

Oil And Gas Division Activities During 2007

Field Operations

Field Operations conducted 118,997 inspections relating to oil and gas operations during 2007. District personnel also investigated a total of 776 complaints.

Oil Field Cleanup Activity

Various fees on the oil and gas industry authorized by the 72nd Legislature became effective September 1, 1991. These fees included drilling permit fees, pipeline severance reconnect fees, fees on extensions to the well plugging rule, fees filed with an organization report for financial assurance, and fees on oil and gas production. The fees and interest, along with penalties and reimbursements associated with plugging violations, are deposited in an oil field cleanup fund. These proceeds are used to plug orphaned wells and clean up abandoned sites.

Certain personnel in each district office, as well as the Austin headquarters office, have been assigned to the oil field cleanup activity and work exclusively with well plugging and pollution site cleanup due to the increase in plugging and cleanup activity brought about by this legislation.

Fiscal Year 2007 Statistics (September 1, 2006 through August 31, 2007)

Unplugged Wells Authorized for Plugging.....	1,683
Total Wells Plugged.....	1,536
Cleanups Approved.....	318
Cleanups Completed	308
**Cost of Well Plugging.....	Plug Database \$18,537,525
**Cost of Cleanups	Site Database <u>\$8,343,461</u>
**Total	\$14,603,138
***Amount Collected from Permit Fees (W-1 and discharge fees)	\$10,096,693
***Amount Collected from Other Sources	<u>\$18,588,141</u>
***Total Collections	\$28,684,834

** Data Source – Oil & Gas (Rbase – Plug & Site Database)

*** Data Source – Finance Division (Accounting System)

ADMINISTRATIVE COMPLIANCE

Geographic Information System

During the calendar year 2007, the GIS Well Mapping Section continued to update and enhance the Commission's Geographic Information System (GIS). As of December 2007, the GIS well data layer contained 1,133,739 wells and/or permitted locations.

Drilling permit and well completion forms are processed, using customized software applications, to update the GIS well data layer. Besides being faster and easier than the old hand-posting method, the computerized method does not degrade older well data.

A project to enhance the GIS well data layer began in September 1994. This project involves researching and linking API numbers in the Commission's well bore database, which were not linked during the initial well conversion phase, to the associated well spot in the well data layer. As of December 2007, there were 768,488 API numbers linked to the well locations in the well data layer.

The Commission routinely uses GIS map products that are larger scale easier to read, and more current than the hard-copy maps they replaced. Plots of these maps and copies of the digital data can be provided to the public at cost. In November 2005, the GIS became viewable to the public over the Internet through the Commission's Public GIS Map Viewer.

P-5 Organization/Financial Assurance Program

During the calendar year 2007, the P-5 Department processed 7,448 new and renewal Form P-5 filings. The number of active operators rose by nearly 250 operators during 2007, ending the year with 7,299 active entities on file. At the end of 2007, a bond, 63.1% by a letter of credit, and 5.9% by cash deposit covered 31% of all active operators with financial security.

Well Completion and Production Activity

In calendar year 2007, the average total number of wells monitored by Commission staff was 369,528. During this same period, the number of new well completions reported remained at a high level. There were 14,247 new well completion filings in 2007 - 5,084 were oil completion filings; 8,643 were gas completion filings; and 520 were injection or other type completions. The number of new well completions processed in 2006 and 2007 are at the highest levels since 1985.

In 2007, over 2.2 million oil and gas production reports were processed. Approximately 33% were for oil completions, 65% were for gas completions, and 2% were for well completions pending processing and classification by the Commission.

TECHNICAL PERMITTING

In 2007, Technical Permitting staff continued to implement a variety of process improvements that resulted in more efficient permit processing, expanded compliance verification, and greater accessibility of information by the public. Technical Permitting staff has issued a greater number of permits overall than the previous years.

The Drilling Permits unit is responsible for processing Form W-1's mailed in or filed on the Online System. Processing drilling permits includes issuing API numbers; mapping the well in the GIS system; checking survey names and distances for accuracy; checking lease line and nearest well distances, and calculating the number of acres in each lease to make sure the well is in compliance with the field rules; approving administrative exceptions to Rules 37, 38, 39, and 40; and sending out Notice of Application letters on exception to Rule 37 permits. After all checks are completed, Drilling Permits then issues the permits electronically.

Commission staff processed 24,256 drilling permit applications during calendar year 2007. These included applications to drill, re-enter, transfer fields, reclass, recomplete, and amend prior filings. Of this number, 20,928 applications were for new drill permits, 2,299 were for recompletions, and 837 were granted administrative approvals for exceptions to Statewide Rule 37. Also, of the total permits processed, operators or their representatives filed 18,987 drilling permit applications through the online system. There were 5,269 drilling permit applications filed hardcopy. As of April 2007, the walk-in permits were suspended. All drilling permits are either submitted online or mailed in.

The Injection-Storage Support unit is responsible for the permitting and technical compliance of injection (H-1), disposal (W-14), hydrocarbon storage (H-4), and brine mining (H-2) wells. The unit schedules and reviews approximately 17,000 mechanical integrity tests (H-5) and 47,000 monitoring reports (H-10 and H-10H) for these types of wells. In addition to routine processing, technical staff reviews complex work over and completion issues, while tracking compliance with rule and permit conditions. When necessary, violation notices are issued and enforcement actions taken as needed.

Commodity prices have continued to rise significantly, supporting accelerating development in technologically challenging areas for unconventional gas reserves such as the Barnett Shale in North Texas and tight gas sands in East and South Texas. Such developments continue to result in high demand for new oil and gas waste disposal capacity. Much of this demand for greater disposal capacity is occurring in urban areas unaccustomed to this type of activity, resulting in notably higher public concern and participation in the regulatory process.

High commodity prices also continue to sustain renewal and expansion of long-established enhanced recovery projects, particularly in the area of carbon dioxide enhanced recovery projects in the Permian Basin of West Texas. During FY07, the total number of disposal well and enhanced recovery injection well permit applications filed was up 28% from FY06.

The natural gas storage industry in Texas continues to grow at a brisk pace. Four new salt cavern gas storage projects were approved in 2007. Several existing storage operations are undergoing significant expansion projects.

The new ‘on-line’ electronic filing capability for annual injection well status reports (Form H-10) was launched in September 2007. The program will significantly improve the efficiency of filing and processing these critical reports.

The Environmental Permits and Support unit reviews surface waste management and subsurface and engineering concerns. Surface waste management includes surface waste storage and disposal, recycling, hauling of oil and gas waste, reclamation plants, hazardous waste, and waste minimization. Subsurface and engineering includes associated field and new field designations, multiple completions, horizontal drilling, enhanced oil recovery, downhole commingling, horizontal and directional surveys, high-cost gas wells, flared/vented gas, skim oil/condensate reports, refinery operations, and gas processing and re-pressurizing plants.

The High-Cost Gas Incentive Program, created in 1989, has two tiers:

For qualified high-cost gas well spudded or completed between May 24, 1989, and September 1, 1996, there is a state severance tax exemption on gas produced through August 31, 2001 (the program was created in 1989);

For qualified high-cost gas wells spudded or completed September 1, 1996, or after, there is a state severance tax reduction based upon the drilling and completion costs of the individual well in relation to the median drilling and completion costs of all high-cost gas wells spudded or completed in the previous fiscal year (the expansion to the program in 1995).

High-cost gas, as defined under this program, is primarily produced either (a) from a gas well completion below 15,000 feet deep, (b) from a designated tight formation, or (c) from Devonian shale. The operator applies to the Railroad Commission for high-cost gas well certification and to the Comptroller for the exemption or reduction.

The High Cost Gas Program is responsible for certifying eligible high-cost gas wells for state severance tax exemption. In 2007, there were 7014 tax exemption certification requests received; 6596 were administratively approved. Also, in 2007, there were 115 requests received for tight sands designation of which 109 were approved.

Technical Permitting staff continued to assist other Commission sections in developing enforcement referrals and in understanding various technical issues, such as, sequestration of carbon dioxide and new technologies allowing the reuse of produced water.

OIL & GAS HEARINGS ACTIVITY

The Office of General Counsel held 626 formal hearings during calendar year 2007. This includes 54 Statewide Rule 37 exception hearings, 346 technical applications, and 154 enforcement cases. Of this total, 72 of the technical hearings were protested. Enforcement actions resulted in fines of \$2,342,125 for 2007.

Developments In The Oil And Gas Industry In Texas

Oil Production And Development

Texas Crude Oil Production

Year	Annual Production (bbls)	Daily Average Production (bbls)	Percent Change from Prior Year
1995	511,962,197	1,402,636	-5.45 %
2000	398,677,877	1,092,268	-2.00 %
2001	378,849,145	1,037,943	-4.97%
2002	364,314,461	998,122	-3.84%
2003	357,239,742	978,739	-1.98%
2004	349,232,520	956,801	-2.24%
2005	344,225,777	943,084	-1.43%
2006	340,884,729	933,931	-.97%
2007	336,777,608	922,678	-1.01%
Year	Total Wells Drilled*	Percent Change from Prior Year	Oil/Gas Wells Plugged
1995	10,156	4.72%	11,081
2000	8,854	32.98%	7,219
2001	10,005	13.00%	8,023
2002	9,877	-1.28%	8,343
2003	9,741	-1.38%	8,720
2004	11,587	18.95%	8,391
2005	12,729	9.86%	6,160
2006	14,786	16.16%	6,417
2007	23,461	36.98%	6,892
Year	Oil Wells	Change from Prior Year	Percent Change from Prior Year
1995	177,397	-2,558	-1.42%
2000	161,097	-1,523	-0.12%
2001	159,357	-1,740	-1.08%
2002	155,865	-3,492	-2.19%
2003	153,461	-2,404	-1.54%
2004	151,205	-2,256	-1.47%
2005	151,286	81	.05%
2006	151,832	546	.36%
2007	153,223	1,391	.92%

*Includes oil, gas, service wells and dry holes.

Natural Gas Production

Texas natural gas production was 6,419 billion cubic feet in 2007. Exports to other states were 2,012 billion cubic feet. Texas natural gas marketed during 2007 was 4,932 billion cubic feet. The following table shows Texas natural gas production for recent years. In 1973, production first dropped since the Railroad Commission has kept records.

Texas Natural Gas Production
(Billion cubic feet)

Year	Total Gas Production	Percent Change from Prior Year	Gas Well Production	Percent Change from Prior Year	Casinghead Production	Percent Change from Prior Year
1995	5 672	-0.07%	4 526	1.50%	1 146	-5.76%
2000	5,646	1.93%	4,776	2.49%	869	-1.14%
2001	5,671	.44%	4,822	.96%	849	-2.30%
2002	5,612	-1.04%	4,782	-.83%	831	-2.12%
2003	5,672	1.07%	4,833	1.07%	838	0.84%
2004	5,785	1.95%	4,481	-7.28%	893	6.56%
2005	5,701	1.45%	5,012	11.85%	689	-22.84%
2006	6,067	6.42%	5,390	7.54%	677	-1.74%
2007	6,421	.94%	5,716	.94%	706	.96%

The Commission continued to use the terms adopted in 1952 that had previously been used by the American Gas Association and the American Petroleum Gas Institute. The term "gas well gas" is used to mean gas produced from wells classified by the Commission as gas wells. The term "dry gas" had been used for this purpose prior to 1952. The term "non-associated gas" is used to mean gas that is not in contact with or dissolved in crude oil in the reservoirs. The term "casinghead gas" is used to mean gas produced from wells classified by the Commission as oil wells. The term "dissolved gas" is used to mean gas that is dissolved in crude oil at reservoir conditions.