

**OIL AND GAS DOCKET NO. 04-0234565**

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**THE APPLICATION OF EOG RESOURCES, INC., TO CONSOLIDATE A VERTICAL INTERVAL AND ADOPT TWO-FACTOR ALLOCATION FOR THE ZWEBB (10,350) FIELD AND TRANSFER CERTAIN WELLS FROM THE POK-A-DOT (8600) TO THE ZWEBB (13500) FIELD, WEBB AND ZAPATA COUNTIES, TEXAS**

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**Heard by:** Margaret Allen, Technical Hearings Examiner

**Procedural history**

Application received: April 21, 2003

Hearing held: May 7, 2003

**Appearances**

Doug Dashiell  
Charles Salmon

Representing  
EOG Resources, Inc.

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

EOG Resources ("EOG") is seeking to designate the interval from 10,238' to 11,101' as shown in the log of the EOG BMT/K&H "C" Lease Well No. 3 as the ZWebb (10,350) Field. The applicant also requests a two-factor allocation formula based 95% on deliverability and 5% per well, and that 14 EOG wells be transferred from the Pok-A-Dot (8600) Field to the ZWebb (10,350) Field. These wells are listed in Finding of Fact 5.

**DISCUSSION OF THE EVIDENCE**

The ZWebb (10,350) Field was discovered in 1968 and produces from the Perdido section of the Wilcox Formation. There are two operators in the field, and EOG operates 51 of the 60 wells. EOG operates 58 of the 67 wells in the Pok-A-Dot (8600) Field which produces from the same Perdido interval. The ZWebb (10,350) Field is under Statewide Rules while the Pok-A-Dot (8600) Field has 80 acre density with 40-acre optional units. The allocation formulae for both fields are suspended. The 14 wells EOG is proposing to transfer from the Pok-A-Dot (8600) Field are closer to the wells in the Zwebb (10,350) Field than to the discovery well for the Pok-A-Dot (8600) Field.

The proposed correlative interval, from 10,238' to 11,101' as shown in the log of the EOG BMT/K&H "C" Lease Well No. 3, includes all of the Perdido interval which is a sand/shale sequence. The Perdido is cut by numerous faults and is found at a range of depths in this area. The sandstones within it are lenticular and often do not extend from one well to the next. For these reasons, the various sandstone reservoirs in these wells tend not to be in communication.

The ZWebb (10,350) Field has already produced 90 BCF and 468,000 barrels of condensate. The Pok-A-Dot (8600) Field has produced 12 BCF and 215,000 BC since 1976. Wells in these fields have had as many as nine separate sets of perforations. All of the Perdido sandstones have similar characteristics and produce similar dry gas. Their pressure gradients are between 0.77 and 0.81 psi per foot of depth. The wells are produced continuously which should limit the amount of cross flow between sandstones open in the same wellbore.

Wells decline about 15% per year and the abandonment gas rate is estimated to be 20 MCF/D

per completion. Reducing the number of separate completions in a well by one will recover an incremental 49 MMCF of gas by lowering the abandonment rate. If one separate completion can be eliminated in each of sixty wells, the incremental recovery will be 2.9 BCF. Downhole commingling of the Perdido sands will also permit recovery from marginal sandstones that would otherwise not support a completion. Downhole commingling also reduces the amount of mechanical work that must be performed and allows the faster recovery of reserves. Mechanical problems with older wellbores have occurred and their probability increases with increasing age of the well.

Because of the multiple producing reservoirs, a two-factor allocation formula is required by statute. One based 95% on deliverability and 5% per well will satisfy the statute.

**FINDINGS OF FACT**

1. Notice of this hearing was given to all operators in the field and to all operators and unleased mineral interest owners of tracts offsetting the discovery tract on April 25, 2003.
2. The 60 wells in the ZWebb (10,350) Field have produced 90 BCF since in 1968, while the 67 wells in the Pok-A-Dot (8600) Field have produced 12 BCF since 1976.
3. The allocation formulae for both fields are suspended.
4. Both fields produce from the same Perdido interval and the wells to be transferred are closer to the wells in the ZWebb (10,350) Field than to the discovery well in the Pok-A-Dot (8600) Field.
5. The following wells belong in the ZWebb (10,350) Field instead of the Pok-A-Dot (8600) Field:

| <b>Well name</b>       | <b>ID Number</b> | <b>County</b> |
|------------------------|------------------|---------------|
| Cabazon No. 2          | 190458           | Webb          |
| Cabazon No. 5          | 188849           | Webb          |
| Cabazon No. 4          | 189382           | Webb          |
| Texaco Fee No. 1       | 174050           | Zapata        |
| Slator Ranch 'A' No. 1 | 173763           | Zapata        |
| Slator Ranch 'A' No. 2 | 176950           | Webb          |
| Slator Ranch 'A' No. 3 | 177401           | Webb          |
| Slator Ranch 'A' No. 4 | 176950           | Zapata        |
| Slator Ranch 'A' No. 5 | 177401           | Zapata        |
| Slator Ranch 'B' No. 1 | 174612           | Zapata        |
| Slator Ranch 'B' No. 2 | 175528           | Zapata        |

|                        |        |        |
|------------------------|--------|--------|
| Slator Ranch 'B' No. 3 | 189375 | Zapata |
| Slator Ranch 'C' No. 1 | 174219 | Zapata |
| Slator Ranch 'C' No. 2 | 176269 | Zapata |

6. The productive Perdido interval is shown between 10,238' and 11,101' in the log of the EOG Resources BMT/K&H "C" Lease Well No. 3.
7. Two factor allocation is necessary because there are multiple reservoirs within the proposed designated interval.
8. Allocation based 95% on deliverability and 5% per well will satisfy statutory requirements.
9. Allowing downhole commingling of the Perdido sands in the ZWebb (10,350) Field will permit recovery from marginal sandstones that would otherwise not support a completion.
10. Downhole commingling reduces the amount of mechanical work that must be performed and allows the recovery of reserves before the development of mechanical problems that have affected older wellbores.
11. Reducing the number of separate completions in a well by one will result in the recovery of an incremental 49 MMCF of gas (2.9 BCF for 60 wells) by lowering the abandonment rate.

**CONCLUSIONS OF LAW**

1. Proper notice was given as required by statute.
2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
3. The requested consolidated vertical interval and two-factor allocation formula field rules will prevent waste, protect correlative rights within the field, and promote orderly development of the reservoirs.
4. Transferring wells into their proper field will protect correlative rights and promote conservation.

**EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that the requested consolidated vertical interval and two-factor allocation formula be adopted as field rules for the ZWebb (10,350) Field. The 14 wells listed in Finding of Fact 5 should be transferred from the Pok-A-Dot (8600) Field to the ZWebb (10,350) Field.

Respectfully submitted,

Margaret Allen  
Technical Hearings Examiner

Date of Commission Action: June 10, 2003.