#### APPLICATION OF EXXON MOBIL CORPORATION TO CONSOLIDATE THE TRAWICK (PETTIT) AND TRAWICK (TRAVIS PEAK) FIELDS AND TO ADOPT FIELD RULES FOR THE PROPOSED TRAWICK (PETTIT-TP CONS.) FIELD, NACOGDOCHES AND RUSK COUNTIES, TEXAS

HEARD BY: Andres J. Trevino, P.E.

DATE OF HEARING: July 25, 2008

#### **APPEARANCES:**

#### **REPRESENTING:**

Exxon Mobil Corporation

Tim George Richard Wachtman William T. Duncan, Jr.

# EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

This is the unprotested application of Exxon Mobil Corporation for the Commission to consider consolidation of the Trawick (Pettit) and the Trawick (Travis Peak) Fields into a new field to be known as the Trawick (Pettit-TP Cons.) Field.

Exxon Mobil requests that the following rules be adopted for the consolidated field:

- 1. Designated interval from 7,390 to 9,760 feet as shown on the log of the Trawick Gas Unit 6 Well No. 2;
- 2. Well spacing a minimum of 467 feet from lease lines with no between-well spacing limitation;
- 3. 640 acre unit density plus 10% tolerance with a maximum diagonal of 10,500 feet, optional 40 acre units with a maximum diagonal of 4,500 feet, no proration plats required while allocation remains suspended;
- 4. Allocation based 25% per well and 75% acreage, associated-prorated field classification and salvage classification for oil wells in the consolidated field.

It is also proposed that the allocation formula remain suspended and that the filing of proration unit plats not be required while the allocation formula remains suspended. The examiner recommends approval of the proposed rules.

#### DISCUSSION OF THE EVIDENCE

The Trawick (Pettit) Field was discovered in 1949 at a depth of 7,050' subsurface depth. This associated field produces from the Pettit limestones which includes the Upper Pettit, the Lower Pettit and the Transition Zone. The field is governed by Special field rules. There are four operators in the field and 52 gas wells and one shut-in oil well. The allocation formula has been suspended since 2007.

The Trawick (Travis Peak) Field was discovered in 1963 at a depth of 8,561' subsurface depth. This non-associated field produces from the Travis Peak sands which exists from 7,910' to 9,360'. The field is governed by Special field rules. There are six operators in the field and 112 wells. The allocation formula for this field is currently suspended.

The fields proposed for consolidation overlap each other and currently production is being commingled with each other. The wells in the Trawick (Pettit) Field currently produce 180 MMCF of gas per month or an average of 201 MCFPD per well. The wells in the Trawick (Travis Peak) Field currently produce 748 MMCF of gas per month or an average of 216 MCFPD per well. The fields are in mid to late stages of production. There currently are 25 wells which are dually completed in both the Pettit and Travis Peak formations. By consolidating the fields into the Trawick (Pettit-TP Cons.) Field, a well drilled to the Travis Peak (deepest zone) can be completed to produce the Travis Peak and the Pettit zones without the need for Rule 10 or Rule 37 exceptions.

The designated interval from 7,390 to 9,760 feet as shown on the log of the Trawick Gas Unit 6 Well No. 2 includes the Upper Pettit, the Lower Pettit the Transition Zone and the Travis Peak zones. The current low production rates from either field alone does not justify drilling a well just to produce from either zone alone. Consolidation will prevent waste by extending the economic life of all zones. Waste will be prevented by encouraging new drilling and recompletion of existing wells. Exxon has estimated that an additional 190 MMCF of gas can be recovered per well with the consolidation.

The proposed minimum well spacing of 467'/0' (leaseline/between well), will provide for flexibility in locating new wells near existing wells which have undrained Pettit and/or Travis Peak zones. Exxon request the well density for the consolidated field to be 640 acre density with optional 40 acre units. Drainage calculations performed on various wells demonstrate the need for flexible drilling units. Four wells completed in the Trawick (Pettit) Field show the wells will drain between 631 acres and 44 acres. Three wells completed in the Trawick (Travis Peak) Field show the wells will drain between 314 acres and 36 acres.

Exxon requests the consolidated field be classified as associated-prorated as there is no evidence that an oil column exists. PVT analysis indicates the Trawick (Pettit) Field is a retrograde condensate field with immobile volumes of liquid hydrocarbons in the pore space. Any "oil" produced is likely to be condensate produced as pressure is reduced in the well bore. There currently is one shut-in oil well in the Trawick (Pettit) Field. Exxon requests to classify any future oil wells with a salvage classification. This will allow any future oil wells to produce oil and gas without restrictions. A restriction of oil or gas production will likely cause the wells to load up and die.

Because the proposed designated intervals contains multiple sands, a two factor

allocation formula is required by statute. Exxon proposes that allocation be based on 75% acreage and 25% per well. This allocation formula is currently suspended and Exxon requests continuation of this status. Exxon additionally requests that the filing of proration plats not be required while the allocation formula remains suspended.

## FINDINGS OF FACT

- 1. Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the subject hearing.
- 2. There was no protest at the call of the hearing.
- 3. The Trawick (Pettit) Field was discovered in 1949 at a depth of 7,050' subsurface depth.
  - a. The field is governed by Special field rules.
  - b. There are four operators in the field and 52 gas wells and one shut-in oil well.
  - c. The allocation formula has been suspended since 2007.
- 4. The Trawick (Travis Peak) Field was discovered in 1963 at a depth of 8,561' subsurface depth.
  - a. The field is governed by Special field rules.
  - b. There are six operators in the field and 112 gas wells.
  - c. The allocation formula has been suspended since 2007.
- 5. The designated interval from 7,390 to 9,760 feet as shown on the log of the Trawick Gas Unit 6 Well No. 2 includes the Upper Pettit, the Lower Pettit the Transition Zone and the Travis Peak zones.
- 6. There are over 25 dually completed wells in the Trawick (Pettit) and the Trawick (Travis Peak) Fields.
- 7. Wells in the fields have drainage areas which vary significantly. Development with 640 acres with optional 40 acre density is necessary to maximize recovery from the field.
  - a. The TGU No. 17-1, (Pettit completion) has a calculated drainage area of 631 acres based on 22,255 MMCF ultimate recovery.
  - b. The TGU No. 32-1, (Pettit completion) has a calculated drainage area

of 320 acres based on 3,002 MMCF ultimate recovery.

- c. The TGU No. 11-7, (Pettit completion) has a calculated drainage area of 76 acres based on 781 MMCF ultimate recovery.
- d. The TGU No. 9-7, (Pettit completion) has a calculated drainage area of 44 acres based on 230 MMCF ultimate recovery.
- e. The TGU No. 22-8, (Pettit completion) has a calculated drainage area of 38 acres based on 320 MMCF ultimate recovery.
- f. The TGU No. 2-2, (Travis Peak completion) has a calculated drainage area of 314 acres based on 25,100 MMCF ultimate recovery.
- g. The TGU No. 3-2, (Travis Peak completion) has a calculated drainage area of 158 acres based on 25,571 MMCF ultimate recovery.
- h. The TGU No. 12-3, (Travis Peak completion) has a calculated drainage area of 77 acres based on 7,063 MMCF ultimate recovery.
- i. The TGU No. 17-6, (Travis Peak completion) has a calculated drainage area of 36 acres based on 3,809 MMCF ultimate recovery.
- 8. The proposed minimum well spacing, 467'/0' (leaseline/between well), will provide for flexibility in locating wells in all productive zones in the Trawick (Pettit-TP Cons.) Field without the need for unnecessary Rule 37 exceptions.
- 9. Allocation based on 75% deliverability and 25% per well is a reasonable allocation formula which satisfies statutory requirements.
- 10. The consolidated field should be classified as associated-prorated as there is no evidence that an oil column exists.
- 11. Continuation of the administrative suspension of the allocation formula for the proposed field is appropriate as there was no protest to the continuation presented at this hearing and there is 100% market demand for gas in the field.

## CONCLUSIONS OF LAW

- 1. Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.
- 2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.

- 3. Consideration of field rules, a determination of their effectiveness and appropriate actions is a matter within the Commission jurisdiction.
- 4. Consolidation of fields and adoption of the proposed field rules will prevent waste, foster conservation and protect correlative rights.

#### **EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions of law, the examiner recommends approval of the proposed field consolidation and proposed field rules for the proposed Trawick (Pettit-TP Cons.) Field and the suspension of the allocation formula.

Respectfully submitted,

Andres J. Trevino, P.E. Technical Hearings Examiner