology may be found in “Estimating Well Completions,” a feature article published in the March 1985 MER.