

October 17, 2006

**OIL AND GAS DOCKET NO. 06-0249086**

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**APPLICATION OF MACHIN & ASSOCIATES, INC. TO CONSOLIDATE VARIOUS DANVILLE FIELDS INTO THE PROPOSED DANVILLE (PETTIT) FIELD AND ADOPT FIELD RULES FOR THE DANVILLE (PETTIT) FIELD, GREGG AND RUSK COUNTIES, TEXAS**

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

**DATE OF HEARING:** October 13, 2006

**APPEARANCES:**

Keith Masters

**REPRESENTING:**

Machin & Associates, Inc.

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

This is the unprotested application of Machin & Associates for the Commission to consider consolidating the Danville (Pettit, Upper), Danville (Pettit, Middle), Danville (Pettit, Lower) and Danville, W. (Pettit, Lower) Fields into a new field designation to be known as the Danville (Pettit) Field. It is proposed that the following special field rules be adopted:

1. The entire combined correlative interval from 7,229' to 7,474' as shown on the Induction-Electrical log of the Tennessee Gas Trans. Co., M.G. Meadows Lease Well No. 3, (API No. 42-183-00235) Henry Wells Survey, A-222, Gregg County, Texas, should be designated as the Danville (Pettit) Field.
2. Minimum well spacing of 467'/933' (leaseline/between well);
3. Density of 160 acres for oil and gas wells with a maximum diagonal of 4,500' and optional 40 acre units and a maximum diagonal of 2,100'. Gas units will have a 10% tolerance and 40 acre tolerance for oil units; and
4. An allocation formula based on 100% acreage.

It is further requested that the Machin & Associates, Patton-Jarvis Lease Well No. 1 be transferred from the Danville (Travis Peak Cons.) Field to the proposed Danville (Pettit) Field. Subsequent to the hearing and review of the data submitted, it was determined that the Danville (Pettit, Middle) Field (a Non-Associated gas field) no longer exists as it was consolidated into the Danville (Travis Peak Cons.) Field by Order No. 06-0205137 effective July 18, 1994.<sup>1</sup> Thus this field is eliminated from subject application. Likewise, the Danville (Pettit, Lower) Field was

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<sup>1</sup> Commission policy is to maintain a field on schedule with notation in field remarks of consolidation.

consolidated into the Danville (Travis Peak Cons.) Field by Order No. 06-0205137 effective July 18, 1994. However, it appears that only the "gas" field was consolidated and not the "oil" field. There are two operators with one well each designated in the Danville (Pettit, Lower) Field. It would be inappropriate to have the "gas" field classified in the Danville (Travis Peak Cons.) Field and the "oil" field classified in the proposed Danville (Pettit) Field. Consequently, the two operators in the Danville (Pettit, Lower) Field are being notified under separate cover of the error and to take the appropriate actions necessary to effect the consolidation into the Danville (Travis Peak Cons.) Field. By copy of the letter, the Commission's Proration and Permitting Sections are notified. The subject application will consist of combining the Danville (Pettit, Upper) and Danville, W. (Pettit, Lower) Fields only. The examiner recommends approval of Machin & Associates application as herein set out.

### **DISCUSSION OF THE EVIDENCE**

The Danville, W. (Pettit, Lower) field is an associated reservoir (the oil discovery in 1984 and gas discovery in 1982) at a depth of 7,422' subsurface depth. There are no wells in the field.

The Danville (Pettit, Upper) Field was discovered in 1959 at 7,320' subsurface depth. Special field rules were adopted by Order No. 6-43,106 effective May 9, 1960, which provide for minimum well spacing of 467'/1650', 80 acre and optional 40 acre density. There are four operators in the field with 3 active wells and 3 shut-in wells.

The entire combined correlative interval from 7,229' to 7,474' as shown on the Induction-Electrical log of the Tennessee Gas Trans. Co., M.G. Meadows Lease Well No. 3, (API No. 42-183-00235) Henry Wells Survey, A-222, Gregg County, Texas, should be designated as the Danville (Pettit) Field. The interval extends from the base of the Pine Island Formation to the top of the Travis Peak Formation.

Consolidation of the subject fields will provide for the orderly development of fields and the efficient and effective recovery of reserves that otherwise would go unrecovered. There has been no development in the field in 15 years. Machin has recently completed its Patton-Jarvis No. 1 on the far west side of the field area (a step out well that was originally permitted in the Danville (Travis Peak Cons.) Field). The well should be transferred from the Danville (Travis Peak Cons.) Field to the proposed Danville (Pettit) Field.

Oil and gas proration unit density of 160 acres and optional 40 acres is necessary for the efficient and effective depletion of the reservoir. Estimated recoveries of four of the 39 wells that have produced from the field range from 53,500 BO to 399,00 BO. The calculated drainage areas range from 33 acres (Myrtle Andrews Well No. 1-L) to 329 acres (J.C. Kinney Well No. 1-T).

Minimum well spacing of 467'/933' (leaseline/between well) will provide flexibility in locating wells in the subject field.

An allocation formula based on 100% acreage will provide for the protection correlative

rights.

**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 Danville, W. (Pettit, Lower) field is an associated reservoir (the oil discovery in 1984 and gas discovery in 1982) at a depth of 7,422' subsurface depth. There are no wells in the field.
4. The Danville (Pettit, Upper) Field was discovered in 1959 at 7,320' subsurface depth. Special field rules were adopted by Order No. 6-43,106 effective May 9, 1960, which provide for minimum well spacing of 467'/1650', 80 acre and optional 40 acre density. There are four operators in the field with 3 active wells and 3 shut-in wells.
5. The entire combined correlative interval from 7,229' to 7,474' as shown on the Induction-Electrical log of the Tennessee Gas Trans. Co., M.G. Meadows Lease Well No. 3, (API No. 42-183-00235) Henry Wells Survey, A-222, Gregg County, Texas, should be designated as the Danville (Pettit) Field.
6. Consolidation of the subject fields will provide for the orderly development of fields and the efficient and effective recovery of reserves that otherwise would go unrecovered.
  - a. Oil and gas proration unit density of 160 acres and optional 40 acres is necessary for the efficient and effective depletion of the reservoir.
  - b. Estimated recoveries of four of the 39 wells that have produced from the field range from 53,500 BO to 399,00 BO.
  - c. The calculated drainage areas range from 33 acres (Myrtle Andrews Well No. 1-L) to 329 acres (J.C. Kinney Well No. 1-T).
7. Minimum well spacing of 467'/933' (leaseline/between well) will provide flexibility in locating wells in the subject field.
8. An allocation formula based on 100% acreage will provide for the protection correlative rights.
9. The Machin & Associates, Patton-Jarvis No. 1 should be transferred from the Danville (Travis Peak Cons.) Field to the Danville (Pettit) 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 for consolidation of fields and field rules, a determination of the effectiveness of the rules and appropriate actions is a matter within the Commission jurisdiction.
4. Adoption of the proposed 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 field rules for the Danville (Pettit) Field.

Respectfully submitted,

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