*****	***********	*******
* KEY ISS	SUES: Confiscation	*
*	Location	*
*	Relinquishment Act	*
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* FINAL (	ORDER: R37 GRANTED	*
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RULE 37	CASE NO. 0218227	
DISTRIC'	T 8	

APPLICATION OF BASS ENTERPRISES PRODUCTION CO. FOR AN EXCEPTION TO STATEWIDE RULE 37 TO DRILL WELL NO. 2, ON THE PRICE ESTATE "A" LEASE, GOMEZ (ELLENBURGER) AND GOMEZ (DEVONIAN) FIELDS, PECOS COUNTY, TEXAS

# **APPEARANCES:**

# **FOR APPLICANT:**

Robert Grable - Attorney George A. Hillis - Division Geologist Terry Payne - Consulting Pet. Engr. Worth Carlin - Landman

## FOR PROTESTANTS:

William E. Black - Attorney Eddie Holland - Petrophysicist Chuck Anderson - Geologist Mike Gelbs - Petroleum Engineer

Phillip Whitworth - Attorney Amy Lee - Attorney

Brian Sullivan - Attorney

### **APPLICANT:**

Bass Enterprises Production Co.

## **PROTESTANTS:**

Spirit Energy 76

Enron Oil & Gas Co.

Texaco Exploration and Production, Inc.

### PROPOSAL FOR DECISION

### PROCEDURAL HISTORY

**APPLICATION FILED:** December 19, 1997 **NOTICE OF HEARING:** January 19, 1998

**HEARD BY:** Daniel W. Ortman - Hearings Examiner

T. H. Richter - Technical Examiner

HEARING DATE: March 4-5, 1998
TRANSCRIPT DATE: March 11, 1998
PFD CIRCULATION DATE: May 11, 1998

# **STATEMENT OF THE CASE**

Bass Enterprises Production Company ("Bass" or "applicant") seeks an exception to Statewide Rule 37 to drill a replacement well on the Price Estate "A" Lease, (the "subject well" and "subject lease") in the Gomez (Ellenburger) and Gomez (Devonian) Fields. Bass was granted a trial amendment to delete the Gomez (Wolfcamp Detrital) Field from this application. The Gomez (Ellenburger) Field requires a minimum spacing of 1980 feet to the nearest lease line and 5280 feet between wells on 640 acres. The Gomez (Devonian) Field requires spacing of 1867 feet to the nearest lease line and 3735 feet between wells on 640 acres.

The subject lease is composed of 704 acres as outlined on the plat attached to the Form W-1 (Drilling Permit) submitted by Bass. The Price Estate "A" Lease is rectangular in shape, measuring approximately 2000 feet by 14,400 feet. The existing well is located approximately 5300 feet from the northern lease line and 1000 feet from the western lease line. This well, Well No. 1, has suffered mechanical damage and production has declined since November 1997. Bass does not plan to operate the replacement well concurrently with the existing well and plans to rework the existing well at a cost of approximately \$700,000 before drilling the replacement well. Bass' lease permits only 60 days in which to begin drilling operations if the workover is not successful. Bass is requesting an exception to Statewide Rule 37 for a replacement well, Well No. 2, located 940 feet from the west lease line and 141 feet from the existing well. A regular location is not available on the lease.

The application is protested by Spirit ("Spirit") Energy 76, Texaco ("Texaco") Exploration and Production, Inc. and Enron ("Enron") Oil and Gas Inc. Protestants argue that granting an exception to Rule 37 for a well at the proposed location is not necessary to prevent confiscation or waste.

# **DISCUSSION OF THE EVIDENCE**

# **Applicant's position and evidence**:

Bass argued that an exception to Rule 37 is necessary to prevent confiscation and waste from the Ellenburger Field and to prevent confiscation from the Devonian Field. The Price Estate "A" Lease, (the "subject tract") is of regular size, 704 acres, and acquired its present shape when it was granted by the State in 1906. The existing well has produced approximately 90.91 Bcf from the Ellenburger Field since it was completed in October 1970. Bass estimates that Well No. 1 would have recovered approximately 112.2 Bcf if it had not encountered mechanical problems. Bass believes that the porosity is uniform under the subject tract and is between 1.2% and 1.9% and calculated that originally the subject tract had 177 Bcf of recoverable gas. Bass calculates that the remaining recoverable reserves under the subject tract are approximately 45 Bcf from the Ellenburger Field, of which approximately 21 Bcf (based on a P/Z analysis) are recoverable from a replacement well at the proposed location. The existing well is located at the same structural position as the replacement well which should continue in the same decline in this pressure depleted area. The current reservoir pressure in this area is 2,000 psi.

In addition to the existing well, one other well has been drilled on the Price Estate "A" Lease. (See Exhibit "A" attached.) The Pan American Price Estate No. 1 is located on the Price Estate "A" Lease to the north of the existing well. The Pan American well was drilled into the Ellenburger formation about 5 years before Well No. 1. The Pan American well produced only 6.4 Mcf per day before it was abandoned.

The Bass Enterprises Production Co. Price "B" Well No. 1 is shown on the attached plat located on the subject tract but is located on Bass Price Estate B Lease to the south of the existing well. This well produced approximately 22.9 million cubic feet of gas per day, but also produced approximately 4,000 barrels of water per day. The Price "B" Well No. 1 later suffered mechanical damage of an undetermined nature and was abandoned.

Bass introduced an exhibit showing the cumulative production from the Gomez (Devonian) Field on the subject, and surrounding tracts, and concludes that the reserves underlying the subject tract are recoverable from the applied-for location. Bass also concludes it is entitled to an exception at the applied for location prevent confiscation or waste of 21 Bcf in the Ellenburger Field, the proposed location is reasonable and a location to the south of the proposed location is not reasonable.

# **Spirit Energy's position and evidence**:

Spirit argues that Bass' proposed exception to Rule 37 is not necessary to prevent confiscation or waste. In the alternative, Spirit argues that a location 141 feet from Bass' existing

Well No. 1 is not a reasonable location and offered an exhibit introduced by Bass at a previous Rule 37 hearing in support of its position. Spirit did not suggest a specific location.

Spirit's exhibits illustrate the structure of the Ellenburger Field on the subject and offsetting tracts and show the cumulative production from the Ellenburger Field of the wells on the subject and offsetting tracts. Spirit's offered a production map showing the cumulative production of the Bass Enterprises Price "B" Well No. 1 is 0.255 Bcf of gas.

Spirit offered three exhibits to show that a well in the proposed location will drain reserves from the offsetting tracts. Spirit's exhibits show that approximately 54% of the reserves produced by a well in the proposed location will migrate from offsetting tracts.

# Enron Oil and Gas and Texaco Exploration and Production, Inc. positions:

Enron Oil and Gas ("Enron") and Texaco Exploration and Production, Inc. ("Texaco") appeared at the hearing through counsel. Both Enron and Texaco own interests in wells offsetting the applied-for location. Neither Texaco nor Enron offered direct evidence, but both stated in opening arguments their opposition to the application. Texaco argued in closing, and offered legal authority in support of its argument, that Bass had not met its burden of proof.

# **EXAMINERS' OPINION**

# **Prevention of Confiscation:**

Protestants do not dispute that the existing well will not recover the reserves remaining under the Price Estate "A" Lease or that a replacement well is effectively the first well on the tract. Spirit argues that Bass is not entitled to an exception to prevent confiscation from the subject tract because it is a voluntary subdivision.

Testimony from Bass' witness established that the tract is a regular size, 704 acres, which assumed its present shape when it was granted by the State in 1906. Bass' position is that the ownership of the minerals underlying the subject tract have been vested in the State since 1906 and therefore the tract is not a voluntary subdivision. Bass offered a form P-12 (Certificate of Pooling Authority) indicating that a mineral or royalty interest in the subject tract has been conveyed subsequent to the tract's formation but chose not to offer the conveyance document.

The issue of ownership of minerals in land subject to the Relinquishment Act is well settled. Greene v. Robison, 8 S.W. 2d 655 (1928). The Act, as interpreted by the Supreme Court, vests ownership of certain minerals in the State and only delegates authority to the surface owner to act as agent for the State to execute a lease. Bass introduced testimony and other evidence that the

minerals underlying the subject tract are subject to the Act; neither Spirit, nor Enron nor Texaco E & P attempted to rebut this evidence. The minerals underlying the subject tract are subject to the Relinquishment Act, ownership of the minerals has been vested in the State since 1906 and consequently the tract is not a voluntary subdivision. Any conveyance of a royalty interest in the minerals underlying the subject tract is immaterial.

Bass' mineral interest in the hydrocarbons underlying the subject tract is entitled to protection from confiscation because the subject tract is a legal subdivision. Bass is entitled, as a matter of law, to an exception to Rule 37 at a reasonable location to prevent confiscation. A reasonable location is one which will recover the remaining reserves on the lease or an equivalent amount in kind. A well at the geometric center is presumed reasonable absent pertinent information to the contrary. A well at an irregular location will not be granted an exception to Rule 37 if a well at an alternate location will recover applicant's fair share and protect the correlative rights of the offset owners.

### Reasonable Location: The Ellenburger Field

Bass introduced a plan of the drilling pad on which Well No. 1 is located. Bass explained that the location was chosen 141 feet southwest of the existing well so that the existing drilling pad could be utilized to drill the proposed well. Bass argues that because it will save drilling costs that the proposed location is reasonable. The examiners disagree. Evidence of reduced drilling costs does not necessarily prove that the proposed location is reasonable. Bass' plan does however show that the proposed location is as near as practical to the center of the tract.

Bass introduced a waiver from an offset operator which waives objection to the location of the existing well. Bass argues that the waiver shows that the proposed location of the existing Well No. 1 is a reasonable location. Bass argues that if the location of the existing well is a reasonable location the proposed location for the replacement well, 141' southwest of the existing well, is also a reasonable location. The examiners disagree. A waiver granted almost 30 years ago before the existing well drained over 90 Bcf from the subject tract is not probative that the same location is reasonable for a replacement well.

Spirit introduced three exhibits showing that the existing well has a radial drainage pattern. Spirit argues that this drainage pattern will allow a replacement well at the proposed location to recover more reserves from the offset tracts than from the subject tract. The examiners disagree. Spirit's exhibits do not consider no-flow boundaries created by offsetting wells on adjacent tracts. The no-flow boundaries create an oval drainage pattern, not a radial drainage pattern, for the existing well.

Bass introduced a map indicating the cumulative production of offsetting wells. It is apparent

from Bass' map that the prolific production<sup>1</sup> from the Ellenburger Formation in this area of the Gomez (Ellenburger) Field is due to east-west fracture systems. Bass' existing well is located in one of the structure's prolific fracture systems and is offset to the west by Protestant's Sabine Royalty Unit Well No. 5 and to the east by the Aubrey Price Well No. 1.

The evidence also shows that a location to the south of the proposed location is not a reasonable location. Spirit's witness testified:

Q(Grable) And you would agree and you would recommend to your management, would you not, that if you lost your Sabine Royalty No. 1, you would stay fairly close to that wellbore location, wouldn't you, to get a replacement?

A(Anderson) That is a legal location. Yes, I would.

Q(Grable) I mean, you wouldn't want to go pioneering some 2,000 feet to the south to see if you could find something better, would you? That would be a risky thing to do, wouldn't it?

A(Anderson) That would be risky.

Protestant's testimony indicates that even on the facts and circumstances of this case, even the protestant's geologist would not recommend drilling a well on the southern portion of the subject tract. This conclusion is supported by a review of the cumulative production and production rates of the wells on the offsetting tracts; the Phillips, Walker Well No. 1; the Shell Price Estate Well No. 1; and Chisos Operating Price Well No. 1A. The examiners agree that a well drilled to the south of the proposed location will not allow Bass a reasonable opportunity to recover the remaining reserves under the subject tract.

Spirit's exhibit titled "Breakeven Gas Reserves" was offered to show that a location to the south of the proposed location is a reasonable location. The exhibit speaks to the revenue required to offset drilling costs and does not otherwise establish that a well drilled to the southern south of the proposed location will allow Bass a reasonable opportunity to recover its fair share.

No regular location is available on the Price Estate "A" Lease. The evidence shows that a

Price Estate A Well No. 1 approx. 91 Bcf
Pan Am Price Estate No. 1 approx. 1 Bcf
Price "B" No. 1 approx. 3 Bcf

Total gas produced from the Price Estate A Lease - approx. 95 Bcf

The unrefuted evidence shows that Bass has produced the following quantities of gas from the one existing well and two abandoned wells on the Price Estate A Lease:

location to south of the proposed location is not a reasonable location. The proposed location is as near as possible to the geometric center of the subject tract and is a reasonable location.

### Reasonable Location: The Devonian Field

Bass is applying for a permit to drill into the Devonian Field if the well is unsuccessful in the Ellenburger Field. Bass has no other well in the Devonian Field on this, or on adjacent tracts. Unocal's Moore J.F. Unit No. 1 Well No. 1 is located approximately 1.8 miles east from the proposed location. Unocal's well is located on approximately 640 acres and has produced approximately 1.475 Bcf of gas. Exxon's Fee L Well No. 1 is located more than 2 miles east of the proposed location. Exxon's well is located on approximately 640 acres and has produced approximately 0.855 Bcf of gas. Bass may reasonably expect to recover a significant amount of reserves from a well drilled into the Devonian Field in the Price Estate "A" Lease.

No wells are producing from the Devonian Field within 2 miles east or west of the northern or southern sections of the Price Estate "A" Lease. The Unocal well and the Exxon well producing from the Devonian formation are located on an east to west line from the proposed location. The proposed location is a reasonable location for a well on the subject tract into the Devonian Field if the proposed well into the Ellenburger formation is not successful.

### **Prevention of waste:**

An application for an exception to Rule 37 based on waste must show three elements: (1) unusual conditions, different from conditions in adjacent parts of the field, exist under the tract for which the exception is sought; (2) as a result of the unusual conditions, hydrocarbons will be recovered by the well for which an exception is sought that would not be recovered by any existing well or by additional wells drilled at a regular location; (3) the volume of hydrocarbons which will be recovered, if the exception is granted, is substantial.

Bass' witnesses testified that recoverable reserves remaining under the subject lease will be recovered by offsetting wells if the requested exception is not granted. Even if an unusual condition underlies the subject tract and is different from adjacent tracts, an exception to Rule 37 is not required to prevent waste.

# **Conclusion**:

An exception to Rule 37 at the proposed location is necessary to prevent confiscation of hydrocarbons underlying the subject tract in the Ellenburger and Devonian Fields. Based on the record in this docket, the examiners recommend adoption of the following Findings of Fact and Conclusions of Law:

# **FINDINGS OF FACT**

- 1. At least 10 days notice of this hearing was given to the designated operator, all lessees of record for tracts that have no designated operator, and all owners of unleased mineral interests for each tract adjacent to the Price Estate "A" Lease ("subject lease") and each tract nearer to the proposed well location than the prescribed minimum distance.
- 2. The application for a Rule 37 exception was filed by Bass Enterprises Production Company on Form W-1 (Application to Drill, Deepen, Plug Back or Re-Enter) on December 19, 1997.
- 3. Bass Enterprises Production Company ("Bass" or "applicant") seeks an exception to Statewide Rule 37 to drill its proposed Well No. 2 on the Price Estate "A" Lease, (the "subject well") in the Gomez (Ellenburger) Field and Gomez (Devonian) Field. The Gomez (Ellenburger) Field requires spacing of 1980 feet to the nearest lease line and 5280 feet between wells on 640 acres. The Gomez (Devonian) Field requires spacing of 1867 feet to the nearest lease line and 3735 feet between wells on 640 acres.
- 4. Bass proposes to drill its replacement well at a surface location 5368 feet FNL and 1160 feet FEL of the Price Estate "A" Lease ("the subject lease") and 5368 feet FNL and 1160 feet FEL of the survey. The proposed surface location is 940 feet from the west lease line.
- 5. The proposed location is as near as practical to the geometric center of the subject tract.
- 6. The Price Estate "A" Lease, the proposed tract is composed of 704 acres. A regular location is not available on the Price Estate "A" Lease.
- 7. Approximately 43 Bcf, or more, of reserves are currently recoverable from the Gomez (Ellenburger) Field under the Price Estate "A" Lease. A well at the proposed location is reasonably expected to recover 21 Bcf of gas which is less than Bass' fair share.
- 8. A well drilled at a location on the subject tract to south of the applied-for location would not reasonably be expected to recover Bass' fair share.
- 9. The subject tract assumed its current shape in 1906.
- 10. Existing offset wells can drain the remaining recoverable reserves from the subject tract.

# **CONCLUSIONS OF LAW**

- 1. Proper notice of hearing was timely issued by the Railroad Commission to the appropriate persons legally entitled to notice.
- 2. All things necessary to the Commission attaining jurisdiction over the subject matter and the parties in this hearing have been performed.
- 3. The applied-for location is reasonable.
- 4. Ownership of the minerals underlying the subject tract has been vested in the State since 1906.
- 5. The Price Estate "A" Lease is a legal subdivision.
- 6. Approval of a permit to drill a well at the proposed location is not necessary to prevent waste of hydrocarbons underlying the subject tract.
- 7. Approval of a permit to drill a well at the proposed location is necessary to prevent confiscation of hydrocarbons underlying the subject tract.

# **EXAMINERS' RECOMMENDATION**

The examiners recommend that Bass Enterprises Production Company's request for an exception to Statewide Rule 37 to drill its proposed Well No. 2 on the Price Estate "A" Lease for the Gomez (Ellenburger) Field and Gomez (Devonian) Fields be **GRANTED.** 

Respectfully submitted,

D. W. Ortman Hearings Examiner

T. H. Richter Technical Examiner