OIL AND GAS DOCKET NO. 06-0253663

THE APPLICATION OF ENCORE OPERATING, L.P. TO CONSIDER CLASSIFICATION OF THE NOBLE LEASE AS A PERMANENT GAS LEASE IN THE STOCKMAN (TRAVIS PEAK) FIELD, SHELBY COUNTY, TEXAS

Heard by: Andres J. Trevino, P.E., Technical Examiner

Hearing Date: October 15, 2007

Appearances:	**Representing:**
Bill Spencer	Encore Operating, L.P.
Cary McGregor	
Ann Wiley	

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Encore Operating, L.P. requests that the Nobles Lease be classified as a permanent gas lease and that all wells drilled in the future on the Nobles Lease be classified as gas wells in the Stockman (Travis Peak) Field. Encore also requests that all overproduction for the Nobles Well No. 5 be canceled.

The application is unprotested and the examiner recommends approval of the permanent gas lease classification and cancel overproduction.

DISCUSSION OF EVIDENCE

The Nobles Lease is a 700 acre pooled unit in the Stockman (Travis Peak) Field. Encore currently has five wells completed on the Nobles Lease to date: the Nos. 1, 2, 3, 5 and 9. Most wells initially do not pass the Form G-5 for administrative gas well classification primarily due to initial low producing GORs. Over time the wells "dry up" and produce with higher GORs and are classified as gas wells upon passing the Form G-5. Form G-5 for the No. 5 does not meet the criteria for gas well classification and is currently classified as a oil well.

The data on Form G-5 for the Grant (adjacent to Nobles lease) Well No. 4 and the Nobles Well Nos. 3 and 5 are compared below:

	Grant Well No. 4	Nobles Well No. 3	Nobles Well No. 5
Gas Volume	83 MCFD	437 MCFD	275 MCFD
Cond. Volume	4 BPD	5 BPD	5 BPD
Water Volume	39 BPD	63 BPD	54 BPD
G/O Ratio	20,154 cuft/bbl	85,574 cuft/bbl	53,133 cuft/bbl
Cond. Color	Brown	Brown	Brown
Cond. Gravity	47.2 API	50.3 API	47.7 API
Init. Boiling Temp	144 F	162 F	162 F
Temp @ 80%	679 F	635 F	673 F
End Point Temp	729 F	739 F	736 F
Recovery	97.5%	97.7%	98%
Residue	2.5%	2.3%	2%
Heptanes Plus	2.6%	1.18%	1.31%

Several PVT analysis have been performed on fluid samples taken from the Arco GU 1 No. 7, the Howard A No.1 and the Stephenson A No. 2 (wells throughout the field). These samples were recombined at the reservoir temperature and reservoir pressures ranging from 1,842 psia to 4,000 psia of each well. The recombined fluids were evaluated during a Constant Composition Expansion. Dew points were observed ranging from 13,024 psia to 7,977 psia. The results of the PVT analysis indictes the reservoir fluids are in the two phase at reservoir pressure. The fact that the dew point pressure is higher than original reservoir pressure is indicative that either 1) there is an oil column/gas cap in the reservoir, or 2) the produced liquid is coming from some oil zones and some gas zones.

Encore believes the Nobles Lease should be permanently classified as a gas lease because the small volume of liquid in the reservoir below dew point is not mobile and will not be recovered as liquid. The constant volume depletion study shows that the maximum percentage of hydrocarbon pore space occupied by retrograde liquid will range from 8.53% a maximum of 22.46% with a maximum percentage of total pore volume ranging from 6% to 15.7%. Published literature indicates that liquid hydrocarbons in a reservoir are essentially immobile until saturations of up to 35% are reached.

Encore believes that all wells on its Nobles Lease in the Stockman (Travis Peak) Field should be permanently classified as gas wells. There is no evidence that an oil column exists in the Travis Peak anywhere in this area. Within the Stockman (Travis Peak) Field, there are about 54 Travis Peak wells, four of which are classified as oil wells. Encore believes that there is some free oil production in small amounts from some individual stringers within the gross Travis Peak interval, skewing the G-5 results.

Data from wells on the Nobles lease indicate that the current producing gas-oil ratios for most wells are significantly higher now than the ratios were when the wells were initially completed. Encore expects similar performance from future wells on the Nobles Lease.

FINDINGS OF FACT

1. Notice of this hearing was given to all affected persons at least ten days prior to the date of hearing. No protests were received.

2. The Nobles Lease is a 700 acre lease in the Stockman (Travis Peak) Field. Encore currently has five wells completed on the Nobles Lease to date: the Nos. 1, 2, 3, 5 and 9.

3. All wells completed on the Unit, except No. 5, are classified as gas wells based on Form G-5.

4. The Miles Bell Lease No. 5 first produced in October 2006 and the data on Form G-5 did not meet the criteria for gas well classification. Encore submitted a compositional analysis for this well indicating that the mole percent C_{7+} was 1.31%.

5. Wells on the Nobles lease initially fail to pass G-5 criteria for administrative approval of gas well classification due to low GORs. Over time the wells “dry up” and produce at higher GORs

6. Several PVT analysis from wells throughout the field indicated that the dew point pressures are higher than original reservoir pressure, indicating the presence of either an oil column/gas cap, or that the produced liquid is coming from some oil zones and some gas zones.

7. The constant volume depletion study from the same PVT analysis shows that the maximum percentage of hydrocarbon pore space occupied by retrograde liquid will range from 8.53% a maximum of 22.46% with a maximum percentage of total pore volume ranging from 6% to 15.7%. Published literature indicates that liquid hydrocarbons in a reservoir are essentially immobile until saturations of up to 35% are reached.

8. The evidence intimates that there is no oil column in the Stockman (Travis Peak) Field anywhere in the area of the Nobles Lease.

    a. Within the Stockman (Travis Peak) Field surrounding the Nobles Lease, there are about 54 Travis Peak wells, four of which are classified as oil wells.

    b. There are likely some thin, individual stringers within the gross Travis Peak interval which produce free oil, resulting in unreliable G-5 data.

9. Production data from the wells around the Nobles Lease indicate that the current producing gas-oil ratios for most wells are significantly higher now than the ratios were when the wells were initially completed. Encore expects similar performance from future wells on the Nobles Lease.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was issued.

2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.

3. All wells completed on the Encore Operating, L.P. - Nobles Lease in the Stockman (Travis Peak) Field are gas wells.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that all wells on the Encore Operating, L.P. - Nobles Lease in the Stockman (Travis Peak) Field be permanently classified as gas wells.

Respectfully submitted,

Andres J. Trevino, P.E.
Technical Examiner