



**CHRISTI CRADDICK**

**Chairman**

**DAVID PORTER**

**Commissioner**

**BARRY T. SMITHERMAN**

**Commissioner**

**TEXAS**

**PETROFACTS**

**A Monthly Data Review from the Railroad Commission of Texas ■ August 2014**

**HIGHLIGHTS**

**Natural Gas Production**

In May 2014 Texas natural gas production was 679.62 billion cubic feet (bcf), down from 701.08 bcf produced during the same month in 2013. *(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 May 2014 Texas crude oil production averaged 2.509 million barrels per day (mmb/d), up from 2.033 mmb/d reported during the same month in 2013. *(See Note above.)*

**Rotary Rigs Operating in Texas**

In July 2014 the average Texas rotary rig count was 892, up from 841 rigs running during the same month last year. The July rig count was up from the June rig count of 891.

*Source: Baker Hughes Co.*

**Permits to Drill**

In July 2014 the Railroad Commission issued 2,419 original permits to drill, up from 1,843 permits issued during the same month last year and up from 2,185 permits issued in June.

**Oil and Gas Well Completions**

In July 2014 operators reported 1,958 oil completions, up from 1,860 oil completions during the same month last year. There were 234 gas completions in July, down from 470 gas completions reported during the same month last year. There were 2,192 wells drilled in Texas in July, down from 2,330 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 2013 level of \$98.12 per barrel to \$97.89 per barrel during the 3<sup>rd</sup> quarter of 2014 and average \$96.62 for the year, according to the U.S. Energy Information Administration's (EIA) "Short-Term Energy Outlook" for August 2014.

The West Texas Intermediate spot average is expected to increase from the 2013 average level of \$97.91 per barrel to \$101.36 per barrel during the 3<sup>rd</sup> quarter of 2014 and average \$100.45 for the year.

U.S. petroleum demand is expected to decrease 0.05 percent from 2013 to 2014 to 18.88 million barrels per day and increase 0.53 percent from 2014 to 2015 to 18.98 million barrels per day.

U.S. natural gas demand is expected to increase 1.74 percent from 2013 to 2014 to 26.49 trillion cubic feet, and is expected to increase by 0.55 percent from 2014 to 2015 to 26.63 trillion cubic feet.

EIA projects that natural gas Henry Hub spot prices will average \$3.95 per mmbtu for the 3<sup>rd</sup> quarter of 2014 and average \$4.46 per mmbtu for the year. This is a 19.57 percent increase from EIA's 2013 Henry Hub spot price of \$3.73 per mmbtu. *(Note: Beginning January 2013 EIA discontinued publishing wellhead prices and began publishing a natural gas spot price at the Henry Hub.)*

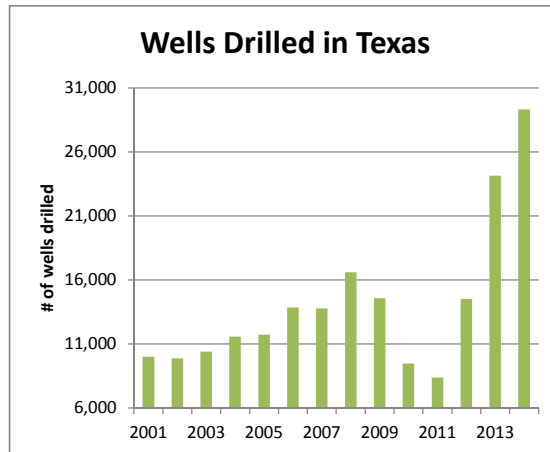
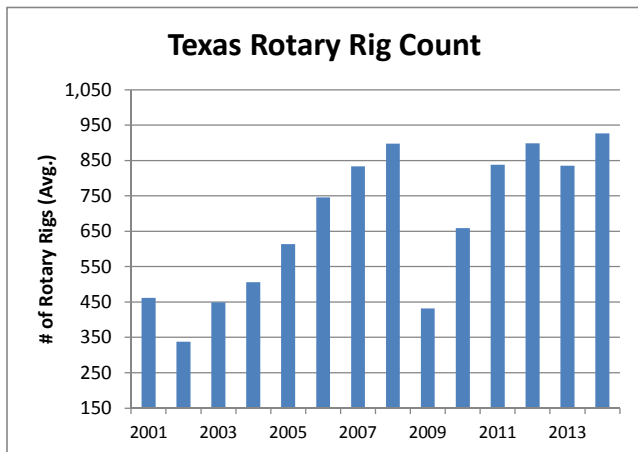
EIA projects a natural gas Henry Hub spot price of \$4.00 per mmbtu for 2015, a 10.31 percent decrease from the \$4.46 projected average price for 2014. *(See note above.)*

**INSIDE**

Rotary Rig Count	2
Drilling Permits	2
Well Completions	2
Texas Natural Gas	3
Texas Gas Storage	4-5
Texas Crude Oil	6
US Petroleum	7

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

Period	Active Rotary Rigs *		Permits #	Wells Completed		Wells Drilled **
	Texas	U.S.		Oil	Gas	
1993	264	754	11,612	4,646	3,295	9,969
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
Last 12 months	927	1,945	24,172	25,253	4,077	29,330
Jul-13	841	1,766	1,843	1,860	470	2,330
Aug-13	848	1,781	1,606	1,576	500	2,076
Sep-13	837	1,760	1,531	1,456	424	1,880
Oct-13	820	1,744	1,735	1,758	493	2,251
Nov-13	829	1,756	1,559	1,625	167	1,792
Dec-13	843	1,771	1,619	1,348	156	1,504
Jan-14	836	1,769	1,791	3,131	398	3,529
Feb-14	844	1,769	1,682	2,768	232	3,000
Mar-14	864	1,803	1,894	2,965	272	3,237
Apr-14	882	1,827	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



\* Source: Baker Hughes Inc.

# Totals shown are number of drilling permits issued

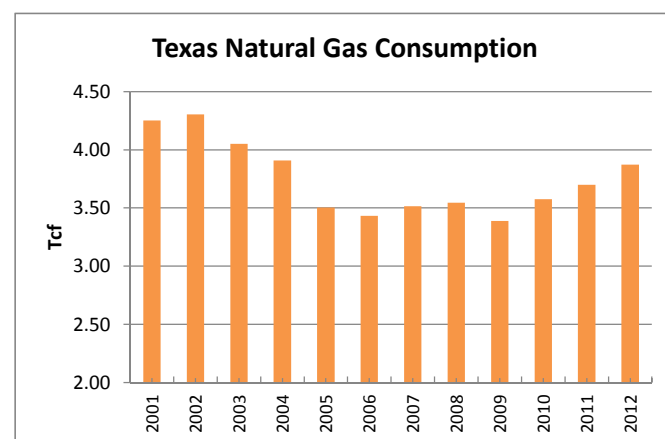
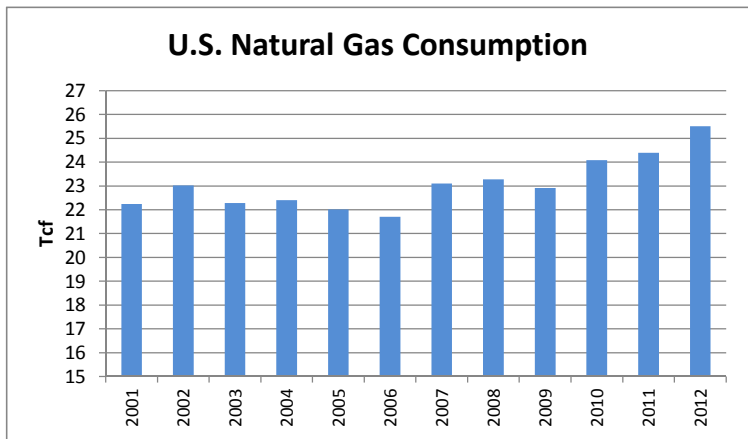
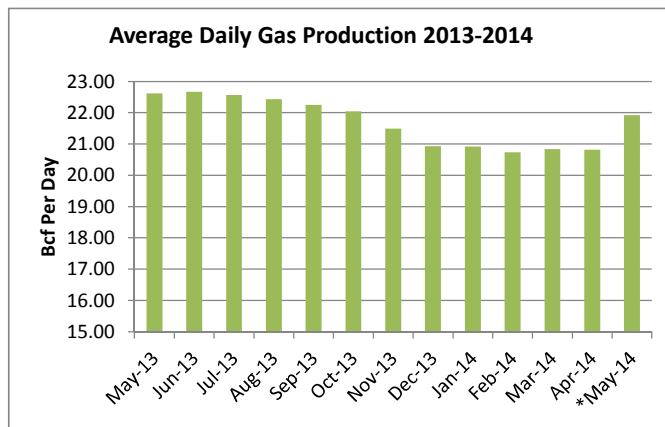
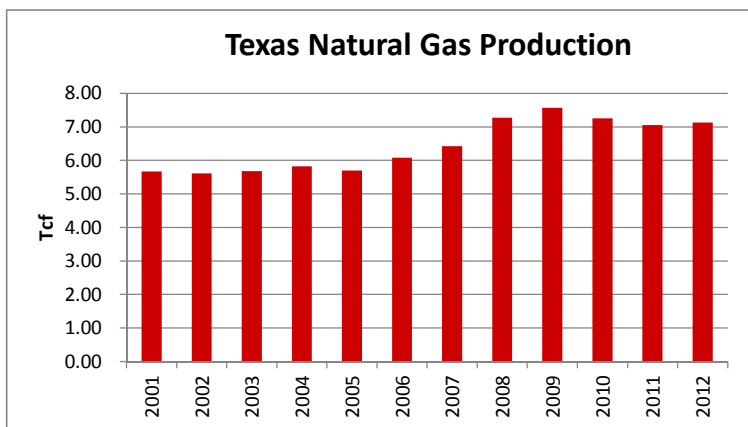
\*\* Wells drilled are oil and gas well completions and dry holes drilled/plugged.

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

Period	Total Production *	Proved Reserves #	Consumption #	Producing Wells *	Wellhead Price **
1993	5.61	37.8	3.74	50,794	\$2.04
1994	5.68	39.0	3.67	52,614	\$1.85
1995	5.67	39.7	3.80	53,612	\$1.55
1996	5.77	41.6	3.99	55,052	\$2.17
1997	5.81	41.1	4.12	56,736	\$2.32
1998	5.77	40.8	4.21	58,436	\$1.96
1999	5.54	43.4	4.01	59,088	\$2.19
2000	5.65	45.4	4.42	60,486	\$3.68
2001	5.67	46.5	4.25	63,598	\$4.00
2002	5.61	47.5	4.30	65,686	\$2.95
2003	5.68	48.7	4.05	68,488	\$4.88
2004	5.82	53.3	3.91	72,237	\$5.46
2005	5.70	60.2	3.50	76,510	\$7.33
2006	6.08	65.8	3.43	83,218	\$6.39
2007	6.42	76.4	3.52	88,311	\$6.25
2008	7.27	81.8	3.55	96,502	\$7.97
2009	7.57	85.0	3.39	101,097	\$3.67
2010	7.25	94.3	3.57	101,653	\$4.48
2011	7.05	104.5	3.70	101,831	\$3.95
2012	7.13	93.48	3.87	102,218	\$2.66

Period	Total Gas Production (Bcf)			
	Daily	Monthly	Gas Well	Casinghead
May-13	22.62	701.08	566.86	134.22
Jun-13	22.67	680.11	546.10	134.00
Jul-13	22.57	699.67	559.41	140.27
Aug-13	22.43	695.37	554.02	141.35
Sep-13	22.25	667.46	527.00	140.46
Oct-13	22.05	683.46	542.28	141.18
Nov-13	21.50	644.88	509.97	134.91
Dec-13	20.93	648.79	509.20	139.60
Jan-14	20.92	648.62	506.20	142.42
Feb-14	20.74	580.68	449.86	130.82
Mar-14	20.84	645.98	497.05	148.92
Apr-14	20.82	624.55	478.21	146.34
*May-14	21.92	679.62	532.13	147.50

\* 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 1.1310 has been applied to reported May 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.

# Source: US Energy Information Administration (EIA):EIA's reserves for estimates for 1992 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	Working Gas*	Working Gas*	Change From	Preliminary
Operator	Field	County Location	Withdrawal Rate (MMCF/DAY)	7/31/2014 (MMCF)	7/31/2013 (MMCF)	One Year Ago (MMCF)	Working Gas* 8/15/2014 (MMCF)
Oneok TX Gas Storage LP	Felmac (Yates)	Gaines	45	2,380	2,039	341	2,091
Oneok TX Gas Storage LP	Loop (Yates)	Gaines	75	800	800	-	800
Enbridge Pipeline LLC	Pickton (Bacon Lime)	Hopkins	15	2,206	2,141	65	2,209
Houston Pipe Line Co.	Bammell	Harris	1,300	20,056	49,973	(29,917)	22,494
Cago, Inc.	Ambassador	Clay	40	80	80	-	80
Hill Lake Gas Storage LLC	Hill-Lake Sand	Eastland	450	7,370	7,412	(42)	7,061
ATMOS Pipeline - Texas	Lake Dallas	Denton	120	3,604	3,486	118	3,609
ATMOS Pipeline - Texas	La-Pan-Miss	Clay	120	2,768	2,559	209	2,810
Cummings Company, Inc.	Leeray Strawn	Stephens	20	-	-	-	-
ATMOS Pipeline - Texas	New York City	Clay	120	4,127	4,426	(299)	4,450
Fort Concho Gas Storage, Inc.	Pecan Station	Tom Green	28	884	1,027	(143)	884
ATMOS Pipeline - Texas	Tri-Cities Bacon	Henderson	275	15,265	15,827	(562)	15,235
ATMOS Pipeline - Texas	Tri-Cities Rodessa	Henderson	50	2,441	2,272	169	2,441
Lower Colorado River Authority	Hilbig	Bastrop	100	2,709	2,326	383	2,156
Natural Gas Pipeline Co.	North Lansing	Harrison	1,100	50,870	81,363	(30,493)	53,197
Devon Gas Services LP	Lone Camp	Palo Pinto	28	248	293	(45)	248
Kinder Morgan Tejas Pipeline LLC	Clear Lake	Harris	900	25,646	58,076	(32,430)	25,447
Energy Transfer Fuel LP	Bryson	Jack	100	5,387	5,555	(168)	5,145
Worsham-Steed Gas Storage, LLC	Worsham Steed	Jack	25	18,205	17,306	899	18,001
Katy Storage and Transportation LP	Pottsville	Hamilton	200	-	-	-	-
Enstor Katy Storage and Transportation LP	Katy Hub & Storage	Fort Bend	700	15,522	21,688	(6,166)	16,480
	<b>Subtotals</b>		<b>5,811</b>	<b>180,568</b>	<b>278,649</b>	<b>(98,081)</b>	<b>184,838</b>
Salt Caverns							
Oneok TX Gas Storage LP	Salado (Loop Yates)	Gaines	500	1,547	1,262	285	1,432
Kinder Morgan Tejas Pipeline LP	Stratton Ridge	Brazoria	250	453	1,177	(724)	453
Centana Intrastate Pipeline LLC	Spindletop	Jefferson	400	4,063	6,869	(2,806)	5,273
Dow Chemical Co.	Stratton Ridge #34	Brazoria	200	-	-	-	-
Dow Chemical Co.	Stratton Ridge #6	Brazoria	180	1,031	905	126	989
Kinder Morgan Texas Pipeline LP	North Dayton	Liberty	750	6,201	6,849	(648)	5,744
ATMOS Pipeline - Texas	Bethel	Anderson	600	5,365	3,541	1,824	5,374
Moss Bluff Hub Partners LP	Moss Bluff	Liberty	1,000	14,306	13,624	682	14,143
Chevron Phillips Chemical Co	Clemens	Brazoria	75	1,154	1,766	(612)	1,401
PB Energy Storage Services, Inc.	Spindletop	Jefferson	480	7,227	6,822	405	7,079
Underground Services Markham, LP	Markham	Matagorda	1,100	14,567	15,600	(1,033)	12,982
Energy Transfer Fuel LP	Bethel Salt Dome	Anderson	600	294	1,500	(1,206)	584
Envoy Resources Inc	Wilson	Wharton	800	6,153	9,668	(3,515)	5,209
Chevron Keystone Gas Storage	Keystone Gas Storage	Winkler	350	5,893	5,097	796	5,691
Underground Storage LLC	Pierce Junction	Harris	350	989	891	98	968
Tres Palacios Storage LLC	Markham	Matagorda	2,500	5,025	18,134	(13,109)	4,674
Golden Triangle Storage, Inc	Spindletop	Jefferson	300	5,162	5,948	(786)	5,252
Freeport LNG Development, LP	Stratton Ridge	Brazoria	300	4,309	8,235	(3,926)	4,309
	<b>Subtotals</b>		<b>10,735</b>	<b>83,739</b>	<b>107,888</b>	<b>(24,149)</b>	<b>81,557</b>
<b>Source: RRC Form G-3</b>		<b>TOTALS</b>	<b>16,546</b>	<b>264,307</b>	<b>386,537</b>	<b>(122,230)</b>	<b>266,395</b>

\* Notes: 1) Native Gas volumes are included in Working Gas volumes with the exception of Houston Pipe Line's Bammell 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, 2013-2014**

	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)
July-13	265,559	<b>13,090</b>	278,649	112,651	<b>(4,641)</b>	108,010	378,213	<b>8,446</b>	386,659
August-13	278,649	<b>6,772</b>	285,421	108,010	<b>(4,043)</b>	103,967	386,659	<b>2,729</b>	389,388
September-13	285,421	<b>16,544</b>	301,965	103,967	<b>10,314</b>	114,281	389,388	<b>26,858</b>	416,246
October-13	301,965	<b>18,647</b>	320,612	114,281	<b>15,916</b>	130,197	416,246	<b>34,563</b>	450,809
November-13	320,612	<b>(9,753)</b>	310,859	130,197	<b>(4,759)</b>	125,438	450,809	<b>(14,512)</b>	436,297
December-13	310,859	<b>(35,054)</b>	275,805	125,438	<b>(32,085)</b>	93,353	436,297	<b>(67,139)</b>	369,158
January-14	275,805	<b>(71,142)</b>	204,663	93,353	<b>(32,576)</b>	60,777	369,158	<b>(103,718)</b>	265,440
February-14	204,663	<b>(70,049)</b>	134,614	60,777	<b>(20,275)</b>	40,502	265,440	<b>(90,324)</b>	175,116
March-14	134,614	<b>(37,858)</b>	96,756	40,502	<b>(3,647)</b>	36,855	175,116	<b>(41,505)</b>	133,611
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

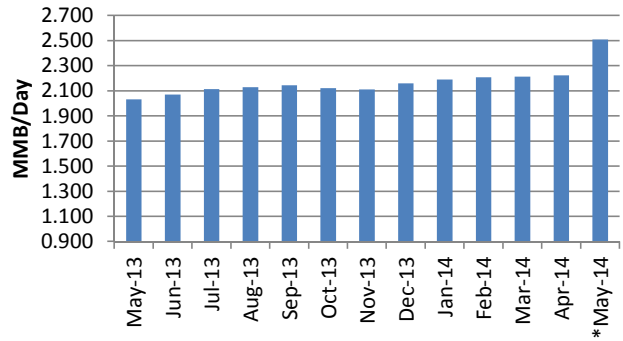
**TABLE 5. TEXAS CRUDE OIL (million barrels)**

Period	Texas Total Production *	Texas Daily Average	% of U.S. Production	Proved Reserves #	% of U.S. Reserves	# of Producing Wells *	WTI Spot Price **
1994	542	1.48	22.29%	5,847	26.0	179,955	\$17.30
1995	513	1.41	21.43%	5,743	25.7	177,397	\$14.73
1996	500	1.37	21.09%	5,736	26.1	175,277	\$16.31
1997	491	1.35	20.85%	5,687	25.2	175,475	\$18.77
1998	460	1.26	20.11%	4,927	23.4	170,288	\$20.01
1999	409	1.12	19.05%	5,339	24.5	162,620	\$14.06
2000	401	1.10	18.82%	5,273	23.9	161,097	\$20.01
2001	381	1.04	17.99%	4,944	22.0	159,357	\$25.95
2002	365	1.00	17.41%	5,015	22.1	155,865	\$26.11
2003	359	0.98	17.41%	4,583	20.9	153,461	\$31.12
2004	351	0.96	17.63%	4,613	21.6	151,205	\$41.44
2005	348	0.95	18.40%	4,919	22.6	151,286	\$56.49
2006	347	0.95	18.69%	4,871	23.2	151,832	\$66.02
2007	342	0.94	18.46%	5,122	24.0	153,223	\$72.32
2008	353	0.97	19.32%	4,555	23.8	156,588	\$99.57
2009	349	0.96	17.90%	5,006	24.2	157,807	\$61.65
2010	369	1.01	18.52%	5,674	24.4	158,451	\$79.40
2011	447	1.22	21.71%	7,014	26.4	161,402	\$94.86
2012	604	1.65	25.46%	9,614	31.5	167,864	\$94.12

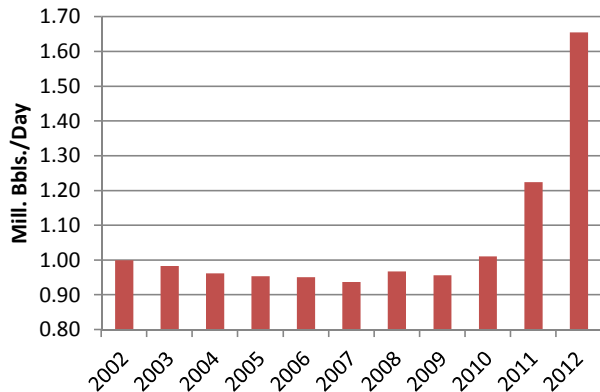
May-13	63.04	2.033
Jun-13	62.15	2.072
Jul-13	65.53	2.114
Aug-13	66.02	2.130
Sep-13	64.39	2.146
Oct-13	65.76	2.121
Nov-13	63.34	2.111
Dec-13	67.01	2.162
Jan-14	67.94	2.192
Feb-14	61.86	2.209
Mar-14	68.68	2.215
Apr-14	66.73	2.224
*May-14	77.79	2.509

\* 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 1.1744 has been applied to reported May crude oil production to obtain an estimate of final crude oil production.

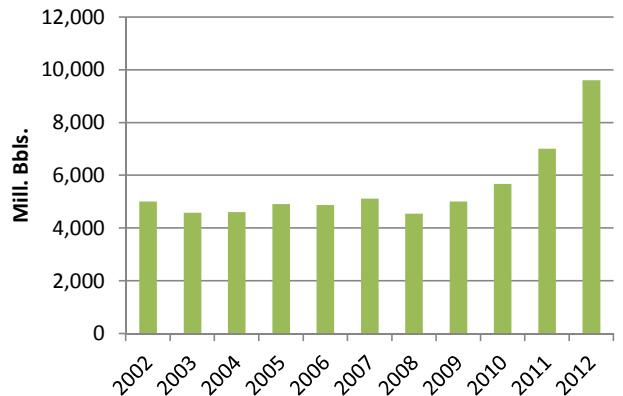
**Texas Oil Production 2013-2014**



**Texas Oil Production 2002 - 2012**



**Texas Crude Oil Reserves 2002 - 2012**



\* 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.

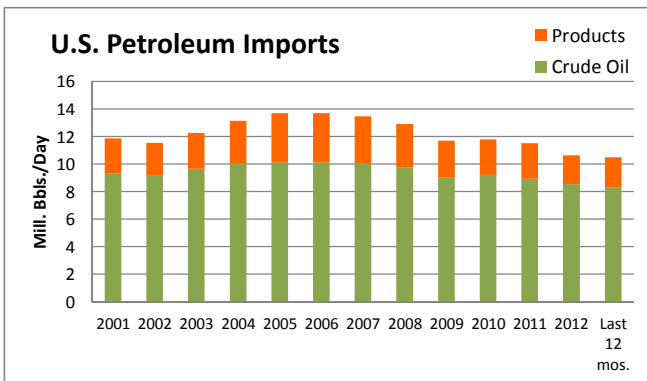
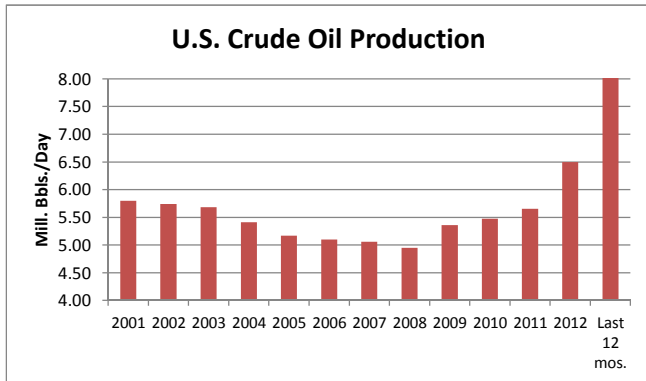
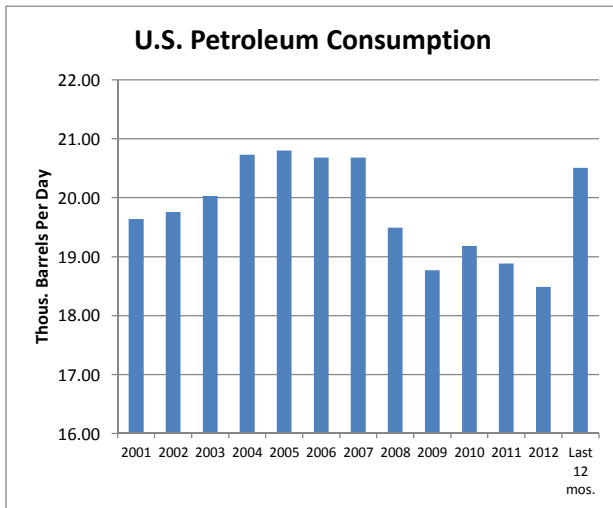
\*\* Source: Texas Comptroller of Public Accounts. Wellhead price is average net taxable price (\$/bbl.) & excludes federal offshore production.

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				
1991	7.42	7.63	5.78	1.84	16.71	24,682	29,528	16.54
1992	7.17	7.89	6.08	1.81	17.03	23,745	23,608	15.99
1993	6.85	8.62	6.79	1.83	17.24	22,957	25,451	14.25
1994	6.66	9.00	7.06	1.93	17.72	22,457	22,255	13.19
1995	6.56	8.84	7.23	1.61	17.72	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	19.64	22,446	35,558	21.84
2002	5.74	11.53	9.14	2.39	19.76	22,677	27,871	22.51
2003	5.68	12.25	9.66	2.59	20.03	21,891	32,833	27.56
2004	5.41	13.13	10.08	3.05	20.73	21,371	37,057	36.77
2005	5.17	13.70	10.12	3.58	20.80	21,757	44,022	50.28
2006	5.10	13.69	10.11	3.58	20.68	20,972	51,429	59.69
2007	5.06	13.46	10.03	3.43	20.68	21,317	51,071	66.52
2008	4.95	12.91	9.78	3.13	19.49	19,121	54,302	94.04
2009	5.36	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	11.50	8.94	2.57	18.88	26,544	n/a	95.73
2012	6.50	10.63	8.53	2.11	18.49	30,529	n/a	94.52
Last 12 mos.	8.38	10.50	8.29	2.21	20.51			

Apr-2013	7.33	10.08	7.73	2.35	18.55
May-2013	7.26	10.05	7.74	2.32	18.55
Jun-2013	7.21	9.79	7.73	2.06	18.72
Jul-2013	7.45	10.24	8.07	2.17	19.05
Aug-2013	7.47	10.20	8.10	2.10	19.09
Sep-2013	7.76	9.98	7.91	2.07	19.12
Oct-2013	7.71	9.59	7.48	2.12	19.27
Nov-2013	7.90	9.31	7.39	1.92	19.41
Dec-2013	7.87	9.50	7.76	1.74	19.08
Jan-2014	7.94	9.27	7.58	1.68	18.92
Feb-2014	8.05	9.15	7.20	1.95	18.99
Mar-2014	8.16	9.24	7.26	1.98	18.53
Apr-2014	8.40	9.58	7.55	2.04	18.78



\* 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.state.tx.us>.

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 85 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 224\* of 254 counties. About 307,700\* 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 \$114.43 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 one million barrels of oil a day; natural gas production in the state exceeds 7 trillion cubic feet a year.

Christi Craddick  
Chairman

David Porter  
Commissioner

Barry T. Smitherman  
Commissioner

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