

**RAILROAD COMMISSION OF TEXAS
LEGAL DIVISION
OIL AND GAS SECTION**

RULE 37 CASE NO. 0205453

**APPLICATION OF BASS ENTERPRISES
PRODUCTION COMPANY FOR AN
EXCEPTION TO STATEWIDE RULE 37
TO DRILL ITS WELL NO. 2, M. H.
GOODE ESTATE 4 LEASE, BROWN-
BASSETT (ELLENBURGER) AND
WILDCAT FIELDS, TERRELL
COUNTY, TEXAS**

FINAL ORDER

The Commission finds that, after statutory notice in the above-numbered docket, heard on July 19, 1994, the presiding examiner has made and filed a report and Proposal for Decision containing Findings of Fact and Conclusions of Law, which was served on all parties of record, and that this proceeding was duly submitted to the Railroad Commission of Texas at conference held in its offices in Austin, Texas.

The Commission, after review and due consideration of the Proposal for Decision, the Findings of Fact and Conclusions of Law contained therein, and any exceptions and replies thereto, hereby adopts as its own the Findings of Fact and Conclusions of Law contained in the Proposal for Decision, and incorporates said Findings of Fact and Conclusions of Law as if fully set out and separately stated herein, save and except:

1. Findings of Fact No. 5:

Amended to read:

Bass's determination of net pay, water saturation and the position and magnitude of the controlling faults reflects remaining reserves which will not be recovered by the existing well on the lease.

2. Findings of Fact No. 6:

Amended to read:

Arco's determination of net pay, water saturation and the position and magnitude of the controlling faults is not compatible with production data of the existing well.

3. Findings of Fact No. 7:

Amended to read:

Bass will not recover its hydrocarbons under the Lease or the equivalent in kind from the existing well on the lease.

- a. At the time the M. H. Goode Estate No. 4-1 was drilled, there was in excess of 41.5 BCF of recoverable reserves under the tract.
- b. The M. H. Goode Estate No. 4-1 recovered 20.98 BCF as of March of 1994 and is expected to recover another 20.4 BCF before it is abandoned.
- c. There is additional gas under the lease which Bass will be prevented from recovering if this exception application is not granted.

4. Findings of Fact No. 8:

Delete in full

5. Conclusions of Law No. 3:

Amended to read:

Bass cannot recover the hydrocarbons under the M.H. Goode Estate 4 Lease in the Brown-Bassett (Ellenburger) Field, or the equivalent in kind, from the existing M.H. Goode 4-1 and is therefore entitled to an exception to Rule 37 to prevent confiscation.

6. Conclusions of Law No. 4:

Delete in full

7. Conclusions of Law No. 5:

Delete in full

Therefore, it is **ORDERED** by the Railroad Commission of Texas that the application of Bass Enterprises Production Company for a spacing exception permit to Statewide Rule 37, to drill Well No. 2, M.H. Goode Estate 4 Lease, containing 1116.34 acres of land in the Brown-Basset (Ellenburger) and Wildcat Fields, Terrell County, Texas, be and it is hereby **APPROVED**, and applicant is granted permission to drill Well No. 2, which will be located as follows, subject to the conditions listed below:

Perpendicular surface location from two nearest designated lines:

1320' FSL & 1320' FSEL OF UNIT

1320' FSL & 1320' FSEL OF SURVEY

CONDITIONS

1. **Fresh Water Sand Protection.** The operator must set and cement sufficient surface casing to protect all usable-quality water as defined by the Texas Water Commission. Before drilling a well, the operator must obtain a letter from the Texas Water Commission stating the depth to which water needs protection. Write: Texas Water Commission, Surface Casing, P. O. Box 13087, Capitol Station, Austin, Texas 78711-3087. File a copy of the Water Commission letter with the appropriate district office.
2. **Permit at Drilling Site.** A copy of the Form W-1 (Drilling Permit Application), the location plat, a copy of Statewide Rule 13 alternate surface casing setting depth approval from the district office, if applicable, and this drilling permit must be kept at the permitted well site throughout the drilling operations.
3. **Notification of Setting Casing.** The operator **MUST** call in notification to the appropriate district office a minimum of eight (8) hours prior to the setting of surface casing, intermediate casing, AND production casing. The individual giving notification **MUST** be able to advise the district office of the docket number.
4. **Producing Well.** Statewide Rule 16 requires that the operator submit a Form W-2 (oil well) or Form G-1 (gas well) to the appropriate Commission district office within thirty (30) days after completion of such well. Completion of the well in a field authorized by this order voids the order for all other fields included in the order unless the operator indicates on the initial completion report that the well is to be a dual or multiple completion and promptly submits an application for multiple completion. All zones are required to be completed before the expiration date of this order.
5. **Dry or Noncommercial Hole.** Statewide Rule 14(b)(2) prohibits suspension of operations on each dry or noncommercial well without plugging unless the hole is cased and the casing is cemented in compliance with Commission rules. If properly cased, Statewide Rule 14(b)(2) requires that plugging operations must begin within a period of one (1) year after drilling or operations have ceased. Plugging operations must proceed with due diligence until completed. An extension to the one year plugging requirement may be granted under the provisions stated in Statewide Rule 14(b)(2).
6. **Intention to Plug.** The operator must file a Form W-3A (Notice of Intention to Plug and Abandon) with the district office at least five (5) days prior to beginning plugging operations. If, however, a drilling rig is already at work on location and ready to begin plugging operations, the district director or the director's delegate may waive this requirement upon request, and verbally approve the proposed plugging procedures.
7. **Notification of Plugging a Dry Hole.** The operator **MUST** call to notify the appropriate district office a minimum of four (4) hours prior to beginning plugging operations. The individual giving notification **MUST** be able to advise the district office of the docket number and all water protection depths for that location as stated in the Water Commission letter.

- 8. **Plugged Wells.** Should this well ever be plugged and abandoned, the Commission will consider such plugging and abandonment as prima facie evidence that production from said well is no longer necessary to prevent confiscation of applicant's property or to prevent waste; and upon such plugging and abandonment, the authority for such well as granted under this permit shall cease.
- 9. **Permit Expiration.** This permit expires two (2) years from the date this order becomes administratively final, unless actual drilling operations have begun. The permit period will not be extended.
- 10. It is further ordered by the Commission that this order shall not be final until twenty days after it is actually mailed to the parties by the Commission; provided that if a motion for rehearing of the application is filed by any party at interest within such twenty day period, this order shall not become final until such motion is overruled, or if such motion be granted, this order shall be subject to further action by the Commission.

Each exception to the examiners' proposal for decision not expressly granted herein is overruled. All requested findings of fact and conclusions of law which are not expressly adopted herein are denied. All pending motions and requests for relief not previously granted or granted herein are denied.

Done this _____ day of _____, 19____.

RAILROAD COMMISSION OF TEXAS

CHAIRMAN

COMMISSIONER

COMMISSIONER

ATTEST:

Secretary

**RAILROAD COMMISSION OF TEXAS
LEGAL DIVISION
OIL AND GAS SECTION**

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FINAL ORDER

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The Commission, after review and due consideration of the Proposal for Decision, the Findings of Fact and Conclusions of Law contained therein, and any exceptions and replies thereto, hereby adopts as its own the Findings of Fact and Conclusions of Law contained in the Proposal for Decision, and incorporates said Findings of Fact and Conclusions of Law as if fully set out and separately stated herein.

Therefore, it is **ORDERED** by the Railroad Commission of Texas that the application of Bass Enterprises Production Company for a spacing exception permit under the provisions of Statewide Rule 37 to drill Well No. 2, M.H. Goode Estate 4 Lease, containing 1116.34 acres in the Brown-Bassett (Ellenburger) and Wildcat Fields, Terrell County, Texas, be and it is hereby **DENIED**.

Each exception to the examiners' proposal for decision not expressly granted herein is overruled. All requested findings of fact and conclusions of law which are not expressly adopted herein are denied. All pending motions and requests for relief not previously granted or granted herein are denied.

Done this _____ day of _____, 19____.

RAILROAD COMMISSION OF TEXAS

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On November 21, 1994 the Commission granted the application of Bass Enterprises Production Company for an exception to Rule 37 for its Well No. 2, M. H. Goode Estate 4 Lease, in the Brown-Bassett (Ellenburger) and Wildcat Fields, Terrell County Texas. A Motion for Rehearing and Request for Oral Argument were filed by Arco/Mobil on December 12th with a Reply by Bass following on December 15, 1994. On December 19, 1994, the Commission extended the time to consider Arco/Mobil's Motion for Rehearing until February 21, 1995. On January 23rd, the Commission granted Arco/Mobil's Request for Oral Argument. Argument was heard on February 2, 1995. At public conference on February 6, 1995, the Commission granted Arco/Mobil's Motion for Rehearing and denied Bass' application.

The Commission, after review and due consideration of the Proposal for Decision, the Findings of Fact and Conclusions of Law contained therein, and any exceptions and replies thereto, and all motions, replies to motions and briefs filed by the parties, hereby adopts the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT

1. Notice of hearing was given by first class mail on June 10, 1994, to all designated operators, lessees of record for tracts that have no designated operator and owners of record of unleased mineral interests for each adjacent tract and each tract within the minimum distances prescribed by the field rules for the Brown-Bassett (Ellenburger) and Wildcat Fields, Terrell County, Texas.

2. Bass Enterprises Production Company ("Bass") has submitted a Form W-1, dated May 10, 1994 to drill its Well No. 2, M.H. Goode Estate 4 Lease ("subject lease and well"), in the Brown-Bassett (Ellenburger) and Wildcat Fields, Terrell County, Texas.
 - a. The Brown-Bassett (Ellenburger) requires 1320' lease-line spacing, 2640' between-well spacing and 640 acre density.
 - b. The Wildcat field requires 467' lease-line spacing, 1200' between-well spacing and 40 acres density.
3. The subject well location is 2007' from the location of the M.H. Goode Estate No. 4-1.
4. Bass proposes to drill the subject well on the remaining 476.34 acres of the 1116.34 acre M.H. Goode Estate 4 lease.
5. Bass' determinations of the appropriate reservoir parameters and the position and magnitude of the controlling fault on the subject lease are not reliable.
 - a. Bass used only a volumetric calculation to estimate its share of the tract's reserves. Arco's volumetric estimate yields reserve calculations that are in agreement with the results of three other well-accepted engineering methods for determining reserves (ie. reservoir simulation, material balance and production history).
 - b. Bass assumed the reservoir pressure, for the purpose of calculating its share of the tract's reserves, is 6760 psia. The pressure at the time the Goode Estate 4-1 Well was drilled was 5,620 psia.
 - c. Bass calculated an apparent water saturation of 80% using its estimate of $R_w = 0.29$. Bass rejected this anomalously high estimate of water saturation and relied upon the opinion of its expert that the proper water saturation value was 35%. Bass' expert, Mr. Platt, offered no specific engineering evidence to support his opinion.
 - d. A gamma-ray/sonic log of the Mobil Bassett-Goode #2 Well shows that the Ellenburger section includes numerous shale or shaley-carbonate intervals. Bass offered no exhibits and no testimony to show how it accounted for these anomalous porosity intervals when making its estimate of the average Ellenburger porosity.
 - e. Estimating porosity-feet using gross feet, as Bass did, assumes that the Ellenburger is homogeneous with respect to effective porosity. Locally, the Ellenburger is not homogeneous with respect to effective porosity as evidenced by the fact that the following wells are non-productive in the Ellenburger yet surrounded by producing Ellenburger wells:
 - i. Shell 2-239 Mitchell
 - ii. Mobil & Western Nat'l 1 Banner.

- f. Bass' estimate of the gross Ellenburger section thickness is approximately 250 feet greater than the actual gross Ellenburger section penetrated in the M. H. Goode Estate 4-1 Well.
 - g. Bass' fault interpretation is not reasonable in light of the seismic data presented by Arco. Though Arco's seismic data is of older vintage its signal to noise ratio is more than sufficient to identify a near top of Ellenburger event and to map the position and throw of a major fault at the Ellenburger level. The fault's position and throw condemns as non-productive, all but the 388 acres south of the fault. Despite Bass' insistence that Arco/Mobil's fault interpretation, as delineated on Arco Exhibit #5, is incorrect, and that there is productive acreage north of Arco's proposed fault, Bass has never drilled any Ellenburger wells in the Brown-Bassett Field north of Arco's proposed fault.
6. Arco's determinations of the appropriate reservoir parameters and the position and magnitude of the controlling faults are more reliable than Bass' determinations.
7. Bass will recover its share of hydrocarbons under the lease or the equivalent in kind from the M. H. Goode Estate 4-1 Well.
 - a. At the time the M.H. Goode Estate No. 4-1 was drilled, there was 17.1 BCF of recoverable reserves under the tract.
 - b. The M.H. Goode Estate No. 4-1 recovered 20.98 BCF as of March of 1994 and will recover another 20.4 BCF before it is abandoned.
8. All of the remaining reserves under the subject lease can be drained by existing wells.
9. All of the interest owners in the M. H. Goode Estate 4-1 well are also interest owners in the M. H. Goode 18-1 Unit well. The M. H. Goode Estate 18-1 Unit well and the M. H. Goode Estate 4-1 well both drain the M. H. Goode Estate Lease. The boundaries of the M. H. Goode Estate Lease are indicated in blue on Arco-Permian Exhibit #3.
10. Bass did not include production from the M.H. Goode Estate 18-1 Unit well in its estimate of its share of hydrocarbons.

CONCLUSIONS OF LAW

1. Proper notice of hearing was timely given to all persons legally entitled to notice.
2. All things have occurred and have been done to give the Commission jurisdiction to decide this matter.
3. Bass failed to carry its burden to show that without this exception it cannot receive its share of hydrocarbons under the M.H. Goode Estate 4 Lease in the Brown-Bassett (Ellenburger)

and Wildcat Fields, or the equivalent in kind. It is therefore not entitled to an exception to Rule 37 to prevent confiscation.

- 4. An exception to Rule 37 is not necessary to prevent waste because there will be no ultimate loss of a substantial amount of hydrocarbons if this application is not granted.

Therefore, it is **ORDERED** by the Railroad Commission of Texas that the application of Bass Enterprises Production Company for a spacing exception permit under the provisions of Statewide Rule 37 to drill Well No. 2, M.H. Goode Estate 4 Lease, containing 1116.34 acres in the Brown-Bassett (Ellenburger) and Wildcat Fields, Terrell County, Texas, be and it is hereby **DENIED**.

Each exception to the examiners' proposal for decision not expressly granted herein is overruled. All requested findings of fact and conclusions of law which are not expressly adopted herein are denied. All pending motions and requests for relief not previously granted or specifically granted herein are denied.

Done this _____ day of _____, 19____.

RAILROAD COMMISSION OF TEXAS

CHAIRMAN

COMMISSIONER

COMMISSIONER

ATTEST:

Secretary

Rule 37 Case No. 0205453

APPLICATION OF BASS	§	BEFORE THE RAILROAD COMMISSION
ENTERPRISES PRODUCTION CO.	§	
FOR A RULE 37 EXCEPTION	§	OF TEXAS
FOR ITS GOODE ESTATE	§	
4-2 WELL, BROWN-BASSETT	§	
(ELLENBURGER) FIELD, TERRELL	§	
COUNTY, TEXAS	§	OIL & GAS DIVISION

ORDER OF DISMISSAL WITHOUT PREJUDICE

On this 13th day of February 1995 came on for consideration the Motion of Bass Enterprises Production Co., Applicant herein, to be permitted to withdraw or dismiss its application, without prejudice to its right to refile the same. The Commission, believing that such action will permit the parties an opportunity to gather additional relevant data and is otherwise in the interest of conservation and justice, hereby orders that the above-referenced application be and hereby is withdrawn and dismissed, without prejudice to the right of the Applicant to refile the same on or after August 13, 1995.

CHAIRMAN

COMMISSIONER

COMMISSIONER

ATTEST:

SECRETARY