MICHAEL L. WILLIAMS Chairman VICTOR G. CARRILLO Commissioner ELIZABETH A. JONES Commissioner





# PETROFACTS

A Monthly Data Review from the Railroad Commission of Texas I January 2009

## Highlights

## **Natural Gas Production**

In October 2008 preliminary and adjusted Texas natural gas production was 676.57 billion cubic feet (bcf), up from 598.71 bcf produced during the same month in 2007. 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 or see the Commission's website at http://www.rrc.state.tx.us

## **Crude Oil Production**

In October 2008 preliminary and adjusted Texas crude oil production averaged 0.945 million barrels per day (mmb/d), up from 0.935 mmb/d reported during the same month in 2007. (See Note above.)

## **Rotary Rigs Operating in Texas**

In December 2008 the average Texas rotary rig count was 826, down from 884 rigs running during the same month last year. The December rig count was down from the November rig count of 899. *Source: Baker Hughes Co.* 

## Permits to Drill

In December 2008 the Railroad Commission issued 1,226 original permits to drill, down from 1,550 permits issued during the same month last year and down from 1,517 permits issued in November.

## **Oil and Gas Well Completions**

In December 2008 operators reported 641 oil completions, up from 464 oil completions during the same month last year. There were 819 gas completions in December, up from 660 gas completions reported during the same month last year. There were 1,462 wells drilled in Texas in December, up from 1,126 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 fall from the average 2008 level of \$92.87 per barrel to \$38.35 per barrel during the 1<sup>st</sup> quarter of 2009 and average \$39.24 for the year, according to the U.S. Energy Information Administration's (EIA) "Short-Term Energy Outlook" for January, 2009. The price is expected to average \$38.67 per barrel for the 2<sup>nd</sup> quarter of 2009.

The West Texas Intermediate spot average is expected to fall from the average 2008 level of 99.55 per barrel to 42.33 per barrel during the 1<sup>st</sup> quarter of 2009 and average 43.25 for the year. The price is expected to average 42.67 per barrel for the 2<sup>nd</sup> quarter of 2009.

U.S. petroleum demand is expected to decrease 02.00 percent from 2008 to 2009 at 19.51 million barrels per day, and increase by 0.84 percent from 2009 to 2010 to 19.28 million barrels per day.

U.S. natural gas demand is expected to decrease by 0.99 percent from 2008 to 2009 to 22.97 trillion cubic feet, and increase by 0.70 percent from 2009 to 2010 to 23.13 trillion cubic feet.

EIA projects that natural gas wellhead prices will average \$5.39 per mcf for the 1<sup>st</sup> quarter of 2009 and average \$4.99 per mcf for the year. This is a 61.92 percent decrease from EIA's 2008 average wellhead price of \$8.08 per mcf.

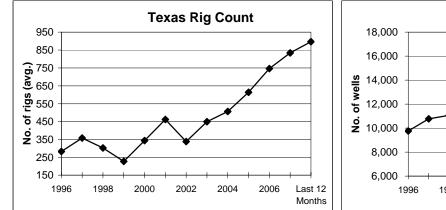
EIA projects an average annual wellhead price of \$5.70 per mcf for 2010, a 12.46 percent increase from the \$4.99 projected average price for 2009.

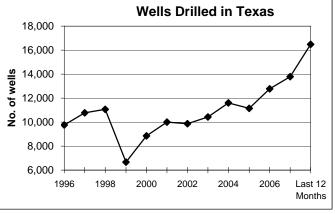
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	F	Rotary Rig	s Active *		Wells Con	npleted	Wells
Period		Texas	U. S.	Permits #	Oil	Gas	Drilled **
1989		264	871	12,756	4,914	2,760	10,054
1990		348	1,009	14,033	5,593	2,894	11,231
1991		315	860	12,494	6,025	2,755	11,295
1992		251	721	12,089	5,031	2,537	9,498
1993		264	754	11,612	4,646	3,295	9,969
1994		274	775	11,030	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	945	13,933	4,482	4,594	10,778
1998		303	827	9,385	4,509	4,907	11,057
1999		226	622	8,430	2,049	3,566	6,658
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	1,383	16,914	3,454	7,197	11,154
2006		746	1,648	18,952	4,761	8,412	12,764
2007		834	1,769	19,994	5,084	8,643	13,778
Last 12	2 Months	896	1,877	23,928	6,322	10,126	16,491
2007	Dec	884	1,811	1,550	464	660	1,126
2008	Jan	858	1,749	1,609	570	565	1,135
	Feb	866	1,765	1,760	536	876	1,417
	Mar	881	1,797	1,926	400	785	1,191
	Apr	887	1,829	2,207	403	827	1,235
	May	906	1,863	1,899	334	857	1,195
	Jun	923	1,902	2,444	432	813	1,248
	Jul	920	1,932	2,183	453	1,065	1,522
	Aug	934	1,987	2,129	357	696	1,057
	Sep	946	2,014	2,335	384	704	1,090
	Oct	911	1,971	2,693	988	1,277	2,269
	Nov	899	1,935	1,517	824	842	1,670
	Dec	826	1,782	1,226	641	819	1,462

Table 1. Texas Drilling and Completion Summary





\* Source: Baker Hughes Inc.

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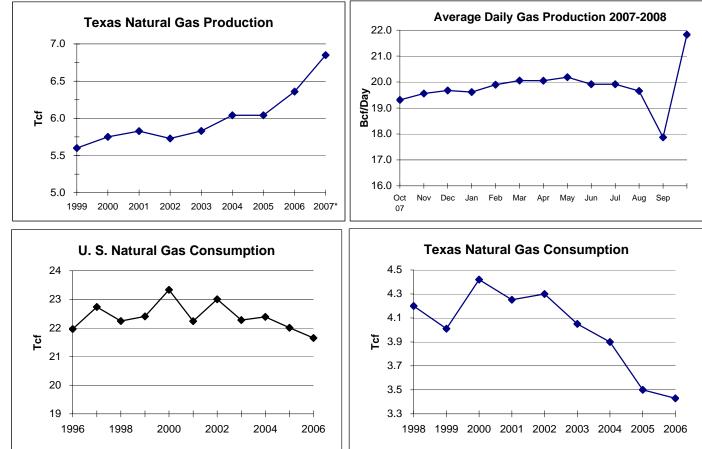
# Totals shown for 1988 and after are number of drilling permits issued; data for previous years was total drilling applications received.

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

	Total	Proved	Consump-	Producing	Wellhead
Period	Production	Reserves #	tion #	Wells	Price **
1989	5.60	41.5	3.62	50,017	\$1.50
1990	5.54	41.4	3.60	49,989	\$1.43
1991	5.52	39.3	3.56	49,825	\$1.39
1992	5.45	38.1	3.48	49,839	\$1.45
1993	5.61	37.8	3.74	50,794	\$1.80
1994	5.69	39.0	3.67	52,614	\$1.68
1995	5.69	39.7	3.80	53,612	\$1.36
1996	5.85	41.6	3.99	55,052	\$1.76
1997	5.85	41.1	3.95	56,736	\$2.14
1998	5.82	40.8	4.20	58,436	\$1.96
1999	5.60	43.4	4.01	59,088	\$1.86
2000	5.75	45.4	4.42	60,486	\$3.51
2001	5.83	43.5	4.25	59,744	\$4.01
2002	5.73	44.3	4.30	56,718	\$2.95
2003	5.83	45.7	4.05	63,534	\$4.88
2004	6.04	49.9	3.90	66,959	\$5.46
2005	6.04	56.5	3.50	70,384	\$7.33
2006	6.36	61.8	3.43	76,821	\$6.40
2007*	6.85	72.0	n/a	81,371	\$6.39

	Total Gas Pro	duction (Bcf)		
	Monthly	Daily	Gas Well	Casinghead
Oct 07	598.71	19.31	537.68	61.03
Nov	586.66	19.56	528.35	58.31
Dec	609.86	19.67	550.62	59.24
Jan	608.02	19.61	548.66	59.36
Feb	577.00	19.90	519.64	57.36
Mar	621.85	20.06	559.77	62.08
Apr	601.45	20.05	540.65	60.80
Мау	625.79	20.19	561.93	63.86
Jun	597.47	19.92	536.61	60.86
Jul	617.30	19.91	550.73	66.57
Aug	609.42	19.66	543.48	65.94
Sep	536.04	17.87	481.32	54.72
Oct*	676.57	21.82	615.73	60.84

\*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 1.2378 has been applied to reported October gas well production to obtain an estimate of final gas well production.



\*\*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 U.S. Energy Information Administration (EIA) and wellhead price is national average.

# Source: EIA's reserve estimates for 1986 and after exclude federal offshore and are wet after lease separation.

Table 2. Texas Natural Gas (Trillion CF)

## Table 3. Texas Gas Storage Operations

		-	Reported Max				Preliminary
Productive or Depleted	utitive or Depleted Reservoirs         Withdrawal Rate         Working Gas* Inventory 11/3008         Change From Inventory 11/3007         Working Gas* One Year Ago (MMCF)         Working Gas* Inventory 11/3007         Change From One Year Ago (MMCF)         Working Gas* Inventory 12/150/ (MMCF)           ge LP         Felma (Yates)         Gaines         45         2,728         2,312         416         2,67           ge LP         Loop (Yates)         Gaines         75         800         800         -         800           C         Pickton (Bacon Lime)         Hopkins         15         -         -         -         -         -         800           Ambassador         Clay         40         80         800         -						
Operator	Field	County Locat					Inventory 12/15/08 (MMCF)
Oneok TX Gas Storage LP	Felmac (Yates)	Gaines	45	2,728	2,312	416	2,671
Oneok TX Gas Storage LP	Loop (Yates)	Gaines	75	800	800	-	800
Houston Pipeline Co.	Bammell	Harris	1,300	49,305	57,768	(8,463)	47,004
Enbridge Pipeline LLC	Pickton (Bacon Lime)	Hopkins	15	-	-	-	-
Cago, Inc.	Ambassador	Clay	40	80	80	-	80
Hill Lake Gas Storage LP	Hill-Lake Sand	Eastland	450	8,075	9,486	(1,411)	7,431
ATMOS Pipeline - Texas	La-Pan-Miss	Clay	120	3,472	3,249	223	2,958
ATMOS Pipeline - Texas	Lake Dallas		120	4,027		(48)	3,795
ATMOS Pipeline - Texas	New York City	Clay	120				5,045
ATMOS Pipeline - Texas	Pecan Station	Tom Green	28	395	397		394
ATMOS Pipeline - Texas	Tri-Cities Bacon	Henderson	275	21,307	21,379		20,518
ATMOS Pipeline - Texas	Tri-Cities Rodessa	Henderson	50				124
Lower Colorado River Authority	Hilbia	Bastrop	100	3.282	3.180	· · ·	3,210
Natural Gas Pipeline Co.	0		1.100	,	,	(6.441)	85,634
Devon Gas Services LP			,				428
Pelican Transmission LLC	•					-	32,718
Energy Transfer Fuel LP						( , , ,	5,634
Falcon Gas Storage, Inc.					,	-	23,809
Cumming Company, Inc.				,0.10	-	-	
Katy Storage and Transportation LP	5			-	-	-	-
Katy Storage and Transportation LP				21 964	24 131	(2 167)	21 971
haly blorage and transportation Er	haly has a biologe						
Salt Cavern	S		- , -	-,	,-		- ,
Oneok TX Gas Storage LP	Salado (Loop Yates)	Gaines	500	2 035	956	1 079	1,735
Centana Intrastate Pipeline LLC							1,151
Dow Chemical Co.				-	-	-	-
Dow Chemical Co.	U			612	798	(186)	599
Kinder Morgan Texas Pipeline LP	North Dayton	Liberty	750	2,412	2,603	(191)	2,282
ATMOS Pipeline - Texas	Bethel	Anderson	600	5,751	5,212	539	5.130
Moss Bluff Hub Partners LP	Moss Bluff	Liberty	1,000	12,398	15,516	(3,118)	11,640
Gulfterra South Texas LP	Wilson	Wharton	800	5,160	2,037	3,123	4,163
Chevron Phillips Chemical Co	Clemens	Brazoria	75	949	1,853	(904)	1,105
PB Energy Storage Services, Inc.	Spindletop	Jefferson	480	6,611	6,927	(316)	6,784
Kinder Morgan Tejas Pipeline LP	Stratton Ridge	Brazoria	250	906	480	426	824
Texas Brine Corp.	Markham	Matagorda	500	24,255	18,770	5,485	23,693
Energy Transfer Fuel LP	Bethel Salt Dome	Anderson	600	4,250	3,414	836	4,341
Union Oil Co. of California	Keystone Gas Storage	Winkler	350	4,250 5,452	4,635	817	4,800
Underground Storage, LLC	Pierce Junction	Harris	350	1,144	2,306	(1,162)	1,332
	FIELCE JULICUUL	TIAITIS			2,300	· · · · ·	
	Markham	Motogorda	0 500	2 404		2 10 1	2 050
Tres Palacios Storage LLC	Markham	Matagorda Subtotals	2,500 <b>9,535</b>	3,484 <b>77,518</b>	- 70,235	3,484 <b>7,283</b>	3,850 <b>73,429</b>

\* Note: Native Gas volumes are included in Working Gas volumes with the exception of Houston Pipe Line's Bammel facility and Natural Gas Pipeline Co.

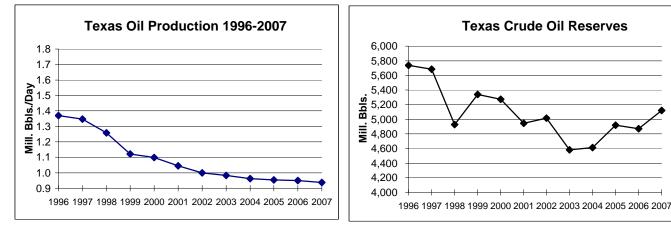
of America's North Lansing facility. (The Native Gas in the Bammel and North Lansing facilities is part of the non-working pad gas.)

	Deple	eted Reserv	voirs	Sa	alt Caverns	5		Total	
	Beginning Balance ( (Mmcf)	Injections/ (Withdrawals) (Mmcf)	Ending Balance (Mmcf)	Beginning Balance (\ (Mmcf)	Injections/ Withdrawals) (Mmcf)	Ending Balance (Mmcf)	Beginning Balance (\ (Mmcf)	Injections/ Nithdrawals) (Mmcf)	Ending Balance (Mmcf)
Nov-07	325,009	(755)	324,254	77,008	(5,822)	71,186	402,017	(6,577)	395,440
Dec-07	324,254	(19,898)	304,356	71,186	(6,164)	65,022	395,440	(26,062)	369,378
Jan-08	304,356	(61,288)	243,068	65,022	(12,399)	52,623	369,378	(73,687)	295,691
Feb-08	243,068	(49,237)	193,831	52,623	(8,244)	44,379	295,691	(57,481)	238,210
Mar-08	193,831	(20,301)	173,530	44,379	5,342	49,721	238,210	(14,959)	340,663
Apr-08	173,530	20,005	193,535	49,721	5,340	55,061	223,251	25,345	248,596
May-08	193,535	25,219	218,754	55,061	7,810	62,871	248,596	33,029	281,625
Jun-08	218,754	(6,162)	212,592	62,871	1,148	64,019	281,625	(5,014)	276,611
Jul-08	212,592	(11,664)	200,928	64,019	3,728	67,747	276,611	(7,936)	268,675
Aug-08	200,928	1,418	202,346	67,747	(3,587)	64,160	268,675	(2,169)	266,506
Sep-08	202,346	23,365	225,711	64,160	1,305	65,465	266,506	24,670	291,176
Oct-08	225,711	22,650	248,361	65,465	1,185	66,650	291,176	23,835	315,011
Nov-08	248,361	22,416	270,777	66,650	10,868	77,518	315,011	33,284	348,295

## Table 4. Texas Gas Storage Operations, 2007 - 2008

	Total	Daily	% of U.S.	Proved	% of U.S.	Active	WTI Spot
Period	Production	Average	Production	Reserves #	Reserves	Wells *	Price **
1989	651	1.78	23.3	6,996	26.3	190,821	\$16.47
1990	646	1.77	24.2	7,106	27.1	194,962	\$19.74
1991	644	1.77	24.0	6,797	27.5	196,292	\$21.48
1992	614	1.68	23.5	6,441	27.1	193,310	\$18.61
1993	576	1.58	22.9	6,171	26.9	186,342	\$17.30
1994	542	1.49	22.3	5,847	26.0	179,955	\$14.73
1995	513	1.40	21.5	5,743	25.7	177,397	\$16.31
1996	500	1.37	21.0	5,736	26.0	175,277	\$18.77
1997	491	1.35	21.0	5,687	25.2	175,475	\$20.01
1998	460	1.26	20.1	4,927	23.4	170,288	\$14.06
1999	409	1.12	19.1	5,339	24.5	162,620	\$14.31
2000	401	1.10	18.8	5,273	23.9	161,097	\$28.71
2001	381	1.04	18.0	4,944	22.0	159,357	\$24.62
2002	365	1.00	17.4	5,015	22.1	146,640	\$24.33
2003	359	0.98	17.4	4,583	20.9	143,561	\$31.08
2004	351	0.96	17.7	4,613	21.5	142,095	\$41.51
2005	348	0.95	18.4	4,919	19.0	141,924	\$56.64
2006	347	0.95	18.6	4,871	23.4	139,292	\$66.05
2007	342	0.94	18.5	5,122	24.0	144,535	\$72.34
Oct-07	28.98	0.0001	Note: The most recent			Production 2007-200	10
Nov	28.24		12 months of production data is preliminary and		Texas OII		0
Dec	29.26		subject to revision. The	1.00			
Jan	29.30		most recent month of	0.95			
Feb	27.67		lata is incomplete and	>0.90			
Mar	29.55	0.0001	may underestimate the	<b>A</b> 0.90 <b>O</b> 0.85 <b>O</b> 0.80 <b>O</b> 0.80			-
Apr	28.61	0 954 1	inal and complete total; a production adjustment	M M M M M M M M M M M M M M M M M M M			
May	29.46	0 0 5 0 1	a production adjustment actor of 1.0572 has	≥0.80			
Jun	28.14		been applied to reported	0.75			
Jul	29.30	0.945	October crude oil	0.70			
			raduction to obtain an				

## Table 5. Texas Crude Oil (million barrels)



Oct-

07

Nov Dec

Jan Feb

Mar

Apr May

Jun

Jul

Aug Sep Oct

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

\* Source: Railroad Commission of Texas, December Active Oil Well Counts

production to obtain an

production.

estimate of final crude oil

0.944

0.896

0.945

29.27

26.87

29.28

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Aug

Sep

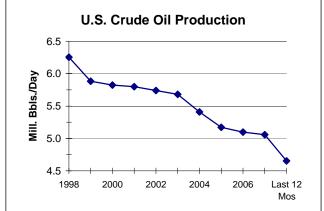
Oct

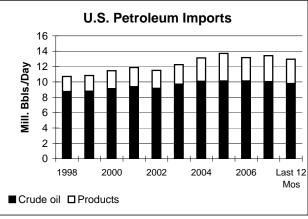
\*\* Source: Texas Comptroller of Public Accounts. Wellhead price is average net taxable price (\$/bbl.) and excludes federal offshore production. Source for 2001 and after is (EIA) and wellhead price is West Texas Intermediate spot average.

## Texas PetroFacts / Railroad Commission of Texas / January 2009

		Imports *	*		Products	Proved	Wells	Wellhead
Period	Production *	Total	Crude Oil	Products	Supplied #	Reserves **	Drilled **	Price **
1989	7.61	8.06	5.84	2.22	17.33	26,501	27,931	\$15.86
1990	7.36	8.01	5.89	2.12	16.99	26,254	32,067	\$20.03
1991	7.42	7.62	5.78	1.84	16.71	24,682	28,892	\$16.54
1992	7.17	7.86	6.08	1.81	17.03	23,745	23,084	\$15.99
1993	6.85	8.48	6.79	1.83	17.24	22,957	24,752	\$14.25
1994	6.66	8.92	7.06	1.93	17.72	22,457	21,566	\$13.19
1995	6.56	8.84	7.23	1.61	17.73	22,351	21,600	\$14.62
1996	6.47	9.18	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	27,873	\$26.72
2001	5.80	11.87	9.33	2.54	19.65	22,446	34,021	\$21.84
2002	5.74	11.52	9.13	2.39	19.76	22,677	26,564	\$22.51
2003	5.68	12.24	9.65	2.59	20.03	21,891	30,675	\$27.56
2004	5.41	13.14	10.06	3.08	20.73	21,371	33,096	\$36.77
2005	5.17	13.71	10.09	3.62	20.80	21,757	40,745	\$50.28
2006	5.10	13.17	10.09	3.08	20.68	20,972	49,507	\$59.69
2007	5.06	13.42	10.00	3.42	20.68	21,317	53,558	\$66.52
ast 12 Mos	4.65	12.94	9.76	3.18	19.64			
Oct 07	5.03	12.95	9.77	3.18	20.45		S. Petrole	um Cons
Nov	5.00	13.19	9.97	3.22	20.70	22 -		
Dec	5.07	12.85	9.82	3.03	20.86	I I		
Jan	5.09	13.49	10.00	3.49	20.11	21 =		•
Feb	5.11	12.60	9.60	3.00	19.78	20 <sup>‡</sup>	<b>A</b> •	
Mar	5.13	12.55	9.61	2.94	19.73	02 00 00 00 00 00 00 00 00 00 00 00 00 0		•
Apr	5.16	13.25	9.81	3.44	19.76	<b>ig</b> 19		
Мау	5.16	12.86	9.63	3.23	19.72			
Jun	5.10	13.36	9.97	3.39	19.55	17 -		
Jul	5.11	13.06	10.07	2.99	19.41	<u>Ŧ</u>		
Aug	4.89	13.06	10.24	2.82	19.26	16 ‡		
Sep	3.96	11.51	8.36	3.15	17.79	1998	2000 2	2002 200
Oct*		13.49	10.06	3.43	19.04			

Table 6. U. S. Petroleum Overview (million barrels per day)





Last 12 Mos

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

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

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

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Address Correction Requested

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

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 237 of 254 counties. About 250,000 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 \$201 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 6 trillion cubic feet a year.

Victor G. Carrillo Commissioner Michael L. Williams Chairman Elizabeth A. Jones Commissioner

