

## **U.S. Offshore Milestones**

[Abbreviations: GOM = Gulf of Mexico; OCS – Outer Continental Shelf: OPA – Oil Pollution Act]

PRE C	PRE Outer Continental Shelf Lands Act		
1896	<ul> <li>First Offshore oil production in the United States</li> </ul>	<ul> <li>From wooden pier off Summerland, CA, in State waters.</li> </ul>	
1938	<ul> <li>First GOM offshore discovery well drilled in State water</li> </ul>	<ul> <li>Creole Field, 2.4 km (1.5 mi) from Louisiana coast in 4.2 m (14 ft) of water from a 100 x 300 ft drilling platform secured to a foundation of timber piles.</li> </ul>	
1946	<ul> <li>First GOM OCS exploratory well drilled in Federal waters</li> </ul>	<ul> <li>16 km (10 mi) southeast of Eugene Island by the Magnolia Petroleum Company.</li> </ul>	
1947	<ul> <li>First well drilled from fixed platform offshore almost out of sight of land in Federal waters</li> </ul>	<ul> <li>Ship Shoal area 19.3 km (12 mi) south of Terrebonne Parish, LA, in 4.8 m (16 ft) of water by Kerr-McGee.</li> <li>Fixed platform/drilling tender combination was major breakthrough in drilling-unit design for offshore use.</li> </ul>	
1953	<ul> <li>Submerged Lands Act passed</li> <li>OCS Lands Act passed – August 7th</li> </ul>	<ul> <li>Grants coastal States jurisdiction over a belt of submerged lands that extends seaward off the coast 3 nautical miles (3.45 statute miles or 5.5 km) except for the coasts of Texas and Florida where jurisdiction extends 3 marine leagues (10.35 statute miles or 16.65 km).</li> <li>Provides for Federal jurisdiction over the OCS and authorizes the Secretary of the Interior to lease those lands for mineral development.</li> </ul>	
POST	<b>Outer Continental Shelf Lands Act</b>		
1954	<ul> <li>First OCS lease sale held</li> </ul>	<ul> <li>Offered blocks offshore Louisiana. The sale brought \$116,378,476 in bonuses into the Federal treasury.</li> </ul>	
1958	<ul> <li>First Pacific offshore drilling and production platform erected in State waters</li> </ul>	<ul> <li>Platform Hazel in 30 m (100 ft) of water and 3.2 km (2 mi) offshore Summerland, CA, by Humble Oil &amp; Refining Company and Western Operations, Inc.</li> </ul>	
1967	<ul> <li>Initial Alaska Prudhoe Bay Field discovery made by exploratory well</li> </ul>	<ul> <li>Well drilled by ARCO.</li> </ul>	
1968	<ul> <li>First Pacific OCS production</li> </ul>	<ul> <li>Platform Hogan, Lease OCS-P 0166.</li> </ul>	
1969	<ul> <li>Santa Barbara Oil Spill</li> <li>National Environmental Policy Act passed</li> </ul>	<ul> <li>Platform blowout in Federal waters spurred development of oil spill regulations and research.</li> <li>Requires a detailed environmental review and statement before any major or controversial Federal action.</li> </ul>	
1970	<ul> <li>Clean Air Act passed</li> </ul>	<ul> <li>Regulates the emission of air pollutants from industrial activities.</li> </ul>	
	<ul> <li>Coastal Zone Management Act passed</li> </ul>	<ul> <li>Requires State review of Federal action that affects the</li> </ul>	

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1973	<ul> <li>Endangered Species Act passed</li> </ul>	<ul> <li>Requires a permit to take an endangered species and that all Federal agencies must ensure that Federal actions will not significantly impair or jeopardize protected species or their habitats.</li> </ul>
1975	<ul> <li>First Alaska Continental Offshore Stratigraphic Test (COST) well drilled</li> </ul>	<ul> <li>Gulf of Alaska.</li> </ul>
1976	<ul> <li>First Alaska lease sale held</li> <li>First Alaska OCS exploratory well drilled</li> <li>First Atlantic COST well drilled</li> </ul>	<ul> <li>Lease sale 39 in Gulf of Alaska. Bonus bids totaled \$571,871,587.</li> <li>Gulf of Alaska, Block 106, by Shell Oil.</li> <li>B-2 well drilled in the Baltimore Canyon Trough for a total depth of 16,043 feet.</li> </ul>
1977	<ul> <li>Clean Water Act passed</li> </ul>	<ul> <li>Regulates discharge of pollutants into the surface waters of the United States.</li> </ul>
1978	<ul> <li>Major amendments to the OCS Lands Act passed</li> <li>First Mid-Atlantic OCS exploratory well drilled</li> </ul>	<ul> <li>Important changes; requirements for 5-year leasing programs; formalized environmental studies program; and formalized coordination and information sharing.</li> <li>Blk 683, NJ 18-3, by Exxon, 5,370 meters (17,720 ft) deep.</li> </ul>
1979	<ul> <li>First South Atlantic OCS exploratory well drilled</li> </ul>	<ul> <li>Blk 2089, NH 17-5, by Tenneco, 2,363 meters (7,754 ft) total well depth.</li> </ul>
1980	<ul> <li>First 5-Year Leasing Program initiated</li> </ul>	<ul> <li>Between 1980 and 1982, twelve OCS lease sales were held.</li> </ul>
1981	<ul> <li>First OCS leasing moratorium enacted by Congress (FY 1982)</li> <li>Highest bid on a block received</li> <li>First North Atlantic OCS exploratory well drilled</li> </ul>	<ul> <li>In central and northern California OCS. However, leasing moratoria was later extended to six other OCS planning areas.</li> <li>\$333,596,200 in So. California lease sale 53, NI 10-06, Blk 464.</li> <li>Blk 133, NK 19-12, by Exxon, 4,303 meters (14,118 ft) deep.</li> </ul>
1982	<ul> <li>MMS created as a bureau of the Department of the Interior</li> <li>Federal Oil &amp; Gas Royalty Management Act passed</li> <li>Initial 5-Year Leasing Program revised</li> </ul>	<ul> <li>With mission to manage OCS mineral resources in an environmentally sound and safe manner and to collect, verify, and distribute mineral revenues from Federal and Indian lands.</li> <li>Designed primarily to assure proper and timely revenue accountability from production and leasing of Federals lands.</li> <li>Introduced area-wide leasing.</li> </ul>
1983	<ul> <li>Record number of lease sales in a year</li> <li>Greatest high bid dollar amount received at a lease sale</li> <li>First compliant guy-towered platform</li> <li>First preleasing moratorium enacted (FY 1984)</li> <li>President signs Proclamation 5030 (3 CFR 22) establishing the U.S. Exclusive Economic Zone (EEZ)</li> </ul>	<ul> <li>Eight sales: GOM 69(2), 72, 74: PAC 73: AK 57, 70: ATL 76, 78.</li> <li>\$4,469,214,969 in the Central GOM lease sale 72.</li> <li>In the GOM, 181.3 kilometers (110 mi) southeast of New Orleans, LA, in 303 meters (1,000 ft) of water</li> <li>North Atlantic.</li> <li>The EEZ is the area contiguous to the territorial sea of the United States, the Commonwealth of Puerto Rico, the Commonwealth of Northern Mariana Islands, and the U.S. overseas territories and possessions and extends 200 nautical miles from the coastline.</li> </ul>

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1984	<ul> <li>National Fishing Enhancement Act passed</li> </ul>	<ul> <li>Encourages using offshore oil platforms as artificial</li> </ul>
	<ul> <li>Most tracts offered at a lease sale</li> <li>Record number of exploratory wells drilled in a year</li> </ul>	<ul> <li>reefs.</li> <li>8,868 tracts in the Eastern GOM lease sale 79.</li> <li>597 in the GOM.</li> </ul>
	<ul> <li>Record number of platform installations in a year</li> </ul>	<ul> <li>229 in the GOM.</li> </ul>
1985	<ul> <li>Well drilled farthest from shore</li> </ul>	<ul> <li>965 kilometer (603 mi) in Navarin Basin, Alaska, Block 673; ARCO, Inc.</li> </ul>
1986	<ul> <li>Deepest well drilled</li> </ul>	<ul> <li>7,620 meters (25,001 ft) in the Central GOM, Viosca Knoll, Block 1177, by Apache Corporation.</li> </ul>
	<ul> <li>OCS Lands Act Amendments to Section 8(g) passed</li> </ul>	<ul> <li>Distributed funds in escrow to Federal Government and affected States.</li> </ul>
1988	<ul> <li>Congress enacts first OCS drilling ban (FY 89 DOI appropriations)</li> <li>Lease in deepest water</li> </ul>	<ul> <li>73 existing leases in Eastern GOM, South of 26° N Latitude. However, drilling moratoria was later expanded to include North Aleutian Basin and leases offshore North Carolina.</li> <li>3,335 meters (10,942 ft) in the Eastern GOM, lease sale</li> </ul>
1989	<ul> <li>Most bids received on a block</li> </ul>	<ul> <li>116, in Lloyd Ridge, Block 737, by Kerr-McGee Corp.</li> <li>15 in Western GOM lease sale 122, offshore Galveston,</li> </ul>
	<ul> <li>The President establishes OCS task Force to examine concerns over adverse impacts of lease sales offshore California and Eastern GOM, south of 26° N.</li> </ul>	TX, Block 313.
1990	<ul> <li>Amendments to Clean Air Act passed</li> <li>Oil Pollution Act of 1990 passed</li> <li>North Carolina Outer Banks Protection Act passed</li> <li>President decides to withdraw certain areas for lease</li> </ul>	<ul> <li>EPA authorized to set air quality standards and regulate air emissions. Listed 189 chemical categories for which EPA would set national emissions standards.</li> <li>Enacted in response to a number of larger tanker spills with the objectives of (1) preventing discharges of oil into Federal waters from vessels and facilities and (2) ensuring that owners and operators have the resources to clean up such spills should they occur.</li> <li>Prohibited the Secretary of the Interior from conducting a lease sale, issuing any new leases, approving any exploration, development and production plans, or any applications for permit to drill or permit any drilling for oil and gas under the OCS Lands Act on any OCS lands offshore North Carolina. Stipulated that an Environmental Sciences Review Panel be established no later than 6 months after enactment.</li> <li>Areas offshore California, Washington, and Oregon, North Atlantic, and Eastern GOM (south of 28°) until after the year 2000.</li> </ul>
1991	<ul> <li>Deepest producing natural gas well</li> </ul>	<ul> <li>6,668 meters (21,878 ft) in the GOM, Well A001, Lease OCS-G 5058, Mobile Block 821, by BP Exploration &amp; Oil Inc.</li> </ul>
1992	<ul> <li>Secretary of Interior delegated OPA-90 authority to MMS</li> </ul>	<ul> <li>Gave MMS the responsibility for certifying (1) oil spill prevention and response plans for all offshore oil and gas facilities, including platforms and pipelines in State waters as well as on the OCS, and (2) financial responsibility for oil spill liability at an increased level of \$150 million for all operators of offshore facilities, including pipelines.</li> </ul>

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	<ul> <li>Conoco Inc. vs. The United States lawsuit</li> </ul>	<ul> <li>Lawsuit concerning congressional moratoria preventing drilling of existing leases in certain areas.</li> </ul>
1993	<ul> <li>Most platform removals in a year</li> </ul>	<ul> <li>182 removals in the GOM.</li> </ul>
1994	<ul> <li>Full transfer of OCS Air Regulations to EPA</li> </ul>	<ul> <li>Air quality regulatory authority for Pacific OCS facilities transferred from DOI to EPA. EPA transferred authority to local air pollution control districts.</li> </ul>
1995	<ul> <li>Deepwater Royalty Relief Act passed</li> <li>Settlement agreement reached as part of Conoco lawsuit</li> </ul>	<ul> <li>Expands MMS's discretionary authority to grant royalty relief and mandates royalty relief (under certain conditions) for GOM leases in 200 meters (658 ft) or greater water depth.</li> <li>Certain leases under litigation were relinquished to the Federal Government by lessees in return for a fee.</li> </ul>
1996	<ul> <li>OPA-90 Amendments passed</li> <li>Congress repeals Section 6003 of OPA-90</li> <li>World's first production SPAR installed</li> <li>Producing well in GOM's deepest water</li> <li>GOM deepwater production record and world record tieback set</li> <li>Royalty Simplication and Fairness Act signed</li> </ul>	<ul> <li>Applied to financial responsibility for offshore facilities and to spill prevention within State waters</li> <li>Resulted in repeal of North Carolina leasing and drilling moratorium.</li> <li>564 meters (1,851 ft) of water in Viosca Knoll, Neptune SPAR by Oryx Energy in Central GOM.</li> <li>Platform Mars in 896 meters (2,940 ft) of water in Central GOM, Mississippi Canyon Block 807, Shell Deepwater Production, Inc.</li> <li>Mensa field subsea system in 1,615 meters (5,300 ft) of water 225 kilometers (140 mi) southeast of New Orleans, LA, with 12-inch flow line tied back to 109 kilometers (68 mi) to a shallow water platform.</li> <li>This act, designed to improve the management of royalties from Federal and OCS oil and gas leases, was the first major legislation affecting royalty management since the Federal Oil and Gas Royalty Management Act of 1982, which was passed in January 1983</li> </ul>
1997	<ul> <li>Most bids received at a lease sale</li> <li>Most tracts bid on at a lease sale</li> <li>GOM gas production record set</li> <li>First royalty relief granted under the Deepwater Royalty Relief Act for existing leases.</li> </ul>	<ul> <li>1,790 bid for Central GOM lease sale 166.</li> <li>1,032 tracts for Central GOM lease sale 166.</li> <li>Southeast Tahoe field, Viosca Knoll Block 784, production rate of 119 MMcfd from a single satellite well tied back to the Bud Lite facility, 13 miles away.</li> <li>Granted to Tatham Offshore, Inc., for Sunday Silence, a deepwater field offshore Louisiana in 457 meters (1,500 ft) water depth, about 45 kilometers (72 mi) offshore and about 84 kilometers (135 mi) south of New Orleans, LA</li> </ul>

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1998	<ul> <li>GOM water-depth drilling record</li> <li>Production record set in GOM (boepd)</li> </ul>	<ul> <li>Set by the Glomar Explorer drill ship, at a water depth of 2,352 meters (7,718 ft), 175 miles southeast of New Orleans, LA, in GOM's Atwater Valley section. Chevron USA Production Company led the project.</li> <li>A-7 well in Ursa field, Mississippi Canyon Blk 809, produced at a rate of 39,317 bpd of oil and 60.67 MMcfd of gas, or 50,150 boepd (oil equivalent). Exceeds</li> </ul>
	<ul> <li>First freestanding offshore compliant tower and tallest freestanding structure in the world</li> </ul>	<ul> <li>previous record of 46,475 boepd set at the Troika development.</li> <li>Baldpate, located in 503 meters (1,650 ft) of water in GOM's Garden Banks Blk 260, extends almost 580 meters (1,902 ft) above the seafloor to the tip of its flare beam</li> </ul>
	<ul> <li>Presidential Directive under the OCS Lands Act to prevent leasing any area under moratorium before 2012</li> </ul>	<ul> <li>boom.</li> <li>Extended by 10 years, areas previously under moratoria.</li> </ul>
1999	<ul> <li>Oil production from the deepwater portion of the GOM surpassed production from the shallow-water portion</li> </ul>	<ul> <li>In November 1999, deepwater production marked a major milestone in the history of GOM production, which started in shallow water in 1947. At the time only 30 (or 4%) of GOM's 747 producing fields were in deepwater, however, they provided over half of the GOM's daily oil production.</li> </ul>
2000	<ul> <li>World water depth record set for an exploratory well from an anchored rig in GOM</li> <li>World's tallest freestanding structure</li> <li>World's deepest water drilling and production platform located in the GOM</li> <li>Longest horizontal reach record set for a well in the GOM</li> <li>Incorporation of the first international technical standard in MMS regulations</li> </ul>	<ul> <li>Announced by Shell Oil on July 4, 2000. The R&amp;B Falcon Corporation's Deepwater Nautilus spudded Baha 2 on the Baha Prospect (Alaminos Canyon Blk 557) reaching a water depth of 2,374 meters (7,790 ft).</li> <li>Installed in 535 m (1,754 ft) of water in the GOM as part of the Texaco USA compliant tower production system (Petronius Project), the structure rises almost 610 meters (2,000 ft) above the seafloor. Oil and gas production from the structure began on July 11, 2000.</li> <li>ExxonMobil Corporation announced on July 3, 2000, the startup of oil and gas production from their Hoover Diana development in 1,463 meters (4,800 ft) of water.</li> <li>British Petroleum spudded the horizontal well on May 7<sup>th</sup> and reached the total depth on July 5<sup>th</sup>. The directional well has a 6,722-meter (22,056 ft or 4.18 mi) offset, with a true vertical depth of 3,003 meters (9,854 ft) and a measured depth of 7,836 meters (25,709 ft or 4.9 mi).</li> <li>MMS incorporated the API version of the ISO standard – API Spec 14A, Petroleum and Natural Gas Industries – Downhole Equipment – Subsurface Safety Valve Equipment.</li> </ul>
2001	<ul> <li>GOM's largest find to date</li> <li>First Alaska OCS Production</li> </ul>	<ul> <li>British Petroleum and ExxonMobil Corporation announced a major discovery in the deepwater GOM on February 13<sup>th</sup>. Located 5 miles northwest of the Thunder Horse field on Mississippi Canyon Blk 776, this new discovery will produce 1 billion barrels, making it the largest ever opened in the GOM and ranking as one of the five largest fields in the GOM. The Discoverer 534 drillship spudded the hole in 1,719 meters (5,640 ft) of water and drilled to a total depth of 7,938 meters (26,045 ft or 4.9 mi).</li> <li>October 31, 2001 – North Star Unit</li> </ul>

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<ul> <li>World deepwater drilling record set at 9,687 feet in the GOM.</li> <li>Offshore world record set for an oil and gas production tieback in the GOM</li> </ul>	<ul> <li>Transocean Sedco Forex's drillship, <i>Discoverer Spirit</i>, spudded an exploration well in 2,945 meters (9,687 ft) of water while working for Unocal at their Trident Prospect located in Alaminos Canyon, Blk 903.</li> <li>ExxonMobil began production on its Mica Project in 4,350 feet of water on Mississippi Canyon Blocks 167 and 211 located 100 miles south of Mobile Bay, Alabama. The subsea development project is tied back by an underwater flowline 29 miles to the existing Pompano platform. The tieback involves both oil and gas. Production started at a rate of 140 million cubic feet of natural gas and 13,000 barrels of oil per day.</li> </ul>	
<ul> <li>World Water Depth Record for well production and laying a pipeline set at 7,209 feet in the GOM.</li> <li>World Record Water Depth Free-Floating Dry Tree System</li> <li>First LNG Proposal submitted under the Deepwater Ports Act</li> <li>Tallest self standing well conductor (pipe)</li> <li>MMS began performing US Coast Guard's fixed facility inspections per agreement between the two agencies.</li> </ul>	<ul> <li>Marathon set the record for well production in Camden Hills consisting of 2 subsea wells with flowlines connected to Canyon Express. TotalFinaElf set the record for laying a pipeline in Camden Hills. Canyon Express links Camden Hills, Aconcaugua, and Kings Peak natural gas fields.</li> <li>BP's Horn Mountain Truss Spar at MC 127 in 5,400 feet of water.</li> <li>Chevron/Texaco filed application with the USCG on December 3, 2002.</li> <li>Located in the Gulf of Mexico in 174 feet of water. Shell's Fergana – Chiles Magellan, OCS-G 22754, Well 1, South Timbalier 239.</li> <li>October 2002</li> </ul>	
<ul> <li>New GOM gas flow rate record</li> <li>First well in water deeper than 10,000 ft - new world water depth drilling record</li> <li>MMS USCG Deepwater Port Cooperating Agency Agreement</li> </ul>	<ul> <li>Shell's Mensa new well record of 143 MMcfpd.</li> <li>Transocean drillship <i>Discover Deep Seas</i> spudded a well in 10,011 feet (3,051 meters) of water while constructing ChevronTexaco's Toledo well in Alaminos Canyon Block 951.</li> <li>Outlined responsibilities related to respective agency requirements of the National Environmental Policy Act for deepwater ports.</li> </ul>	
<ul> <li>Interagency Memorandum of Understanding on Licensing of Deepwater Ports</li> <li>MMS USCG Memorandum of Understanding</li> <li>MMS USCG Memorandum of Agreement OCS-01: Agency Responsibilities</li> </ul>	<ul> <li>Agreement focus was on the licensing phase of deepwater port application review and approval with special emphasis on coordinated, expedited review processes, many of which the MMS has significant responsibilities.</li> <li>Established administrative agreement between agencies that provided for creation and expedited methodology for the review and approval of highly specific and /or technical Memoranda of Agreements.</li> <li>First MOA created under new MMS USCG MOU. Addressed topics of civil penalties, oil spill response, accident investigations, and offshore energy infrastructure.</li> </ul>	
	<ul> <li>World deepwater drilling record set at 9,687 feet in the GOM.</li> <li>Offshore world record set for an oil and gas production tieback in the GOM</li> <li>World Water Depth Record for well production and laying a pipeline set at 7,209 feet in the GOM.</li> <li>World Record Water Depth Free-Floating Dry Tree System</li> <li>First LNG Proposal submitted under the Deepwater Ports Act</li> <li>Tallest self standing well conductor (pipe)</li> <li>MMS began performing US Coast Guard's fixed facility inspections per agreement between the two agencies.</li> <li>New GOM gas flow rate record</li> <li>First well in water deeper than 10,000 ft - new world water depth drilling record</li> <li>MMS USCG Deepwater Port Cooperating Agency Agreement</li> <li>Interagency Memorandum of Understanding on Licensing of Deepwater Ports</li> <li>MMS USCG Memorandum of Understanding</li> <li>MMS USCG Memorandum of Agreement</li> </ul>	

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	2004 Cont'	• TAR	<ul> <li>TAR reaches a milestone of 500 research projects related to offshore safety, technology, and oil spill prevention (<u>http://www.mms.gov/tarprojects/</u>)</li> </ul>
1	2005	<ul> <li>International Regulators Conference (IRF)</li> <li>Energy Policy Act Signed into Law</li> <li>IRF International Performance Indicators</li> <li>TAR Research</li> </ul>	<ul> <li>IRF sponsored the first International Offshore Regulators Conference in London.</li> <li>President Bush signed the Energy Policy Act into law on August 8, 2005.</li> <li>At their annual meeting in September 2005 the IRF agreed on a set of International Performance Indicators.</li> <li>TAR conducts research on Hurricanes Ivan (http://www.mms.gov/tarprojectcategories/Hurricane Ivan.htm), Katrina, and Rita (http://www.mms.gov/tarprojectcategories/HurricanesKat rinaRita.htm)</li> </ul>
	2006	<ul> <li>MMS Publishes Final Rule for Incident Reporting</li> <li>Heerma and Anadarko Set World Record in GOM.</li> </ul>	<ul> <li>This will result in a more consistent incident reporting program and the collection of more reliable incident information. Prevention of future incidents on the OCS is a paramount goal of both industry and MMS.</li> <li>Heerma completed the installation of the world's deepest permanent mooring piles in the GOM.</li> </ul>