

#### STATE OF MICHIGAN

# DEPARTMENT OF NATURAL RESOURCES LANSING



# UNDERGROUND NATURAL GAS STORAGE LEASING PROGRAM REPORT for FISCAL YEAR 2010-2011

# **AUTHORITY:**

Part 5, Section 502, Act 451, Public Acts of 1994, as amended, authorizes the Department of Natural Resources (DNR) to enter into contracts for the Underground Natural Gas Storage (UNGS) Leasing Program. DNR Procedures for UNGS leases of state-owned land directs staff to continue to evaluate and review the program and provide an annual report. This Fiscal Year (FY) 2011 report covering activity from October 1, 2010 through September 30, 2011, was created by the Mineral and Land Management Staff, Forest Management Division.

# **LEASE TERMS:**

Terms of the state's lease for UNGS include a seven-year primary term and a rental rate commencing at \$7.50 per acre per year for the first five years. The rental amount will be adjusted on each fifth-year anniversary date of the lease, based on the Consumer's Price Index for natural gas in Detroit.

There are 39,105 acres under 92 State UNGS Leases. Fifteen leases totaling 19,063 acres do not have an annual rental, as all monies were paid in advance for the longer-term leases.

# **DIRECT LEASES:**

No applications for new storage fields were received in FY 2011. Applications are anticipated for FY 2012.

#### **EXTENSIONS:**

Three UNGS lease extensions covering 520 acres were processed for FY 2011.

# **ASSIGNMENTS:**

There were no UNGS lease assignments in FY 2011.

# **RELEASES:**

No UNGS leases were released in FY 2011.

# **REVENUE AND DISTRIBUTION:**

# Revenue:

During FY 2011, total income from UNGS activities on State lands was \$157,399. UNGS lease revenue includes the standard bonus and rental payments but does not include royalty payments. The liquid production royalty payments from the northern Guelph (Niagaran) reef trend leases are accounted for as part of the oil and gas lease revenue. This liquid production would otherwise not be recovered.

The following chart gives a historical overview of revenue received from this program.

#### REVENUE FROM UNDERGROUND NATURAL GAS STORAGE ACTIVITY

YEARS	ROYALTY (O&G program)	RENTAL	WELL SITE FEES	APPLICATION REVIEW FEES	BONUS	TOTAL INCOME	LEASED ACRES
2002	\$0*	\$30,953	\$1,900	\$4,223	\$5,777	\$42,853	27,783@
2003	\$21,689	\$50,428	\$4,300	\$14,251	\$30,850	\$121,518	29,376
2004	\$148,243 <b>^</b>	\$42,452	\$3,200	\$1,370	\$0	\$195,265	31,132@
2005	\$24,509	\$65,429	\$3,900	\$0	\$3,640	\$97,478	31,412
2006	\$41,639	\$59,163	\$3,300	\$19,325	\$0	\$123,427	31,331
2007	\$32,179	\$70,585	\$3,800	\$78,286	\$66,842	\$251,692	32,053
2008	\$907,732	\$72,984	\$3,800	\$26,282	\$36,000	\$1,046,798	32,610
2009	\$104,564	\$81,445	\$4,300	\$10,960	\$0	\$201,269	32,490
2010	\$469,537	\$120,662	\$2,400	\$2,720	\$322,787	\$918,106	38,946
2011	\$1,114,017	\$153,699	\$3,700	\$0	\$0	\$1,271,416	39,105
TOTALS	\$2,864,109	\$747,800	\$34,600	\$157,417	\$465,896	\$4,269,822	

<sup>\*</sup>Additional royalty payments were expected in FY 2002, but were not received.

## Distribution:

Revenue involving bonus and rent received from the UNGS leasing program is primarily deposited into the General Fund since the leasing is considered a surface right. Revenue associated with those parcels acquired with federal funding such as Pittman-Robertson, and Dingell-Johnson is deposited into applicable funds. Processing fees, also known as application review fees, are deposited into the Forest Land User Fund.

In FY 2011, 88.18 percent of the bonus and rent received from the UNGS leases was deposited into the General Fund. The Pittman-Robertson and Dingell-Johnson Funds received the remaining 11.82 percent.

# **ROYALTY:**

Current royalty amounts are from northern Guelph (Niagaran) reefs that, because of the cyclic underground gas storage operations, produce quantities of liquid hydrocarbons. This production is similar to what is produced during secondary recovery or pressure maintenance operations.

<sup>@</sup> Leased acres increased due to additional parcels found to be under lease.

<sup>^</sup> A settlement was reached on liquid production from Blue Lake 18A Field.

Without the reinjection of the natural gas during storage operations, most of this liquid production may never have been brought to the surface. As mentioned previously, royalty payments are accounted for under the oil and gas lease program.

During FY 2002 an additional northern Guelph (Niagaran) reef UNGS field was identified to have liquid production where state lands were under lease. A settlement for Blue Lake 18A Field was agreed to in FY 2004 and payment was made for current and back production. In FY 2008, the remaining gas in place for the Cold Springs 1 Field was received.

# **LEASE AUDITING:**

The DNR has not contracted for independent audits for the UNGS program since the primary lease revenue is limited to bonus and rent. Review of bonus and rent payments is currently completed by in-house staff. If royalty revenue significantly increases, the DNR could complete a cost/benefit analysis to determine if an audit would be appropriate under the oil and gas program.

## **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	None						
Pending Audits	None						

#### **LEASING POTENTIAL:**

There is potential for additional interest in the Guelph (Niagaran) Reef Trends for UNGS in nearly depleted oil and gas producing fields. These reefs make excellent gas storage reservoirs because their height increases the volume of gas that can be stored per surface acre, as compared to the thinner Michigan Stray Sand rock formation gas storage fields. Several nondevelopment leases have been issued recently to complete existing UNGS fields. Nine applications for new UNGS Fields were received in FY 2007, six in FY 2008, one in FY 2009 and FY 2010 and more are expected in FY 2012. This potential, as well as the increased demand during winter months, has increased our expectations that there may be additional UNGS leases applied for and negotiated in the future.

# **LEASING ISSUES:**

The UNGS lease and leasing procedures were reviewed, updated and approved by the Director of the DNR in FY 2010.