Supplemental Edition 2001

Changes and Additions to the 1999 Edition

Investments in Energy Security

State Incentives to Maximize Oil and Gas Recovery



A Publication of the Interstate Oil and Gas Compact Commission



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The viewpoints and recommendations contained in this publication do not necessarily represent those of the funding agency or the United States government.

For more information about the IOGCC or this report, visit the IOGCC Web site at **www.iogcc.state.ok.us**, call **405/525-3556** or send e-mail to **iogcc@iogcc.state.ok.us**. For additional information on the Energy Council, call 972/243-7788.

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Introduction

This report is a supplement to the 2000 version of *Investments in Energy Security:* State *Incentives to Maximize Oil and Gas Recovery*, published by the Interstate Oil and Gas Compact Commission (IOGCC).

The IOGCC, with funding from the U.S. Department of Energy, compiles this annual catalogue of oil and gas incentive programs to assist government entities in developing new, and enhancing existing, oil and natural gas

incentives. The IOGCC is a 66-year-old organization representing the governors of 30 states that produce virtually all the domestic oil and natural gas in the United States.

Since the 2000 edition was published, several new incentives have been enacted or implemented. New or significantly altered incentive projects, as of the publication of this report, are listed at the right.

In this report, the IOGCC uses a somewhat broader definition of "incentive" than is traditional. The IOGCC's scope is not limited to tax incentives, but includes any program that assists oil and natural gas producers in the efficient recovery of petroleum resources while maintaining health and environmental protection.

State incentive programs are varied, including tax relief for low-volume, economically marginal wells or idle wells brought back into production; petroleum information services provided to the oil and gas industry; and incentives to develop and use new technologies that increase the efficiency of extraction. These programs vary in quantifiable effectiveness. While many have proven successful, over the years some incentives have been disappointments.

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Please note that this supplement includes only the incentive catalogue portion of the IOGCC's annual study. Not included is the well-received economic analysis of selected incentives, written by David M. Garlick. Readers should obtain a copy of the December 1999 *Investments in Energy Security* for a comprehensive look at the value of oil and gas incentive programs to the states. Because of data requirements for thorough evaluation, the economic analysis section includes only those incentives reported to the IOGCC prior to the 2000 legislative sessions.

It is important to note that even when a particular incentive program is not extensively used by industry or judged successful based on economic rewards to the state, its adoption can strengthen the interests of oil and natural gas producers considering expanding in that state. The attitude displayed by the state in adopting incentives is one of welcome, and business people prefer to operate where they are welcome.

INTRODUCTION (continued)

In creating this report, the IOGCC worked with state, federal and international agencies and consulted with industry to compile and analyze information. Consistent with its mission of promoting the conservation and efficient recovery of petroleum resources while protecting health, safety and the environment, the IOGCC has created this publication to assist legislators and regulators who are crafting new incentives and to communicate states' actions with members of Congress, federal agency officials and the oil and gas industry.

A great deal of appreciation is due to the many individuals and organizations who provided information and guidance for this project. Many are recognized in the "Acknowledgments" portion of this publication, which also serves as a contact list for information regarding oil and gas incentive issues.

The Energy Council, an organization of elected and provincial legislators from 10 energy-producing states, the Canadian province of Alberta and Venezuela, has joined with the IOGCC in distributing this report. This collaborative effort will communicate findings to a wider audience.

Additional information about the IOGCC and an online version of this report can be accessed on the World Wide Web (www.iogcc.state.ok.us). For additional information about the Energy Council, call 972/243-7788.

Christine Hansen Executive Director

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State Incentive Programs

ALABAMA

NEW Carbon Sequestration Potential of Coalbed Methane Reservoirs in the Black Warrior Basin

Researchers are conducting an investigation entitled "Geologic Screening Criteria for Sequestration of Carbon Dioxide in Coal." This program is approximately 56% supported by federal funds (U.S. Department of Energy) and 44% by the Geological Survey of Alabama, the University of Alabama, Alabama Power Company, and Jim Walter Resources, Inc.

Effective date: October, 2000

Goal: To quantify the potential for enhanced recovery of coalbed methane in the Black Warrior Basin by injection of carbon dioxide; and to develop a geologic screening model that is broadly applicable to North America and European coal basins.

Impact: This investigation is designed to determine the feasibility of using carbon dioxide extracted from coal-fired power plants for enhanced coalbed methane recovery. Coal can absorb approximately twice as much carbon dioxide as methane and is therefore a potential sink for greenhouse gases emitted from coal-fired power plants. Coalbed methane reservoirs are especially attractive sites for carbon sequestration because carbon dioxide can be used to sweep unrecovered methane. Therefore, carbon sequestration in coalbearing strata provides a basis for a market-based environmental solution that can result in expansion of natural gas reserves in coalbed methane fields by as much as 40%.

Severance Tax Reduction

The severance tax is defined as the privilege tax plus the production tax. The severance tax for oil and gas permitted on or after July 1, 1996, and before July 1, 1999, is reduced 50% from: production tax historically at 2% and the privilege tax historically as much as 8%. This bill gives a 50% tax break on both the privilege and the production tax from the commencement of production. The tax reduction now totals 1% production plus 3% privilege for the first five years of production.

Citation: Ala. Code § 40-20 (1975)

Effective dates: July 1, 1996, through July 1, 1999

Severance Tax Exemption

Extends the reduced rate of taxation to 1% for any well for which the initial permit issued by the Oil and Gas Board is dated on or after July 1, 1996, and before July 1, 2002, except a replacement well for which the initial permit is dated before July 1, 1996. This rate is in effect for a period of five years commencing with commercial production, after which the previous rate applies.

Citation: Ala. Code § 9-17-25(b) (1975)

Effective date: July 1, 1996; End date: July 1, 2002

Goal: Defray the expense connected with producing oil and gas.

ALABAMA (continued)

EXTENDED New Wells

Oil and gas wells permitted on or after July 1, 1996, and before July 1, 2002, except a replacement well for a well for which the initial permit was issued before July 1, 1996, are eligible for a privilege tax reduction. The rate reduction of 4% is applicable for a period of five years commencing with commercial production, after which the 6% rate applies. *Citation:* Act 96-277, House Bill No. 54; amends Ala. Code §§ 40-20-2(a) and 9-17-25 (1975)

Effective date: July 1, 1996

New Wells

Severance tax is reduced from 2% to 1%, and privilege tax is reduced from 8% to 4% for:

- Discovery oil wells;
- Development oil wells when drilling commenced within four years of the completion date of the discovery well, and oil is produced from a depth of 6,000 feet or greater;
- Development wells when drilling commenced within two years of the completion date of the discovery well, and oil or gas is produced from a depth of less than 6,000 feet.

This tax reduction applies for five years from the date production begins from these wells.

Citation: Ala. Code § 40-20-2(a)(4) (1975)

Effective date: July 1, 1984

Unit Operations

A reduction of the percentage required for ratification of a unit agreement was enacted by the legislation. This legislation reduces the percentage from three-fourths to two-thirds for ratification of a unit agreement under the terms of the allocation formula established by the State Oil and Gas Board and for ratification of an addition to the unit area. There has been no effectiveness study conducted.

Citation: 2000 Acts of Alabama 1714
Effective date: September 1, 2000
Goal: To encourage enhanced recovery.
Active supporters: State Oil and Gas Board

Eastern Gulf Subsalt Project, Geological Survey of Alabama

Investigators are conducting a research program called "Stratigraphic and Structural Framework of Subsalt Strata in the Mobile, Viosca Knoll (North), Pensacola and Destin Dome Areas of the Gulf of Mexico." This program is 50% supported by federal funds (Minerals Management Service) and 50% supported by the Geological Survey of Alabama.

Effective date: June 1999

Goal: To assess the hydrocarbon potential of ultra-deep Triassic strata from onshore areas in south Alabama and the Florida panhandle to the DeSoto Canyon salt basin.

Impact: Results from petrographic and petrophysical analysis of wells in onshore areas indicate that some sandstone units have porosity exceeding 20% at depths greater than 17,000 feet. In offshore areas, subsalt strata are imaged below broad salt pillows in

ALABAMA (continued)

seismic reflection data sets. Stratal geometries suggest development of deep rift valley lake facies with significant hydrocarbon source-rock and reservoir potential. Possible trapping geometries include structural traps associated with rift structure and angular unconformity traps sealed by salt.

Coalbed Methane Fracture System Study, Geological Survey of Alabama

Researchers are conducting an investigation entitled "3-D Characterization of Natural and Induced Fractures in Coalbed Methane Reservoirs in the Black Warrior Basin in Alabama." This program is approximately 80% supported by federal funds (Environmental Protection Agency) and 20% supported by the Geological Survey of Alabama.

Effective date: September 2000

Goal: To quantify the effects of hydraulic fracturing and water production in coalbed methane wells on domestic groundwater supplies using advanced reservoir modeling software.

Impact: This investigation will be the first to apply Discrete Feature Network (DFN) technology to model the flow of water in coalbed methane reservoirs. This study is intended to identify boundary conditions that facilitate coalbed methane operations while protecting shallow aquifers. Key variables to be incorporated in the model include natural fracture architecture, induced fracture geometry, the distribution of completed zones and well spacing.

Royalty Payment

Increases the minimum royalty payment threshold to \$100.

Citation: S.B. 92; Act 99-396

Marginal/Stripper Wells

Privilege tax is reduced from 8% to 6% of value on wells producing 25 barrels of oil or less per day, or 200 Mcf per day of natural gas.

Citation: Ala. Code §§ 40-20-1 and 2(a) (1975)

Effective date: 1985

Enhanced Recovery

Severance tax is reduced to 6% of value on any oil well produced or developed from a qualified enhanced recovery project. The State Oil and Gas Board of Alabama approves the projects and calculates "incremental production" by determining a base production rate. Incremental production for the project is production over that base rate. Incremental natural gas from a qualified enhanced recovery project is taxed at a reduced rate of 4%.

Citation: Ala. Code § 40-20-1 § 40-20-2(a)(2) (1975)

Effective date: May 1, 1985

Offshore Deep Wells

A privilege tax reduction to 4% for offshore wells permitted after July 1, 1998, and a borehole depth greater than 18,000 feet. A privilege tax reduction to 6% for offshore wells permitted before July 1, 1988, with a borehole depth greater than 18,000 feet. The wells must be drilled offshore in state waters. All new wells drilled after July 1, 1988, qualify for a privilege tax reduction to 6%.

ALABAMA (continued)

Effective date: July 1, 1988; no sunset. Citation: Ala. Code § 40-20-2(a)(5)(1975)

Discovery Wells

Privilege tax reduction for discovery wells found after July 1, 1984. A tax reduction of 6% for qualifying discovery wells for up to five years from production date. Replacement wells for discovery wells also qualify for remainder of the five-year period. All new wells drilled after July 1, 1984, qualify for a privilege tax reduction to 6%.

Citation: Ala. Code § 40-20-2 (1975)

Effective dates: July 1, 1984; five years from production date.

Core and Sample Library, Geological Survey and State Oil and Gas Board

The Geological Survey of Alabama maintains a core and well sample library that includes cuttings from 4,000 oil and gas wells, core from 1,700 oil and gas wells, cuttings from 2,800 water and stratigraphic test wells and core from 350 industrial mineral core holes. Rules and regulations of the State Oil and Gas Board require that exploration companies submit cores and drill cuttings following the completion of wells. Rule 400-1-3-.10 of the Code of Alabama 1975 states in part that "A complete set of cuttings, correctly labeled and identified as to depth, shall be filed with the Board within 30 days from the time of completion of any well unless otherwise approved by the Supervisor. If cores are taken, a complete set of cores, either whole or at least quarter slabs, correctly labeled and identified as to depth, shall be filed with the Board within six months from the time of completion of any well unless otherwise approved by the Supervisor." The facility has four viewing rooms for use by operators and researchers.

Goals: To encourage oil and gas production by making useful data available to producers. Counteract the loss of infrastructure in the independent industry.

ALASKA

Cook Inlet Royalty Reduction

Firms shall pay a royalty of 5% on the first 25,000,000 barrels (25 mmbls) of oil and the first 35,000,000 Mcf of gas (35 Bcf) produced for sale from that field that occurs 10 years following production. Production must begin prior to January 1, 2004. Fields eligible are Falls Creek, Nicolas Creek, North Fork, Point Starichkof, Redoubt Shoal and West Foreland.

Citation: Alaska Stat. 38.05.180(f)

Effective date: August 8, 1998 *End date:* Ten years after production begins. Production must begin prior to January 1, 2004.

Goal: To initiate production from undeveloped or shut-in oil and gas fields in the Cook Inlet that were discovered prior to January 1, 1998, and have been undeveloped or shut-in from at least December 31, 1997.

Active Supporters: Industry and Legislature

Areawide Lease Sales

Provide an established time each year that acreage within a geographical region will be available for lease. This will increase the number of lease sales conducted by the state.

ALASKA (continued)

Effective date: January 1, 1997 End date: Ongoing

Impact: The first North Slope areawide lease sale brought \$52 million in bonus bids, making it the fourth-largest sale in state history. The state has held areawide lease sales every year since 1998. North Slope areawide and Beaufort Sea areawide sales occur annually in October. Cook Inlet areawide sales occur annually in May.

Goal: To allow companies to plan and develop their exploration strategies and budgets years in advance. This will result in more efficient exploration and earlier development of oil and gas resources.

Active Supporters: Industry, Gov. Tony Knowles, Legislature

Impact: The first North Slope areawide lease sale brought in \$52 million in bonus bids, making it the fourth-largest sale in state history.

Stranded Gas Development Act

This is not a strict incentive but rather an authorization for redesign of portions of Alaska's tax system. The law authorizes the Commissioner of Revenue, via an application process, to negotiate contracts with project sponsors to provide fiscal terms to improve the economic feasibility of developing Alaska's stranded gas resources for a liquefied natural gas export project. It allows fiscal arrangements to be tailored to the specific economics of a project. Those arrangements must be consistent with the long-term fiscal interests of the state. The state's 12.5% royalty share may or may not be changed.

Goal: To develop Alaska's North Slope gas reserves for a liquified natural gas (LNG) export project.

Supporters: The legislation was submitted by the governor of Alaska. It is supported by the Alaska Legislature and by private industry.

Note: This act contained an application deadline. Alaska Stat. 43.82.170 prohibits action on an application unless the application was received by June 30, 2001. Without further action by the Legislature, this relief is no longer available.

Stranded Gas Pipeline Carriers

Gov. Knowles signed CSHB 290 into law, effective August 9, 2000. This law restricts common carrier status of a North Slope natural gas pipeline to intrastate transportation.

Citation: CSHB 290

Effective date: August 9, 2000

Goals: To free export shippers of North Slope natural gas from the common carrier requirement to accept all tendered volumes of natural gas.

Impact: The guarantee of pipeline capacity for an LNG export project is an incentive for developers of natural gas that is now stranded on the North Slope.

Economic Limit Factor

The severance tax rates for oil and gas are reduced by a field's Economic Limit Factor (ELF). During the life of a field, production income diminishes while some operating costs remain fixed. At some point, total operating costs, royalties and production taxes, will exceed gross revenue and the field may be shut in. This is called the economic limit. As production diminishes, the tax rate on the field also decreases. The ELF provides for lower tax rates based on daily per well production and the productivity of the field.

Citation: Alaska Stat. 43.55.012

Effective date: 1989

ALASKA (continued)

Goals: To keep fields in production as they decline and encourage operators to drill development wells.

Impact: Severance tax rate is effectively zero for the smaller oil fields in Alaska.

Shallow Gas Leasing

Over-the-counter leases are available specifically for the development of coalbed methane and shallow (less than 3000 feet) gas sands. There is no bonus payment to the state and annual rental payments are kept at 50 cents per acre. A reduced royalty of 6.25%, rather than 12.5%, applies if the shallow gas is sold to a local utility. The royalty reduction applies only if the shallow gas is not in direct competition with higher royalty, deeper gas.

The bond requirement is \$25,000, rather than \$1 million for other gas drilling.

Citation: Alaska Stat. 38.05.177

Effective date: Adopted July 1996, no sunset

Goal: To locate local sources of gas that can be delivered to consumers in remote areas at less cost than alternative energy sources.

Active Supporters: Industry, native corporations and rural utilities

Impact: The state held its first noncompetitive Shallow Gas Lease Offering on February 29, 2000. Thirty-six applicants submitted 263 lease applications.

Exploration Incentive Credit

Operators drilling on <u>state lands</u> may earn Exploration Incentive Credit (EIC) based on footage drilled and the region in which drilling takes place. Credits may be as high as 50% of eligible costs if performed on state land, and as high as 25% of eligible costs if performed on federal land or private land. Work must be performed within two years of the lease sale, and geophysical data from these activities must be made public after the sale.

Citation: Alaska Stat. 38.05.180(i) Effective date: November 9, 1979

Goal: To encourage exploration on state land.

Impact: Two applications are pending in the Copper River Basin.

The Commissioner of Natural Resources may grant an EIC for exploratory drilling, stratigraphic test well drilling, and for geophysical work on other lands within the state (this includes federal as well as private land owned by Native Alaskan regional corporations formed under the Alaska Native Claims Settlement Act). Wells must be drilled three or more miles from another well or within three miles of an oil or gas well when the commissioner finds that they are drilled in separate exploration targets. Credits may be as high as 50% for wells drilled on federal land, and 25% for wells on private land. The amount of drilling credits is based on feet drilled. Exploration data remains confidential for two years. The amount of credit may not exceed \$5 million per project, and the total of credits may not exceed \$30 million.

Citation: Alaska Stat. 41.09.010

Effective dates: July 7, 1994, through July 7, 2004

Goals: To encourage exploration in remote parts of the state and to provide a means for the state to obtain exploration data from state, federal and certain private lands.

Active Supporters: Division of Oil and Gas, Department of Natural Resources and industry

Impact: Not yet known.

ALASKA (continued)

Exploration License Program

The Exploration License Program (ELP) offers large unexplored areas of Alaska for exploration. The license confers the exclusive right to explore, for up to 10 years, areas between 10,000 and 500,000 acres in size. Applicants bid on the license, and the applicant willing to spend the most on exploration wins the license fee. No licensee may hold more than 2 million acres under license at any given time.

Citation: Alaska Stat. 38.05.131-134

Effective date: 1996

Goal: To encourage exploration in Alaska's interior and unexplored areas (not applicable to the Alaskan North Slope or Cook Inlet, which are known oil and gas provinces).

Impact: The state has received two proposals for the Copper River Basin and a license may be awarded by August 2000. The state is currently reviewing two license proposals for the Susitna Basin area.

Cook Inlet Discovery Royalty

Permits the granting of discovery royalty for wells in the Cook Inlet Sedimentary Basin that have discovered oil or gas in a previously undiscovered oil or gas pool, provided the wells are capable of producing in payable quantities. The discovery royalty is set at 5% for 10 years following the date of discovery.

Citation: Alaska Stat. 38.05.134

Effective date: July 1996

End date: Ongoing

Goal: To encourage exploration for oil and gas in the Cook Inlet.

Active Supporters: Alaska Legislature, small Cook Inlet exploration and production firms.

Royalty Reduction

If a delineated field or pool has not previously produced, the royalty can be lowered to 5%. The royalty may be reduced to 3% in an existing producing field or pool in order to prolong its economic life as costs per barrel increase. The royalty may also be reduced to 3% to establish production of shut-in oil or gas.

Citation: Alaska Stat. 38.05.180

Effective dates: July 1995 through July 1, 2015

Goal: To encourage otherwise uneconomic production of oil and gas.

Active Supporters: Industry, Department of Natural Resources' Division of Oil and Gas.

ARIZONA

Property Tax Reduction

The Property Tax Reform and Reduction Act, passed by the 42nd Legislature in July 1996, reduced the property tax assessment ratio for all real and personal property used by producing oil, gas and geothermal interests to 28% of full cash value from 100%. The tax rate will decrease an additional 1% per year until holding at 25% in 1999 and thereafter.

Citation: A.R.S. 42-15001

Effective date: 1996 tax year; no sunset

Goals: To provide tax equity for oil, gas and geothermal interests, and to encourage leasing and exploration activity.

ARKANSAS

Active supporters: Paul Slayton, Mountain States Petroleum; John Somers, High Plains Petroleum; Arizona Oil and Gas Conservation Commission; Arizona Geological Survey *Impact*: The tax assessment ratio reduction is effective in achieving tax equity.

Marginal Wells

Severance tax is reduced from 5% to 4% for marginal wells, which are defined by the state as wells which produce an average of less than 10 barrels of oil per day (BOPD) during any calendar month.

Effective date: February 25, 1983; no sunset

Act 1093 of 1995 provides severance tax relief to certain projects designed to increase oil production in Arkansas:

1. Idle Wells

Inactive oil wells (no production for 12 consecutive months) that are restored and re-established as producing wells are exempted from severance taxes for 10 years from the date of renewed production.

Citation: Ark. Stat. 15-72-1002

2. Idle Fields

An inactive oil field that is later returned to production shall be exempted from severance taxes for oil produced from all zones, horizons and formations that were once productive but have ceased to produce.

Citation: Ark. Stat. 15-72-1002

3. Enhanced Oil Recovery

Enhanced recovery projects approved by the Oil and Gas Commission are entitled to a 50% reduction in severance taxes for the incremental volume of oil attribut able to the project.

Citation: Ark. Stat. 15-72-1001

4. New Technologies

Incremental production due to application of new research technologies approved by the Oil and Gas Commission is exempt from severance tax.

Citation: Ark. Stat. 15-72-1003

Effective date of Act 1093: April 10, 1995; no sunset

Goals: To provide an incentive to continue production from wells that have reached their economic limit, to encourage re-establishment of production from idle wells and to encourage initiation of enhanced recovery activities to maximize recovery of oil.

Impact: Because few operators have taken advantage of this program, it has been only moderately effective.

Discovery Gas Wells

The volume for discovery gas wells was increased from 50% to 75% of Absolute Open Flow. This change affects only newly discovered fields or zones discovered in existing fields that are deeper than any previous production in the field.

Citation: Arkansas Amendment to Rule D-16, Order Reference No. 74-94

Effective date: October 25, 1994; no sunset

Goal: To encourage exploration for and discovery of new gas sources in the Arkoma Basin. Active supporters: SEECO, Inc. (filed the petition for the amendment), Thomas C. Mueller,

and Samson Resources Company.

Impact: No new discoveries have been made since the adoption of this rule change.

Financial Responsibility

An amendment to an oil and gas rule reduces operator financial responsibility from \$15,000 to at least \$3,000 for each Intent to Drill or change of operator.

Citation: Amendment to Rule B-2, Order Reference 27-95

Effective date: June 21, 1995; no sunset

Goal: To increase exploration and drilling activity in Arkansas.

Active supporters: Oil and gas operators, Arkansas Oil and Gas Commission.

Impact: The lowering of this requirement is thought to have helped bring new oil and gas operators to Arkansas.

Services

Severance tax credit for saltwater disposal costs is available for production from wells that produce both oil or gas and saltwater. Costs include depreciation of cash investment, maintaining and improving the system, costs of services, labor, supplies, utilities and other operating expenses.

Citation: Ark. Code Subchapter 2, 26-58-200 through 211

Effective date: June 11, 1969; no sunset

CALIFORNIA

Active, Idle, and Orphan Wells

In response to the growing number of idle and orphan wells, bonding levels for active and long-term idle wells and idle well fees were increased to provide more financial assurance and more funding to plug existing orphan wells. Such resources are needed to cover costs the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (Division) incurs for orphan well plugging and abandonment, and remediation of hazardous conditions. In addition, operators can provide idle well management options in lieu of the above bonding and fee requirements.

The Division's orphan well plugging fund doubled to \$1 million a year beginning July 1, 1999, before dropping back to \$500,000 per year commencing July 1, 2005. The additional funds will help eliminate the state's current orphan well inventory.

Citation: §§ 3008, 3202, 3204, 3205, 3205.5, 3206, and 3258. Public Resources Code Effective date: January 1, 1999

Goals: To provide funding for the state to plug and abandon orphan wells, encourage idle well management and eliminate environmental and safety hazards.

Idle and Orphan Wells

California provides a 10-year abeyance of the assessment on oil and gas produced from orphan wells and wells that have been idle for five (5) or more years when they are re

CALIFORNIA (continued)

turned to productive status. Furthermore, the State Oil and Gas Supervisor may permit an operator to evaluate the economic viability of an orphan well for 90 days without having to provide bond coverage or assume plugging responsibility for the "adopted" orphan well.

Citation: § 3238, Public Resources Code

Effective date: January 1, 1997; no sunset

Goals: To resume production from idle and orphan wells, reduce the state's orphan well-plugging costs, increase the energy supply, eliminate environmental and safety hazards, create tax revenue, and produce jobs.

Impact: Positive response; nearly 1.2 million barrels of oil were exempted from the oil and gas assessment for 1999.

Services

Natural gas used on-site for pressure-maintenance or other producing operations is exempt from assessment.

COLORADO

Marginal/Stripper Wells

Oil wells producing less than 10 BOPD are exempt from severance tax. A tax credit is available for 87.5% of ad valorem tax.

Citation: Colo. Rev. Stat. § 39-29-105

Effective date: January 1, 1985; no sunset

Active supporters: The Rocky Mountain Oil and Gas Association (RMOGA) drafted and supported this legislation.

Levy Reduction and Fee Eliminations

In an effort to encourage more effective land and soil reclamation, rules were promulgated to address concerns related to permitting, surface owner notification, site preparation and interim and final reclamation. Elimination of 0.2 mills of environmental response fund levy, all drilling permit fees, recompletion permit fees, pit and other environmental permit fees, change of operator fees, hearing fees and reduction in conservation fund levy. *Citation:* Reclamation Rules (300-Series, 800-Series, 1000-Series, 1100-Series)

Tax Offset

Severance taxes in Colorado are imposed on up to 5% of the gross income at the well-head, with a credit granted for a portion of ad valorem taxes paid. The net result is approximately a 1% tax rate on gross production.

Effective date: January 1, 1978; no sunset

Secondary/Tertiary Recovery

Oil and gas leasehold and lands employing secondary/tertiary recovery or recycling projects are assessed at 75% of the annual gross production value.

Citation: Colo. Rev. Stat. § 39-7-102(2)(a) and (b)

Effective date: January 1, 1978; no sunset

Goal: To conserve and avoid waste of oil and gas.

COLORADO (continued)

Active supporters: RMOGA drafted and supported this program.

Impact: RMOGA believes this incentive has increased the efficiency of oil recovery through the application of secondary and tertiary recovery and recycling techniques.

Prohibition Against Additional Taxes

Municipalities and counties may not consider oil and gas wells and their related facilities as a business or occupation for the purpose of imposing an occupational privilege tax.

Citation: H.B. 1045 (1996)

Effective date: April 17, 1996; no sunset

Active supporters: RMOGA and Colorado Oil and Gas Association

Impact: RMOGA's membership believes this legislation has been extremely effective.

FLORIDA

Exemptions for New Fields, Old Wells and Shut-in Wells

This incentive encourages producers to drill wells in new fields, rework old wells and open shut-in wells by granting exemptions from tax on production from these type wells for a period of four to five years.

Citation: Fla. Stat. 211.027

Effective dates: July 1, 1997; ends 48 months to 60 months after start date

Goal: To encourage and increase oil production.

Deep Wells

Oil or gas produced after July 1, 1997, from wells at least 15,000 feet deep is exempt from production taxes for 60 months after completion date. No new exemptions will be granted after June 30, 2002.

Citation: Fla. Stat. Title XIV, § 211.02, and Chapter 86-178, Laws of 1986

Effective dates: July 1, 1996, through June 30, 2007

New Wells

Production from new oil or gas wells in an existing field established before July 1, 1997, is exempt from severance taxes for 48 months after completion. No new exemptions will be granted after June 30, 2002.

Citation: Fla. Stat. Title XIV, § 211.02, and Chapter 86-178 (1986)

Effective dates: July 1, 1996, through June 30, 2007

New Fields

Production from oil or gas wells drilled in a new field after July 1, 1997, is exempt from production taxes for 60 months after completion.

Citation: Fla. Stat. Title XIV, § 211.02, and Chapter 86-178 (1986)

Effective dates: July 1, 1996, through June 30, 2007

Marginal/Stripper Wells

Severance tax is reduced from 8% to 5% for oil wells producing less than 100 BOPD. Stripper gas is taxed at \$0.12 Mcf.

Citation: Fla. Stat. Title XIV, § 211.02, and Chapter 86-178 (1986)

FLORIDA (continued)

Effective date: July 1, 1986; no sunset

Idle Wells

Wells idle for two years or more prior to July 1, 1997, are exempt from production taxes for 48 months.

Citation: Fla. Stat. Title XIV, § 211.02, and Chapter 86-178 (1996)

Effective dates: July 1, 1996, through June 30, 2002

Horizontal Wells

Production from horizontal wells drilled after July 1, 1997, is exempt from severance taxes for 60 months after the completion date. No new exemptions will be granted after June 30, 2002.

Citation: Fla. Stat. 211.027

Tertiary Recovery

The severance tax rate is reduced from 8% to 5% for incremental production attributable to a tertiary recovery project.

Citation: Fla. Stat. Title XIV, § 211.02, and Chapter 86-178

Effective dates: July 1, 1996, through June 30, 2007

Services

Oil and gas produced and used on-site are exempt from severance taxes.

ILLINOIS

Illinois First

Illinois First is a statutory initiative granted by Gov. George Ryan and the Illinois Legislature with the purpose of enhancing transportation, public services, education and environmental infrastructure. The initiative includes \$10 million over five years to plug abandoned oil and gas wells.

Effective dates: July 1, 1999, through June 30, 2004

Goal: To plug abandoned oil and gas wells and clean up abandoned production facilities throughout the state.

Active supporters: Illinois Oil and Gas Association (IOGA) and area legislators from oil-producing counties in the state.

Note: This program has been successful.

Crude Oil Marketing and Education Act

This voluntary program is modeled after the Oklahoma Energy Resources Board. A tax of 1/10th of 1% of gross revenue of crude oil sales is collected into a fund. One-half of the fund is dedicated to abandoned oil field site cleanup and the remainder will fund energy education in public schools.

Effective date: July 1, 1998

Goal: To increase awareness of energy and oil issues among the general public, especially among school age children, and to clean up abandoned production sites.

Active supporters: IOGA.

ILLINOIS (continued)

Oilfield Equipment Sales Tax Relief

Oilfield equipment is exempt from sales tax.

Effective date: 1996; no sunset

Active supporters: IOGA, State Representative John O. Jones (R), State Senator Bill O'Daniel (D), and State Senator Harry "Babe" Woodyard (R).

Goal: To keep the Illinois oil and gas market viable and able to compete with other states and countries.

Impact: \$1 million per year savings to the oil industry, particularly small independent operators, is estimated.

Note: Illinois does not have a severance tax on oil or gas production.

INDIANA

Indiana currently has no oil or gas incentive programs. Severance tax on Indiana's oil and gas production is 1%.

KANSAS

Unitization

This act empowers the Kansas Corporation Commission (KCC) to unitize a pool upon request of a working interest owner under certain circumstances. First, the primary production from a pool has reached a low economic level and without introduction of artificial energy, abandonment of the well is imminent; or the unitized management sought is economically feasible and necessary to prevent waste. Second, the value of the estimated recovery is greater than the costs incident to conducting the recovery. Finally, the operation is fair and equitable. The act further establishes the rights of owners of oil and gas rights under unleased land as being a working interest to the extent of 7/8 interest and a royalty owner to the extent of 1/8 interest. The KCC can alter the extent of a royalty interest. Finally, the act states that it is the duty of the operator of the unit to file ad valorem taxes.

Citation: House Bill 2826 amending: K.S.A. 55-1304, K.S.A. 1999 Supp. 55-1305, K.S.A.

55-1308 and K.S.A. 55-1312 *Effective date:* March 30, 2000

Goals: Promote secondary operation / management standards for unitization.

Active supporters: Kansas Independent Oil and Gas Association (KIOGA), Kansas Petroleum Council (KPC), and the KCC.

• • •

Property Taxation

This act relates to the property tax valuation of oil and gas properties. Factors to be considered when assessing property taxes include the age of the well, quality of product produced, nearness to market, the cost of operation, the probable life of the well, character, extent and permanency of market, the quantity of product produced, the number of wells being operated, and other factors affecting the value of the lease. The act also establishes the method for calculating the property taxes.

Citation: House Bill 2823 amending: K.S.A. 79-331

Effective date: April 13, 2000

Goals: To change the oil/gas valuation method for county property tax purposes.

Active supporters: KIOGA, KPC and the KCC.

Refundable Income Tax Credit for Property Taxes Paid

Gov. Bill Graves signed legislation which provided an income tax credit to working interest owners equal to 75% of the 1998 personal property tax paid on the working interest of an oil lease, from which the average daily production per well is 15 barrels or less. The property tax must have been levied for property tax year 1998 and timely paid during the income tax year in which the credit is taken. By making the credit effective for the tax year beginning after December 31, 1997, immediate relief is available. For taxable years commencing after December 31, 1998, an income tax credit is allowed equal to 50% of the property tax paid for wells producing 15 barrels or less per day when the price per barrel is \$16 or less. The amount of the credit which exceeds the tax liability is refundable.

Citation: 1999 Kan. Sess. Laws, Ch. 154, New § 2

Effective date: May 27, 1999; no sunset

Impact: \$8.2 million immediately available to operators with continued future relief for

marginal wells when oil prices are \$16 or less.

Royalty Interests, Statute of Limitations on FERC-Ordered Refunds

The period of time during which first sellers of natural gas could commence a civil action against royalty interest owners to obtain refunds of reimbursements for ad valorem taxes on royalty interests during the years 1983 through 1988 was declared expired and the refund claims were deemed to be uncollectible. The Legislature reaffirmed that the Kansas five year statute of limitations found in K.S.A. 60-511 applied to these claims created when the Federal Energy Regulatory Commission (FERC), more than 15 years after its initial determination, reversed its long-standing policy that the Kansas ad valorem tax, which was based on production, was a severance tax and could be added to the maximum lawful price set by the NGPA at that time. FERC ordered first sellers to refund the amount of the ad valorem tax. This statute and that part of the FERC order relating to penalty and interest is under court challenge in both state and federal courts.

Citation: K.S.A. 55-1624 Effective date: April 30, 1998

Incremental Production

A severance tax exemption for a period of seven years is given to the incremental production resulting from a production enhancement project begun on or after July 1, 1998. Incremental severance and production is defined as production in excess of base production. Base production is the average monthly amount of production for the 12-month period immediately prior to the project beginning date, minus the monthly rate of production decline. The monthly rate of production decline would be determined with reference to the same 12-month period used to determine the base production. The monthly rate of production decline is the decline that would have occurred except for the enhancement project. The credit does not apply in any fiscal year if in the preceding calendar year the price exceeded, in the case of oil, \$20 per barrel; or, in the case of natural gas, \$2.50 per Mcf. Language was added to clarify the existing law to include wells

that have an established incline in production volumes and for wells that have had casing failures (or for other reasons lack production volumes) immediately prior to the enhancement project.

Citation: K.S.A. 1999 Supp. 79-4217

Effective date: July 1, 2000

Goal: To promote old wells producing after enhancements, through tax relief.

Active supporters: KIOGA, KPC and the KCC.

Marginal/Stripper Wells

The existing severance tax exemptions for marginal/stripper wells was expanded to increase exemptions and to allow for further increases in exemption amounts if oil prices decrease. The 2 BOPD exemption on oil produced from a lease or production unit increased to an average daily production of 5 BOPD. The 3 BOPD exemption for wells with a completion depth of 2,000 feet or more increased to an average daily production of 6 BOPD. Further exemptions were provided for if the price of oil decreases. Oil priced at \$16 or less now has a 7 BOPD exemption; should oil drop to \$13 per barrel, the exemption is 10 BOPD exemption. Tertiary recovery from a water flood process from wells of 2,000 feet or less now has a 6 BOPD exemption and wells in excess of 2,000 feet have a 7 BOPD exemption. The exemption is 10 BOPD if the oil price reaches \$14 per barrel. Tertiary recovery oil priced at \$16 or less now has an 8 BOPD exemption and \$14 oil would have a 10 BOPD exemption. The exemption for gas severed from a well having a gross value of not more than \$81 per day during a calendar month was increased to \$87.

Citation: K.S.A. 79-4217(b)(1) and (b)(2) Effective date: May 1, 1998; no sunset Goal: To prevent premature plugging of wells.

Idle Wells

The "Three Year Inactive Wells Act" allows a 10-year exemption from severance tax for inactive wells returned to production. To qualify, a well must have been inactive prior to July 1, 1993, and must have produced no more than one of the 36 months prior to filing with the KCC for approval. This bill applies only to wells placed back in production prior to July 1, 1996.

Citation: K.S.A. 79-4217(b)(5)

Effective dates: July 1, 1996, through July 1, 2006

Secondary/Tertiary Recovery

Incremental production resulting from a tertiary recovery process is exempt from severance and production taxes.

Citation: K.S.A. 79-4217

New Wells/New Pools

Production from new pools is exempt from severance tax for 24 months from commencement of production.

Citation: K.S.A. 79-4217(b)(4) Goal: To encourage exploration.

Impact: Industry spokesmen believe this is a very important exemption to Kansas' producers because it serves as a motivator for new exploration.

Natural Gas Severance Tax Reduction

Legislators enacted an annual stepped reduction in severance tax on natural gas from 7% to 4.33% over a three-year period. The final reduction took place in July 1996.

Citation: Kan. Sess. Laws Chapter 79, Article 4217

Effective date: July 1, 1994

Impact: The fact that natural gas has overtaken oil as Kansas' greatest-valued petroleum

product is in part attributable to incentives such as this one.

Services

Electricity and other utilities used in the severance of oil and gas are exempt from state sales tax.

Citation: Kan. Sess. Laws Chapter 79, Article 3606

Effective date: July 1, 1994; no sunset

Natural gas used in injection projects, for fuel in recovery operations, or from a well having an average daily production with a value not more than \$87, is exempt from severance and production tax.

Citation: Kan. Sess. Laws Chapter 79, Article 4217(b)(1)

Effective date: July 1, 1994; no sunset

Kansas Geological Survey

The Kansas Geological Survey (KGS) conducts research and provides information about the state's petroleum resources. The KGS conducts programs for the petroleum industry so the state will continue to enjoy the benefits of revenue generated by the industry. The KGS provides the petroleum industry with the benefits of research and information, much as the state land grant schools provide support to the agricultural industry.

Citation: Kan. Sess. Laws Chapter 76, Articles 322 through 326

Effective date: 1998

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Goal: To encourage the development of natural resources of economic value.

Active supporters: State legislative support exists.

Impact: Oil fields have been discovered based on KGS research. The KGS is widely recognized as being the source of much petroleum information and for its work on problems posed by the industry. The survey frequently appears before legislative committees in support of tax incentives and provides technical assistance to the industry.

Digital Petroleum Atlas, Kansas Geological Survey

This is a long-term program to develop a prototype digital petroleum atlas for the United States, starting with Kansas and extending into the adjoining mid-continent region. Extensive data sets about typical plays, details from pools in production, and technologies that have provided the most effective exploration, development, production and additional recovery efforts are assembled and provided to operators in digital form. Hard copies are also available. The program focuses on helping operators determine why pools produce and behave the way they do so that analog techniques can be used where appropriate, regardless of the age of the rock and geography of pool setting. Currently the program is 80% supported by federal funds and 20% supported by Kansas general funds.

Citation: Direct congressional appropriation, through the U.S. Department of Energy Effective dates: August 1995; new appropriation in 1996

Goals: To lower exploration and production costs and increase success rates by facilitating

technology and information transfer.

Petroleum Research Section (PRC), Kansas Geological Survey

The PRC conducts research and provides instructional services for the Kansas petroleum industry. It uses a wide variety of technologies and has a broad range of scientific interests. Most members of the section have industry experience. The section also operates the Kansas Well Core Library in Lawrence, which is open to the public.

Goal: To stem the decline in Kansas' oil production by providing research and petroleum data to the industry.

Impact: Reviews of the section's research and workshops have been very strong. The discovery of the Bluebell Field in Kansas has been attributed to work done by this group. The Petroleum Research Section is a national leader in making petroleum data available electronically, especially through the Internet.

University of Kansas Energy Research Center

The Kansas Geological Survey and the University of Kansas fund an integrated energy research program focused on petroleum. The Research Center coordinates information relating to ongoing petroleum research, and makes that information available to industry. *Goals:* To stimulate energy research and assist in gaining funding. To help maintain the Kansas energy industry.

Active supporters: Kansas Geological Survey and academic units of the University of Kansas, including the geology department and the Tertiary Oil Recovery Project. Impact: The program has contracted more than \$6.6 million in support of energy research. Many conferences and short courses have been held. The program integrates staff in 18 university departments that conduct energy research.

Technical Information Services for the Petroleum Industry

Through Technical Information Services, the Kansas Geological Survey provides public access to petroleum data, including scout tickets and well log data. The Well Sample Library in Wichita operates the sample cuts, archives well samples and makes these materials available to operators.

Effective date: 1987 (with earlier precursors)

Goals: To encourage oil and gas production by making useful data available to producers; counteract the loss of infrastructure in the independent industry.

Active supporters: Kansas Geological Survey.

KENTUCKY

Credit for Production From Recovered Inactive Oil Wells and Gas Wells

These two incentives give producers a credit on the 4.5% severance tax imposed on production from oil and gas wells that are brought back into production after having been inactive for two years, or plugged and abandoned.

Citation: KRS 137.132 and KRS 143A.033 Effective date: July 15, 1998; no sunset Goal: To recover inactive or abandoned wells.

Active supporters: Kentucky Oil and Gas Association, Kentucky Division of Oil and Gas.

KENTUCKY (continued)

Investigation of Abandoned Wells

This statute allows producers with a proper testing permit to test inactive wells for 60 days prior to posting bond for the well.

Citation: KRS 353.730

Effective date: July 15, 1998; no sunset Goal: To recover inactive or abandoned wells.

Active supporters: Kentucky Oil and Gas Association, Kentucky Division of Oil and Gas.

LOUISIANA

Act 2 of 1994

This act, re-enacting La. R.S. 47:633, reduced severance taxes on the following categories of wells in order to stimulate exploration and development:

1. Marginal Wells

Oil wells producing less than 10 barrels of oil per day are exempt from severance taxes during any month in which oil prices average less than \$20. When oil prices are greater than \$20 per barrel, severance tax is reduced by 75% to 3.125%. Wells producing more than 10 and less than 25 barrels of oil per day with at least a 50% saltwater cut are taxed at 6.25%, a 50% reduction.

Citation: La. R.S. 47:633, S.B. 31 (1994), La. R.S. Ann. of 1950, (renewed by Act 16 of 1996)

Effective dates: July 1994 through June 30, 2003

2. Horizontal/New Discovery/Deep Gas or Condensate Wells

Severance taxes for oil or gas from horizontally drilled wells or recompletions, certified new discovery oil and natural gas wells, and gas or condensate produced from wells drilled to at least 15,000 feet are suspended from the date of first production for a period of 24 months (extended in 1996 Act 16 and in 1998 Act 7), or until payout of the well cost, whichever comes first. Payout of the well cost shall be determined by the Department of Natural Resources. To be eligible, new discovery wells must be completed in a new reservoir before September 30, 2000.

Citations: Act 2 (S.B. No. 31); S.B. 32, amending La. R.S. Ann. 47:633(7)(c)(iv)(a) and 648.2(1)(c), La. R.S. Ann. of 1950; 1996 Act 16

Effective date: July 7, 1994; no sunset

Goals: To encourage horizontal, new and deep well drilling. This is consistent with the public policy of Louisiana to promote economic growth and revitalize and stimulate the petroleum industry, which is in decline due to world markets and trends. Active supporters: Governor's Energy Committee.

Impact: According to a study by the Louisiana State University Center for Energy Studies, the program has been marginally effective in meeting its goals. Many of the new discoveries are deep wells that also qualify for reduced severance tax under Act 2 of 1994.

Produced Water Injection

To help accomplish the objective of reducing the discharge of produced water and

LOUISIANA (continued)

to help ease the tremendous financial burden placed on the oil and gas industry, it is the purpose of this section to provide an economic incentive to producers of oil and gas by allowing them to realize a severance tax savings (20% on incrementally produced oil and gas) if they inject produced water into an oil or gas reservoir for the purpose of increasing the recovery of hydrocarbons.

Citation: La. R.S. 47:633.5

Orphan Well Plugging

Act 404, passed by the Legislature in 1993 and amended by Act 297 of 1995, establishes an orphan well plugging and site restoration fund, which is overseen by an Oil Field Site Restoration Committee. This fund receives monies from a \$10 annual fee per non-producing well (except temporarily abandoned or saltwater disposal wells in stripper fields) and a production fee totaling \$0.01 per barrel of oil or condensate and \$0.002 per Mcf of gas. The bill also provides that at the time of property transfer, a site-specific trust account may be established to provide funds for site restoration. These accounts are based on an assessment of the full cost of restoration following a detailed review of site conditions and disclosure of known problems by the seller. Once established, the accounts remain with the site through subsequent property transfers. If an account is established and fully funded, the transferring party is not held liable by the state for future restoration costs. The 1995 amendment provides that contractors bidding on plugging and site restoration projects shall take the salvage value of equipment left on-site into account in making a bid. *Citation:* 1993 La. Act 404; amended by 1995 La. Act 297

Tertiary Recovery

No severance tax shall be due on production from a qualified tertiary recovery project approved by the Secretary of the Department of Natural Resources until the project has reached payout. Payout is calculated from the total of production from investment costs; expenses particular to the tertiary project, not to include charges attributable to primary and secondary operations on that reservoir; and interest at commercial rates.

Citation: La. R.S. Ann. 47:633.4

Effective date: July 12, 1984; no sunset

Goals: To provide an economic incentive to producers to invest in tertiary recovery projects to enhance Louisiana's crude oil production, to the ultimate benefit of the state and the people.

Active supporters: Oil and gas industry, legislative leaders.

Impact: Enhanced oil recovery projects have taken place, but it is unknown how many would have taken place in the absence of an incentive. One large project is currently active. Industry investment in the project is approximately \$30 million. While the effectiveness of the program has not been studied, analysis of statistics from the Louisiana Department of Natural Resources and Department of Revenue and Taxation would be informative.

Marginal Gas Wells

Gas wells producing less than 250 Mcf per day are taxed at a reduced rate of \$0.013/Mcf. *Citation*: La. R.S. 47:633

MARYLAND

There are currently no oil or gas incentive programs in Maryland.

MICHIGAN

Marginal/Stripper Wells

Severance taxes are reduced from 6.6% to 4% for production from stripper oil wells. The severance tax rate for all gas production is 4%. Stripper oil wells are defined by the state as wells with an average maximum daily production less than or equal to 10 BOPD. Production from marginal oil properties receives the same reduction when average per well production is:

- 20 BOPD or less for properties with average completion depths greater or equal to 2,000 feet but less than 4,000 feet;
- 25 BOPD or less for properties with average completion depths greater or equal to 4,000 feet but less than 6,000 feet;
- 30 BOPD or less for properties with average completion depths greater or equal to 6,000 feet, but less than 8,000 feet;
- 35 BOPD or less for properties with average completion depths of at least 8,000 feet.

Citation: 1929 Mich. Pub. Acts 48

Effective date: March 19, 1996; no sunset

Goal: To increase well life and volume of production.

Active supporters: Petroleum industry and Michigan state government.

Impact: This program encourages marginal and stripper wells to produce and not be

plugged and abandoned.

Note: The Michigan Court of Appeals, on July 23, 1996, held in an unpublished case that severance tax is not due on gas used on-site to purify gas, as purification costs are part of the costs of production. This decision is favorable to oil and gas producers.

MISSISSIPPI

Enhanced Oil Recovery

Reduces the assessed tax rate to 3% of the value of the oil produced by an enhanced oil recovery method in which carbon dioxide is used when transported by a pipeline to the oil well, has been expanded to include any other enhanced oil recovery method approved and permitted by the State Oil and Gas Board on or after April 1, 1994.

Citation: Miss. Code Ann. § 27-25-503 (1) (2001)

Effective date: April 1, 1994; no sunset

Goal: To encourage the use of enhanced recovery methods of production.

Active supporters: Mississippi Independent Producers and Royalty Owners Association

(MIPRO) and Mid-Continent Oil and Gas Association (MCOGA).

Impact: Believed to have increased the use of enhanced oil recovery techniques.

MISSISSIPPI (continued)

Discovery Wells

Oil or gas produced from a discovery well for which drilling commenced on or after April 1, 1994, but before July 1, 1999, shall be exempt from taxes for five years. This exemption begins on the date of first sale of production for oil, and the earlier of one year from completion or the date of first sale for natural gas wells. This exemption applies to oil provided the price does not exceed \$25 per barrel, and applies to natural gas provided the price does not exceed \$3.50 per 1,000 cubic feet. Any such production for which a permit was granted by the Mississippi State Oil and Gas Board and drilling commenced before July 1, 2003, shall be exempt for five years, notwithstanding that this exemption shall be repealed from and after July 1, 2003.

Citation: Miss. Code Ann. § 27-25-503 (3) (a), § 27-25-703 (5) (a) (2001) Effective dates: April 1, 1994, through July 1, 1999; expires July 1, 2003

Goal: To encourage the drilling of discovery wells.

Active supporters: MCOGA and MIPRO.

Oil or gas produced from a discovery well for which drilling commenced on or after July 1, 1999, shall be assessed at the rate of 3% for five years. The assessment at this rate shall begin on the date of the first sale of production for oil, and the earlier of one year from completion or the date of first sale for natural gas wells. This reduced tax rate applies to oil provided the price does not exceed \$20 per barrel, and applies to natural gas provided the price does not exceed \$2.50 per 1,000 cubic feet. Any such production for which a permit was granted by the Mississippi State Oil and Gas Board and drilling commenced before July 1, 2003, shall be assessed at the reduced rate for five years, notwithstanding that this provision shall be repealed from and after July 1, 2003.

Citation: Miss. Code Ann. § 27-25-503 (3) (b), § 27-25-703 (5) (b) (2001)

Effective dates: July 1, 1999, through July 1, 2003

Goal: To encourage the drilling of discovery wells.

Active supporters: MCOGA and MIPRO.

Impact: Drilling is reported to have increased 100% since this program became effective. This incentive also conveys to the industry a positive attitude on the part of the State of Mississippi and has resulted in considerable cost savings to producers.

Development Wells or Replacement Wells Drilled In Connection With Discovery Wells

Production from a development or replacement well drilled in connection with the drilling of a discovery well shall be assessed at a rate of 3% for three years. This applies to oil from wells for which drilling commenced on or after January 1, 1994, but before July 1, 1999, and for natural gas produced from wells for which drilling commenced after January 1, 1994. This reduced rate begins on the date of first sale of production for oil, and the earlier of one year from completion or the date of first sale for natural gas wells. Any such production for which a permit was granted by the Mississippi State Oil and Gas Board and drilling commenced before January 1, 2003, shall be exempt for three years, notwithstanding that this exemption shall be repealed from and after January 1, 2003.

Citation: Miss. Code Ann. § 27-25-503 (3) (a), § 27-25-703 (5 (a) (2001)

Effective dates: January 1, 1994, through July 1, 1999, for oil; January 1, 1994, for natural gas; expires on January 1, 2003, for both oil and natural gas.

Goal: To encourage the drilling of development wells to increase production and reserves. Active supporters: MCOGA and MIPRO.

MISSISSIPPI (continued)

Impact: This program is thought to have been effective in encouraging drilling development wells by improving the economics of the well project.

Production from a development or replacement well drilled in connection with the drilling of a discovery well shall be assessed at a rate of 3% at the point of production for three years. This applies to oil and natural gas from wells for which drilling commenced on or after July 1, 1999. Any such production for which a permit was granted by the Mississippi State Oil and Gas Board and drilling commenced before July 1, 2003, for oil and January 1, 2003, for natural gas, shall be assessed at this reduced rate for three years, notwithstanding that this reduced rate shall be repealed from and after January 1, 2003. *Citation:* Miss. Code Ann. § 27-25-503 (3) (b), § 27-25-703 (5 (b) (2001)

Effective dates: July 1, 1999, through July 1, 2003, for oil; July 1, 1999, through January 1, 2003 for natural gas

Goal: To encourage the drilling of development wells to increase production and reserves. *Active supporters:* MCOGA and MIPRO.

Impact: Encourages drilling development wells by improving the economics of the project.

Development Wells Utilizing 3-D Seismic

Oil or gas production from a development well utilizing three-dimensional seismic for which drilling commenced on or after April 1, 1994, but before July 1, 1999, shall be assessed at the rate of 3% at the point of production for five years. This reduced tax rate applies to oil provided the price does not exceed \$25 per barrel, and applies to natural gas provided the price does not exceed \$3.50 per 1,000 cubic feet. Any such production for which a permit was granted by the Mississippi State Oil and Gas Board and drilling commenced before July 1, 2003, shall be taxed at the reduced rate for five years, notwithstanding that this provision shall be repealed from and after July 1, 2003.

Citation: Miss. Code Ann. § 27-25-503 (4) (a), § 27-25-703 (6) (a) (2001) Effective dates: April 1, 1994, through July 1, 1999; expires on July 1, 2003

Goal: To encourage the use of 3-D seismic technology in development drilling.

Active supporters: MCOGA and MIPRO.

Impact: This incentive is believed to have contributed to the increased use of 3-D seismic technology in Mississippi.

Oil or gas production from a discovery well utilizing three-dimensional seismic for which drilling commenced after July 1, 1999, shall be assessed at the rate of 3% at the point of production for five years. This reduced tax rate applies to oil provided the price does not exceed \$20 per barrel, and applies to natural gas provided the price does not exceed \$2.50 per 1,000 cubic feet. Any such production for which a permit was granted by the Mississippi State Oil and Gas Board and drilling commenced before July 1, 2003, shall be assessed at the reduced rate for five years, notwithstanding that this provision shall be repealed from and after July 1, 2003.

Citation: Miss. Code Ann. § 27-25-503 (4) (b), § 27-25-703 (6) (b) (2001)

Effective dates: July 1, 1999, through July 1, 2003

Goal: To encourage the use of 3-D seismic technology in development drilling.

Active supporters: MCOGA and MIPRO.

Impact: This incentive is believed to have contributed to the increased use of 3-D seismic technology in Mississippi.

MISSISSIPPI (continued)

Inactive Wells Exemption

Oil or gas produced before July 1, 1999, from a well inactive for two years, shall be exempt from taxes for three years beginning on the date of first sale of production. This exemption applies to oil provided the price does not exceed \$25 per barrel, and applies to natural gas provided the price does not exceed \$3.50 per 1,000 cubic feet. Any such production which began before July 1, 2003, shall be exempt for three years, notwithstanding that this provision shall be repealed from and after July 1, 2003.

Citation: Miss. Code Ann. § 27-25-503 (5) (a), § 27-25-703 (7) (a) (2001) Effective dates: Wells drilled prior to July 1, 1999; expires on July 1, 2003

Oil or gas produced on or after July 1, 1999, from a well inactive for two years, shall be exempt from taxes for three years beginning on the date of first sale of production. This exemption applies to oil provided the price does not exceed \$20 per barrel, and applies to natural gas provided the price does not exceed \$2.50 per 1,000 cubic feet. Any such production which began before July 1, 2003, shall be exempt for three years, notwith-standing that this provision shall be repealed from and after July 1, 2003.

Citation: Miss. Code Ann. § 27-25-503 (5) (b), § 27-25-703 (7) (b) (2001)

Effective dates: July 1, 1999, through July 1, 2003

Marginal Wells

The owner of a marginal well shall be entitled to a refund of two-thirds of the taxes paid monthly on oil produced from such well if the average monthly sales price of oil produced from such well does not exceed \$12 per barrel. This incentive lowers the severance tax from 6% to 2%. Eligible wells are those producing 20 barrels per day or less from depths of up to 7,500 feet, and wells producing up to 40 barrels per day from depths greater than 7,500 feet. To receive the refund, the owner shall present the State Tax Commission with a statement from the State Oil and Gas Board certifying that the well is a marginal well. The State Tax Commission shall then determine the average monthly sales price of the oil sold from such well. The definition of a marginal well is determined by the State Oil and Gas Board.

Citation: Miss. Code Ann §27-25-503 (6) (2001)

Effective date: Expires July 1, 2003

Carbon Dioxide Reductions and Exemptions

As noted above under **Enhanced Oil Recovery**, there is a reduction in the rate of the privilege tax to 3% for oil leases using enhanced production methods in which carbon dioxide is used. This appears in Miss. Code Ann. § 27-25-503.

Mississippi law also provides that gas, including carbon dioxide, used for purposes of injection shall be exempt from the state's 6% privilege tax. This exemption only applies to carbon dioxide to be used for enhanced oil recovery projects within the state of Mississippi.

Citation: Miss. Code Ann. § 27-25-703 (2) (2001)

Note: It should be noted that Miss. Code Ann. § 27-25-703, which deals with the severance tax levied on natural gas, will be effective as written until July 1, 2004. On July 1, 2004, a revised version of § 27-25-703 goes into effect.

MISSOURI

Missouri has one plugging incentive program, which follows. Five counties of 160 now produce oil or gas. The state does not tax oil or gas production.

Plugging

In lieu of fines for regulatory violations, operators are offered the opportunity to do community service by plugging a comparable number of orphan wells selected by the state.

MONTANA

New Wells

Oil or gas production from new wells, or wells that have not produced for five years, are exempt from production taxes, except for the 0.5% resource indemnity tax, for the first 12 months of production.

Citation: Mont. Code Ann. tit. 15, Chapter 451 (1995)

Effective date: January 1, 1996

Goal: To stimulate exploration and new production.

Active supporters: MPA, NMOGA, oil and gas county commissioners, land and mineral owners associations.

Impact: The incentive is a factor in the more favorable tax climate for new production, and keeps Montana competitive with neighboring states for drilling dollars.

Horizontal Wells

Production taxes for oil or gas wells that are completed horizontally or for horizontally recompleted oil wells that have not been producing for five years or more are exempt from production taxes, except for the 0.5% resource indemnity tax for the first 18 months of production.

Citation: Mont. Code Ann. tit. 15, Chapter 9 (1993); amended Chapter 554 (1999)

Effective dates: December 31, 1993; January 1, 1999

Impact: With the increase in oil prices in the years of 2000-2001, operators in existing fields have used the idle well, horizontal recompletion incentive and have increased production. The horizontal incentive has been popular since its inception in 1993.

Horizontally Recompleted Wells

Horizontally recompleted oil wells pay a reduced production tax rate on the incremental production for the first 18 months of production after recompletion. This incentive is suspended when the price of West Texas Intermediate crude oil exceeds \$30 per barrel for a calendar quarter and reactivates when the price of oil drops below \$30 per barrel. Wells that have not produced for 5 years or more are treated, for tax purposes, as new wells.

(See also: Horizontal Wells section.)

Citation: Mont. Code Ann. tit. 15, Chapter 9 (1993)

Effective dates: January 1, 1994, to January 1, 2002

Goal: To encourage the use of advanced technologies in oil production.

Active supporters: MPA, Shell Western Exploration and Production, Burlington Resources Oil and Gas (formerly Meridian Oil), oil and gas county commissioners and land and mineral owners associations.

MONTANA (continued)

Impact: It is reported that major producers have drilled more horizontal wells than anticipated, which may be at least partially in response to this incentive program. The recent 4% per year decline in production has nearly leveled off.

Secondary/Tertiary Recovery

Production taxes are reduced for incremental production from secondary and tertiary recovery projects. Incremental secondary production is taxed at 8.5%. Incremental tertiary production is taxed at 5.8%. This incentive is suspended when the price of West Texas Intermediate crude oil exceeds \$30 per barrel for a calendar quarter and reactivates when the price of oil drops below \$30 per barrel.

Citation: Mont. Code Ann. tit. 15, Chapter 9 (1993); amended Chapter 451 (1995) Effective date: January 1, 1994

Goal: To extend economic life of depleted wells and fields through advanced technology application.

Active supporters: MPA, Shell Western Exploration and Production, Burlington Resources Oil and Gas, oil and gas county commissioners, land and mineral owners associations. Impact: Oil production for 1995 is virtually flat, with 1994 production stemming an annual decline of 4% per year in previous years. This incentive coupled with the state's horizontal wells incentive is credited with stemming this decline.

Marginal/Mini Stripper Wells (3 barrels per day or less)

Oil from a well which produces 3 barrels per day or less is exempt from production taxes, except the 0.5% resource indemnity tax. A suspension clause eliminates this tax exemption when West Texas Intermediate crude oil prices reach \$38 per barrel for a calendar quarter and reactivates when the price drops below \$38 per barrel. Montana defines a stripper oil well as a well that produces less than 15 barrels per day.

Citation: Mont. Code Ann. tit. 15, Chapter 488 (1999); amended Chapter 421 (2001) Effective date: July 1, 1999

Goals: To keep marginal wells in production, preserve jobs, and prevent premature abandonment.

Active supporters: Northern Montana Oil and Gas Association (NMOGA), Montana Petroleum Association (MPA), county commissioners, land and mineral owner associations.

Impact: Incentive trigger price raised to \$38 West Texas Intermediate in 2001 session. Operators testified that wells were kept in production and employees were hired to service the wells.

Marginal/Stripper Wells (10 -15 barrels per day)

The production tax rate on the first 10 barrels produced from a stripper oil well is 5.5%. The production tax rate is 9% on the next 10 - 15 barrels of oil produced from a stripper well. Lower tax rates are provided for stripper well production when the price of West Texas Intermediate crude oil remains below \$30 per barrel in a calendar quarter. Montana defines a stripper oil well as a well that produces less than 15 barrels per day.

Citation: Mont. Code Ann. tit. 15, Chapter 530 (1999)

Goal: To increase Montana's oil production, keep marginal wells in production, and maintain the jobs associated with these wells.

MONTANA (continued)

Services

Crude oil or gas used by operators in connection with operations is tax exempt.

Citation: Mont. Code Ann. § 15-36-305

Effective date: Title chapter currently in effect

Goal: To make the tax code more equitable by not taxing production which is actually a

cost of doing business and not to be sold for a profit.

NEBRASKA

Marginal/Stripper Wells

A severance tax reduction from 3% to 2% is available for oil wells that produce less than 10 BOPD.

Citation: Neb. Rev. Stat. tit. 57, §§ 701 through 719

NEVADA

Reduced Administrative Fee for New Production

The amount of the administrative fee that a producer or purchaser of oil or natural gas must pay on new production pursuant to subsection 2 of Nevada Revised Statute 522.150 is one-half cent (5 mills) per barrel of oil or per 50,000 cubic feet of natural gas, as appropriate. New production is defined as production from new wells or existing wells completed in new intervals as determined by the Commission on Mineral Resources. Any qualifying well will receive a reduced administrative fee for one full year. Upon completion of a qualifying well, the producer will submit a Form 5, "Well Completion Report." The production date as reported on the Form 5 will be the effective date for the reduced fee.

Citation: NAC 522.343; NRS 522.040,50

Effective date: January 27, 2000

NEW MEXICO

Stripper Wells

Reduces both severance and emergency school taxes for stripper well properties having average daily production of less than 10 barrels or 60 MCF per eligible well. Severance taxes are reduced from 3.75% to 1.875% or 2.13/16% and emergency school taxes are reduced from 4% to 2% or 3% for gas and from 3.15% to 1.58% or 2.36% for oil during periods of low prices (less than \$1.15 and between \$1.15 and \$1.35 per MCF for gas and less than \$15 and between \$15 and \$18 per barrel for oil).

Citation: OCD Rule 33; §§ 7-29B-1 through 7-29B-6, NMSA 1978, as amended

Effective date: June 18, 1999; no sunset

Goal: To encourage production from marginal wells and avoid premature abandonment and plugging.

NEW MEXICO (continued)

Well Workover Project

Reduction in severance taxes from 3.75% to 2.45% for oil and gas produced from wells having qualified workover operations performed. Does not apply when oil price is \$24 or more per barrel.

Citation: OCD Rule 32; §§ 7-29B-1 through 7-29B-6, NMSA 1978, as amended Effective dates: June 16, 1995; amendment effective June 1, 1999. Prior to that time, 1.875% rate applies to only the incremental production; no sunset

Goal: To encourage operators to perform workover operations to increase production and avoid premature abandonment and plugging.

Improvements in OCD Regulatory Processes

The OCD Engineering Bureau significantly reduced the turnaround time for administrative applications from 39 days in 1997 to 28 days in 1998. For 1999, the turnaround time averaged 21 days.

With industry assistance, the OCD is continually reviewing its rules and procedures to identify opportunities to change or eliminate outdated, unduly burdensome, or unnecessary requirements. The following rules have been adopted or amended in the last few years.

- Rule 101—This rule was amended to allow letters of credit to satisfy the financial assurance requirement for well plugging. In early 2000, the New Mexico Legislature amended the statute to permit letters of credit for financial assurance in addition to security and cash bonds.
- Rule 107—This rule, concerning tubingless completions, was amended effective February 26, 1999, to eliminate, in most cases, the requirement of application and approval prior to completion.
- Rule 112A—This rule, concerning multiple completions, was amended effective April 15, 1999, to eliminate, in most cases, the requirement of application and approval prior to completion.
- Rules 7, 11, 12, and 1201-1223—These rules, concerning notice and other proce dural requirements, were amended effective July 15, 1999, to make the notice provisions simpler and more consistent between administrative and hearing applications. In addition, a conforming amendment was made to the notice provisions of Rule 303, concerning downhole commingling, effective July 30, 1999.
- Rule 104—This rule, concerning well spacing, was amended effective August 31, 1999, to relax setback requirements for gas wells. Oil and gas operators now have more flexibility to select well sites, and fewer permits are required. The amendments also allow for the drilling of infill well on a 320-acre gas spacing unit.
- Rule 303.C—This rule, concerning downhole commingling, was amended effective
 May 15, 2000, to streamline the process of approval of downhole commingling
 applications, provide for pre-approval of downhole commingling in designated pools,
 and providing a procedure for pre-approval on a pool-wide or area-wide basis. This
 amendment should significantly increase the recovery of oil and gas reserves from
 existing wellbores.
- Rule 711—This rule, concerning surface waste disposal facilities, was amended to eliminate the need for Division approval of certain documentation prepared by waste generators.

NEW MEXICO (continued)

• New Rule 712—This rule provides for the disposal of certain non-domestic wastes arising from oil and gas production and related activities at solid waste disposal facilities. This rule was adopted on November 30, 2000.

The OCD issued an order on February 1, 1999, approving 80-acre infill drilling in the Blanco-Mesaverde Pool in the San Juan Basin. This action allows for the potential recovery of an additional 1.5 trillion to 3 trillion cubic feet of new gas reserves.

Production Restoration Project

Exemption from severance tax (3.75%) for wells that had fewer than 31 days of production in any period of 24 consecutive months after January 1, 1993, which are brought back into production. Does not apply when the oil price is \$24 or more per barrel.

Citation: OCD Rule 31; §§ 7-29B-1 through 7-29B-6, NMSA, 1978 as amended Effective date: June 16, 1995; no sunset

Goal: To encourage operators to return wells to production and avoid premature abandonment and plugging.

State Royalty Reductions

A lower royalty rate (5%) applies to oil wells operated pursuant to a state oil and gas lease if the wells averaged: (i) less than 3 BOPD for the preceding 12-month period but not more than 5 BOPD for any month during that 12 month period if producing from shallower than 5,000 feet; and (ii) less than 6 BOPD for the preceding 12-month period but not more than 10 BOPD for any month during that 12-month period for production from 5,000 feet or deeper. Certain conditions apply and an application and fee are required.

Citation: § 19-10-5.1, NMSA 1978, as amended

Effective date: May 18, 1994; no sunset

Goal: To encourage production from marginal wells and avoid premature plugging and abandonment.

Enhanced Oil Recovery Projects

Severance tax reduced from 3.75% to 1.875% for oil produced from the date of positive production response. OCD approval is required. Does not apply when the oil price is \$28 or more per barrel.

Citation: OCD Rule 30; Enhanced Oil Recovery Act, §§ 7-29A-1 through 7-29A-5, NMSA 1978

Effective date: March 6, 1992, for carbon dioxide injection projects; January 1, 1994, for processes other than carbon dioxide; no sunset

Goal: To encourage the use of enhanced recovery techniques, including waterflooding, pressure maintenance, and tertiary recovery projects or expansions.

NEW YORK

New York State Energy Research and Development Authority

The New York State Energy Research and Development Authority (NYSERDA) was created by the state's Legislature in 1975 as a public benefit corporation. One goal of NYSERDA's

NEW YORK (continued)

research and development program is to expand the use of New York state's indigenous and renewable energy resources. NYSERDA's natural gas program has evolved into a multifaceted research and development program structured around the following goals: to help develop new natural gas reserves through innovative exploration methods and reservoir studies; to enhance existing reservoir production by developing or demonstrating new technology and products; to increase natural gas storage from depleted natural gas fields and bedded salt; to improve industry environmental performance; and to conduct extensive industry outreach to educate firms on opportunities for economic production in New York state. Over the last six years, NYSERDA has provided more than \$3 million for over 60 natural gas and petroleum projects. Information on NYSERDA's programs can be found at www.nyserda.org.

Current Initiatives:

Natural Gas and Petroleum Emerging Resources Program

The purpose of this solicitation is to expand investment in New York state by identifying new exploration targets. Selected projects will apply advanced technology and/or geological analysis to target high potential but less-explored formations. This program will specifically target: black shales, Silurian reefs, all fractured carbonates, all hydrothermal dolomites, the Beekmantown, the Herkimer/Oneida, Cambrian sandstones, and the oil-bearing Devonian sands. Other formations will be considered based on presented geologic support. Three project types are solicited: **geologic characterization studies** that use technologies such as remote sensing, gravity aeromagnetics, seismic or geologic modeling to identify prospects in the targeted formations (\$75,000 per project); **prospect development projects** to identify and develop specific reservoirs with the goal of leasing and testing one of the targeted formations (\$100,000 per project); and, **research and development consortia** to look at larger geological relationships or other technical issues that are key to resource development but may exceed the grasp of an individual operator (\$150,000 per project). Proposals are due in early fall and mid-winter.

NORTH DAKOTA

North Dakota has a gross production tax of 5% and an extraction tax of 6.5% on oil. The following incentives relate only to a reduction on the extraction tax. In all cases the gross production tax is assessed.

NEW Extraction Tax Trigger

The new trigger price for excise tax incentive elimination on oil production will occur if West Texas Intermediate crude oil averages \$38 per month for five consecutive months. The trigger price will be adjusted for inflation on an annual basis by the North Dakota Tax Department. For an operator, this can immediately reduce taxes after approval. The reduction is 2.5 - 6.5%. The North Dakota Industrial Commission (NDIC) Oil & Gas Division and the North Dakota Petroleum Council are monitoring the effectiveness of this incentive.

Citation: Senate Bill 2205

Effective date: August 1, 2001; no sunset

Goal: The previous trigger price was \$33 and the trigger mechanism was unclear. The tax

NORTH DAKOTA (continued)

trigger nearly tripped in 2000 and would have cost oil producers in North Dakota \$20 million in the first six months. The new trigger raises the trigger price significantly and will provide more stability for oil producers and hopefully result in more exploration and production. *Active supporters*: North Dakota Petroleum Council member companies.

NEW Statutory Unit Ratification

The new law lowers the percentage of working interests and mineral owners approval required to form and dissolve an oil production unit from 70% to 60%. The NDIC Oil & Gas Division and the North Dakota Petroleum Council are monitoring the effectiveness of this incentive.

Citation: Senate Bill 2120

Effective date: August 1, 2001; no sunset

Goal: Lowering the unitization percentage has been a controversial issue for more than twenty years; the lower percentage will help production companies in their secondary

recovery methods.

Active supporters: North Dakota Petroleum Council member companies.

Abandonment of Wells—Suspension of Drilling

This rule defines what constitutes abandonment of a well in the state of North Dakota. The rule also dictates how soon after abandonment a well is to be plugged and the drill site reclaimed. By giving the well temporarily abandoned status, the NDIC director may waive this requirement for one year. The director may extend a well's temporarily abandoned status for one year. The director also may approve suspension of the drilling of a well. If suspension is approved, a plug must be placed at the top of the casing. Unless authorized by the director, a well must be plugged and its site reclaimed if drilling has been suspended for 30 days.

Citation: 43-02-03-55

Effective date: August 1, 1999

Goal: To prevent the permanent plugging of wells due to low oil prices.

Active supporters: NDIC.

Application for Stripper Well Property Determination

This rule gives the requirements for an operator desiring to classify a property as a stripper well property for the purposes of exempting production from extraction taxes.

Citation: 43-02-08-02

Effective date: August 1, 1999 Goal: To eliminate application costs.

Active supporters: NDIC.

Application for Workover Project Determination

Applicants have the burden of establishing entitlement to the exemption provided in NDCC § 57-51.1-03 and upon completion of the workover project shall submit all information necessary for a determination by the director.

Citation: 43-02-09-04

Effective date: August 1, 1999

Active supporters: NDIC.

NORTH DAKOTA (continued)

Horizontal Re-entry Well Exemption

Oil produced from a horizontal re-entry well during the first nine consecutive months starting with the date the well was recompleted as a horizontal well is exempt from the oil extraction tax. The designation of a horizontal re-entry well is given to a well initially drilled and completed as a vertical well which is re-entered and recompleted as a horizontal well after March 31, 1995. This designation may also apply to the re-entry and recompletion of a vertical well that is classified by the NDIC as a dry hole.

Citation: Rule 81-09-03-10

Effective date: April 1, 1995; no sunset

Goal: To increase oil production from a reservoir.

Active supporters: Oil and gas industry.

Tribal Lands Oil Tax Exemption

Initial production of oil from a well is exempt from extraction tax (6.5%) for 60 months if:

• the well is located on a reservation, or

• the well is located on trust land held for a tribe, or

• the land is held by a tribe at the time this Act was passed.

Citation: N.D. Cent. Code 51-51.1-03(8) Effective date: July 31, 1997; no sunset

Goal: To encourage petroleum development upon tribal lands. *Active supporters:* Private individuals and independent producers.

Marginal/Stripper Wells

Oil produced by stripper wells is exempt from extraction taxes. Stripper wells are defined as wells with average daily production for the past 12 months of up to 10 BOPD at a depth of less than 6,000 feet; up to 15 BOPD at a depth of 6,000 to 10,000 feet; and up to 30 BOPD at depths greater than 10,000 feet. Stripper wells must be certified by the NDIC.

Citation: N.D. Admin. Code Chapter 81-09-03 § 07

Effective date: August 1, 1987; no sunset

New Wells

Production from new wells drilled and completed after April 27, 1987, is exempt from extraction taxes for the first 15 months of production and taxed at a rate of 4% thereafter (reduced from 6.5%).

Citation: N.D. Admin. Code Chapter 81-09-03 § 06

Effective date: July 1, 1987; no sunset

Horizontal Wells

Production from new horizontal wells drilled and completed after April 27, 1987, but before April 1, 1995, is exempt from extraction taxes for the first 15 months following well completion, and is then taxed at a rate of 4% thereafter. Oil produced from a horizontal well drilled and completed after March 31, 1995, is exempt for the first 24 months. See trigger provisions above.

Citation: N.D. Admin. Code Chapter 81-09-03 § 06

Effective date: April 1, 1995; no sunset

Impact: Excellent, according to the North Dakota Petroleum Council (NDPC), which finds that horizontal drilling has increased. The NDPC attributes the quadrupling of drilling

NORTH DAKOTA (continued)

activity to this incentive, plus new technology, new finds and good oil prices. The NDIC's Oil and Gas Division statistics are expected to show an increase in permits and a decline in the rate of well plugging. As an unexpected benefit, while pursuing new horizontal plays, two new plays and two new fields have been discovered.

Idle Wells

Production from oil wells that have been inactive for at least two years and are returned to production is exempt from extraction taxes for 10 years, beginning the first day of the month in which NDIC certification is received by the Tax Commissioner.

Citation: N.D. Admin. Code Chapter 81-09-03 § 11

Effective date: April 1, 1995; no sunset

Active supporters: This and the following incentives were promoted by the NDPC dating back to 1987. In most efforts, it received vigorous support from oil producing counties, rural electric cooperatives and economic development organizations.

Impact: The NDPC feels this and most of the other incentives have been great successes.

Workovers

Production resulting from qualifying workover projects is exempt from extraction taxes for 12 months, beginning the third month after completion of the workover project, and is taxed at 4% thereafter. Wells which have produced less than 50 BOPD during the last six months of continuous production before workover qualify for this exemption. The operator must notify the NDIC before beginning the project. The project must cost at least \$65,000, or production must increase 50% or more in the first two months after project completion. See trigger provisions above.

Citation: N.D. Admin. Code Chapter 81-09-03 § 08

Effective date: August 1, 1989; no sunset

Impact: There has been a substantial increase since implementation of this program.

Secondary/Tertiary Recovery

Incremental oil from secondary recovery projects is exempt from extraction taxes for five years, and incremental oil from tertiary projects is exempt for 10 years from the date incremental production commences. All oil from a qualifying secondary or tertiary recovery project is taxed at a reduced rate of 4% once the five- or ten-year exemption has expired. Non-incremental oil from a qualifying secondary recovery project when its average production level has increased to at least 25% over normal operations for six months is taxed at a reduced rate of 4%. Non-incremental oil from a qualifying tertiary recovery project that produces at least 15% above normal operations for one month and continues to operate as a qualified project is taxed at a reduced rate of 4%.

Citation: N.D. Admin. Code Chapter 81-09-03, 05, 05.1, 05.2, N.D. Cent. Code 57-51 Effective date: August 1, 1987; no sunset

Goals: To encourage use of secondary and tertiary recovery technologies and to encourage new investment in unitized fields.

Impact: Secondary and tertiary recovery projects have increased significantly.

Services

Natural gas used on-site in the production of oil or gas is exempt from production taxes. *Citation:* N.D. Admin. Code Chapter 81-09-02 § 16

NORTH DAKOTA (continued)

Effective date: Adopted August 1, 1986, and amended July 1, 1989; no sunset

Note: According to the NDPC, North Dakota was the only state in 1995 to increase oil production after 10 consecutive years of decline. The most significant incentives have been the 15-month holiday for new wells drilled after April 1987, the incremental exemption for secondary and tertiary recovery projects and the 24-month tax holiday for all horizontal wells drilled after March 1995. A great deal of the North Dakota incentive program information herein is derived from the North Dakota Revenue Department tax incentive program summary, published April 1996.

OHIO

Plugging

A landowner grant program has been established for the plugging of orphan wells. Between \$200,000 and \$350,000 per year will be set aside to fund this program. Eligible landowners can plug the orphan wells on their land sooner and have more control in the plugging process than in the state's traditional bid process. The landowners must receive bids from contractors for a plugging plan that complies with state regulations and submit an application to the Division of Mineral Resources Management. If approved, the landowner will be reimbursed for the cost of plugging. Recent contracts in the fall of 1998 to plug 36 wells under this program show promise to reduce the average cost per well of plugging, thereby providing for the ability to plug additional orphan wells.

Citation: Ohio Revised Code § 1509.071

Effective date: October 25, 1995

Goal: To encourage landowner-initiated plugging of orphan wells at a lower cost to Ohio.

Active Supporters: Ohio Oil and Gas Association.

Impact: This program provides the division with a second effective mechanism to plug orphan wells in Ohio.

Amendment to Plugging

This amendment permits the division to transfer to landowners or their agents for production, a well eligible for plugging under this program if Ohio's well ownership requirements are met. Wells previously abandoned will become property of the state. Landowners or registered well owners can take over the well for production.

Ohio Oil and Gas Energy Education Program (OOGEEP)

With the passage of Substitute Senate Bill 46 in December, 1997, and the approval of producers and royalty owners in a required referendum held in March 1998, the Ohio Oil and Gas Energy Education Program (OOGEEP) became effective on April 1, 1998.

OOGEEP has completed a comprehensive oil and gas training guide, *Responding To Oilfield Emergencies Field Guide One*; a training CD; and its first permanent training facility in an effort to assist and support local emergency responders. These tools will enable them to understand and implement effective emergency response practices at typical oilfield and production sites. Ohio is the first state to offer such a safety training program to its emergency responders.

OHIO (continued)

The training guide, training CD and workshops cover the following topics:

- Overview of the oil and gas industry;
- · Communicating the emergency;
- Evaluating the emergency;
- Responding to drilling site emergency;
- Description and pictures of typical equipment found at an oilfield site; and
- Related informational resources.

In addition to the Oilfield Emergency Response program, OOGEEP facilitates other educational programs that encourage oil and gas education curricula in classrooms; promote public awareness about the industry, and educate and promote safety information.

OOGEEP is a nonprofit organization and is funded entirely by independent producers and royalty owners through an assessment on the production of all crude oil and natural gas in Ohio. The assessment on crude oil is equal to one cent (\$0.01) per gross barrel and one-tenth of one cent (\$0.001) per gross thousand cubic feet of natural gas. All first purchasers of crude oil and natural gas are required to collect the assessment and submit quarterly payments directly to OOGEEP.

The OOGEEP Operating Board consists of six independent producers and one member representing a farmer's organization. As outlined in the Ohio Revised Code, they are appointed by the Ohio Department of Natural Resources, Division of Minerals Resources Management, Technical Advisory Council based upon recommendations from a qualified producers organization and an organization representing farmers, such as the Ohio Oil and Gas Association and the Ohio Farm Bureau.

Citation: Ohio Revised Code §§ 1510.01 - 1510.13

Effective Date: April 1, 1998

Goals: To facilitate educational programs; to encourage oil and gas education curricula in classrooms; to promote public awareness about the industry; to educate and promote safety information on related facilities and equipment; and to demonstrate to the general public the importance and economic significance of the industry. With renewed interest in natural gas and crude oil drilling and production, it is important to industry, regulatory, and emergency response entities that our Oilfield Emergency Response training program reach as many people as possible. OOGEEP is currently, and will continue to drive the increase in knowledge base where it is needed and intends to extend this knowledge to other oil and gas producing states.

Active supporters: Active supporters of the Oilfield Emergency Response program include: OOGEEP, Ohio Oil & Gas Association, Ohio Department of Natural Resources Division of Mineral Resources Management and various emergency response agencies.

OKLAHOMA

Three-Dimensional Seismic Technology

Production from an oil, gas, or oil and gas well drilled between July 1, 2000 and July 1, 2003, which is located within the boundaries of a three-dimensional seismic shoot and was

drilled based upon three-dimensional technology, is exempt from paying gross production taxes for a period of time determined by the date on which the three-dimensional shoot was shot. There is a rebate of 6/7 of the gross production tax paid on oil and/or gas produced from a qualified well that is completed based on three-dimensional seismic technology.

Citation: Okla. Stat. tit. 68, § 1001 (J) (2000) Effective dates: July 1, 2000, through June 30, 2003

Active Supporters: Oklahoma Corporation Commission and oil and gas operators in the

state.

EXTENDED Reduction in the State's Gross Production Tax

Reduction in the state's production tax when the price of oil is between \$14 and \$17 per barrel. The gross production tax falls to 4 percent from 7 percent. The gross production tax is reduced to 1 percent if oil prices fall below \$14 per barrel.

Citation: H.B. 1003X

Effective date: Feb. 5, 1999, through July 1, 2004.

Reactivation of Plugged and Abandoned Wells

Production from a qualifying well that was plugged and abandoned will be exempt from gross production tax for a period of 28 months from the date on which production was established as an enhancement project well. This incentive applies to wells for which production is re-established on or after July 1, 1994, and prior to July 1, 2003.

Citation: Okla. Stat. tit. 68 § 1001 (F) (1) (2000)

Effective date: July 1, 1994

Goal: To encourage re-evaluation and reactivation of abandoned leases and prospects.

Active supporters: State Sen. Paul Muegge and State Rep. Larry Rice.

Production Enhancement Projects (Workovers/Recompletions/Fracturing)

Incremental production resulting from down hole workovers, recompletions or fracturing projects to existing wells is eligible for the tax incentive as noted above for 28 months from the date after project completion. Production enhancement projects begun between July 1, 1994, and June 30, 2003, are eligible for this exemption. Incremental production is production above base production. For projects begun between July 1, 1994, and July 1, 2003, base production is the average monthly production during the 12 months immediately proceeding the commencement of the project or the average monthly amount of production for the 12 month period immediately prior to the commencement of the project less the monthly rate of production decline for the project for each month beginning 180 days prior to the commencement of the project. There is a rebate of 6/7 of the gross production tax paid on the incremental oil and/or gas produced from an approved production enhancement project.

Citation: Okla. Stat. tit. 68, § 1001(G) (2000)

Effective dates: July 1, 1994, through June 30, 2003

Goal: To encourage operators to increase production from existing fields by performing workovers, recompletions, fracturing, installation of pumps, plunger lifts, and compression.

Rebate Program Expansion for Compression and Pumping Mechanisms

Initial installation of a gas compression and/or pumping mechanism will qualify incremental

oil production for a rebate of 6/7 of the gross production tax for 28 months from the date of first production utilizing installed equipment. (This is an expansion of the existing rebate program to include these two categories of work.)

Citation: Okla. Stat. tit. 68, § 1001 (G)(2)(e)((7)) (2000)

Effective dates: July 1, 1997 (Gas well - May 6, 1996), through July 1, 2003

Goal: To enhance profitable operations and to maximize ultimate extraction before wells are plugged.

Active supporters: Oklahoma Mid-Continent Oil and Gas Association, Oklahoma Independent Petroleum Association.

Secondary Recovery Project

Incremental recovery from approved secondary oil or gas recovery projects begun on or after July 1, 1993, and before July 1, 2000, is eligible for the above tax incentive until payout, not to exceed 10 years. Project payback provides for recovery of capital expenses, starting in 1989, and 50% of operating expenses, starting in 1993.

Citation: Okla. Stat. tit. 68, § 1001(D)(2) (2000)

Effective dates: July 1, 1993, through June 30, 2000

Goal: To encourage operators to increase ultimate recovery by employment of secondary recovery techniques.

Impact: There have been limited but increasing numbers of applications for this refund.

Secondary Recovery Properties

Incremental recovery from approved secondary oil or gas recovery projects begun on or after July 1, 2000, and before July 1, 2003, is exempt from paying the gross production tax for up to five years, or ending upon termination of the secondary recovery process, whichever occurs first.

Citation: Okla. Stat. tit. 68, § 1001 (D)(3) (2000) Effective dates: July 1, 2000, through June 30, 2003

Tertiary Recovery

Incremental recovery from approved tertiary oil or gas recovery projects begun on or after July 1, 1993, and before July 1, 2003, is eligible for the tax exemption incentive until payout, not to exceed 10 years. Project payback provides for recovery of capital and operating expenses. Administrative expenses and capital expenses of pipelines built to transport carbon dioxide to a project are excluded.

Citation: Okla. Stat. tit. 68, § 1001(D)(4) (2000)

Effective dates: July 1, 1993, through June 30, 2003

Goal: To encourage operators to increase ultimate recovery by employment of tertiary recovery techniques.

Impact: There have been limited but increasing numbers of applications for this refund.

Idle Wells

Wells brought back into production may be exempt from paying gross production taxes for 28 months. There is a rebate of 6/7 of the gross production tax paid on oil and/or gas produced from a qualified well where production was reestablished. The wells must have been reactivated between July 1, 1994, and July 1, 2003. Wells reactivated prior to July 1, 1997, must have been inactive for not less than two years. Wells reactivated between

July 1, 1997, and June 30, 2003, must have been inactive for not less than one year. Wells which experience mechanical failure, or loss of mechanical integrity, are also considered inactive wells and fall within this statute.

Citation: Okla. Stat. tit. 68, §§ 1001 (F)(2) (2000) Effective dates: July 1, 1994, through June 30, 2003 Goal: To increase production from existing fields.

Impact: There has been a modest number of applications by operators, indicating that this program has had limited effect in bringing idle wells back into production.

Economically At-Risk Oil Leases

Operators may apply to the Oklahoma Tax Commission for a 6/7 incentive on demonstration that they operate a lease that is economically at-risk. A lease must operate at a net loss or net profit which is less than the severance tax paid for the lease during the previous tax year. Gross production tax exemptions under this section are limited to production from calendar years 1997 and 1998.

Citation: Okla. Stat. tit. 68, § 1001.3 (2000)

Effective date: January 1, 1999

New Discovery Wells

Production from new discovery wells completed or re-entered between July 1, 1995, and June 30, 2003, is exempt for 28 months from the date of first sales. New discovery wells must produce crude oil in paying quantities at least one mile from the nearest producing oil well in the same producing interval; crude oil in paying quantities beneath current production in a deeper producing interval that is greater than one mile from the nearest oil well producing from the same producing interval; natural gas in paying quantities at a site that is more than two miles from the nearest gas well producing from the same producing interval; or natural gas in paying quantities in a deeper producing interval that is at least two miles from the nearest gas well producing from the same producing interval. There is a rebate of 6/7 of the gross production tax paid on oil and/or gas produced from wells classified by the Corporation Commission as new discovery.

Citation: Okla. Stat. tit. 68, §§ 1001(I)(1), (2), (3) (2000) Effective dates: July 1, 1995, through June 30, 2003

Horizontal Wells

Production from horizontally drilled wells is exempt until payout or for 24 months maximum. There is a rebate of 6/7 of the gross production tax paid on oil and/or gas produced from qualified horizontally drilled wells. Production eligible for this refund must have commenced from wells drilled after July 1, 1995, and prior to July 1, 2003. Any incremental production from a horizontally drilled well producing prior to July 1, 1994, is also exempt until payout or for 24 months maximum.

Citation: Okla. Stat. tit. 68, § 1001(E) (1) (2000)

Effective date: 1990; revised in 2000

Goal: To encourage the use of new technology and increase recovery.

Deep Wells

Production from wells drilled to depths of 15,000 feet or greater, which were spudded between July 1, 1994, and June 30, 2000, are exempt from paying gross production taxes

for 28 months. The exemption period of 28 months begins with the date of first sales. Production from wells drilled to depths of 12,500 feet or greater, which were spudded between July 1, 1997, and June 30, 2003, are exempt from paying gross production taxes for 28 months beginning with the first sale of production. There is a rebate of 6/7 of the gross production tax paid on oil and/or gas produced from a qualified well drilled and completed at a depth of 12,500 feet or deeper.

Citation: Okla. Stat. tit. 68, §§ 1001(H) (2000)

Effective date: July 1, 1994, through June 30, 2000; and July 1, 1997, through June 30,

2003

Goal: To stimulate natural gas development in Oklahoma.

Special Programs

The Oklahoma Commission on Marginally Producing Oil and Gas Wells collects and distributes information on stripper production and performs many other activities useful to the petroleum industry, especially small operators. It is funded by small oil and gas taxes from nonexempt production. Producers can opt out of paying.

The Oklahoma Energy Resources Board (OERB) was established for energy education and the remediation of abandoned oil field sites. The OERB conducts educational programs for children, and spends at least half of its funding on oil field cleanup projects. The OERB also studies remediation technology using U.S. Department of Energy funds.

Small Business Linked Deposit Program

Provides low-interest loans to qualifying businesses, including oil-related businesses.

OREGON

Oregon currently has no oil or gas incentive programs.

PENNSYLVANIA

Grandfathering Pre-Act Wells from Bonding

Bonding is not required for any well drilled prior to April 18, 1985, the date of the Oil and Gas Act, or for on-site disposal of residual waste at these well sites.

Citation: 71 P.S. § 1934-A

Effective date: November 26, 1997; no sunset Goal: To allow operators more working capital. Active supporters: Independent oil producers.

Orphan Wells

Permit fees are waived for producers who recondition an orphan well from the Department of Environmental Protection's plugging inventory and return it to production.

Citation: Pa. Laws 223, Chapter 6, § 601(c): Waiver for Rehabilitation of Abandoned or

Orphan Wells

Effective date: August 1, 1992; no sunset

PENNSYLVANIA (continued)

Goals: To bring wells back into service and remove them from the state's plugging list and to increase production while saving plugging costs for the state.

Impact: One producer in Pittsburgh has taken advantage of the program. There have been other inquiries about the program to the Department of Environmental Protection.

SOUTH DAKOTA

Oil Field Services

An oil field services sales tax provision provides a 1% tax exemption on oil field services. The effective tax rate is 3%.

Citation: S.D. Codified Laws Ann. § 10-45-5.3

Effective dates: July 1, 1982; amended July 1, 1991; no sunset

Goals: To maintain a competitive oil field services industry in South Dakota, and to stimulate oil and gas exploration.

Impact: This incentive is thought to have had little impact.

Voluntary Environmental Audit

Voluntary environmental audit privilege provides limited immunity for violations of environmental law, rule, regulation or permit enforced by the Department of Environment and Natural Resources which are discovered and reported to the department within 30 days. The department is prohibited from prosecuting those violations if they are corrected within 60 days. If the violations are not corrected within 30 days, a written compliance schedule may be negotiated between the department and the operator. The department is prohibited from requesting the results of an environmental audit.

The environmental audit may not be used as a civil or criminal defense if the producer:

- Willfully and knowingly committed the violation;
- Has a pattern of repeated violations;
- Has not corrected the violation within 60 days of discovery;
- Has been penalized for a violation within two years of disclosure of the present violation.

Citation: S.D. Codified Laws Ann. §§ 1-40-33 through 36; § 1-40-3

Effective date: July 1, 1996

Goals: To encourage self evaluation and improve the environment by enabling businesses to perform self-assessment and to report and voluntarily mitigate environmental problems without the threat of penalty.

Active supporters: Introduced by the Senate Agriculture and Natural Resources Committee on behalf of the Department of Environment and Natural Resources; supported by the Industry and Commerce Association (ICA), the retailers' association and others.

Impact: Not yet known.

Natural Gas Sold Out of State

The mineral severance tax is imposed at the time natural gas is sold or consumed, whichever occurs first. This effectively eliminates severance tax on natural gas sold out of state.

SOUTH DAKOTA (continued)

Citation: S.D. Codified Laws Ann. § 10-39A-3.1

Effective dates: March 8, 1978; amended July 1, 1991

Goal: To encourage development of the natural gas industry in South Dakota.

Active supporters: This program came about as a committee bill sponsored by the Depart-

ment of Environment and Natural Resources.

Impact: Relatively little impact, as very little natural gas is sold out of state.

Oil and Gas Royalty Increment Status

The Commissioner of School and Public Lands can grant significantly lower state royalty rates on school and public lands, when no lease has been issued within the last 10 years, and no prospecting or exploration permit for oil and gas has been issued in the last five years. There cannot have been oil or gas production on the state-owned land or land within the immediate area. The rate may be lowered to 1/16 for the first three years of the lease, 1/12 for the second three years, and a minimum of 1/8 thereafter.

Citation: S.D. Codified Laws Ann. §§ 5-7-41 through 45

Effective date: July 1, 1993; no sunset

Goals: To encourage the development of oil and gas on public lands and to avoid any substantial impact on privately owned minerals immediately adjacent to these leased minerals.

Active supporters: Department of School and Public Lands.

Impact: The effectiveness of this program has not been studied, but it is believed to have been very effective in increasing the number of leases granted on certain lands that otherwise would remain unleased. According to the Department of Environment and Natural Resources, this is reflected in oil and gas auction results in Hyde and Buffalo counties.

TENNESSEE

Tennessee currently has no oil or gas incentive programs.

TEXAS

Extended Tax Rate Reductions - High Cost Gas Incentive

Extension on the tax rate reduction for high-cost natural gas wells. There is a 100% reduction up to 120 months or until cumulative value of exemption equals 50% of drilling and completion cost.

Citation: H.B. 2615

Effective date: September 1, 1999, through August 31, 2010 Goal: To increase exploration for deep/high cost gas production.

Active supporters: Railroad Commission of Texas (RRC), Texas Independent Producers and Royalty Owners (TIPRO), Texas Oil and Gas Association (TXOGA), and regional oil and gas associations.

Severance Tax Administration

Removal of accelerated biennial due date ("speed up") for natural gas severance taxes and penalties for speeding up late payments. Eliminates early payment of natural gas tax in

odd-numbered years.

Agency: Comptroller of Public Accounts.

S.B. 290 Production Qualification Query System

This Internet-based query system was developed to provide quick and easy access to oil leases and gas wells that meet the production criteria specified in SB290 for a temporary severance tax exemption. Depending on the price certified by the Comptroller, these wells and leases may be exempt from severance tax payments. Wells can no longer qualify for S.B. 290, but this guery system is maintained to provide a historical record.

Citation: S.B. 290

Goal: To create a more efficient and easier way to access leases and wells that may qualify for the severance tax exemption.

Effective date: The query system was implemented in March 1999. This query is currently available through the RRC Web site.

Impact: Allows operators, gatherers and interest owners to quickly and easily verify which wells or leases may be eligible for the severance tax exemption.

Active supporters: Industry, royalty owners, public.

Texas Oil and Gas Production Query System (ACTI)

Texas created an Internet-based production query system to provide quick and easy access to Texas oil and gas production information. The project was funded by the U.S. Department of Energy and initiated in conjunction with Lawrence Livermore National Laboratory and Texas A&M University.

Effective date: In March 1998, production information for 1997 and 1996 was made available on the RRC Web site through the ACTI Production Query System. In September 1998, production from 1993 through the current production month became available.

Goal: To use the technology to provide the global community with oil and gas information as a means of promoting further domestic exploration and production.

Impact: The production query system is being widely used. The public can access production totals by county, field, district, lease or operator.

Active supporters: Industry, royalty owners, public.

Flared Casinghead Gas

If an operator markets casinghead gas that had previously been released to the air (vented or flared) for 12 months or more in compliance with RRC rules and regulations, the operator may receive a severance tax exemption for that gas for the life of the oil well or lease.

Citation: § 202.058

Effective date: September 1, 1997 Goal: To conserve natural gas.

Active supporters: RRC, TIPRO, TXOGA and regional associations.

Impact: This incentive pertains to a small number of wells.

Two-Year Inactive Wells

This incentive mirrors the successful three-year inactive wells incentive originally passed in 1993. Any oil or gas well that has not produced in more than one month in the last 24 is eligible for a 10-year severance tax exemption upon a return to beneficial production.

Citation: § 202.056

Effective date: September 1, 1997, to August 31, 2009, for application for certification; February 28, 2010, for certification; severance tax exemption is for up to 10 years from date of RRC certification.

Goal: To encourage the return to productivity of inactive wells, with the resulting benefits to the state economy; to reduce the need for state and industry-funded plugging.

Active supporters: RRC, TIPRO, TXOGA and regional associations.

Impact: This incentive is based on Texas' Three-Year Inactive Wells program, which enjoyed such success that at least nine states adopted similar programs, but was allowed to expire. In the year prior to the Three-Year Inactive Wells incentive, 368 wells inactive for three years or more were brought back into production. Following enactment, from September 1993 through February 1996, 6,071 wells were returned to production, with an annual average of 2,428 reactivated wells. This increase of 670% in inactive wells returned to production is valued at an estimated \$565 million at the wellhead and approximately \$1.65 billion to the economy of Texas each year. This benefit to the state is estimated to be enough to create 10,792 new jobs.

The Two-Year Inactive Well Program was originally scheduled to expire in August 1999. The 76th Texas Legislature extended the program for 10 years, until February 2010. The current Two-Year Inactive well incentive became effective September 1, 1999. Following enactment, from September 1997 to June 1, 2001, 5,064 wells were returned to production with an annual average of approximately 1,200 wells. This increase of inactive wells returned to production is valued at an estimated \$2.08 billion at the wellhead and approximately \$7.24 billion to the economy of Texas each year. This benefit to the state is estimated to be enough to create 77,374 new jobs.

Marginal Gas Wells

The RRC can exempt marginal gas wells from otherwise applicable production limitations if the wells are located in gas fields without special field rules. A marginal gas well is defined in the Texas Natural Resources Code as a gas well incapable of producing more than 250,000 cubic feet of gas per day under normal operating conditions. Prior to this legislation, the TRC was precluded from exempting individual marginal wells that exist in fields with other wells capable of producing above marginal limits. This legislation replaced the RRC's requirement to limit production from gas wells producing more than 100,000 cubic feet of gas per day unless it is a marginal well in a field for which special field rules are not in effect.

Citation: H.B. 1178; amends Tex. Nat. Res. Code Ann. § 86.091

Effective date: May 16, 1997

Goal: To relieve regulatory burden of testing marginal gas wells.

Impact: Raises the production limitations on marginal gas wells and reduces industry expense associated with testing of gas wells.

Enhanced Oil Recovery

Severance tax is reduced by 50% (from 4.6% to 2.3%) for oil production from new enhanced oil recovery projects and incremental production from expanded projects for 10 years after RRC certification of production response. The RRC certification is a three-step process: first, (form H-12), the operator seeks approval and area certification for the

new/expanded project; second, (form H-13), the operator seeks Railroad Commission certification that the project evidences a positive production response (an increased rate of production attributable to the project); third, (form H-14), the operator files an annual status report without which the credits are not validated. The application for positive production response certification must be filed within three years of project approval for secondary enhanced recovery, and within five years for tertiary recovery. *Citations:* Statewide Rule 50; Tex. Tax Code Ann. tit. 2(I), § 202.054 *Effective dates:* Effective 1989 for new projects, and 1991 for expanded projects. Deadline for applying for approval and area designation is December 31, 2007.

Goal: To encourage additional recovery of the state's oil reserves through the use of enhanced oil recovery technology, and to extend the lives of wells with the resulting benefit to the Texas economy through job creation and additional severance taxes.

High-Cost Gas Incentive

Gas from high-cost wells spudded or completed between May 24, 1989, and September 1, 1996, is <u>exempt</u> from severance taxes through August 31, 2001. High-cost gas, as defined under this program, is primarily produced from designated tight formations, paralleling the federal statutes of the Natural Gas Policy Act of 1978. Legislation in 1995 designated wells spudded or completed from August 31, 1996, through August 31, 2002, eligible for severance tax reduction based on the drilling and completion costs of the individual well in relation to median drilling and completion costs of all high-cost gas wells spudded or completed in the previous fiscal year. The tax <u>reduction</u> is for the first 120 consecutive calendar months from the first day of production, or until the cumulative value of the tax reduction equals 50% of the drilling and completion costs incurred, whichever comes first. The 76th Legislature extended the reduction period to August 31, 2010.

Citation: Statewide Rule 101; Tex. Tax Code Ann. tit. 2(I), § 201.057

Effective dates: September 1, 1991; through August 31, 2010 (Applies to wells spudded between May 24, 1989, and August 31, 2001.)

Goal: To encourage drilling for high-cost gas, with resulting benefits to the Texas economy *Active supporters:* RRC and petroleum industry associations.

Impact: This incentive, in combination with federal incentives, is credited with the drilling of more than 14,000 new high-cost wells in the period since it took effect. These wells have a cumulative gas production of 9.7 trillion cubic feet with a wellhead value of \$16.3 billion. The economic value of production is \$47.4 billion. Texas state officials estimate that Texas producers between 1989 and 1995 drilled more than 6,000 wells because of the incentive. Extending the incentive is expected to spur drilling of another 3,300 wells between 1997 and 2000. In addition, the incentive contributed to a changing industry attitude and reinvestment in the industry. According to the RRC, high-cost gas wells supplied about 20% of Texas' total natural gas production in 1994, and supplied about 5% of the gas used in the U.S. during the record cold winter of 1995–1996.

Marginal Wells on State Land

The Texas School Land Board may grant a reduced royalty rate for a period of two years for marginally economic state leases. To qualify, the lease must produce an average of 15 BOPD per well, or an average of 90 Mcf of gas per day per well. Once the reduced rate is granted, royalty rates will not increase for that lease for two years. Additional reductions can be applied for at the expiration of the two-year period. This tax reduction applies

when oil prices average less than \$25 per barrel.

Citation: Tex. Nat. Res. Code Ann. § 32.067, and Tex. Admin. Code tit. 31, § 9.7

Effective date: September 1, 1995

Goal: To extend the lives of leases on state lands.

Co-Production Oil and Gas

Co-production oil and gas are produced from an enhanced recovery project in which water and hydrocarbons are removed together from a reservoir. Regardless of whether it is a new or expanded project, co-production oil receives a 50% reduced severance tax rate from 4.6% to 2.3% for 10 years. The lower rate starts the first month the RRC certifies positive production response. Co-production gas is exempt from severance taxes on the first day of the month that the RRC certifies the project through August 31, 2001.

Citation: H.B. 2723 (1993), Texas Tax Code § 201.057

Effective dates: September 1, 1993. The deadline for certification applications was December 31, 1993. The oil severance tax reduction and the gas exemption for qualified wells is effective through August 31, 2001.

Goals: To encourage additional recovery of the state's oil reserves through the use of enhanced oil recovery technology and to extend the lives of wells.

Active supporters: RRC and regional oil and gas associations.

Impact: This incentive pertains to a very small number of producers.

Paperwork Reduction

Producers may delay payment of royalties until they reach a total of \$100 or 12 months proceeds have accumulated, whichever comes first. Annual reporting for the lease may not exceed \$3,000.

Citation: H.B. 1593

Effective date: June 15, 1995

Goal: To help the state and operators avoid the costs of administering small royalty

checks.

Royalty Reduction

Royalty rates are reduced for production early in the terms of leases. For submerged areas, production in years one and two earns a royalty of 20%; production in years three and four earns 22%. For uplands production, year one earns a royalty rate of 20%; production in year two earns 22.5%.

Citation: School Land Board rule

Goal: To maintain overall royalty revenue while providing an operator greater working interest revenue.

Active supporters: TIPRO, Texas Mid-Continent Oil and Gas Association, and industry. Impact: The effectiveness of this incentive has not been studied, but it is reported that more activity occurs earlier in the terms of leases since the rule took effect than prior to implementation of the incentive. The program benefits both the state and operators.

UTAH

Workovers/Recompletions

A working interest owner who pays for all or part of the expenses of a recompletion or workover is entitled to a tax credit equal to 20% of those expenses. The tax credit may not exceed \$50,000 per well during each calendar year until December 31, 1994, and \$30,000 per well during each calendar year, beginning January 1, 1995, through December 31, 2004.

Citation: Utah Code Ann. § 59-5-102(3)

Effective dates: January 1, 1990, through December 31, 2004

Goals: To encourage investment in and continued production of wells, increase recovery, delay abandonment, establish new production, and provide for economic gains in areas of the state which have oil and gas activity. Since the cost of a workover is only a fraction of the cost to drill a new well, a workover incentive is expected to extend the producing life of wells in the Utah Basin, thereby creating jobs and tax revenue in that region.

Active supporters: Petroleum industry, county and state governments.

Impact: This is an effective and widely used incentive.

Graduated Severance Tax Rate

For oil, the severance tax rate is 3% up to and including the first \$13 per barrel, and 5% of the value exceeding \$13 per barrel. The severance tax rate for natural gas is 3% for the first \$1.50 per Mcf, and 5% of value above \$1.50.

Citation: Utah Code Ann. § 59-5-102(1) Effective date: January 1, 1992; no sunset

Goal: To provide tax relief during periods of low prices, encouraging continued production.

Marginal/Stripper Wells

Stripper wells are tax exempt unless the exemption prevents the severance tax from being treated as a deduction for federal tax purposes. Stripper wells are defined as wells which produce an average of less than 20 BOPD for one year, or 60 Mcf or less of natural gas per day for 90 consecutive days.

Citation: Utah Code Ann. § 59-5-102(2)(b) Effective date: January 1, 1984; no sunset

Goals: To encourage continued production activity and to avoid premature abandonment of marginal wells.

Field Exemption

The first \$50,000 annually in gross value of each well or field is exempt from severance taxes, to be prorated proportionally among the interest owners.

Citation: Utah Code Ann. § 59-5-102(2)(a) Effective date: January 1, 1947; no sunset Goal: To encourage exploration activity.

Wildcat Wells

No severance tax is imposed on the first 12 months of production from wildcat wells started after January 1, 1990.

Citation: Utah Code Ann. § 59-5-102(2)(d) Effective date: January 1, 1990; no sunset Goal: To encourage exploration activity.

UTAH (continued)

New Wells

The first six months of production from new wells started after January 1, 1984, but before January 1, 1990, and development wells started after January 1, 1990, is exempt from severance taxes.

Citation: Utah Code Ann. § 59-5-102(2)(e)

Effective dates: January 1, 1984, (new wells); no sunset, and January 1, 1990 (develop-

ment wells); no sunset

Goal: To encourage exploration activity.

Enhanced Recovery

A 50% reduction in severance tax is available for the incremental production achieved from an enhanced oil or gas recovery project.

Citation: Utah Code Ann. § 59-5-102(4) Effective date: January 1, 1996; no sunset

Goals: To encourage initiation of enhanced recovery projects and use of marginal wells,

increase production and avoid premature abandonment of marginal wells.

Active supporters: Industry and state government.

VIRGINIA

Coalfield Employment Enhancement Tax Credit

One cent per million BTUs of coalbed methane production is credited to the producer.

Citation: Va. Code Ann. § 58.1 - 439.2

Effective dates: July 1, 1996, to January 1, 2007

Goals: To preserve and expand the coal industry and related jobs, and to encourage pro-

duction of coalbed methane.

Active supporters: Virginia's coal producers.

Impact: Production of coalbed methane has increased since this incentive was passed. It is not known to what extent this incentive affected the increase.

Sales and Use Tax Exemptions

Raw materials, fuel, power, energy, supplies, machinery, tools and repair/replacement parts used directly in the drilling, extraction, refining or processing of natural gas or oil and reclamation of the well area are exempt from the 3.5% state sales and use tax, and the 1% local sales and use tax. Exemption includes all phases of production and processing, including gathering, until gas is pipeline quality.

Citation: Va. Code Ann. § 58.1-609.3(12)

Effective dates: July 1, 1994, through June 30, 2001

Goal: To stimulate investment in Virginia by providing sales and use tax exemptions similar to exemptions offered in other Appalachian Basin states.

Active supporters: Virginia Oil and Gas Association.

Impact: Initial, onetime revenue impact for Virginia's economy is estimated at \$1 million. The 1996 impact is estimated at \$250,000 to \$325,000 (approximately \$2,300 to \$2,700 per conventional well, and \$1,400 to \$1,800 per coalbed methane well). As a result, some producers have increased investment in Virginia.

VIRGINIA (continued)

Pollution Control Equipment and Facilities Tax Exemptions

Certified pollution control equipment and facilities, including real and tangible property, which are certified by the Department of Mines, Minerals and Energy to be in conformity with state requirements, are exempted from state and local sales and use taxes and are eligible for exemption from local tangible personal property taxes.

Citation: Va. Code Ann. § 58.1-609.3(9), § 58.103660

Effective dates: July 1, 1994, to June 30, 2001

Goal: To promote the production of oil and gas in Virginia.

Active supporters: Virginia Oil and Gas Association.

Impact: Some producers have increased investment in Virginia as a result of the approxi-

mately \$25,000 to \$30,000 (\$100 to \$150 per well) annual savings.

Virginia Department of Mines, Minerals and Energy, Division of Mineral Resources

The Division of Mineral Resources conducts research and provides information about the state's gas and oil resources for Virginia's gas and oil industry. The division maintains all information on coreholes, geologic features in gas and oil bearing areas, and a database on wells drilled in the Commonwealth.

Citation: Va. Code Ann. Chapter 25 of Title 45.1

Effective date: Virginia's geological survey was started in 1835.

Goal: Enhance the development and conservation of energy and mineral resources in a safe and environmentally sound manner to support a more productive economy.

Active Supporters: Gas and oil operators.

Impact: Customers continually rate the services of the division as very useful.

Direct Sales of Natural Gas by Producers

Producers of natural gas may sell directly to as many as 35 commercial and industrial customers without having to become certified as a public utility. The customer limit was raised during the 1997 Virginia General Assembly session from a 10-customer limit.

Citation: Va. Code Ann. § 56-265.1 (amended by 1996 Va. Acts 105)

Effective dates: 1990, amendment effective July 1, 1997

Goal: To allow gas producers to sell natural gas to commercial and industrial customers in areas not served by local gas utilities.

Active supporters: Virginia gas producers, local economic development officials.

Impact: Several companies have extended service under this program.

Consent to Stimulate Coalbed Methane

The Virginia Gas and Oil Act requires a producer of coalbed methane to obtain consent from the coal operator of each coal seam located within 750 horizontal feet of a well or 100 vertical feet of any coal seam to be stimulated. A 1997 amendment to this requirement provides that this consent shall be deemed to be granted for any tract where title to the coal is held by multiple owners who have not leased the tract for coal development when the gas operator obtains consent from the co-owners holding a majority interest in the tract.

Citation: Va. Code Ann. § 45.1-361.29.F.2 (amended by 1996 Va. Acts 759 and 765)

Effective date: July 1, 1997

Goal: To allow production of coalbed methane gas when the consent to stimulate cannot

VIRGINIA (continued)

be obtained from all co-owners of a tract of coal. *Active Supporters:* Virginia Oil and Gas Association.

Impact: It is too early to determine the effects of this change.

WEST VIRGINIA

Severance Tax Exemption

Imposes a tax equal to 5 percent of the gross value produced for the privilege of severing natural gas or oil. Effective taxable periods beginning on or after Jan. 1, 2000. An exemption from the severance tax is granted for natural gas provided free to surface owners. The exemption is granted to low-volume wells, producing less than 5 Mcf of natural gas per day or oil wells that produced an average of less than one-half barrel of oil per day during the calendar year immediately preceding a given taxable period. Natural gas or oil produced from a well that has not produced marketable quantities for five consecutive years immediately preceding the year in which the well is placed back into production and begins producing marketable quantities is also exempted for a maximum of 10 years.

Citation: H.B. 2749

Effective date: May 12, 1999

Goal: To maintain the production of marginal oil and gas wells.

Bona Fide Future Use Program

Wells that have not been producing in the previous 12 months can be designated as having a "bona fide future use." Such a designation would keep idled wells from being deemed abandoned and avoid subjecting them to a plugging obligation.

Goal: To stimulate returning existing, idled wells to production and encourage new wells.

Direct Use Sales Tax Exemption

When the exemption from sales tax for contractors was removed in 1989, subcontractors were included for the oil and gas industry, even though contract drillers were still exempt from sales tax on purchases used directly in the production of oil and gas. The 1994 Legislature clarified in Senate Bill 328 that this "direct use" exemption was available also to oil and gas subcontractors.

Effective date: 1989 and 1994

Natural Gas Vehicle Incentive

In April 1996, then Gov. Gaston Caperton signed a bill creating a tax credit that will be available for a period of 10 years. The credit can be applied for a vehicle converted to run on natural gas or the purchase of a factory-built natural gas vehicle. The credit will be worth \$3,750 for a light duty vehicle under 10,000 pounds gross vehicle weight (GVW), \$9,250 for a medium duty vehicle with 10,000 to 26,000 pounds GVW, and \$50,000 for a heavy duty vehicle of more than 26,000 pounds GVW.

WYOMING

Wyoming Crude Oil Task Force

The task force was established in 1998 by Gov. Jim Geringer to recommend actions the state could take to assist producers during times of low prices. Among the recommendations:

- a general business tax to replace the tiered system of property tax;
- a minerals director position in the governor's cabinet;
- a state royalty rate reduction;
- a study of strategies to maximize Wyoming prices and market options;
- a suspension of state and federal plugging requirements in instances where wellbore integrity can be demonstrated;
- unified and simplified reporting;
- a task force to evaluate and integrate available technology and funding sources;
- optimization of motor efficiency and design and overall field operations for electric usage.

New and Horizontal Wells

Production from a new well drilled after July 1, 1993, and before March 31, 2003, is exempt from excise taxes for 24 months. The exemption for production between July 1, 1993, and December 31, 1994, is limited to the first 40 BOPD or the first 240 Mcf of gas per day, provided the price does not exceed \$25 per barrel or \$2.75 per Mcf. This exemption was amended May 1, 2000. As amended, gas wells drilled to a total depth of less than 2,500 feet are excluded from this exemption. Production from new wells or horizontal wells drilled between January 1, 1995, and March 31, 2003, is exempt from excise tax. The exemption is limited to the first 60 BOPD or the first 360 Mcf of gas per day, provided the price does not exceed \$22 per barrel or \$2.75 per Mcf.

Citation: Wyo. Stat. § 396-302(s), H.B. 288A

Effective dates: Effective January 1, 1995, for oil or gas produced between July 1, 1993, and March 31, 2003.

Goals: To encourage discovery of new reserves and continued production of older reservoirs. The May 1, 2000, amendment's goal was the exclusion of coalbed methane wells. *Active Supporters:* Petroleum industry, Wyoming Oil and Gas Conservation Commission (WOGCC) and pro-business legislators.

Impact: 9,860,000 gross barrels of oil plus gas equivalent were produced in the six years for which statistics are available. A total of 2,574 wells were triggered by the incentive during the fiscal years 1994, 1995, 1996, 1997, 1998 and 1999. The slowing of Wyoming's rate of decline in oil production is partially attributed to this incentive.

Idle Wells

A five-year severance tax reduction from 6% to 1.5% is available on oil produced from previously idle wells. Wells must not have produced for at least the two consecutive years prior to January 1, 1995. This tax reduction applies for the first 60 months of renewed production or until the average price of oil reaches a level of \$25 per barrel averaged over the preceding six months, whichever occurs first.

Citation: Wyo. Stat. § 39-14-205(h)

Effective date: January 1, 1995; no sunset

Active supporters: Petroleum industry, WOGCC and pro-business legislators.

Impact: 263,000 gross barrels of oil in 1999.

WYOMING (continued)

Marginal/Stripper Wells

Wells which produce an annual average of less than 15 BOPD while the price of oil is less than \$20 per barrel are taxed at 4% (reduced from 6%). When the price of oil is \$20 or more, wells producing 10 BOPD or less receive the 2% tax reduction.

Citation: Wyo. Stat. § 39-14-205(a)(xx)(A)(B) Effective date: January 1, 1995; no sunset

Goal: To encourage continued production from low-volume, marginal wells. *Active supporters:* Petroleum industry, WOGCC and pro-business legislators.

Impact: Wyoming recognizes that high severance tax rates contribute to premature abandonment. In 1982, taxable stripper production was almost 6% of the total taxable production. That number increased to 17% in 1999, when 6,785,000 barrels of oil qualified for this reduction. The importance of this incentive continues to grow as Wyoming's fields continue to mature.

Environmental Audit Privilege

This privilege gives oil and gas companies complete immunity from fines and penalties of the Department of Environmental Quality for violations that are reported to the department along with remediation plans.

Citation: Wyo. Stat. §§ 35-11-1105 and 1106

Effective date: February 18, 1995

Goal: To encourage environmental compliance.

Active supporters: Mineral industry, other Wyoming industries and pro-business legislators.

State-Funded Demonstration Project

The state of Wyoming, concerned with the economic and employment costs of abandonment of marginal wells, has funded a demonstration project which should benefit wells in danger of abandonment. The new technology is a hydraulic fracture technique for sandstone reservoirs. This technique is expected to produce oil economically from shallow sandstone formations, reducing the rate of abandonment for many marginal wells. *Effective date:* Rock Creek Enterprises conducted the demonstration in April 1996. *Goal:* To encourage production from marginal wells as a result of more efficient recovery.

Federal Incentive Programs

BUREAU OF LAND MANAGEMENT (BLM)

Royalty Rate Reduction for Stripper Oil Property

The operator or owner of a federal stripper oil property that is producing less than 15 BOPD average qualifies for a royalty rate reduction from the normal royalty rate of 12.5%. This royalty rate reduction is based on a sliding scale.

Citation: 61 FR 4748, 4750; 43 C.F.R. §§ 3103.4-1, 3103.4-4

Effective date: 1992; extended indefinitely in 1997

Goal: To extend the economic life of property and enhance production.

Heavy Oil Royalty Rate Reduction

Operators of properties that produce "heavy oil," crude oil with a gravity of less than 20 degrees API (American Petroleum Institute), are eligible for a royalty rate reduction. The royalty rate reduction is based on a sliding scale for qualifying heavy oil properties. The sliding scale is intended to somewhat offset the reduced prices paid for oil as gravity decreases. For example, at 20 degrees API gravity the royalty rate is 12.5%, which can be reduced to a minimum of 0.5% based on the corresponding API gravity of the oil.

Citation: 61 FR 4748, 4750; 43 C.F.R. §§ 3103.4-1, 3103.4-3

Effective date: Feb. 8, 1996

Goals: To extend the economic life of the property and to enhance production.

Impact: The BLM reports that for the first eight months the incentive was in effect, 30 California applicants qualified. Applicants in Louisiana, Nevada and Wyoming also have taken advantage of this incentive.

Fuel Substitution

A royalty rate reduction is available for operators who choose to burn clean fuel for onlease beneficial use. The conversion for this exchange is BTU for BTU (1:1).

Note: Any operator can request a royalty rate reduction on a federal lease property. A royalty rate reduction will be granted only on an economic basis after strict scrutiny.

DEPARTMENT OF COMMERCE

Emergency Oil and Gas Guaranteed Loan Program

Provides \$500 million in loan guarantee authority to a board comprised of the Secretary of Commerce and the chairmen of the Securities and Exchange Commission and the Federal Reserve. Individual loans for as much as \$10 million are eligible for guarantees of up to 85%. There are no minimum loan guarantee amounts and all loans must be repaid no later than December 31, 2010.

Citation: Public Law 106-51; 13 CFR Chapter V, Part 500; 64 FR 57946; 15 U.S.C.S. § 1841 Effective dates: Oct. 18, 1999; expires Dec. 31, 2001.

Eligibility: Any independent oil and gas company that is a small business concern under Section 3 of the Small Business Act that is an oil field service company whose main business is providing tools, products, personnel and technical solutions on a contractual basis

DEPARTMENT OF COMMERCE (continued)

to exploration and production operators that drill, complete wells and produce, transport, refine and sell hydrocarbons and their by-products as its main commercial business. The company also must have experienced layoffs, production losses or financial losses since the beginning of the oil import crisis, after January 1, 1997.

Goal: To assist the independent oil and gas producers in the United States with recovery from the low price period, while sustaining domestic oil production.

INTERNAL REVENUE SERVICE (IRS)

NEW Extension of the Suspension of the 100% Net-Income Limit

Two methods of depletion are allowable under the Code: (1) the cost depletion method and (2) the percentage depletion method. Under the percentage depletion method, generally 15% of the taxpayer's gross income from the property is allowed as a deduction in each taxable year. (§ 613 (c)) The amount deducted generally may not exceed 100% of the net income from that property in any year. (§ 613 (a)) The Taxpayer Relief Act of 1997 suspended the 100% of net income limitation for production from marginal wells for the taxable years beginning after 1997 and before January 1, 2001.

The provision extends the period when the 100% net-income limitation is suspended to include taxable years beginning after December 31, 1999 and before January 1, 2002. *Citation*: I.R.C. § 613A

Natural Gas Vehicles

A \$2,000 adjustment to gross income on federal taxes is available for the purchase of a natural gas powered vehicle (NGV). This adjustment can be applied for a vehicle converted to run on natural gas or for the purchase of a factory-built NGV. In the case of any natural gas powered truck or van with a gross vehicle weight (GVW) rating greater than 10,000 pounds but not greater than 26,000 pounds, the allowable deduction is \$5,000. For a natural gas powered truck or van with a gross vehicle weight rating greater than 26,000 pounds, or any bus which has a seating capacity of at least 20 adults (not including the driver), the deduction is \$50,000. The deduction pertains only to that portion of equipment installed (including installation costs) to convert a vehicle to the use of natural gas, or in connection with the exhaust from such vehicles.

Citation: I.R.C. 179A

Effective date: Property placed in service after June 30, 1993, and before January 1, 2005

OTHER PROPOSED PROGRAMS

Energy Tax Policy Act of 2001

The Energy Tax Policy Act of 2001 would amend the Internal Revenue Code with respect to energy conservation credits and deductions. Those credits and deductions would include:

- · a residential solar energy credit;
- the credit for electricity from renewable sources;
- a credit for stationary fuel cell powerplant expenditures;
- an alternative motor vehicle credit;
- the credit for electric vehicles;

IRS (continued)

- an energy efficient appliance credit;
- a credit for energy efficiency improvements to existing homes;
- a business credit for construction of a new energy efficient home;
- a deduction for energy efficient commercial building property;
- a deduction for qualified energy management devices and retrofitted meters; and
- an energy credit for combined heat and power system property.

This proposed legislation sets forth provisions concerning energy suppliers and supply, including provisions relating to:

- the treatment of natural gas gathering lines as seven-year property;
- the treatment of petroleum refining property as seven-year property;
- the expensing of capital costs incurred in complying with EPA sulfur regulations;
- an environmental tax credit for every gallon of 15 ppm or less sulfur diesel produced by a small business refiner;
- tax exempt bond financing of certain electric facilities;
- special rules for nuclear decommissioning costs;
- a marginal well production credit;
- a deduction for delay rental payments for domestic oil and gas wells;
- allowing an election to expense geological and geophysical expenditures;
- the extension and modification of credit for producing fuel from a nonconventional source;
- an advanced clean coal technology credit; and
- energy-related businesses on Indian reservations.

Citation: H.R. 2511

Sponsor: Rep. Jim McCrery

Goal: To amend the Internal Revenue Code of 1986 to provide tax incentives to encourage energy conservation, energy reliability, and energy production.

MINERALS MANAGEMENT SERVICE (MMS)

Federal Oil and Gas Royalty Simplification and Fairness Act of 1996

The Royalty Simplification and Fairness Act (RSFA) streamlines the audit and appeal process, shortens records retention requirements, alters reciprocal interest requirements with industry receiving interest on overpayments, limits the liability period to seven years and specifies liable parties, and reduces reporting requirements through prepayments of royalties on marginal properties.

Citation: 30 U.S.C.S. §§ 1701 et seq.; 104 H.R. 1975

Effective dates: Provisions are effective beginning September 1, 1996.

Goals: To decrease the time required for collections owed to the U.S. government, to lessen burdensome and costly record keeping, to quicken resolution of money disputes and correction of underpayment/overpayment problems, and to provide a more cost-effective approach to royalty management by streamlining and simplifying certain royalty requirements and practices.

Active supporters: U.S. Sens. Don Nickles, Frank Murkowski and Pete Domenici; U.S. Reps. Ken Calvert, Bill Brewster, Calvin Dooley, Billy Tauzin and Frank Lucas.

MMS (continued)

Impact: The RSFA amends portions of the Federal Oil and Gas Royalty Management Act of 1982 to provide that owners of operating rights in a federal oil and gas lease are primarily liable for royalty payments on their portions of their lease, and that owners of record title for such leases are secondarily liable. This required the collection of data connecting the lessees with the parties who are currently paying and reporting on federal leases, an increased administrative burden on industry and government.

OTHER PROGRAMS

The MMS has a number of initiatives designed to encourage domestic oil and natural gas production in the Gulf of Mexico. These incentives include:

Royalty Suspension (RS) Leases

An automatic royalty suspension volume is provided for deep water leases and specified in the Notice of OCS Lease Sale and the lease document. The royalty suspension volumes in a recent lease sale were 9 million BOE for water depths from 800 to 1,599 meters and 12 million BOE for 1,600 meters and greater.

Citation: 30 CFR 260.120-124 Effective date: March 26, 2001

Goal: To encourage the development of offshore deepwater resources.

Deep Gas Incentive

This incentive is for exploration of deep gas deposits in shallow water (below 200 meters). This program provides for a royalty suspension on the first 20 BCF of natural gas produced from a well drilled and completed below 1500 feet. The incentive is specified in the Notice of OCS Lease Sale and in the lease document and was first offered in the March 28, 2000 lease sale.

Goal: Exploration and development of offshore deep gas reserves.

Subsalt Lease Term Extension

This incentive encourages drilling of wells with subsalt hydrocarbon objectives. The program provides up to a two-year extension of the five-year primary lease term, thus allowing the operator additional time to refine subsalt imaging techniques as well as processing and interpretation of such imaging.

Citation: Notice to Lessees and Operators No. 2000-G22

Goal: Development of offshore subsalt resources.

Pre-Act (Deepwater Royalty Relief Act of November 28, 1995) and Post 2000 Deepwater Discretionary Royalty Relief

This rule provides a royalty suspension incentive that applies specifically to marginal oil and gas fields and projects that would otherwise be uneconomical. The incentive is applicable to deepwater, 200 meters and greater, and the operator must receive approval through an application process.

Citation: Existing 30 CFR Part 203 for Pre-Act leases, effective February 17, 1998. Proposed 30 CFR Part 203 published November 16, 2000; when final, applicable to Pre-Act and Post 2000 leases; 65 FR 69259.

Goal: Increased development of offshore deepwater resources.

International Incentive Programs

CANADA

FEDERAL PROGRAMS

Atlantic Canada Investment Tax Credit (ACITC)

The federal government offers a tax credit specific to investments in Atlantic Canada. ACITC provides a credit equal to 10% of the cost of certain investments. Among those investments are the costs associated with bringing an offshore well into production. The ACITC is not refundable for foreign corporations, but is refundable under certain circumstances for Canadian-controlled private companies.

ALBERTA

Deep Gas Royalty Holiday

This is Alberta's only royalty reduction program for natural gas and was initiated by the government in 1985. The goal of the program was to encourage exploration for deep gas pools. As deep wells are very expensive to drill, the program provides a reduction in royalty for wells dependent upon depth drilled beyond 2,500 meters. The Deep Gas Royalty Holiday (DGRH) was last reviewed in 1999.

The DGRH applies to all new wells drilled into previously undefined gas pools or extensions of existing pools located below 2,500 meters. The drilling spacing unit must be wholly outside of the deep gas pools as defined by the Alberta Energy and Utilities Board. The royalty holiday is defined in terms of a dollar amount applied against royalties. The benefit applies until the value of the natural gas and by-products exempted equals the amount determined by a depth-based schedule. The maximum value of the holiday is \$3.6 million, and the entitlements must be used within 10 years from the finished drilling date. Submission of an application is required to apply for the benefits.

Citation: A.R. 351/93

Effective date: May 31, 1985; no sunset

Goal: To encourage the discovery of deep gas pools.

Third Tier Exploration Oil Royalty Holiday

A third tier exploratory well is an oil well or an oil sands well that was spudded after September 30, 1992 and classified as a new field wildcat (NFW), or a new pool wildcat (NPW), or a deeper pool test (DPT). Initiated by the industry, the goal of this program is to encourage the discovery of new oil pools in a mature basin. The results of a review conducted in 2000 showed that the policy has been effective in achieving its goal as it caused higher exploration activity resulting in more new discoveries.

This program reduces royalty on the new oil well that results in the discovery of a new productive pool. The royalty holiday is effective from the first production month until the accumulated royalty holiday reaches \$1 million or 12 production months, whichever occurs first. This program allows an earlier payout of successful exploration well costs. Wells producing from third-tier vintage oil pools receive a lower royalty rate. This lower royalty

ALBERTA (continued)

rate plus the holiday is meant to reflect the higher costs of finding and developing smaller oil pools. Wells that commence production on or after October 1, 1992, will be reviewed by the Alberta Department of Energy (ADOE) to assess eligibility. The royalty holiday will be established for qualifying wells when the ADOE calculates royalty for the month that initial oil production is reported. The holiday is retroactive, to the month when production commenced. No application is required for the program.

Citation: A.R. 16/93

Effective date: October 1, 1992; no sunset

Goal: To encourage the discovery of new oil reservoirs.

Reactivated Oil Well Holiday

A reactivated well is an oil well or oil sands well that was reactivated on or after October 1, 1992, after the well did not produce any substance during its qualifying period. The program was introduced by the government of Alberta in 1992 with the goal of encouraging reactivation of shut-in oil or oil sands wells. The policy has been positive for sustaining the production from mature oil pools.

The program provides a royalty holiday for the wells that are successfully reactivated to help earlier recovery of the reactivation costs. Non-producing wells that commence production on or after October 1, 1992, will be reviewed by the ADOE to establish the royalty holiday for the qualifying wells. The royalty holiday is available from the reactivation date until a cumulative of 8,000 cubic meters of oil has been produced from the reactivated well. No application is required for the program.

Citation: A.R. 352/92

Effective date: October 1, 1992; no sunset

Goal: To encourage reactivation of non-producing wells.

Low Productivity Oil Well

Initiated by the oil producers in 1991, the ADOE developed this policy to alleviate the royalty burden on low productivity oil wells. The goal of the program is to ensure that royalty is not a barrier to the incremental investments necessary to increase production from low productivity oil wells. The program provides a maximum royalty rate of 5% of production for wells currently producing at modest levels.

Well production history will be reviewed by the ADOE to establish royalty adjustment for eligible wells when the royalty is calculated. The program ensures that the royalty rate applying to the first 16,000 cubic meters of oil or oil sands production from each eligible well will be the lower of 5% or the rate determined by the oil royalty formula. No application is required for the program.

Citation: A.R. 350/92

Effective date: October 1, 1992; no sunset

Goal: To encourage additional production from low productivity wells.

Enhanced Oil Recovery Royalty Relief

Introduced in 1977, this program offsets the costs of enhanced oil recovery (EOR) after the less costly primary and secondary extraction methods have been exhausted. The program's goal was to facilitate the use of EOR methods for conservation of petroleum resources and

ALBERTA (continued)

to prolong the economic production life of mature oil pools. EOR recovery schemes are allowed to deduct approved costs from royalty payable on the incremental oil recovered. The allowable EOR costs are incremental to the base recovery scheme and must be approved by the ADOE.

The program was reviewed in 2000. Effective August 2000, the program is not open to new projects, however, the ADOE will still continue to consider the expansion of existing projects based on economic viability of the EOR schemes. The key criteria for scheme approval are:

- the scheme must receive technical approval from Alberta Energy and Utilities Board;
- the scheme must use the injection of chemicals or other material approved by the Minister;
- the scheme is likely to produce more oil from the pool than could be produced under the base recovery scheme for the pool; and
- the costs to implement and operate the EOR scheme are significantly greater than the costs to implement and operate the base recovery scheme.

Citation: A.R. 348/93

Effective date: 1977. The program is not open to new projects effective August, 2000. Goal: To encourage the use of enhanced oil recovery methods to conserve the province's petroleum resources.

Horizontal Re-entry Oil Royalty Reduction

This is a permanent royalty policy that was proposed and supported by the petroleum industry. The goal is to prolong the economic production life of mature oil pools by using horizontal well technology, thereby conserving the province's oil resources. The program was last reviewed in 2000.

The royalty rate will be capped for oil produced from an eligible horizontal extension. The cap will be the royalty rate associated with the average production volume for the latest 12 months when production occurred before re-entry. For a well with a 12-month production average of up to 184 cubic meters per month, royalty will be capped at one half that rate for the incremental production that exceeds the qualifying average. To obtain the capped royalty for horizontal re-entry oil well production, a written application is to be submitted to the ADOE.

Citation: A.R. 348/92

Effective date: October 1, 1992; no sunset

Goal: To encourage incremental production from mature pools.

Experimental Project Petroleum Royalty Regulation

The policy was introduced in 1979 to encourage the development of new and improved methods for crude oil recovery. The program reduces the royalty associated with experimental projects.

The experimental schemes approved by the Alberta Energy and Utilities Board are eligible for a flat royalty rate of 5% of the production during the experimental royalty period. To obtain the 5% experimental royalty rate, an operator must file a letter with the ADOE

ALBERTA (continued)

requesting approval of the scheme, and specification of an experimental royalty period.

Citation: A.R. 65/92

Effective date: 1972; no sunset

Goal: To encourage development of new and improved oil recovery methods.

NEWFOUNDLAND AND LABRADOR

Overview

The royalty regime is designed to be sensitive to the levels of risks and profits associated with the area in question and to be comparative with the royalty regimes in other districts, while providing an equitable sharing of revenues.

The similarity in the offshore and onshore geology, coupled with the potential for the discovery of hydrocarbon accumulations both in the onshore and nearshore areas, have led to increased interest by the petroleum industry in developing the western Newfoundland area. The establishment of a royalty regime contributes to lowering the risks to the petroleum industry as well as fully assessing the petroleum potential in this area.

This system is based on extensive economic analysis and is designed:

- to reflect the attractiveness of the province's onshore petroleum resources;
- to be sensitive to small and marginal prospects;
- to be competitive with the royalty systems applied in other jurisdictions; and
- to ensure a minimum level of fiscal benefits to Newfoundland and Labrador.

The royalty holiday provides the most assistance to small and marginal prospects, ensuring that no royalty will be paid on the first 2 million barrels, or equivalent, of production. The basic royalty ensures that beyond 2 million barrels, the province will receive a minimum of 5 percent of gross revenue. The profit sensitive component is designed to reflect changing economic circumstances and to ensure our competitiveness with the systems applied in other jurisdictions. Unless a certain profit level is exceeded, then no additional royalty beyond the 5 percent basic will be levied. If, however, such a profit level is exceeded, then government revenue will increase as project profitability increases.

The discovery of hydrocarbons in Newfoundland and Labrador has the potential to create new economic opportunities. The development of a viable petroleum industry in western Newfoundland could represent a new industry whose magnitude will be very dependent on the success of the current round of exploration programs.

Definitions

Gross revenue: gross sales revenue less transportation costs to point of sale.

Net revenue: gross revenue less uplifted costs. Costs: exploration, capital, and operating.

Uplifts: gross-up of costs (proxy for overheads).

Return allowance: allowance for a rate of return on investment (uplifted costs).

Components of Royalty Regime

The regime has three basic components that are:

NEWFOUNDLAND AND LABRADOR (continued)

1. Royalty Holiday

2 million barrels or equivalent (the 2 million-barrel holiday in the onshore was use as an incentive to attract exploration and development of onshore petroleum resources);

2. Basic Ad Valorem Royalty

5 percent of gross revenue;

3. Two Tier Net Profits Tax

a. **Incremental Royalty — Tier 1:** 20 percent of net revenue after a rate of return of 5 percent plus the long-term government bond rate.

Type: Net profit based.

Term: Commences upon incremental royalty tier 1 payout and continues to the end of production.

Amount: Net revenue multiplied by the tier 1 incremental royalty rate and basic royalty is creditable against tier 1 incremental royalty.

When: Eligible costs have been repaid, including eligible capital and operating costs; basic royalty; and a tier 1 incremental royalty return allowance.

b. **Incremental Royalty--Tier 2:** 5 percent of net revenue after a rate of return of 15 percent plus the long-term government bond rate.

Type: Net profit based.

Term: Commences upon incremental royalty tier 2 payout and continues to the end of production.

Amount: Net revenue multiplied by the tier 2 incremental royalty rate. When: Eligible costs have been repaid, including eligible capital and operating costs; basic royalty; incremental royalty — tier 1; and a tier 2 incremental royalty return allowance.

In 1996, the province announced the establishment of a royalty regime that applies to the development of all petroleum resources in the Newfoundland and Labrador offshore area, with the exception of the Hibernia and Terra Nova projects. In conjunction with this regime, the government indicated its intention to provide an exemption from the application of the province's Retail Sales Tax (RST) to all petroleum related capital and operating expenditures in the offshore area.

This generic royalty regime will translate into increased industry activity, more employment and a stronger provincial economy. It will also provide government with a new source of revenue. The basic royalty commences at a low rate and increases as certain cumulative levels of production are reached, providing an incentive to develop small and marginal prospects by ensuring that minimal royalties are paid on these types of fields. Once cumulative production reaches 100 million barrels (mmbls) or, if the project becomes profitable before that point, the province will receive 5% of gross revenue increasing to 7.5% at higher levels of cumulative production.

The two tier net royalty is profit sensitive. It is designed to reflect changing economic circumstances and to ensure competitiveness with royalty systems in other jurisdictions. When a certain profit level is achieved, the net royalty is applied with the province

NEWFOUNDLAND AND LABRADOR (continued)

receiving the greater of the gross or tier one net royalty payable. If profits increase beyond that level, government revenue will also increase. If these profits increase significantly, then government revenue will also increase significantly as the tier two net royalty component will levy an additional 10% of net revenue.

NOVA SCOTIA

Research and Development Tax Credit

The province of Nova Scotia offers a research and development tax credit, which is similar to the federal Scientific Research and Experimental Development incentive program. Nova Scotia taxpayers, who engage in qualified research, are eligible for this incentive.

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Definitions

Abandoned wells are wells which have been permanently plugged. The remaining petroleum production potential of these wells is often lost forever.

Bcf is an acronym for "billion cubic feet" of gas.

BOPD is an acronym for "barrels of oil per day."

Development wells are new wells drilled into existing reservoirs and are also known as "in-fill" wells.

Discovery wells are wells drilled to extract petroleum from a previously unproduced pool.

Enhanced oil recovery usually refers to the employment of tertiary recovery and secondary recovery methods. These higher technology, more expensive techniques include miscible fluid displacement, microemulsion flooding, thermal methods, and other chemical flooding methods.

Idle wells are oil or gas wells which have not been abandoned, but are not currently producing. Idle wells are also referred to as "inactive" or "shut-in" wells.

Incremental production is the increase in the amount of oil or gas produced as a direct result of an enhanced recovery or enhanced production project.

Mcf is an acronym for "thousand cubic feet."

Marginal wells are low-producing wells on the margin of profitability. States differ in the maximum a well can produce and qualify as a marginal well.

Orphan wells are idle wells whose owners are unknown, cannot be located, or are insolvent.

Primary recovery of oil is powered by the pressure energy existing in the reservoir. Further production requires the artificial introduction of energy.

Recompletion is a downhole operation in an existing well which initiates production in a geologic interval not currently producing in that well.

Secondary recovery generally consists of the injection of water in a controlled fashion into a known reservoir in order to displace the oil from the rock and push it to a producing well.

Severance tax is an excise tax levied on a barrel of oil or cubic foot of gas produced within a state. It is also called "production tax." Severance taxes are of two types: ad valorem, which is a percentage of the value of the product; and specific per barrel/Mcf, which is based on units of production (i.e., \$1/barrel).

Stripper wells are low-volume wells in the final stages of production. Exact definitions, as used in state incentive programs, vary from state to state. Since production from these wells is quite low, they are also marginal wells.

Tertiary recovery involves steam flooding or the injection of carbon dioxide gas to manipulate the reservoir and improve recovery.

Workovers are well-servicing operations designed to maintain, restore or increase the productivity of an oil or gas well and extend the well's economic life. Workovers can include such operations as repairing the cement casing in the well hole, re-acidizing, re-perforating, and removing accumulated sand or paraffin from the wellbore. These are standard operations that are not considered to be enhanced recovery projects.

ORDER FORM

This publication is a supplement to the December 1999 comprehensive edition of the IOGCC report on state incentives, *Investments in Energy Security*. The December 1999 edition includes an in-depth evaluation of the economic contributions of state incentives by David M. Garlick and Patricia Cleary Leo, and is a valuable resource. **Copies of that report are usually \$45**, but you can receive a \$10 discount when you use this "supplemental publication" order form.

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The Interstate Oil and Gas Compact Commission (IOGCC) represents the governors of 37 states 30 member and seven associate states that produce virtually all the domestic oil and natural gas in the United States. Five international affiliates have been accepted into the IOGCC in recent years.

The organization's mission is to promote the conservation and efficient recovery of domestic oil and natural gas resources, while protecting health, safety and the environment.

Since its creation in 1935, the IOGCC has assisted states in balancing a multitude of interests — maximizing domestic oil and natural gas production, minimizing the waste of irreplaceable natural resources, and protecting human and environmental health — through sound regulatory practices. The IOGCC plays an active role in Washington, D.C., serving as the voice of the states on oil and natural gas issues and advocating states' rights to govern the resources found within their borders.

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