

KEY ISSUES: confiscation
reasonable location

R37 DENIED

February 10, 2000

**RULE 37 CASE NO. 0220851
DISTRICT 7C**

APPLICATION OF PROSPECTIVE INVESTMENT & TRADING CO., LTD. FOR AN EXCEPTION TO STATEWIDE RULE 37 TO DRILL WELL NO. 5 ON THE HALFF ESTATE LEASE TO THE AMACKER-TIPPETT (WOLFCAMP), AMACKER-TIPPETT SW (WOLFCAMP), AMACKER-TIPPETT (STRAWN), AMACKER-TIPPETT (DEVONIAN) AND WILDCAT FIELDS, UPTON COUNTY, TEXAS

APPEARANCES:

FOR APPLICANT:

David Gross - Attorney
Dale Miller - Graduate Engineer
Louis L. Lint - Geophysical Consultant
John M. Redmond - Vice President Engineering

APPLICANT:

Prospective Investment & Trading Co., Ltd.
“ ” “ ” “
“ ” “ ” “
“ ” “ ” “

FOR PROTESTANT:

Mike McElroy - Attorney
Mike Jensen - Sr. Development Engineer
Brian Blome - Sr. Geologist
David Scolman - Sr. Geophysicist

PROTESTANT:

Ocean Energy Resources, Inc.
“ ” “ ”
“ ” “ ”
“ ” “ ”

INTERESTED PARTY:

William T. Duncan - Staff Engineer Exxon Corporation

AMENDED PROPOSAL FOR DECISION
PROCEDURAL HISTORY

APPLICATION FILED:	December 15, 1998
NOTICE OF HEARING:	March 10, 1999
PREHEARING CONFERENCE:	March 31, 1999
AMENDED APPLICATIONS FILED:	May 20 and June 3, 1999
AMENDED NOTICE OF HEARING:	May 21, 1999

SECOND AMENDED NOTICE

OF HEARING:	June 4, 1999
HEARD BY:	Daniel W. Ortman - Hearings Examiner Margaret Allen - Technical Examiner
HEARING DATES:	July 12 & 13, 1999
TRANSCRIPT DATE:	July 20, 1999
PFD PREPARED BY:	Mark Helmueller - Hearings Examiner Margaret Allen - Technical Examiner
ORIGINAL PFD CIRCULATION DATE:	December 7, 1999
AMENDED PFD CIRCULATION DATE:	February 10, 2000

STATEMENT OF THE CASE

Prospective Investment & Trading Co., Ltd. ("Pitco" or "Applicant") seeks an exception to Statewide Rule 37 to drill Well No. 5 on the Halff Estate Lease to the Amacker-Tippett (Wolfcamp), Amacker-Tippett, SW (Wolfcamp), Amacker-Tippett (Strawn), Amacker-Tippett (Devonian) and Wildcat Fields, Upton County, Texas. The Amacker-Tippett, SW (Wolfcamp), Amacker-Tippett (Wolfcamp) and Amacker-Tippett (Strawn) Fields require minimum spacing of 660 feet to the nearest lease-line and 1320 feet between wells on 160 acre proration units, with optional 80 acre units. The Amacker-Tippett (Devonian) oil field is subject to the statewide rules requiring a minimum spacing of 467 feet to the lease line and 1200 feet between wells. The Amacker-Tippett (Devonian) gas field requires minimum spacing of 660 feet to the nearest lease-line and 1880 feet between wells. The subject lease is rectangular and locations regular to lease-lines are available. The proposed well would be located 110' from the nearest lease-line.

The Halff Estate Lease (the "subject lease") comprises 489 acres in the western portion of Section 20 as outlined on the plat attached to the Form W-1 (Application for Permit to Drill, Deepen, Plug Back, or Re-Enter) submitted by Pitco on June 3, 1999 (see Attachment A). The nearest well to the proposed location is Pitco's Halff Estate Well No. 1 ("Halff #1") which is located approximately 1133 feet to the northwest and is completed into the Amacker-Tippett (Wolfcamp) Field. Pitco's Form W-1 states the Halff #1 will not produce concurrently with the proposed well. Accordingly, the proposed well would not be irregular as to between well spacing.

Pitco's application is protested by Ocean Energy Resources, Inc. ("Ocean" or "Protestant"). Ocean operates three wells on Section 21 offsetting Section 20 to the south. Ocean's Barnett Well No. 21-3 ("Barnett #21-3") is producing from the Amacker-Tippett, SW (Wolfcamp) Field located at a regular location 660 feet from the lease-line.

A Prehearing Conference was held on March 31, 1999 to address Pitco's discovery request for seismic information held by a nonparty, Enron Oil and Gas ("Enron"). Enron opposed disclosure of its seismic information, but offered to sell it to the applicant at the standard price. After hearing argument, the examiners entered an order denying Pitco's discovery request for Enron's seismic information.

The examiners issued a Proposal for Decision in this case on December 7, 1999. In response to exceptions this amended Proposal for Decision was issued January 31, 2000.

APPLICANT PITCO'S POSITION AND EVIDENCE

Amacker-Tippett (Wolfcamp)¹

This application for an exception to Statewide Rule 37 is to allow Pitco to recover hydrocarbons from an anomalously thick geologic feature it characterizes as a "slide block"² within the Amacker-Tippett (Wolfcamp) Field. Most of the slide block is located on Ocean's offsetting lease in Section 21, south of Pitco's lease, however, Pitco claims that the slide block extends on to its lease. Pitco further contends that the slide block is an independent reservoir that is not in communication with the rest of the Amacker-Tippett (Wolfcamp) reservoir. Pitco argues that a well at a regular location 660' north of the lease line will not encounter the slide block. Only a well drilled at the proposed location 110' from the lease line will penetrate the slide block and allow recovery of Pitco's fair share of the slide block's reserves. Accordingly, Pitco claims that it will suffer confiscation from the Amacker-Tippett (Wolfcamp) Field and will not have a reasonable opportunity to produce its fair share of reserves if its application is denied.

In this area there are four well-known slide blocks. Pitco claims that even though the slide blocks are located within debris flows, there is little or no reservoir communication between the slide block and surrounding debris flow. According to Pitco, the log signature and seismic character of such slide blocks are distinctive, allowing Pitco's geologist to testify that he could delineate a slide block very accurately with 3D seismic.

Pitco's only current producing well in the Wolfcamp on the subject lease is the Halff #1. This

¹Pitco's Application seeks a Rule 37 exception for two Commission recognized Wolfcamp fields: Amacker-Tippett (Wolfcamp) and Amacker-Tippett, SW (Wolfcamp). Pitco contended that the Barnett #21-3 is improperly designated in the Amacker-Tippett, SW (Wolfcamp) field. Pitco included the Amacker-Tippett, SW (Wolfcamp) Field in its application because it believes that the field designation for the proposed well should be the same as the Barnett #21-3. In this hearing, neither applicant nor protestant made any distinction in the evidence submitted between the two fields. Accordingly, solely to eliminate potential confusion and to avoid unnecessary repetition, any references to the "Amacker-Tippett (Wolfcamp) Field" will mean both the Amacker-Tippett (Wolfcamp) Fields identified in Pitco's Application.

²Pitco's geologist testified that during the Middle Wolfcamp, there was a structurally-elevated carbonate platform south and west of the proposed location. Carbonate debris eroded off the edge of this platform and was swept onto the floor of the basin that existed at that time. These debris flows were concentrated into channels that previous flows had scored out of the basin floor. Almost all of the current Wolfcamp production in the Amacker-Tippett area comes from the old channels on the basin floor where the carbonate debris accumulated.

Occasionally, earthquakes or very large storms broke intact pieces of the shelf off which then slid out onto the basin floor. These very large pieces of intact rock are referred to as slide blocks. According to Pitco's geologist, such a slide block leaves a distinct scour pattern in the debris flow channel. When the flows of average-sized detritus resumed, debris flow material filled in behind, around and eventually over the top of the discrete slide block.

well is marginal, producing only 200 MCF/D and ½ BOPD. This well is 1133 feet northwest of the proposed location, and produces from a channel filled by average-sized debris flows.

In February 1999, Ocean completed the Barnett #21-3. Pitco believes that the Barnett #21-3 encountered a previously undiscovered slide block. Pitco's geologist testified that the log for the Barnett #21-3 is consistent with logs from wells which encountered other slide blocks. He also presented seismic evidence that showed the diagnostic shape of the scour pattern that he believes underlies the slide block and that helps distinguish the block from the surrounding debris flow. Pitco's seismic cross sections showed its interpretation of the size, shape and location of the slide block discovered by the Barnett #21-3. On Pitco's maps, the block extends less than 660 feet onto its lease and unless its well is 110 feet from the common lease line, the well will be unable to recover reserves from the slide block.

In support of its contention that the slide block reservoir is largely separate from nearby wells completed in the debris flow, Pitco noted that the producing characteristics, including fluid types, bottom-hole pressure and production rates, of the Barnett #21-3 differ significantly from those of its Halff #1. After producing an estimated 540,000 BO since 1976, the Halff #1 is almost depleted, and is now a statutory gas well. Based on surface pressure, Pitco estimated the bottom-hole pressure in the Halff #1 to be only about 77 psi. The Barnett #21-3, drilled in 1998, is definitely not depleted, having an initial potential of 528 BOPD and had already produced 27,000 barrels by the time of the hearing. The initial bottom-hole pressure of the Barnett #21-3 was significantly higher, at 1300 psi, than the estimated current bottom-hole pressure of the Halff #1.

Pitco also presented evidence that it has not recovered its fair share of the original reserves under its Halff Estate Lease. Using its isopach map and certain other assumptions, Pitco estimated the original recoverable Wolfcamp reserves under the Halff Estate at 1,077,000 barrels of oil. The two Halff Estate Wells, completed in the Amacker-Tippett (Wolfcamp) Field, recovered 893,000 barrels of oil. Pitco believes it is entitled to produce the difference between the original reserves and the actual production, or an additional 184,000 barrels of oil, in the future. It asserts that only by drilling at its proposed location can it ever hope to recover the remaining oil.

As part of the volumetric calculations on original oil-in-place, Pitco estimated that there were 621,000 barrels of recoverable oil in the slide block, prior to the drilling of the Barnett #21-3. This assumes that the slide block reservoir was at original conditions and was not previously drained. Pitco estimated that 14% of the reservoir volume and therefor 86,000 barrels of recoverable oil were present in the part of the slide block underlying Pitco's subject lease prior to the drilling of the Barnett #21-3. Because the Barnett #21-3 is the only well draining the slide block, Pitco contends that a portion of its original reserves has been drained.

Pitco's experts admitted on cross-examination that the slide block may be in partial "pressure" communication with the surrounding Amacker-Tippett (Wolfcamp) reservoir. However, Pitco contends such communication has been slow, occurring over a period of millions of years. Pitco's experts

admitted that if the slide block was completely unconnected to the surrounding debris flow, the initial pressure in the Barnett #21-3 well should have been about 3900 psi, which is virgin pressure in the Amacker-Tippett (Wolfcamp) Field. Pitco believes the **pressure** depletion found in Barnett #21-3 came from production by Ocean's Barnett et al "E" Well No. 1, ("Barnett E-1") 1800 feet northwest of No. 21-3. According to Pitco its nearest well, the Halff #1, was not in communication with the slide block, and did not recover any of the slide block's reserves.

Ocean's Barnett E-1 well was drilled right on the edge of the slide block, and according to Pitco was completed in both the debris flow and the slide block. Pitco believes that the Barnett "E" was a relatively poor well, producing only 250,000 BO between 1955 and 1995. If the proposed Halff #5 is drilled more than 110 feet from the lease line it might encounter just the edge of the slide block. Pitco claims such a well may also influence pressure in the slide block, as the Barnett E-1 did, but such a well would be no better than the Barnett E-1 and would not get Pitco's share of the reserves from the slide block. Pitco contends that any new well on its Halff Estate that misses the slide block will encounter only debris flow reservoir that is already depleted by the Halff #1.

Finally, Pitco argued that even if it was deemed to have recovered its fair share of oil and gas from its lease, that the decision of the Texas Supreme Court in *Benz-Stoddard v. Aluminum Company of America*, 368 S.W.2d 94 (Tex. 1963) allows it the opportunity to recover the reserves in place in each specific feature.

Amacker-Tippett (Devonian)

Pitco stated that an important secondary objective of the proposed well is to recover hydrocarbons from the Devonian reservoir. The evidence distinguishing the proposed location from a 660' location was based on a seismic survey showing geophysical evidence of a fault in the Devonian reservoir approximately 75' north of the 660' location. Pitco's geophysicist characterized a 660' well as uncomfortably close to the fault. No evidence was submitted by Pitco to show what, if any, impact the presence of a nearby fault would have on recovery of hydrocarbons from the Devonian reservoir. Finally, Pitco argued it is entitled as a matter of law to an exception for drilling a well into the Devonian reservoir because Ocean admitted that it did not hold the mineral rights to the Devonian reservoir on its lease. Pitco contends that if Ocean does not hold the Devonian mineral rights, it is not entitled to protest Pitco's application for a Rule 37 exception.

Amacker-Tippett (Strawn) and Wildcat

Pitco's application also requested Rule 37 exceptions for the proposed well location in the Amacker-Tippett (Strawn) Field or any Wildcat Field encountered. Pitco admitted that it would not drill a well solely to encounter the Strawn reservoir because Strawn production is sporadic. A Strawn well would produce only 10,000 to 50,000 BO. Pitco presented no evidence differentiating its proposed location from a 660' lease line location for either the Strawn reservoir or any Wildcat field.

PROTESTANT OCEAN'S POSITION AND EVIDENCE

Amacker-Tippett (Wolfcamp)

Protestant Ocean disagrees with Pitco that the Barnett #21-3 encountered a slide block separate from the debris flow where the rest of the Amacker-Tippet (Wolfcamp) wells are completed. Ocean contends that the very thick interval encountered by the Barnett #21-3 is simply a thick pile of accumulated detrital debris similar in character to the debris flow found by other wells. Ocean does not dispute that this thick section extends into Pitco's Halff Estate Lease. Ocean also presented its own interpretation of the seismic data to support its claim that the feature is a debris pile as opposed to a single slide block.

In its seismic survey Ocean picked a very different marker to indicate the Wolfcamp. Ocean also used different reservoir parameters to determine the size of the Wolfcamp reservoir. Despite, the differences in mapping techniques, the isopach maps of both companies look similar in character.

According to Ocean's engineer, Ocean was surprised to find bottom-hole pressure depleted in the Barnett #21-3 and believes this depletion must be due to the drainage of a significant amount of fluid by earlier wells. Ocean's experts testified that both the Barnett E-1 and the Halff #1 are in communication with the debris pile around the Barnett #21-3 and that either or both of these wells produced a significant portion of the reserves originally in the feature.

Ocean argued that if significant reserves were drained from the thicker section of the debris flow by other wells located around this feature, then Pitco's share of the reserves in the feature could also be drained by a proposed well completed in the debris flow outside the thicker section. Ocean accordingly contends that it is not necessary for the proposed well to directly encounter the feature as claimed by Pitco. Maps from both companies indicate the presence of Wolfcamp debris flow reservoir at a regular location offsetting the Barnett #21-3.

Ocean noted that the Pitco's Halff #1 produced 540,000 barrels of oil from 65 feet of Wolfcamp pay. According to Ocean's geologic map, a regular location on Pitco's lease would still encounter net pay as much as 100 feet thicker. In fact, Ocean testified that Pitco should drill away from the Barnett #21-3, not as close as possible, so that it might encounter a less depleted part of the reservoir. At the applied-for location, Pitco would be crowding a well that has already shown considerable pressure depletion.

Amacker-Tippett (Devonian)

Ocean does not have the rights to develop the Devonian underneath its Barnett Lease but is protesting Pitco's application for a Rule 37 exception for the Devonian, to prevent Pitco from using a Rule 37 exception in the Devonian reservoir to justify a later Rule 37 exception at the same location for the Amacker-Tippett (Wolfcamp) Fields. According to Ocean, a well at a regular location on the Halff

Estate Lease will encounter at least the same amount of reserves in the Devonian reservoir as a well at the proposed location. Ocean disputes that a fault exists near a 660' location on the Pitco lease and believes that even if such a fault exists it is not sealing. Accordingly, Ocean argued that a well at a 660' location would have the same access to hydrocarbons from the Devonian as a well at the proposed 110' location.

Amacker-Tippett (Strawn)

Ocean agrees that the Strawn reservoir is erratic and unpredictable. Accordingly, the proposed location offers no greater benefit for recovery in the Strawn reservoir than a 660' location.

EXAMINERS' OPINION

Amacker-Tippett (Wolfcamp) Fields

The Commission may grant an exception to Rule 37 to prevent confiscation or to prevent waste. Pitco argues it is entitled to an exception to prevent confiscation in the Amacker-Tippett (Wolfcamp) Fields. Pitco does not argue that an exception is necessary to prevent waste.

To establish that it is entitled to an exception to Rule 37 to prevent confiscation, an applicant must show that absent the applied for well, it will be denied a reasonable opportunity to recover its fair share of hydrocarbons currently in place under the lease, or its equivalent in kind. The examiners will first address Pitco's calculation of reserves in its Halff Estate Lease. The examiners will then address the geological and engineering evidence to determine whether the slide block is a separate reservoir from the Amacker-Tippett (Wolfcamp) Fields. Finally, the examiners will address Pitco's citation of the Benz-Stoddard decision, *supra*,

Calculation of Reserves

It is the basic right of every landowner or lessee to a fair and reasonable chance to recover the oil and gas under his property as recognized by the Texas Supreme Court in *Gulf Land Co. v. Atlantic Refining Co.*, 131 S.W.2d 73, 80 (Tex. 1939). Denial of that fair chance is confiscation within the meaning of Rule 37. *Id.* Additionally, an applicant may not seek a Rule 37 exception to redress past drainage. *Railroad Commission v. Texas Company*, 298 S.W.2d 666,668 (Tex.Civ.App. Austin - 1957, writ ref'd n.r.e.) Because an application cannot seek redress for past drainage, an applicant must provide evidence that it will not be afforded an opportunity to recover its fair share of the reserves **currently** in place.

Pitco's calculation of reserves ignores the prohibition from seeking redress for past drainage. Pitco uses the **original** estimated reserves on the subject lease, and then subtracts the combined recovery from the two producing wells on the lease. Pitco then claims that the only way it can recover the remainder is by drilling a well at the proposed location to encounter the reserves in the slide block.

This argument fails because the production figures for the recovery from Pitco's two wells may not accurately reflect the amount of hydrocarbons remaining on Pitco's lease. Pitco's wells may have produced hydrocarbons from adjacent tracts. Alternatively, wells on adjacent tracts may have produced Pitco's original reserves. Because Pitco's calculation fails to account for these potential discrepancies, Pitco's estimate does not accurately reflect the **current** reserves and therefore can not be relied upon to support a Rule 37 exception based on confiscation.

Even if Pitco provided proper evidence depicting the current reserves underlying the subject lease, it still must show that the proposed location is reasonable. As discussed below, the geologic and engineering evidence fail to establish that the proposed location is reasonable.

Geologic Evidence

The primary issue to be determined from the geologic and engineering evidence is whether the target feature is a separate compartment. In other words, one must establish whether the reserves are in their own individual container, a container that is not accessible unless it is directly tapped by a well. Based upon the agreed upon evidence, including a published article discussing the geology of the Amacker-Tippett Field relied upon by experts for both parties,³ the examiners conclude that it is probable that the feature depicted on the isopach maps is a slide block as opposed to a thick debris pile. The VanDerLoop article also notes:

The slide block is probably intensely fractured because its reservoir is in pressure communication with 5 surrounding wells which did not encounter the same facies. (VanDerLoop, p. 141.)

As in the article, the evidence here indicates that the slide block possessed original porosity which was enhanced during transport. Reservoir quality would not deteriorate near the interface between the slide block and the surrounding debris flow even if they were deposited by different mechanisms. Porosity and permeability between the slide block and surrounding debris flow are more likely greater than within either facies. In layman's terms, the slide block leaks and is not a separate compartment.

There is little dispute on the regional depositional environment for the Wolfcamp in this area. It also matters little which seismic wiggle-trace most closely approximates the top of the Wolfcamp Reservoir. There are only minor differences in the reservoir configuration on the isopach and structural maps of the two parties. Maps of both parties indicate that a well at a regular location on Pitco's lease could be drilled to encounter a thicker Wolfcamp section than the Halff #1.

The applicant claims it needs the applied-for location because a well at a regular location, which

³Protestant Ocean's Exhibit 6, VanDerLoop, Mary, 1990, Amacker-Tippett Wolfcamp Field, Upton County, Texas in Permian Basin Oil and Gas Fields: Innovative Ideas in Exploration and Development West Texas Geological Society, Inc. Symposium, Publication No. 90-87, J.E. Flis and R.C. Price, Editors, pp.133-151.

encountered the edge of the slide block, might be in the same “poor” position as the Barnett E-1. Pitco calls the Barnett E-1 a marginal well (at 240,000 barrels of oil), and claims that its production was low partly because it encountered the interface between the debris flow and the slide block. However, it was one of the first wells in the area and must have been largely responsible for depleting reserves from the slide block as shown by the low initial pressure in the Barnett #21-3 well. In fact, if the slide block and the surrounding Wolfcamp Reservoir were not originally in communication, the completion of the Barnett E-1 put them in communication.

In summary, it is the examiners’ conclusion that the geologic feature encountered by the Barnett #21-3 well probably is a slide block. However, the geologic evidence fails to establish that the slide block is a separate compartment.

Engineering Evidence

The engineering evidence establishes that the slide block is not a separate reservoir. The Barnett #21-3 was the first well drilled near the top of the slide block and it encountered pressure that must have been drawn down by other nearby wells. Pressure draw down from virgin pressure at 3900 psi to the current 1300 psi indicates that a large amount of fluid has already been drained from the slide block, a fact admitted both by Pitco’s witnesses and in the exhibits it submitted. Pitco may be accurate in claiming that the true current bottom-hole pressure in the Halff #1 may be far below the 1300 psi measured in the Barnett #21-3, but that does not prove lack of effective communication between the slide block and nearby wells.

Even though the current production from the Halff #1 and Barnett #21-3 is significantly different, that is not unusual for wells in this reservoir that are in communication. The bottom-hole pressures in the older wells near the intersection of Sections 20, 21, 60 and 80 depleted at the same time and rate. These four wells had excellent ultimate recoveries, but the oil rates, ultimate recoveries and gas/oil ratios varied between wells. For example, the Halff #1 produced 540,000 barrels and its current gas/oil ratio is over 300,000 cubic feet per barrel. The R.P. Amacker Well No. 2 in Section 80 produced even more oil but its most recent gas/oil ratio was 500 cubic feet per barrel.

The oil/water contact identified in the Barnett #21-3 is about the same as in the surrounding wells, a further indication of reservoir communication. A regular location would be structurally lower than the Barnett #21-3, but structure is relatively unimportant in this solution gas drive reservoir.

It is the examiners’ conclusion that the geologic and engineering evidence establish that the feature, whether you call it a slide block or debris pile, is in communication with the existing wells and not separate from the surrounding Wolfcamp Reservoir. A location regular to the lease line would be in communication with the reserves contained in the slide block, even though the debris flow may not be as thick as the slide block feature. Excellent wells have been completed in the Amacker-Tippett (Wolfcamp) Field near the slide block at thickness equivalent to a regular lease line location. Accordingly, the proposed exception location is not reasonable.

Applicability of Benz-Stoddard decision

In closing, Pitco argued that where reserves were present in separate **features** that, “you are entitled to a reasonable opportunity to recover the reserves in place beneath your tract in each specific **feature**” citing Benz-Stoddard, *supra*, as authority.

Pitco’s citation of Benz-Stoddard is not on point. Benz-Stoddard involved a Rule 37 exception permit which was issued for a small parcel allowing completion of a well into ten separately recognized commission **fields**, even though Benz had already recovered far more in reserves than the amount estimated under the parcel. In Benz-Stoddard, each **field** was recognized as separate and not in communication with any other field. Benz-Stoddard did not discuss recovery of hydrocarbons from different **features** of the same **field** as suggested by Pitco’s argument. Accordingly, Benz-Stoddard does not provide authority for Pitco’s claim that it requires an exception to Rule 37 in order to prevent confiscation. In any event, the previously discussed communication between this slide block and the debris field allows Pitco’s existing wells and any new regularly placed well to drain both features.

Amacker-Tippet (Devonian)

Pitco argued in its closing argument that it was entitled as a matter of law to a Rule 37 exception allowing it to drill a well into the Devonian reservoir. Pitco’s argument is based on the admission by Ocean during cross-examination that Ocean did not own the mineral rights for the Devonian reservoir. In essence, Pitco’s argument challenges Ocean’s standing to protest the Rule 37 application to drill to the Devonian reservoir. Pitco apparently does not challenge Ocean’s standing to protest the application for the Rule 37 exceptions in the Wolfcamp, Strawn and Wildcat fields. Notably, Pitco did not object to any of Ocean’s testimony or evidence related to the Devonian field. Additionally, Pitco introduced its own extensive evidence to support its claim for an exception to the Devonian reservoir. Ocean claimed that its interests in other fields could be affected by an exception for the Devonian, as Pitco could drill the Rule 37 exception well to the Devonian reservoir and then attempt to bootstrap a Rule 37 exception for the Wolfcamp reservoir.

Pitco’s last minute challenge to Ocean’s standing is undercut by the failure to object at the beginning of the hearing or when Ocean submitted evidence on the Devonian reservoir. It is further undermined by Pitco’s submission of extensive evidence on the same issue. Ocean clearly had proper standing to contest Pitco’s Application for the Wolfcamp, Strawn, and Wildcat reservoirs. Further, Ocean’s rights in the Wolfcamp, Strawn, and Wildcat reservoirs could possibly be affected by Pitco. Pitco could **apply**⁴ for a Rule 37 exception to complete its well into the Wolfcamp reservoir after it completed a well into the Devonian reservoir using the existing wellbore as the unusual condition necessary for a Rule 37 exception. The interest of the Commission in making a complete determination

⁴The examiners’ express no opinion on the merit of a subsequent application seeking to bootstrap a Rule 37 exception to an existing well bore other than to note the requirement that a well can not be drilled as a subterfuge to obtain a later exception.

of all issues presented by Pitco's application, and the preservation of the Commission's administrative resources together suggest that all the evidence presented on the Devonian should not be ignored as Pitco belatedly suggests.

In considering the evidence presented, it is the examiners' conclusion that Pitco's seismic evidence fails to provide a sufficient reason to distinguish a well at a regular location from the applied-for location. The small fault which Pitco claims is present approximately 75' north of a 660' location, would not impede Devonian production. This was established through geologic evidence showing that the throw of the fault does not exceed the thickness of the reservoir. Accordingly, the reservoir would remain in communication even across the fault. Pitco, therefore is not entitled to the grant of a Rule 37 exception in the Amacker-Tippett (Devonian) Field, as a regular location for a well would not be affected by the claimed fault.

Amacker-Tippett (Strawn) and Wildcat

As admitted by Pitco, there is no evidence that either the Amacker-Tippett Strawn Field or a Wildcat Field is more likely to be present at the applied-for location than at a regular location. Pitco admitted that it would not seek an exception solely to drill in the Strawn or Wildcat Fields. Accordingly, there is no evidence that Pitco requires a Rule 37 exception for the Amacker-Tippett Strawn Field or any Wildcat Field.

CONCLUSION

The evidence and legal authority presented establish that Pitco is not entitled to a Rule 37 exception in order to prevent confiscation in the Amacker-Tippett (Wolfcamp), Amacker-Tippett, SW (Wolfcamp), Amacker-Tippett (Devonian), Amacker-Tippett (Strawn), and Amacker-Tippett Wildcat fields. The evidence indicates that Pitco can recover any remaining hydrocarbons on its lease in all applied-for fields by drilling a well at a regular location. The evidence further establishes that the geologic feature, whether it is a slide block or a debris pile is in communication with the surrounding Wolfcamp reservoir. Accordingly, a well at the proposed 110' location is not reasonable for the Amacker-Tippett (Wolfcamp) Field or the Amacker-Tippett, SW (Wolfcamp) Field.

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 with designated operators, and all unleased mineral interests owners for each affected adjacent tract and each tract within the prescribed minimum distance of the proposed well location.
2. The application for an exception to Statewide Rule 37 was originally filed with the Commission by Prospective Investment & Trading Co., Ltd. ("Pitco" or "applicant") on Form W-1 (Application to Drill, Deepen, Plug Back or Re-Enter) on December 15, 1998. A revision was filed on May 20, 1999. The further amended application for an Exception to Statewide Rule 37 that is the subject of this proceeding was filed on June 3, 1999.
3. Pitco seeks an exception to Statewide Rule 37 to complete Well No. 5 (the "subject well") on Half Estate Lease, ("subject lease") into the Amacker-Tippett (Wolfcamp), Amacker-Tippett, SW (Wolfcamp), Amacker-Tippett (Devonian), Amacker-Tippett (Strawn) and Wildcat Fields, (the "subject fields") in Upton County, Texas. The Amacker-Tippett SW (Wolfcamp), Amacker-Tippett (Wolfcamp) and Amacker-Tippett (Strawn) Fields require minimum spacing of 660 feet to the nearest lease-line and 1320 feet between wells on 160 acres, with optional 80 acre units. The Amacker-Tippett (Devonian) oil field is subject to the statewide rules requiring minimum spacing of 467 feet to the nearest lease-line and 1200 feet between wells. The Amacker-Tippett (Devonian) gas field is subject to a minimum spacing requirement of 660 feet to the nearest lease-line and 1800 feet between wells. The subject lease is rectangular and locations regular to lease-lines are available. The location of the proposed well is 110 feet from the nearest lease-line.
4. Pitco's application has been protested by Ocean Energy Resources, Inc. ("Ocean" or "Protestant"). Ocean is the operator of an offset tract to the south of the subject lease.
5. The wells in the immediate vicinity of the applied-for location that are designated as producing from the Amacker-Tippett (Wolfcamp) Field and Amacker-Tippett SW (Wolfcamp) Field (collectively, the "Wolfcamp Fields") are in communication and produce from the same detrital reservoir.
6. A geologic feature exists in the Wolfcamp Reservoir on the boundary of the subject lease and the Ocean lease offset to the south. This feature is significantly thicker than the surrounding reservoir.
7. Geologic and engineering evidence establish that this geologic feature in the Wolfcamp Reservoir is in effective communication with the surrounding detrital Wolfcamp reservoir.
 - a. The highly productive Ocean Barnett #21-3 well encountered this thick geologic

feature in the Wolfcamp Reservoir.

- b. Nearby offset wells completed in the thinner detrital section of the Wolfcamp Reservoir are also highly productive.
 - c. The initial bottom hole pressure of the Ocean Barnett #21-3 well was depleted from the virgin pressures for the Wolfcamp Reservoir.
 - d. The oil-water contact between the Ocean Barnett #21-3 and the surrounding wells is similar.
- 8. The communication between the geologic feature in the Wolfcamp Reservoir and the surrounding detrital reservoir will provide applicant with the reasonable opportunity to recover its fair share of hydrocarbons under the Halff Estate Lease from a location regular to lease lines.
 - 9. Geologic evidence does not show a sealing fault or other feature that would adversely affect production in the Amacker-Tippett (Devonian) Field at a regular location.
 - 10. Pitco presented no evidence distinguishing potential production at a regular location from potential production at the proposed location in the Amacker-Tippett (Strawn) and Wildcat Fields.
 - 11. A regular location will afford the applicant a reasonable opportunity to produce the remaining recoverable reserves under the Halff Estate from each of the subject fields.

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. An exception to the well spacing rules is not necessary to give applicant a reasonable opportunity to recover its fair share of hydrocarbons from the Amacker-Tippett (Wolfcamp), Amacker-Tippett, SW (Wolfcamp), Amacker-Tippett (Devonian), Amacker-Tippett (Strawn) and Wildcat Fields.
- 4. An exception to Statewide Rule 37 for a well at the applied-for location is not necessary to prevent confiscation.

RECOMMENDATION

The examiners recommend that the subject application be denied in its entirety in accordance with the attached final order.

Respectfully submitted,

Mark J. Helmueller
Hearings Examiner

Margaret Allen
Technical Examiner