

STATE OF MICHIGAN DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENT LANSING



OIL AND GAS LEASING PROGRAM REPORT for FISCAL YEAR 2009-2010

AUTHORITY:

Part 5, Section 502, Act 451, Public Acts of 1994, as amended, authorizes the Department of Natural Resources and Environment (DNRE) to enter into contracts for the oil and gas leasing program. The DNRE oil and gas lease maintenance procedures direct staff to continue to evaluate and review the program and to provide an annual report. This Fiscal Year (FY) 2010 report, covering activity from October 1, 2009 through September 30, 2010, was created by the Mineral and Land Management staff, Forest Management Division.

LEASE TERMS:

The DNRE currently owns 6.4 million acres of mineral rights. At the close of FY2010, 1.1 million of those acres were under lease for oil and gas exploration and development, and there were 10,933 active oil and gas leases.

State oil and gas leases issued pursuant to competitive lease auctions include a 1/6 royalty rate, a bonus consideration of \$13.00 per acre minimum, a five-year term, a rental rate of \$2.00 per acre, per year, and a limit of two, one-year extensions at the state's option. Direct lease terms are negotiated and generally have a minimum 3/16 royalty rate, a higher bonus, and a shorter term than auction leases.

DRILLING PERMITS:

During FY2010, a total of 67 drilling permits were issued by the Office of Geological Survey (OGS), for oil and gas wells involving state-owned minerals. Reflecting industry's downward trend, this figure decreased from FY2009's total of 95 permits.

WELL COMPLETIONS:

There were 16 new wells completed in FY2010 involving the state's participation in production. Of those 16, five were dry holes; seven were completed as gas wells, and two are oil, both of which were found to be producible. By comparison, FY2009 totals reflected three dry holes; 29 completed gas wells, and three completed for oil.

DIRECT LEASES:

Direct oil and gas leases are granted on parcels with state-owned minerals which are needed to complete drilling units or for state-owned minerals suspected of being drained, by offsetting wells on private lands. For FY2010, 42 direct leases were issued, covering 1,961 acres.

EXTENSIONS:

Lease extensions are granted pursuant to lease terms when it is in the best interest of the state to do so. During FY2010, there were 235 oil and gas lease extensions processed.

ASSIGNMENTS:

Ownership interests in State of Michigan oil and gas leases, whether fractional, formational, partial, or full interest, may be assigned from one legal entity to another. During FY2010, there were 3,650 oil and gas lease assignments processed.

RELEASES:

During FY2010, a total of 1,455 leases covering 125,801 acres in 31 counties were released. Division staff who monitor lease expiration dates and payment of annual rentals initiated the majority of the releases. The Lessees submitted the remaining releases to the DNRE.

AUCTION NOMINATIONS:

Nominations of lands to be considered for leasing were received during two open nomination periods during FY2010. Nominations were received from both industry and staff. There were 128,786 acres nominated during the first nomination period of November 2, 2009 through December 1, 2009. Those nominations resulted in 127,059 acres being offered for possible lease at the May 2010 oil and gas lease auction. Lease classification, deed restrictions, and errors in nomination information resulted in fewer acres offered for lease than were nominated. A second nomination period was held May 7, 2010 through June 7, 2010. A total of 521,863 acres were nominated for possible inclusion in an October 2010 lease auction. Again, lease classification, deed restrictions, and nominator error resulted in fewer acres to be offered for lease than were nominated and 450,766.36 acres were offered for lease in the October 2009 auction.

Staff continues to nominate parcels where drainage is suspected. Continued nominations by division staff help in the elimination of drainage of the state's mineral resources without benefit of compensation.

AUCTION SUMMARY:

There were two oil and gas lease auctions held during FY2010. There were 10,452 acres of state-owned oil and gas rights offered at the October 2009 lease auction. There were successful bids on 6,147 acres which resulted in 65 oil and gas leases being issued. The May 2010 oil and gas lease auction saw successful bids on 118,117 acres out of 118,579 acres offered. The successful bids resulted in the issuance of 1,293 oil and gas leases. The total bonus and rental from oil and gas lease auctions in FY2010 was \$178, 554,018.98.

CURRENT EVENTS:

Nationwide, Michigan is ranked 18th in oil production and 12th in natural gas production.

Michigan's oil production increased 7.71 percent in FY2010 after experiencing a 2.76 percent decline in FY2009. In FY2010, Michigan's natural gas production had an overall 5.51 percent decrease following a 6.2 percent decline in FY2009.

During FY2008, the extraordinary market prices for oil and gas radically impacted the amount of royalties received as oil exceeded \$140.00 per barrel (bbl) and natural gas averaged over \$9.00 per thousand cubic feet (Mcf). Subsequently, market prices fell back to more normal ranges with the state receiving an average of \$77.00 per bbl in FY2009 and \$72.00 in FY2010. For natural gas, the state received an average of \$6.45 per Mcf in FY2009 compared to \$4.59 in FY2010. Also in FY2010, the state received an unprecedented amount of bonus and rental due to industry interest in the yet-to-be-proven natural gas formation known as the Collingwood-Utica that is referenced later in this report.

REVENUE AND DISTRIBUTION:

Revenue received on state-owned lands and the reported estimated production on a state-wide basis, over the past ten years are reflected on the following tables:

TABLE I - OIL AND GAS REVENUE ON STATE-OWNED LANDS

Year	Royalty	Rental	Bonus	Application Review Fees	Total Income
2001	\$58,580,656	\$506,328	\$2,169,167	\$106,910	\$61,363,061
2002	\$34,252,158	\$462,570	\$1,416,030	\$114,487	\$36,245,245
2003	\$51,182,252	\$568,543	\$1,028,415	\$93,305	\$52,872,515
2004	\$52,741,445	\$546,401	\$1,307,726	\$179,205	\$54,774,777
2005*	\$55,223,339	\$785,538	\$10,166,719	\$171,185	\$66,346,781
2006*	\$54,172,346	\$829,427	\$4,049,379	\$222,685	\$59,273,837
2007*	\$44,682,254	\$945,326	\$1,770,174	\$185,255	\$47,583,009
2008*	\$83,414,222	\$1,135,318	\$15,437,610	\$433,735	\$100,420,885
2009	\$52,013,926	\$1,483,493	\$4,943,970	\$199,920	\$58,641,309
2010	\$43,575,020	\$1,580,620	\$178,802,2722	\$677,305	\$224,635,217
TOTALS:	\$529,837,618	\$8,843,564	\$221,091,462	\$2,383,992	\$762,156,636

^{*} Fiscal Years 2005 through 2008 were impacted by the Section 29 contract between Motor City Four (MC4) and the State of Michigan. During this period of time, MC4 received the royalties from the parcels impacted by the contract.

The numbers identified above are subject to change due to subsequent activity such as industry adjustments for volume imbalances, audit settlements, and refunds.

TABLE II – OIL AND GAS PRODUCTION ON STATE-OWNED LANDS

Year	State-Wide Oil Production (bbls) (Actual per Treasury**)	Annual Percentage Change in State-Wide Oil Production**	State-Wide Natural Gas Production (Mcf) (Actual per MPSC)	Annual Percentage Change in State-Wide Natural Gas Production	Estimated State Royalty Portion of Oil & Condensate Production (bbls)*	Estimated State Royalty Portion of Natural Gas Production (bbls)*
2001	7,411,234	-6.99%	231,200,000	-4.86%	261,166	15,168,152
2002	7,411,234	-1.54%	216,400,000	-6.40%	250,419	14,562,742
2003	6,975,958	-4.40%	198,800,000	-8.13%	219,270	12,531,174
2004	5,907,776	-15.31%	190,100,000	-4.38%	203,567	12,841,542
2005	5,974,977	1.14%	180,000,000	-5.31%	229,586	10,995,406
2006	5,679,101	-4.95%	174,900,000	-2.83%	199,194	10,652,892
2007	5,584,229	-1.67	164,400,000	-6.00%	191,011	9,041,528
2008	6,094,755	9.14%	158,300,000	-3.71%	183,913	8,808,034
2009	5,926,306	-2.76%	147,500,000	-6.82%	181,742	8,329,378
2010	6,383,033	7.71%	140,000,000	-5.51%	164,471	7,454,550
TOTALS:	63,348,603		1,801,600,000		2,084,339	110,385,398

^{*} Estimated production from state land is calculated from company reported volumes and decimal interest from remittances received during the year.

LEASE AUDITING:

DNRE staff reviews various reports and transactions to ensure proper and timely payment of rent and royalties have been made. Through these efforts, the following occurred during FY2010:

Underpaid royalty identified: \$203,267

Underpaid royalty collected to date: \$186,840
Late interest payments collected: \$_6,427
Total Additional Revenue Collected: \$193,267

The DNRE also began conducting independently contracted audit reviews in 1997 when concerns were raised regarding the Post-Production Cost (PPC) deductions taken by some companies. PPC deductions primarily affect natural gas production. The DNRE agrees some deductions are reasonable, such as CO₂ or H₂S removal to make the gas marketable as well as some transportation costs. Additionally, the courts have also upheld PPC deductions should be allowed. Unfortunately, the Michigan court decision did not define what those costs should be.

^{**} Actual state-wide numbers are based on data provided by Treasury and the Michigan Public Service Commission (MPSC) with MPSC numbers based upon calendar years versus fiscal years. As a result, the 2010 MPSC numbers are estimated.

Allowable PPC deductions differ according to what larguage is present in the DNRE's oil and gas leases. For those leases issued after July 1996, the deductions are specifically defined and very limited. For leases issued prior to July 1996, the DNRE worked with various public organizations, industry members, and state agencies to develop the "Audit Calculation Standards" (Standards) to define reasonable deductions for the older leases. The audits consider the applicable lease language; the Standards, and any additional written agreement that may be in place with the company under review.

Overall, the reviews have resulted in a significant return. Many settlements also include the results being extrapolated across all units operated by the company as extrapolation saves both the DNRE and company additional time and expense. Some reviews also resulted in refunds being issued by the DNRE. In these situations, the refunds were primarily due to the companies taking a conservative approach while the DNRE worked toward issuing the Standards. Nevertheless, even these reviews resulted in a savings to the DNRE when the audit identified several disallowances on the claims filed.

The audit program continues to be a very effective tool in increasing the amount of royalties collected and ensuring compliance with the DNRE's lease terms. The following tables describe the number and results of the settled reviews, as well as the current number of audits in process.

FY2010 Settlement Results:

Number of Company Audits	Number of Units Audited	Amount Due to the State	Amount Currently Collected	Amount Refunded to Company	Refund Savings Resulting from Audit Disallowances	Contract Costs Where Settlement has Occurred
7	27	\$1,008,968	\$1,008,968	\$254,924	\$817,948	\$163,767

Overall Summary:

	Number of Company Audits	Number of Units Audited	Amount Due to the State	Amount Currently Collected	Amount Refunded to Company	Refund Savings Resulting from Audit Disallowances	Contract Costs Where Settlement has Occurred
Settled Audits	46	178	\$7,125,444	\$6,238,524	\$959,115	\$1,035,450	\$1,994,141
Pending Audits	9	38					

DISTRIBUTION:

Revenue involving bonus, rent, and royalty received from the oil and gas leasing program is deposited into the Michigan Natural Resources Trust Fund (MNRTF) and Game and Fish Protection Trust Fund (GFPTF), which includes the federal Pittman-Robertson and Dingell-Johnson Funds. Processing fees, also known as application review fees, are deposited into the Forest Land User Fund.

In FY2010, approximately 69 percent of the bonus, rent, and royalties received were deposited into the MNRTF. The GFPTF received 31 percent which was largely due to the bonus and rent received at the May 2010 lease auction. In more typical years, around 90 percent of the revenue has gone to the MNRTF with the remaining percentage to the GFPTF.

LEASING ISSUES:

During FY2010 there has been a continuation in the shift of focus from Devonian Antrim Shale development work, a mainstay of the Michigan oil and gas exploration and production industry since the early 1990s, toward oil targets in the southern Michigan Trenton-Black River exploration play, Central Basin Devonian targets, and the emerging Ordovician Utica-Collingwood play. Continued excitement about the potential of the Utica-Collingwood deep play helped to drive record numbers of nominations and bonus payments for the State of Michigan's oil and gas lease auctions in FY2010.

The significant increase in nominations experienced in recent years has created some key management issues. Historically, the number of acres nominated for a single auction was 100,000 or less. Since 2008, the number has increased to over 200,000 and then, with the most recent auction, well over 500,000 as previously discussed. The following is a list of the management issues encountered when nominations exceed 125,000 acres:

- 1. Staff time committed to verifying and entering the larger nominations into the Land Ownership Tracking System (LOTS) database is extensive, taking away from other, sometimes time sensitive, lease management duties such as Assignments and Extensions.
- Server space for both LOTS and the Parcel Review System (PRS) was inadequate
 to accommodate such a large group of nominations, which caused numerous
 delays in completing system functions necessary to bring the auction to fruition,
 such as the fund association function to ensure revenue is appropriately
 distributed, downloading and uploading the parcels to the auction system, and
 building leases.
- Lease classification review completed by field staff, even when using the PRS database and limiting the number of actual reviews to 125,000 acres, took away from other responsibilities, including revenue generating functions, such as timber marking.
- 4. The potential for reclassification requests, for those parcels automatically classified as non-development due to the size of the nominations, is extensive and will require both field and Lansing staff involvement for processing.
- Additional lease management functions involving single, large groupings of leases that are difficult to administer. An example would be processing extension or release requests where nearly 1,300 leases will be due to expire at the same time.
- 6. Physical and electronic file space is very limited and lease auctions of this size push us well past our limit.

As a result of all of these limitations, staff recommendations are to not exceed 150,000 nominated acres for a single auction.