## DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL & GAS

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 29, 2005

Mr. Randall D. Jones, Manager, Land & Negotiations Aurora Gas, LLC 10333 Richmond Avenue, Suite 710 Houston, TX 77042

Re: Three Mile Creek Unit
Three Mile Creek No. 1 Well
Certified Capable of Producing in Paying Quantities

Dear Mr. Jones,

On April 22, 2005, Aurora Gas, LLC (Aurora), the Three Mile Creek Unit Operator, requested that the Division of Oil and Gas (the Division) deem the Three Mile Creek No. 1 Well (the TMC Unit #1 Well) capable of producing in paying quantities under 11 AAC 83.361 (the Application). The Application included: Exhibit A, a map showing the well location; Exhibit B, a summary of monthly operating expenses; Exhibit C, an index of geo-technical data; and Exhibit D, Operating Cost Analysis and wellhead price information. Aurora also provided well test results, pressure graphs, and the Alaska Oil and Gas Conservation Commission (AOGCC) form 10-407, *Well Completion or Recompletion Report and Log* for the TMC Unit #1 Well. On July 21, 2005, the Division received a revised Exhibit B with annual operating expenses. The Division cannot disclose the details of the confidential data<sup>3</sup>, but the geological, geophysical, engineering, and financial data provided in support of the Application, and otherwise available to the Division, indicate that the TMC Unit #1 Well is capable of producing hydrocarbons in paying quantities from the Beluga Formation within the Three Mile Creek Reservoir.

<sup>1</sup> 

<sup>&</sup>lt;sup>1</sup> 11 AAC 83.395 (4) "paying quantities" means quantities sufficient to yield a return in excess of operating costs, even if drilling and equipment costs may never be repaid and the undertaking considered as a whole may ultimately result in a loss; quantities are insufficient to yield a return in excess of operating costs unless those quantities, not considering the costs of transportation and marketing, will produce sufficient revenue to induce a prudent operator to produce those quantities;

<sup>&</sup>lt;sup>2</sup> 11 AAC 83.361 states: For the purposes of 11 AAC 83.301 - 11 AAC 83.395, a well will be considered capable of producing hydrocarbons in paying quantities, as defined in 11 AAC 83.395, when so certified by the commissioner following application by the lessee or unit operator. The commissioner will require the submission of data necessary to make the certification, including all results of the flow test or tests, supporting geological data, and cost data reasonably necessary to show that the production capability of the well satisfies the economic requirements of the paying quantities definition.

<sup>&</sup>lt;sup>3</sup> AS 38.05.035(a)(9)(C) and (D)

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## **Background:**

On January 30, 2004, the Division and Cook Inlet Region, Inc. (CIRI) approved the formation of the Three Mile Creek Unit, effective January 31, 2004. The Three Mile Creek Unit is located on the West side of Cook Inlet, about four miles west of the Beluga River Unit and seven miles north of the village of Tyonek. The unit area encompasses approximately 8,080 acres within seven oil and gas leases. Approximately 68.3% of the unit area lies within four State of Alaska (State) leases, and the remaining unit area lies within three CIRI leases.

The AOGCC issued permit number 204-183, which authorized Aurora to drill the TMC Unit #1 Well (API 50-283-20108-00). Aurora spud the well on December 3, 2004, and reached total depth on December 24, 2004. The surface location is on State lease ADL 388233, 1,504' FNL and 145' FWL of Section 35, Township 13 North, Range 11 West, Seward Meridian (T13N, R11W, SM). Drilled to 8,185' measured depth (MD), or 8,015.6' true vertical depth (TVD), the bottom-hole location is 1,540' FNL and 688' FEL within Section 34, T13N, R11W, SM.

During January 2005, Aurora perforated and performed drill-stem tests on four zones of interest, two in each of the Tyonek and Beluga formations. Aurora plugged back the two deeper Tyonek zones as non-commercial and installed a completion packer and tubing above the two shallower Beluga zones (Tsuga 2-6). The well produced gas from the Tsuga 2-6 interval in the Beluga Formation at a rate of approximately 2 million cubic feet per day (MMCFD). The top of the productive Beluga Formation occurs at 3,530' MD and the base of the interval occurs at 4,605' MD in the TMC Unit #1 Well.

Aurora shut-in the well and released the rig on January 19, 2004. In June 2005, Aurora reinstalled a rig to perforate and test five shallower prospective Beluga intervals. Favorable results from these additional Beluga sandstone tests may require dual or selective completions to isolate the shallower zones from the deeper ones, due to initial reservoir pressure differential between the multiple zones.

On June 6, 2005, Aurora applied to form the Three Mile Creek Participating Area within the Three Mile Creek Unit, and the Initial Plan of Development includes plans to install gas processing facilities and construct a pipeline to transport the gas to market. The Division and CIRI are currently reviewing Aurora's Three Mile Creek Participating Area Application. Aurora anticipates production startup in early August 2005.

## **Decision:**

Aurora evaluated the geological data and flow tests to estimate gross daily production from the TMC Unit #1Well, considered the market value of the gas, and estimated the cost to operate the well. Aurora's calculations showed a return in excess of operating costs. Aurora complied with all applicable regulations, and the flow test results, geological data, and economic data support approval of the Application under 11 AAC 83.361. I certify the TMC Unit #1 Well is capable of producing hydrocarbons in paying quantities as defined in 11 AAC 83.395.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> The Commissioner, Department of Natural Resources delegated his authority under 11 AAC 83.3 to the Division Director.

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A person affected by this Decision may appeal it in accordance with 11 AAC 02. Any appeal must be received within 20 calendar days after the date of "issuance" of this Decision, as defined in 11 AAC 02.040 (c) and (d). Appeals may be mailed or delivered to Thomas E. Irwin, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, 1-907-269-8918, or by electronic 99501; faxed to sent dnr appeals@dnr.state.ak.us. This Decision takes effect immediately. If no appeal is filed by the appeal deadline, this Decision becomes a final administrative order and decision of the Department on the 31<sup>st</sup> day after issuance. An eligible person must first appeal this Decision in accordance with 11 AAC 02 before appealing this Decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

Sincerely,

Original signed by Mark D. Myers, Director

Mark D. Myers Director

cc: Teresa Ressler, CIRI
John Norman, Chair AOGCC
Jim Cowan, Resource Evaluation Section
Jeff Landry, Assistant Attorney General