



# TEXAS

# PETROFACTS

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## A Monthly Data Review from the Railroad Commission of Texas ■ May 2015

### HIGHLIGHTS

#### Natural Gas Production

In February 2015 Texas natural gas production was 675.11 billion cubic feet (bcf), up from 625.43 bcf produced during the same month in 2014. *(Note: Recent oil and gas production data are considered preliminary, incomplete, and subject to revision. See pages 3 and 6 for the most recent production adjustment factors.)*

#### Crude Oil Production

In February 2015 Texas crude oil production averaged 2.891 million barrels per day (mmb/d), up from 2.402 mmb/d reported during the same month in 2014. *(See Note above.)*

#### Rotary Rigs Operating in Texas

In April 2015 the average Texas rotary rig count was 422, down from 885 rigs running during the same month last year. The April rig count was down from the March rig count of 492.

*Source: Baker Hughes Inc.*

#### Permits to Drill

In April 2015 the Railroad Commission issued 848 original permits to drill, down from 1,919 permits issued during the same month last year and down from 923 permits issued in March.

#### Oil and Gas Well Completions

In April 2015 operators reported 1,867 oil completions, up from 1,012 oil completions during the same month last year. There were 314 gas completions in April, up from 92 gas completions reported during the same month last year. There were 2,181 wells drilled in Texas in April, up from 1,104 wells drilled during the same month last year.

### TRENDS

#### EIA Short-Term Outlook for Crude Oil and Natural Gas:

The average price of imported crude for U.S. refiners (an indicator of world oil prices) is expected to decrease from the average 2014 level of \$89.57 per barrel to \$51.97 per barrel during the 2nd quarter of 2015 and average \$50.80 for the year, according to the U.S. Energy Information Administration's (EIA) "Short-Term Energy Outlook" for May 2015.

The West Texas Intermediate spot average is expected to decrease from the 2014 average level of \$93.17 per barrel to \$55.48 per barrel during the 2<sup>nd</sup> quarter of 2015 and average \$54.32 for the year.

U.S. petroleum demand is expected to increase 1.79 percent from 2014 to 2015 to 19.37 million barrels per day and increase 0.36 percent from 2015 to 2016 to 19.44 million barrels per day.

U.S. natural gas demand is expected to increase 4.63 percent from 2014 to 2015 to 28.06 trillion cubic feet, and is expected to decrease by 0.75 percent from 2015 to 2016 to 27.85 trillion cubic feet.

EIA projects that natural gas Henry Hub spot prices will average \$2.70 per mmbtu for the 2nd quarter of 2015 and average \$2.93 per mmbtu for the year. This is a 33.26 percent decrease from EIA's 2014 Henry Hub spot price of \$4.39 per mmbtu. *(Note: Beginning January 2013 EIA discontinued publishing wellhead prices and began publishing a natural gas spot price at the Henry Hub.)*

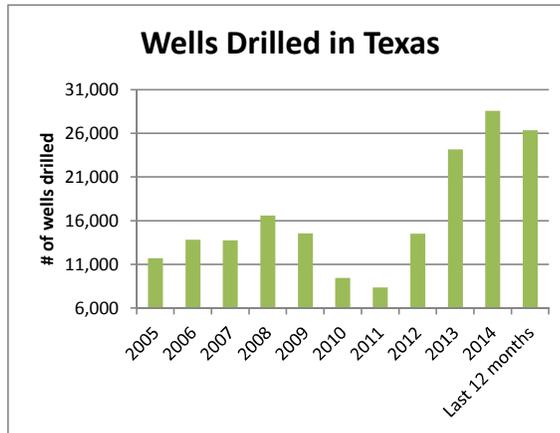
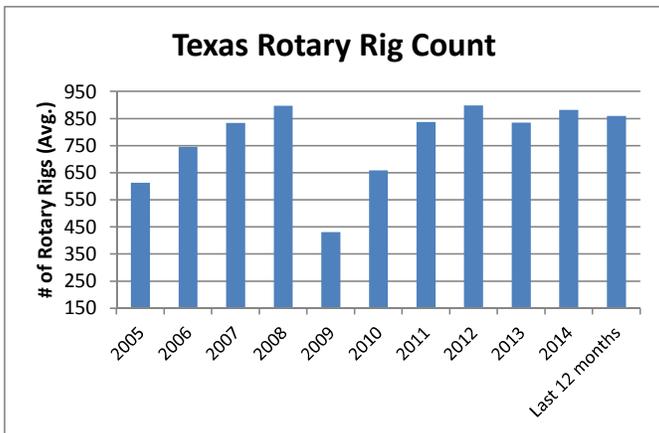
EIA projects a natural gas Henry Hub spot price of \$3.32 per mmbtu for 2016, a 13.31 percent increase from the \$2.93 projected average price for 2015. *(See note above.)*

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**TABLE 1. TEXAS DRILLING AND COMPLETION SUMMARY**

Period	Active Rotary Rigs *		Permits #	Wells Completed		Wells Drilled **
	Texas	U.S.		Oil	Gas	
1994	274	775	11,248	3,962	3,553	9,299
1995	251	723	11,244	4,334	3,778	9,785
1996	283	779	12,669	4,061	4,060	9,747
1997	358	943	13,933	4,482	4,594	10,778
1998	303	827	9,385	4,509	4,907	11,057
1999	227	625	8,430	2,049	3,566	10,778
2000	343	918	12,021	3,111	4,580	8,854
2001	462	1,156	12,227	3,082	5,787	10,005
2002	338	830	9,716	3,268	5,474	9,877
2003	449	1,032	12,664	3,111	6,336	10,420
2004	506	1,192	14,700	3,446	7,118	11,587
2005	614	1,381	16,914	3,454	7,197	11,726
2006	746	1,649	18,952	4,761	8,534	13,854
2007	834	1,769	19,994	5,084	8,643	13,778
2008	898	1,880	24,073	6,208	10,361	16,615
2009	432	1,086	12,212	5,860	8,706	14,585
2010	659	1,541	18,029	5,392	4,071	9,477
2011	838	1,875	22,480	5,380	3,008	8,391
2012	899	1,919	22,479	10,936	3,580	14,535
2013	835	1,761	21,471	19,249	4,917	24,166
2014	882	1,862	25,792	24,999	3,585	28,585
Last 12 months	860	1,843	24,222	22,520	3,856	26,377
Apr-14	885	1,835	1,919	1,012	92	1,104
May-14	892	1,859	2,389	2,057	323	2,380
Jun-14	891	1,861	2,185	1,739	316	2,055
Jul-14	892	1,876	2,419	1,958	234	2,192
Aug-14	900	1,904	2,440	2,157	303	2,460
Sep-14	902	1,930	3,013	2,048	328	2,377
Oct-14	899	1,925	3,046	2,035	354	2,389
Nov-14	904	1,925	1,508	1,570	380	1,950
Dec-14	872	1,882	1,506	1,559	353	1,912
Jan-15	773	1,683	1,102	1,450	344	1,794
Feb-15	599	1,348	924	1,521	210	1,731
Mar-15	492	1,108	923	1,547	305	1,852
Apr-15	422	976	848	1,867	314	2,181



\* Source: Baker Hughes Inc.

# Totals shown are number of drilling permits issued

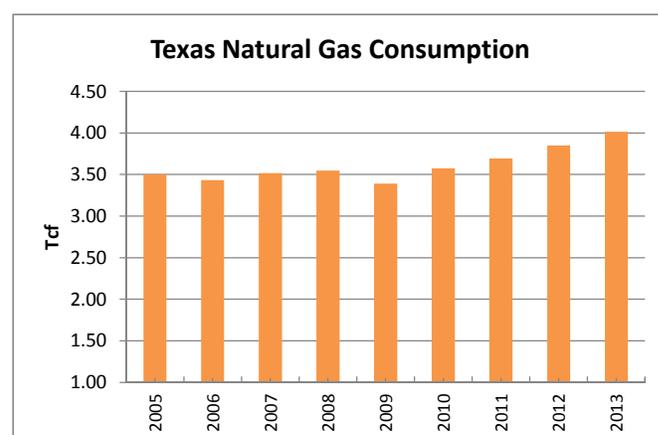
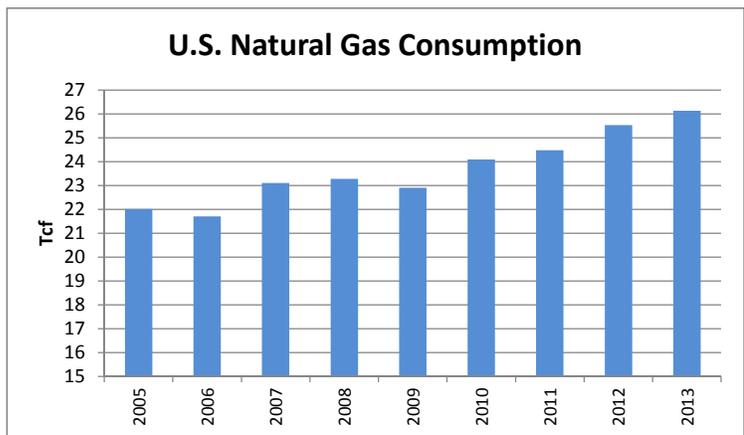
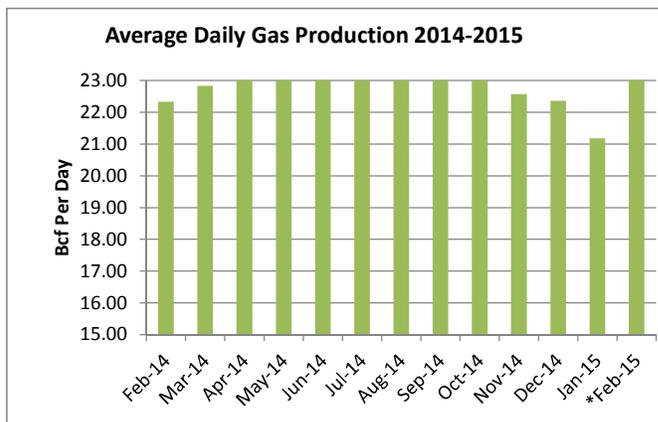
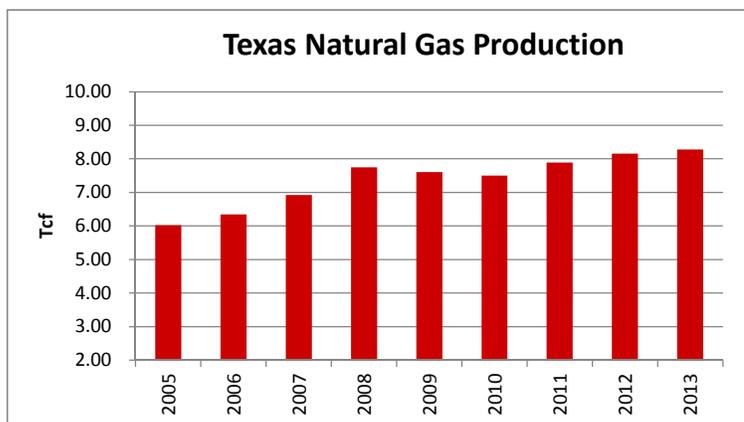
\*\* Wells drilled are oil and gas well completions and dry holes drilled/plugged.

**TABLE 2. TEXAS NATURAL GAS (Trillion CF)**

Period	Total Production *	Proved Reserves #	Consumption #	Producing Wells *	Wellhead Price **
1994	5.71	39.02	3.67	52,614	\$1.85
1995	5.71	39.74	3.80	53,612	\$1.55
1996	5.88	41.59	3.99	55,052	\$2.17
1997	5.86	41.11	4.12	56,736	\$2.32
1998	5.83	40.79	4.21	58,436	\$1.96
1999	5.61	43.35	4.01	59,088	\$2.19
2000	5.76	45.42	4.42	60,486	\$3.68
2001	5.83	46.46	5.25	63,598	\$4.00
2002	5.73	47.49	4.30	65,686	\$2.95
2003	5.82	48.72	5.05	68,488	\$4.88
2004	6.02	53.28	3.91	72,237	\$5.46
2005	6.02	60.18	3.50	76,510	\$7.33
2006	6.34	65.81	3.43	83,218	\$6.39
2007	6.92	76.36	3.52	88,311	\$6.25
2008	7.75	81.84	3.55	96,502	\$7.97
2009	7.61	85.03	3.39	101,097	\$3.67
2010	7.50	94.29	3.57	101,653	\$4.48
2011	7.89	104.45	3.69	101,831	\$3.95
2012	8.16	93.48	3.85	102,218	\$2.66
2013	8.28	97.92	4.02	103,445	n/a

Total Gas Production (Bcf)				
Period	Daily	Monthly	Gas Well	Casinghead
Feb-14	22.34	625.43	485.85	139.58
Mar-14	22.83	707.76	546.55	161.21
Apr-14	23.31	699.22	536.20	163.02
May-14	23.49	728.11	555.59	172.52
Jun-14	23.55	706.36	533.92	172.44
Jul-14	23.40	725.50	544.50	181.00
Aug-14	23.50	728.35	542.38	185.96
Sep-14	23.13	693.99	517.81	176.18
Oct-14	23.01	713.25	532.79	180.46
Nov-14	22.57	677.19	507.73	169.46
Dec-14	22.37	693.41	516.84	176.57
Jan-15	21.18	656.64	496.40	160.24
*Feb-15	24.11	675.11	531.49	143.62

\* Note: The most recent 12 months of production data is preliminary and subject to revision. The most recent month of data is incomplete and may underestimate the final and complete total; a production adjustment factor of 1.1551 has been applied to reported February gas well production to obtain an estimate of final gas well production.



\* Source: Railroad Commission of Texas. The most recent 12 months of production data is subject to revision. Annual data is subject to revision as the Commission receives many corrected or delinquent production reports.

# Source: US Energy Information Administration (EIA):EIA's reserves for estimates for 1994 and after exclude federal offshore and are wet after lease separation.

\*\* Source: Texas Comptroller of Public Accounts. Wellhead price is average net taxable price (\$/Mcf) and excludes federal offshore production.

Source for 2001 and after is EIA and wellhead price is national average. Beginning 01/13 EIA will discontinue publishing wellhead prices and begin publishing a natural gas spot price at the Henry Hub.

**TABLE 3. TEXAS GAS STORAGE OPERATIONS**

Productive or Depleted Reservoirs			Reported Max				Preliminary
Operator	Field	County Location	Withdrawal Rate (MMCF/DAY)	Working Gas* 4/30/2015 (MMCF)	Working Gas* 4/30/2014 (MMCF)	Change From One Year Ago (MMCF)	Working Gas* 5/15/2015 (MMCF)
Oneok TX Gas Storage LP	Felmac (Yates)	Gaines	45	2,678	1,014	1,664	2,678
Oneok TX Gas Storage LP	Loop (Yates)	Gaines	75	800	800	-	800
Enbridge Pipeline LLC	Pickton (Bacon Lime)	Hopkins	15	2,254	2,189	65	2,254
Houston Pipe Line Co.	Bammell	Harris	1,300	41,685	10,362	31,323	44,682
Cago, Inc.	Ambassador	Clay	40	80	80	-	80
Hill Lake Gas Storage LLC	Hill-Lake Sand	Eastland	450	6,264	3,266	2,998	7,810
ATMOS Pipeline - Texas	Lake Dallas	Denton	120	2,734	3,160	(426)	2,734
ATMOS Pipeline - Texas	La-Pan-Miss	Clay	120	2,042	1,885	157	2,303
Cummings Company, Inc.	Leeray Strawn	Stephens	20	-	-	-	-
ATMOS Pipeline - Texas	New York City	Clay	120	3,615	3,149	466	3,619
Fort Concho Gas Storage, Inc.	Pecan Station	Tom Green	28	844	895	(51)	844
ATMOS Pipeline - Texas	Tri-Cities Bacon	Henderson	275	13,270	10,881	2,389	13,978
ATMOS Pipeline - Texas	Tri-Cities Rodessa	Henderson	50	2,738	2,441	297	2,738
Lower Colorado River Authority	Hilbig	Bastrop	100	3,506	2,615	891	3,700
Natural Gas Pipeline Co.	North Lansing	Harrison	1,100	39,194	34,114	5,080	46,077
Devon Gas Services LP	Lone Camp	Palo Pinto	28	406	184	222	468
Kinder Morgan Tejas Pipeline LLC	Clear Lake	Harris	900	51,699	13,187	38,512	56,040
Energy Transfer Fuel LP	Bryson	Jack	100	5,203	5,404	(201)	5,693
Worsham-Steed Gas Storage, LLC	Worsham Steed	Jack	25	18,478	9,580	8,898	20,497
Katy Storage and Transportation LP	Pottsville	Hamilton	200	-	-	-	-
Enstor Katy Storage and Transportation LP	Katy Hub & Storage	Fort Bend	700	18,555	8,469	10,086	19,610
	<b>Subtotals</b>	<b>Fort Bend</b>	<b>5,811</b>	<b>216,045</b>	<b>113,675</b>	<b>102,370</b>	<b>236,605</b>
Salt Caverns							
Oneok TX Gas Storage LP	Salado (Loop Yates)	Gaines	500	1,722	1,506	216	1,914
Kinder Morgan Tejas Pipeline LP	Stratton Ridge	Brazoria	250	949	296	653	994
Centana Intrastate Pipeline LLC	Spindletop	Jefferson	400	8,772	884	7,888	9,655
Dow Chemical Co.	Stratton Ridge #34	Brazoria	200	-	-	-	-
Dow Chemical Co.	Stratton Ridge #6	Brazoria	180	912	1,103	(191)	908
Kinder Morgan Texas Pipeline LP	North Dayton	Liberty	750	8,589	5,026	3,563	8,767
ATMOS Pipeline - Texas	Bethel	Anderson	600	3,381	3,652	(271)	3,471
Moss Bluff Hub Partners LP	Moss Bluff	Liberty	1,000	12,536	3,960	8,576	15,241
Chevron Phillips Chemical Co	Clemens	Brazoria	75	1,640	725	915	1,640
PB Energy Storage Services, Inc.	Spindletop	Jefferson	480	6,013	6,490	(477)	6,085
Underground Services Markham, LP	Markham	Matagorda	1,100	16,118	7,976	8,142	17,900
Energy Transfer Fuel LP	Bethel Salt Dome	Anderson	600	3,119	748	2,371	3,668
Envoy Resources Inc	Wilson	Wharton	800	6,186	4,142	2,044	7,266
Chevron Keystone Gas Storage	Keystone Gas Storage	Winkler	350	4,152	3,586	566	5,002
Underground Storage LLC	Pierce Junction	Harris	350	1,784	1,225	559	1,735
Tres Palacios Storage LLC	Markham	Matagorda	2,500	10,973	2,268	8,705	14,053
Golden Triangle Storage, Inc	Spindletop	Jefferson	300	3,121	1,606	1,515	4,797
Freeport LNG Development, LP	Stratton Ridge	Brazoria	300	696	4,309	(3,613)	696
	<b>Subtotals</b>		<b>10,735</b>	<b>90,663</b>	<b>49,502</b>	<b>41,161</b>	<b>103,792</b>
<b>Source: RRC Form G-3</b>		<b>TOTALS</b>	<b>16,546</b>	<b>306,708</b>	<b>163,177</b>	<b>143,531</b>	<b>340,397</b>

\* **Notes:** 1) Native Gas volumes are included in Working Gas volumes with the exception of Houston Pipe Line's Bammel facility and Natural Gas Pipeline Co. of America's North Lansing facility, in which the native gas is part of the non-working resident gas. 2) Due to an expansion of the North Lansing facility, 9,700 MMCCF of Resident Gas Inventory was converted to Working Gas volume as of June, 2007. 3) Tres Palacios Storage LLC Salt Cavern facility was added to report as of October, 2008.

**TABLE 4. TEXAS GAS STORAGE OPERATIONS, 2014-2015**

	Depleted Reservoirs			Salt Caverns			Total		
	Beginning Balance (Mmcf)	Injections/ (Withdrawals) (Mmcf)	Ending Balance (Mmcf)	Beginning Balance (Mmcf)	Injections/ (Withdrawals) (Mmcf)	Ending Balance (Mmcf)	Beginning Balance (Mmcf)	Injections/ (Withdrawals) (Mmcf)	Ending Balance (Mmcf)
April-14	96,756	<b>17,119</b>	113,875	36,855	<b>12,647</b>	49,502	133,611	<b>29,766</b>	163,377
May-14	113,875	<b>26,727</b>	140,602	49,502	<b>18,061</b>	67,563	163,377	<b>44,788</b>	208,165
June-14	140,602	<b>21,959</b>	162,561	67,563	<b>12,185</b>	79,748	208,165	<b>34,144</b>	242,309
July-14	162,561	<b>18,007</b>	180,568	79,748	<b>3,991</b>	83,739	242,309	<b>21,998</b>	264,307
August-14	180,568	<b>10,785</b>	191,353	83,739	<b>(1,505)</b>	82,234	264,307	<b>9,280</b>	273,587
September-14	191,353	<b>29,085</b>	220,438	82,234	<b>19,404</b>	101,638	273,587	<b>48,489</b>	322,076
October-14	220,438	<b>36,768</b>	257,206	101,638	<b>21,978</b>	123,616	322,076	<b>58,746</b>	380,822
November-14	257,206	<b>15,296</b>	272,502	123,616	<b>2,552</b>	126,168	380,822	<b>17,848</b>	398,670
December-14	272,502	<b>(4,745)</b>	267,757	126,168	<b>(5,185)</b>	120,983	398,670	<b>(9,930)</b>	388,740
January-15	267,757	<b>(43,828)</b>	223,929	120,983	<b>(16,782)</b>	104,201	388,740	<b>(60,610)</b>	328,130
February-15	223,929	<b>(44,503)</b>	179,426	104,201	<b>(36,529)</b>	67,672	328,130	<b>(81,032)</b>	247,098
March-15	179,426	<b>(6,704)</b>	172,722	67,672	<b>(4,525)</b>	63,147	247,098	<b>(11,229)</b>	235,869
April-15	172,722	<b>43,323</b>	216,045	63,147	<b>27,516</b>	90,663	235,869	<b>70,839</b>	306,708

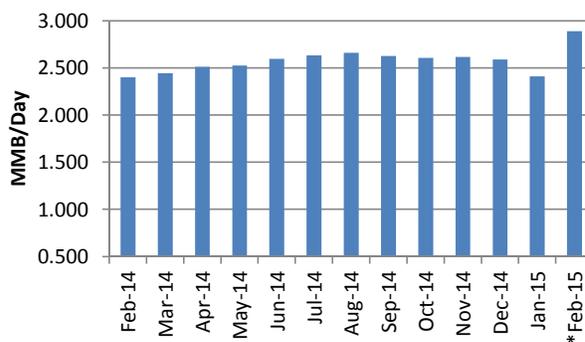
**TABLE 5. TEXAS CRUDE OIL (million barrels)**

Period	Texas Total Production *	Texas Daily Average*	% of U.S. Production	Proved Reserves #	% of U.S. Reserves	# of Producing Wells *	WTI Spot Price **
1994	543	1.49	22%	5,847	26.04%	179,955	\$17.30
1995	515	1.41	22%	5,743	25.69%	177,397	\$14.73
1996	500	1.37	21%	5,736	26.05%	175,277	\$16.31
1997	491	1.35	21%	5,687	25.22%	175,475	\$18.77
1998	459	1.26	20%	4,927	23.42%	170,288	\$20.01
1999	409	1.12	19%	5,339	24.53%	162,620	\$14.06
2000	401	1.10	19%	5,273	23.92%	161,097	\$20.01
2001	381	1.04	18%	4,944	22.03%	159,357	\$25.95
2002	366	1.00	17%	5,015	22.11%	155,865	\$26.11
2003	359	0.98	17%	4,583	20.94%	153,461	\$31.12
2004	351	0.96	18%	4,613	21.59%	151,205	\$41.44
2005	349	0.96	18%	4,919	22.61%	151,286	\$56.49
2006	347	0.95	19%	4,871	23.23%	151,832	\$66.02
2007	343	0.94	19%	5,122	24.03%	153,223	\$72.32
2008	353	0.97	19%	4,555	23.82%	156,588	\$99.57
2009	349	0.96	18%	5,006	24.20%	157,807	\$61.65
2010	368	1.01	18%	5,674	24.39%	158,451	\$79.40
2011	443	1.21	22%	7,014	26.42%	161,402	\$94.86
2012	607	1.66	26%	9,614	31.49%	167,864	\$94.12
2013	775	2.12	28%	10,468	31.37%	179,797	\$97.91

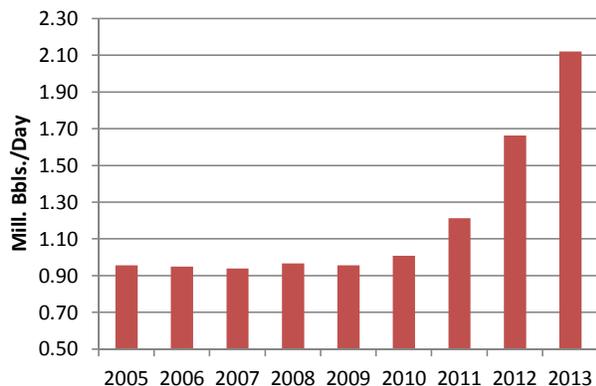
Feb-14	67.27	2.402
Mar-14	75.79	2.445
Apr-14	75.34	2.511
May-14	78.28	2.525
Jun-14	77.94	2.598
Jul-14	81.62	2.633
Aug-14	82.45	2.660
Sep-14	78.77	2.626
Oct-14	80.81	2.607
Nov-14	78.53	2.618
Dec-14	80.27	2.589
Jan-15	74.74	2.411
*Feb-15	80.95	2.891

\* Note: The most recent 12 months of production data is preliminary and subject to revision. The most recent month of data is incomplete and may underestimate the final and complete total; a production adjustment factor of 1.1740 has been applied to reported February crude oil production to obtain an estimate of final crude oil production.

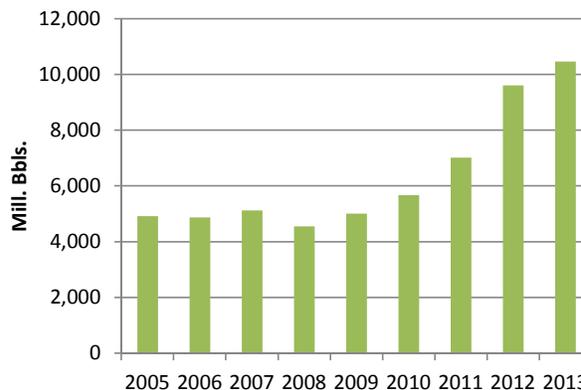
**Texas Oil Production 2014-2015**



**Texas Oil Production 2005 - 2013**



**Texas Crude Oil Reserves 2005- 2013**



\* Source: Railroad Commission of Texas. Production data is subject to revision.

# Source: U.S. Energy Information Administration (EIA). Reserve estimates for 1985 and after exclude federal offshore.

\*\* Source: Texas Comptroller of Public Accounts. Wellhead price is average net taxable price (\$/bbl.) & excludes federal offshore production.

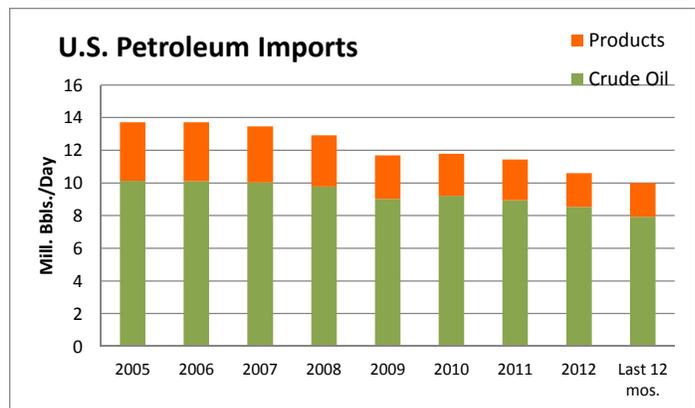
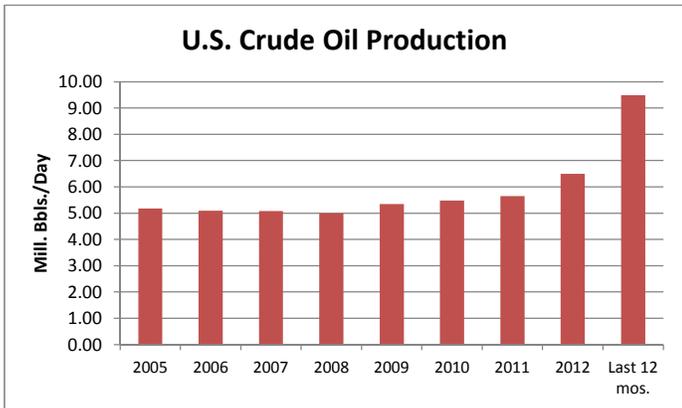
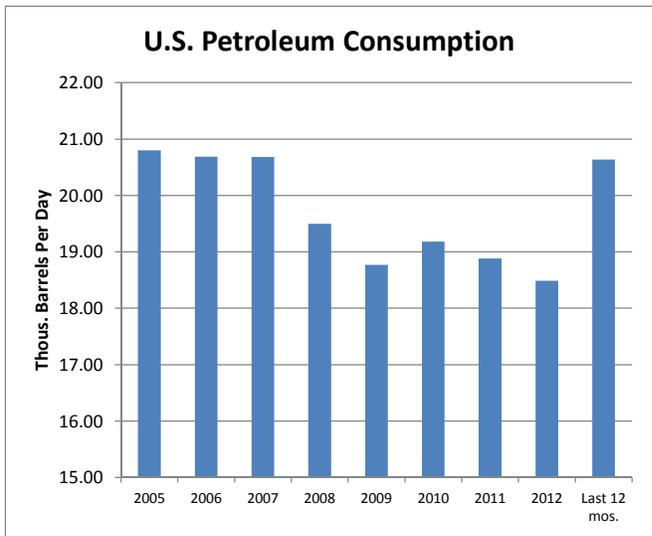
Source for 2001 and after is EIA. Wellhead price is West Texas Intermediate spot average.

**TABLE 6. US PETROLEUM OVERVIEW (MILLION BARRELS PER DAY)**

Period	Production*	Imports **			Products Supplied #	Proved Reserves **	Wells Drilled **	Wellhead Price **
		Total	Crude Oil	Products				
1993	6.85	8.62	6.79	1.83	17.24	22,957	25,451	14.25
1994	6.67	9.00	7.06	1.93	17.72	22,457	22,255	13.19
1995	6.56	8.84	7.23	1.61	17.73	22,351	21,600	14.62
1996	6.47	9.48	7.51	1.97	18.31	22,017	23,886	18.46
1997	6.45	10.16	8.23	1.94	18.62	22,546	27,586	17.23
1998	6.25	10.71	8.71	2.00	18.92	21,034	22,911	10.87
1999	5.88	10.85	8.73	2.12	19.52	21,765	18,939	15.56
2000	5.82	11.46	9.07	2.39	19.70	22,045	29,287	26.72
2001	5.80	11.87	9.33	2.54	19.65	22,446	35,558	21.84
2002	5.74	11.53	9.14	2.39	19.76	22,677	27,871	22.51
2003	5.65	12.26	9.67	2.60	20.03	21,891	32,833	27.56
2004	5.44	13.15	10.09	3.06	20.73	21,371	37,057	36.77
2005	5.18	13.71	10.13	3.59	20.80	21,757	44,022	50.28
2006	5.09	13.71	10.12	3.59	20.69	20,972	51,429	59.69
2007	5.08	13.47	10.03	3.44	20.68	21,317	51,071	66.52
2008	5.00	12.92	9.78	3.13	19.50	19,121	54,302	94.04
2009	5.35	11.69	9.01	2.68	18.77	20,682	32,803	56.35
2010	5.48	11.79	9.21	2.58	19.18	23,267	36,611	74.71
2011	5.65	11.44	8.94	2.50	18.88	26,544	n/a	95.73
2012	6.50	10.60	8.53	2.07	18.49	30,529	n/a	94.52
Last 12 mos.	9.49	10.00	7.93	2.07	20.64			

Jan-2014	8.02	9.27	7.58	1.68	18.92
Feb-2014	8.14	9.15	7.20	1.95	18.99
Mar-2014	8.27	9.24	7.26	1.98	18.53
Apr-2014	8.55	9.58	7.55	2.04	18.78
May-2014	8.62	9.38	7.17	2.22	18.52
Jun-2014	8.68	8.82	7.05	1.76	18.83
Jul-2014	8.76	9.47	7.62	1.85	19.16
Aug-2014	8.84	9.31	7.47	1.84	19.28
Sep-2014	8.96	9.15	7.51	1.64	19.04
Oct-2014	9.14	8.91	7.13	1.78	19.63
Nov-2014	9.21	8.97	7.27	1.69	19.21
Dec-2014	9.42	9.39	7.21	2.18	19.52
Jan-2015	9.31	9.39	7.15	2.24	19.25

(Monthly data is subject to revision.)



\* Sources: U.S. Energy Information Administration (EIA). Recent production data is subject to revision.

\*\* Source: EIA. Wells drilled includes crude oil, natural gas, and dry wells drilled. U.S. average wellhead (first purchase) price is dollars per barrel. (Per most recent data from EIA)

# Source: EIA. Petroleum products supplied is a measure of domestic consumption.

## **Railroad Commission of Texas**

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*Texas PetroFacts* is available in PDF format for download from the Railroad Commission web site at <http://www.rrc.texas.gov>.

Created in 1891 by the Texas Legislature, the Railroad Commission today is known principally as a leader in the regulation and conservation of oil and natural gas in Texas. For more than 100 years, the Commission has been charged with preventing waste and pollution while safeguarding property rights.

We believe the people of Texas continue to have a vital stake in the orderly production and conservation of the state's natural resources. Across the state, crude oil and natural gas are produced in 225\* of 254 counties. About 280,900\* persons are employed in oil and gas exploration, production, refining, and related industries. In all, businesses involved with the Texas oil and gas industry contribute about \$206 billion annually to the state's more than one trillion-dollar economy.

As an oil and gas producer, the state of Texas ranks among the nations of the world. Texas leads the United States in the production of crude oil and natural gas, and its marketed production of natural gas represents one-third of total U. S. supply. Texas produces an average of nearly two million barrels of oil a day; natural gas production in the state exceeds 8 trillion cubic feet a year.

David Porter  
Chairman

Christi Craddick  
Commissioner

Ryan Sitton  
Commissioner

\* The number of producing counties and employment data are subject to revision.