

October 9, 2006

**OIL AND GAS DOCKET NO. 04-0248382**

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**APPLICATION OF EOG RESOURCES, INC. TO CONSIDER AN MER AND INCREASED NET GOR AUTHORITY FOR THE NINE MILE POINT FIELD CONSOLIDATED GAS UNIT WELL NO. 15, NINE MILE POINT (CONSOL. FLD.) FIELD, ARANSAS COUNTY, TEXAS**

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**HEARD BY:** Thomas H. Richter, P.E.

**DATE OF HEARING:** September 27, 2006

**APPEARANCES:**

Doug Dashiell, attorney  
Kelly Reiber

**REPRESENTING:**

EOG Resources, Inc.

**EXAMINER'S REPORT AND RECOMMENDATION**  
**STATEMENT OF THE CASE**

This is the unopposed application of EOG Resources for an MER and a net gas-oil ratio (GOR) of at least 1.2 MMCFD and 180 BOPD for its Nine Mile Point Field Consolidated Gas Unit Well No. 15. In the alternative, because of a downhole mechanical problem which should be remedied shortly, it is proposed that a net GOR with a resulting gas limit of 6 MMCFD and an MER of 500 BOPD be approved on a temporary basis subject to an administrative review in 12 months for modification or continuation on a permanent basis. It is proposed that the field be classified as Associated-Prorated and not subject to 49-B allowable limitation and the allocation formula be suspended. The examiner recommends approval.

**DISCUSSION OF THE EVIDENCE**

The Nine Mile Point (Consol. Fld.) was formed 1967 by consolidation of several fields. The field is located in Aransas Bay east of the City of Rockport. Special Field Rules were adopted in 1967. The field is designated as Non-Associated Prorated. There are three operators in the field and 11 active wells. Cumulative production from the field is 95.1 BCF of gas (liquid hydrocarbons have not been accurately reported as the wells flow full wellstream from the offshore platforms to the onshore gas processing plant). Current production from the field is 3.13 MMCFD and 280 BOPD.

The consolidated field is composed of 12 reservoirs that extend over a 1500' interval from 10,253' to 11,708' as seen in the log of the Humble Oil and Refining Co., Aransas State Tract 167 Well No. 1). Basic reservoir parameters are: average porosity 20%; average water saturation 55%; reservoir drive is pressure depletion. The reservoir type is retrograde condensate (average temperature is 250 degrees F and pressure gradient of .77 psi/ft). The gas gravity is 0.75 and a liquid gravity of 50 degrees API. There is complex faulting. No new wells had been drilled since 1996. EOG acquired the Exxon wells and has commenced re-completing wells.

The field should remain classified as Associated-Prorated and not subject to 49-B allowable limitation. The Exxon Company USA, Nine Mile Point Field Consolidated Gas Unit Well No. 15 was completed in 1982 through perforations from 10,758' to 11,982' subsurface depth and has produced 6.9 BCF of gas. The original bottomhole pressure was 8,844 psig. The well was recently re-completed in a shallower zone (still within the designated consolidated interval for the subject field). The testing showed the well to be an oil well (the first well so designated in the field). The well was originally completed with 2-7/8ths inch tubing cemented in place. In performing the re-completion, a "fish" was lost in the hole. Current production from the well is from the K-17 thru K-77 zones and no production from below the K-77 which represent some 8 additional perforation sets. EOG had a PVT analysis performed which concluded that the hydrocarbon liquid production was that of a "volatile oil". The reservoir pressure at re-completion was 6,205 psig. The mechanical constant composition expansion (CCE) measured a "bubble point" at 6,136 psig at 250 degrees F. Continuing efforts are being made to retrieve the fish. None of the K zones are stand alone reservoirs. The lower zones are retrograde condensate reservoirs and it appears that at least one of the upper reservoirs is a volatile oil type reservoir. The reservoirs themselves are not in natural pressure communication. This is apparent if oil is on top gas. The 49-B designation is not necessary to preserve reservoir energy to prevent waste.

In addition, the Nine Mile Point Field Consolidated Gas Unit Well No. 17 was re-completed and is now producing at 1,000 MCFD. The Nine Mile Point Field Consolidated Gas Unit Well No. 20 was re-completed and is producing 800 MCFD.

If the fish can not be removed, the Nine Mile Point Field Consolidated Gas Unit Well No. 15 well remain classified as an oil well. Testing of the well in the current configuration demonstrates that the well needs to flow at rates of at least 1.2 MMCFD and 180 BOPD to produce. If removal of the fish is successful, it is anticipated that the well will be capable of flowing at 6 MMCFD and 500 BOPD. The testing shows that the well is rate sensitive.

CHOKE (64ths)	OIL (BOPD)	GAS (MCFD)	GOR	FTP (PSI)	WTR (BPD)
18	260	1375	5288	890	400
22	240	1200	5000	880	390
28	195	1280	6564	680	380
16	all fluid production ceased on the fourth day and the GOR went to 100,000+				

It is necessary that the well be flowed at the highest rate to maintain sufficient velocity to lift the reservoir fluid.

There is a market for 100% of the produced gas and the allocation formula should be suspended. Cancellation of the over production will not harm correlative rights.

**EXAMINER'S OPINION**

The examiner recommends that the subject application be approved for an MER of 500 BOPD and a net GOR that results in a casinghead gas limit of 6 MMCFD for a period of 12 months subject to administrative review for modification or continuation on a permanent basis. The top allowable for a "bay" well at this depth is 192 BOPD and a casinghead gas limit of 384 MCFD. The testing shows that the well will not flow at such a limited production rate.

The subject field should be designated as Associated-Prorated and not subject to 49-B allowable limitation. The reservoirs are not in communication and do not rely on one another to supply reservoir energy.

**FINDINGS OF FACT**

1. Notice of this application was given to all person entitled to notice at least ten (10) days prior to the hearing.
2. There was no protest of the application.
3. The Nine Mile Point (Consol. Fld.) was formed 1967 by consolidation of several fields.
  - a. The field is designated as Non-Associated Prorated and there are three operators in the bat area field and 11 active wells.
  - b. Cumulative production from the field is 95.1 BCF of gas and the current production from the field is 3.13 MMCFD and 280 BOPD.
  - c. The top allowable for a "bay" well at this depth is 192 BOPD and a casinghead gas limit of 384 MCFD.
4. The Exxon Company USA, Nine Mile Point Field Consolidated Gas Unit Well No. 15 was completed in 1982 through perforations from 10,758' to 11,982' subsurface depth and has produced 6.9 BCF of gas.
  - a. The well was recently re-completed in a shallower zone and in performing the re-completion, a "fish" was lost in the hole.
  - b. Current production from the well is from the upper K-17 thru K-77 zones and no production from below the lower K-77 zones which represent some 8 additional perforation sets.

5. Testing of the well in the current configuration demonstrates that the well needs to flow at 1.2 MMCFD and 180 BOPD to produce. If removal of the fish is successful, it is anticipated that the well will be capable of flowing at 6 MMCFD and 500 BOPD. The testing shows that the well is rate sensitive.
6. The field should remain classified as Associated-Prorated and not subject to 49-B allowable limitation.
  - a. None of the K zones are stand alone reservoirs.
  - b. The lower zones are retrograde condensate reservoirs and it appears that at least one of the upper reservoirs is a volatile oil type reservoir and the reservoirs themselves are not in natural pressure communication as it is apparent if oil is on top gas.
  - c. The 49-B designation is not necessary to preserve reservoir to prevent waste.
7. Cancellation of the over production of the Nine Mile Point Field Consolidated Gas Unit Well No. 15 (RRC No. 099731) will not harm correlative rights.
8. There is a market for 100% of the produced gas and the allocation formula should be suspended.

**CONCLUSIONS OF LAW**

1. Notice of this hearing was provided in accordance with all applicable regulatory statutes and rules.
2. All things have occurred or been accomplished to afford the Commission the jurisdiction to consider and decide this matter.
3. Consideration and approval of this application for a gas-oil ratio which results in a casinghead gas limit of 6,000 MCFD and an MER of 500 BOPD is a matter properly within the jurisdiction of the Commission to foster conservation and prevent waste.
4. Approval of the proposed application of EOG Resources for the Nine Mile Point Fld Cons Unit Well No. 15 for a net gas-oil ratio which increases the permitted GOR to a gas limit of 6,000 MCFD and an MER of 500 BOPD will foster conservation and prevent waste.
5. Cancellation of overproduction will not harm correlative rights.

**EXAMINER'S RECOMMENDATION**

It is recommended that the application of EOG Resources for the Nine Mile Point Fld Cons Unit Well No. 15 for a net gas-oil ratio which increases the permitted GOR to a gas limit of 6,000 MCFD and an MER of 500 BOPD be approved on a temporary basis for a period of 12 months subject to administrative review for modification or continuation on a permanent basis. It is further recommended that all overproduction for the Nine Mile Point Fld Cons Unit Well No. 15 (RRC No. 099731) be canceled. The field should remain classified as Associated-Prorated and not subject to 49-B allowable limitation.

Respectfully submitted,

Thomas H. Richter, P.E.  
Technical Examiner  
Office of General Counsel