

LINDIL C. FOWLER, JR., GENERAL COUNSEL
COLIN K. LINEBERRY, DIRECTOR
HEARINGS SECTION

# RAILROAD COMMISSION OF TEXAS

# OFFICE OF GENERAL COUNSEL

RULE 37 CASE NO. 0268592 Application Status No. 705947 District 03

APPLICATION OF ACOCK OPERATING LTD., FOR A RULE 37 EXCEPTION FOR THE DAUGHERTY UNIT LEASE, WELL NO. 2, WINNIE, N. (FB-A INTMD. SD) AND STOWELL (CRAWFORD U-1) FIELDS, CHAMBERS COUNTY, TEXAS

**APPEARANCES:** 

FOR APPLICANT:

APPLICANT:

Glenn E. Johnson David Triana Bob Dawson Acock Operating Limited.

FOR PROTESTANTS:

PROTESTANTS:

Richard Joseph Ahrens

PROPOSAL FOR DECISION

PROCEDURAL HISTORY

DATE APPLICATION FILED: DATE OF NOTICE OF HEARING: CONTINUANCE GRANTED: DATE OF HEARING: HEARD BY:

February 18, 2011 May 5, 2011

November 24, 2010

January 27, 2011

Gene Montes, Hearings Examiner Richard Atkins, Technical Examiner

DATE PFD CIRCULATED:

July 29, 2011

## STATEMENT OF THE CASE

Acock Operating Ltd. ("Acock") seeks a drilling permit for an oil well pursuant to the provisions of Statewide Rule 37 for the Daugherty Unit Lease, Well No. 2, a proposed directional well in the Winnie, N. (FB-A, Intmd. SD) and Stowell (Crawford U-1) Fields, Chambers County, Texas. The bottomhole of the proposed well is 55 feet south of the Leo Arens Lt 12 T. Koch Sbd. tract. The location of the well is dictated by the geologic conditions surrounding the reservoir, the characteristics of the reservoir itself, and a surface obstruction. One of the mineral interest owners of the Leo Arens Lt 12 T. Koch Sbd. tract protested the application.

The proposed well is located within a 40 acre pooled unit, the Daugherty Unit. Appendix 1 to this proposal for decision is a copy of Acock Exhibit No. 1 which is a location plat for the Daugherty Well No. 2. The portion of that exhibit describing the pooled unit, the Daugherty Unit, is reproduced below as Figure 1. The Daugherty Unit is outlined in blue and the area is indicated by the hashed dotted blue lines. It is made up of four tracts. The northern portion of the unit is a 22 acre tract. The 22 acre tract is part of the larger 60.61 acre tract identified as the Leo Arens Lt 12 T. Koch Sbd. tract. The 60.61 acre tract is set out in red on Figure 1. One mineral interest owner of that tract has protested the proposed location of the well.

DAUGHERTY MALE SUBFACE
MATERIAL STATES

CITED ACRES

ACOCK
MATERIAL STATES

CITED ACRES

DAUGHERTY MALE
SALE
MATERIAL STATES

ACOCK
MATERIAL STATES

CITED ACRES

ACOCK
MATERIAL STATES

ACOCK

Figure 1. Plat, Acock Exhibit No. 2.

The field rules for the Winnie, N. (FB-A, Intmd. SD) and Stowell (Crawford U-1) Fields provide for 330 foot lease line spacing. A Rule 37 exception is needed for the proposed Daugherty Well No. 2 because of an internal property line caused by an unleased mineral interest in one of the four tracts that comprise the pooled unit — the 22 acre portion derived from the larger 60.61 acre Leo Arens Lt 12 T. Koch Sbd. tract. The bottomhole of the well is closer than 330 feet to the boundary of the Leo Arens Lt 12 T. Koch Sbd. tract which contains the unleased mineral interest of the protestant. A hearing was held on May 3, 2011, at which Acock and the protestant appeared and presented evidence. The examiners recommend that the application be approved.

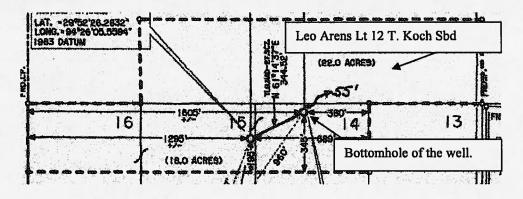
#### DISCUSSION OF THE EVIDENCE

# Acock Operating, Ltd.

Acock Operating, Ltd. filed a Form W-1 for a new oil well to be drilled into the Winnie, N. (FB-A, Intmd. SD) Field and the Stowell (Crawford U-1) Field. The Stowell (Crawford U-1) Field is the primary target. The applicant also intends to recover reserves that are contained within the Winnie N. (FB-A, Intmd. SD) Field. The well is to be located in Chambers County approximately five miles northeast of the city of Winnie, Texas which is the nearest town in the county of the proposed well site. The well is located within the Francisco Valmore Survey, Abstract A-26. The proposed well is a directional well that is to be drilled at a surface location that is 195 feet north of the southern boundary of the pooled unit and a bottomhole location that is 55 feet south of the internal property line created by the unleased interest of the protestant in the Leo Arens Lt 12 T. Koch Sbd tract. The bottomhole location is regular as to the external boundaries of the pooled unit but, as noted, only 55 feet from the internal lease line of the Leo Arens Lt 12 T. Koch Sbd. tract.

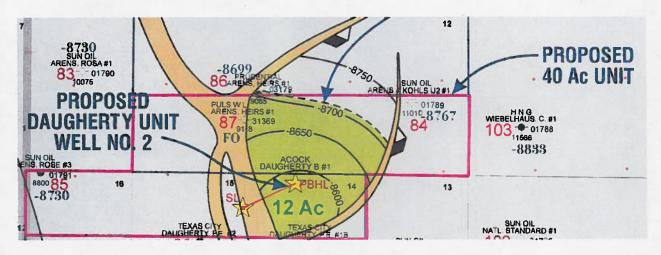
The well is to be drilled within a 40 acre pooled unit. The pooled unit is made up of four tracts: (1) Daugherty Lt 14 T. Koch Sbd., (2) Daugherty Lt 15 T. Koch Sbd., (3) Daugherty Lt 16 T. Koch Sbd., and (4) Leo Arens Lt 12 T. Koch Sbd. The first three tracts, each comprised of 6 acres, make up 18 acres of the pooled unit. Those 18 acres are 100% leased by Acock. The well is to be located on one of these three tracts. The remaining 22 acres that make up the pooled unit consist of a 22-acre portion of a larger 60.61 acre tract. This is the Leo Arens Lt 12 T. Koch Sbd. tract. The pooled unit is illustrated in Figure 2 which is a reproduction of the area of the plat, filed by Acock, showing that unit. The protestant, Richard Joseph Arens, owns an undivided 17.47236 percent mineral interest of the entire 60.61 acre tract. Mr. Arens' interest is unleased. The bottomhole of the well is 55 feet south of the internal property line created by Mr. Arens unleased tract.

Figure 2
Pooled Tract Shown on Plat, Acock Exhibit No. 2.



The surface area of the productive zones, when viewed on the Structure Map, Acock Ex. 5, is roughly twelve acres. That reservoir is contained within a rough triangular area bordered almost completely on all three sides by various faults. The fault lines and the estimated location of the reservoir are depicted in a portion of Acock Ex. No. 5. A portion of that exhibit is reproduced below as Figure 3. The fault lines are indicated in that figure by the various segments that are light brown going north-south and jutting northeast off the main fault forming a roughly open triangle. These fault lines prevent the operator from locating the well at a regular location.

Figure 3
Structure Map: Top Crawford, Acock, Ex. 5



Robert R. Dawson, a geologist who testified on behalf of the applicant explained that two geologic conditions drive the location of the well. The first factor is the fault lines which are apparent in Figure 3. The second factor is the fact that the field has been identified as a water drive reservoir. He explained that in a water drive reservoir as the oil is extracted the water will move up and replace the oil as it is produced. As a result, the optimal location of the well to maximize drainage from the reservoir and prevent waste is at the highest structural point.

A crawfish pond is located at the surface and this is another factor affecting the location of the well. Thus, the surface location of the proposed well is offset from the proposed bottomhole location. Mr. Dawson explained that the well is expected to extend to 8,900 feet. The deviation is expected to occur within the first 4,000 to 5,000 feet of the wellbore. At about 5,000 feet the wellbore will extend vertically to its final depth. It will pass through the Winnie N. (FB-A, Intmd. SD) Field and into the Stowell (Crawford U-1) Field. As noted above, the main target is the Stowell (Crawford U-1) Field.

Mr. Dawson estimated that the recovery factor for this area was 600 barrels of oil per acre-foot. He noted that the recovery factor for the Stowell (Crawford U-1) Field is well established because there has been a great deal of production in the area. As already noted, the area of the top of the formation is estimated to be 12 acres. Based on an analysis of various

wells in the area, Acock Exhibit 4, Mr. Dawson estimated the thickness of the Stowell (Crawford U-1) Field to be approximately 12 feet in the targeted area. Mr. Dawson also noted that Acock intended to recover any oil found in the Winnie N. (FB-A, Intmd. SD) Field above the Stowell (Crawford U-1) Field. Based upon his analysis of the recovery factor, the area of the identified reserve, and the estimated thickness of those reserves, he estimated that the ultimate recovery would be approximately 72,000 barrels of oil.

## Protestant Richard Joseph Arens

Only one individual filed a protest: Richard Joseph Arens. As noted above, the protestant owns an undivided 17.47236 percent interest in the Leo Arens Lt 12 T Koch Sbd tract. That interest is unleased. The protestant did not present evidence to challenge the assertion made by the applicant that the location of this well was necessary to recover any hydrocarbons in these fields. He also did not challenge that the proposed well location was necessary to promote conservation and prevent avoidable physical waste. Mr. Arens complained about the process employed by Acock to obtain the proposed permit. He asserted that he had previously been approached by other oil and gas companies who sought to lease his interest and that he turned those entities down. He indicated that he had no intention to lease his interest to Acock because he wanted to preserve the mineral estate for his descendants. He disagreed with other members of his family who had an interest in the tract and had entered into a lease. He also asserted that he had not been dealt with fairly by Acock and was generally frustrated with the Rule 37 process.

Mr. Arens also explained that his initial request for a telephonic hearing was challenged by Acock. Furthermore, Acock submitted a letter to the Commission which Mr. Arens argued contained statements that were not true. The letter had an attached affidavit challenging Mr. Arens' assertion that he was not physically able to attend the hearing. He challenged the credibility of Acock's application and contended that because information contained in the affidavit was untrue, then the information presented by the applicant at the hearing may not be true.

#### **EXAMINERS' OPINION**

An owner of oil and gas is entitled to a reasonable opportunity to recover the remaining recoverable hydrocarbons underlying his tract, and any denial of that reasonable opportunity amounts to confiscation. Atlantic Refining Co. v. Railroad Commission, 346 S.W.2d 801 (Tex. 1961); Imperial American Resources Fund, Inc. v. Railroad Commission, 355 S.W.2d 280 (Tex. 1977). When the subject tract contains regular locations, the applicant for a Rule 37 exception based on confiscation must prove that the proposed regular location is necessary to provide it the required reasonable opportunity to recover its fair share of existing resources and that the proposed location is reasonable.

Additionally, an owner of oil and gas is entitled to a reasonable opportunity to recover the remaining recoverable hydrocarbons underlying his tract. If a substantial amount of oil will be saved by the drilling of a well that otherwise would ultimately be lost, the permit to drill such a

well may be justified under Rule 37 to prevent waste. *Hawkins v. Texas Co.*, 209 S.W. 2d 338, 343 9Tex. 1948). An exception based on waste may be granted upon a showing that unusual conditions underlying the tract for which a permit is sought exist. Those conditions are different from conditions on adjacent parts of the field. Additionally, the applicant must establish that a substantial amount of oil would be unrecovered absent the proposed well. The courts have found that evidence that 25,000 to 30,000 barrels of oil would not be recovered by existing wells has been held to be a substantial amount of oil. *Id.* 

An applicant seeking an exception to Rule 37 based on waste must establish three elements. First, that unusual conditions, different from conditions in adjacent parts of the field, exist under the tract for which the exception is sought. Second, as a result of these conditions, oil will be recovered by the well for which a permit is sought that would not be recovered by an existing well or by an additional well drilled at a regular location. Three, the amount of otherwise unrecoverable oil is substantial.

The examiners are of the opinion that Acock proved that the requested Rule 37 exception is necessary to prevent waste and prevent confiscation. Due to unusual geologic conditions, there is no other feasible location to access the reserves identified by the applicant. Absent the proposed well the applicant would be unable to recover the reserves identified in these fields under the unit. The applicant established that reserves under the Daugherty Unite is estimated to be at least 72,000 barrels of oil.

The examiners have considered the correlative rights of the protestant in his unleased mineral interests. Acock made an attempt to lease Mr. Arens mineral interest and the evidence suggests that the only reason the protestant's interests are not leased is Mr. Arens' determination that the minerals be preserved in place.

The examiners note that while the protestant may perceive that he has been treated unfairly, the fact that an offer was made is uncontested. Furthermore, the Commission ensured that the protestant would have an opportunity to participate by ordering that a telephonic hearing be held to accommodate the protestant, a fact conceded by the protestant during the hearing. Furthermore, the record reflects that Acock ultimately agreed to a telephonic hearing. The examiners find that the protestant had an opportunity to challenge this application and that he has been afforded due process.

The examiners have concluded that the location of the proposed Daugherty Unit, Well No. 2 is reasonable. This location will allow production of the reserves in the Stowell (Crawford U-1) Field and the Winnie, N. (FB-A, Intmd. SD) Field from beneath the Daugherty Unit. Accordingly, the examiners recommend that the application be approved. Based on the evidence in the record in this docket, the examiners recommend adoption of the following Findings of Fact and Conclusions of Law.

<sup>&</sup>lt;sup>1</sup> "I have been afforded a chance to appear by phone. I do appreciate that." Tr. p. 32.

## FINDINGS OF FACT

- 1. At least ten (10) days notice of this hearing was provided to all affected persons as defined by Statewide Rule 37(a)(2) and 37(a)(3) and the special field rules for the Stowell (Crawford U-1) and the Winnie, N. (FB-A, Intmd. SD) Fields.
- 2. Acock Operating Ltd ("Acock") seeks a drilling permit pursuant to the provisions of Statewide Rule 37 for the Daugherty Unit, Well No. 2, a proposed directional well in the Stowell (Crawford U-1) Field and the Winnie, N. (FB-A, Intmd. SD) Field, Chambers County, Texas.
- 3. Field rules for the Stowell (Crawford U-1) and the Winnie, N. (FB-A, Intmd. SD) Fields provide for 330 feet lease line spacing.
- 4. The surface location of the well is 195 feet north of the southern boundary of the Daugherty pooled unit and 889 feet west of the Daugherty Lt 13 T. Koch Sbd. lease line. The terminus of the well is 55 feet south of the Leo Arens Lt 12 T. Koch Sbd. tract and 380 feet east of the Daugherty Lt 13 T. Koch Sbd. Appendix 1 to this proposal for decision, incorporated into this finding by reference is a plat showing the 40 acre pooled Daugherty Unit, Proposed Well No. 2, the tracts that comprise this pooled unit, and the tract that contains the unleased mineral interest.
- 5. The surface location of this well is reasonable due to the accommodation required by a surface obstruction. The location of the well, the path of the wellbore, and the location of the bottomhole are required to avoid subsurface faults and maximize recovery from the water-drive reservoir.
- 6. A Rule 37 exception is needed for the proposed Daugherty Unit, Well No. 2, because the bottomhole of the well is closer than 330 feet to the Leo Arens Lt 12 T. Koch Sbd. tract and the associated unleased mineral interest in that tract.
- 7. There is no evidence that the petroleum reserves beneath the Daugherty Unit in the Stowell (Crawford U-1) Field have been drained by wells in adjacent tracts.
- 8. The fault block created by the intersecting faults beneath the Daugherty Unit combined with the water-drive mechanism in the fields at issue constitute an unusual condition, different from conditions in other parts of the fields.
- 9. The proposed bottomhole location is at or near the top of the producing sands that comprise the fields at issue.
- 10. Nearly the entire producible reservoir in the fields at issue is located beneath the boundaries of the Daugherty Unit.

- 11. The reserves identified in this proceeding would not be recovered absent the requested well. No regularly located well could recover the reserves at the top of the formation.
- 12. The reserves under the Daugherty Unit within the fields at issue are estimated at 72,000 barrels of oil. The estimated recovery is substantial.
- 13. The Stowell (Crawford U-1) Field and the Winnie, N. (FB-A, Intmd. SD) Field have been active and productive in this area.
- 14. The Acock application is opposed by a mineral interest owner of the Leo Arens Lt 12 T. Koch Sbd. tract who holds an undivided 17.47236 percent mineral interest in that tract. The applicant attempted to lease the protestant's mineral interests but was unsuccessful. The protestant's tract is approximately 55 feet from the proposed bottomhole of the well.
- 15. Acock studied the recovery from the Stowell (Crawford U-1) Field and determined that it is well established at 600 barrels per acre-foot.
- Based upon the recovery factor identified in Finding of Fact No. 15 and the estimated size of the primary target, Acock estimated total recovery of 72,000 barrels of oil.
- 17. Due to the size and configuration of the identified reservoir, the geologic fractures in the area and the nature of the reservoir itself there is not a regular location on the Daugherty Unit, 330 feet or more away from the Leo Arens Lt 12 T. Koch Sbd. tract that would recover the oil in the fields at issue.
- 18. Drilling the Daugherty Unit, Well No. 2 at the location proposed by Acock is necessary to provide Acock and its lessors with an opportunity to recover their fair share of the oil from the reservoir and avoid waste.
- 19. The proposed location of the Daugherty Unit, Well No. 2 is reasonable and will allow recovery of the reserves in the Stowell (Crawford U-1) Field and the Winnie, N. (FB-A, Intmd. SD) Field under the Daugherty Unit.

#### **CONCLUSIONS OF LAW**

- 1. Proper notice of hearing was timely issued by the Railroad Commission to appropriate persons legally entitled to notice.
- 2. The Commission has jurisdiction over the subject matter and the parties in this proceeding.

3. Approval of the Rule 37 exception for the Daugherty Well No. 2, as proposed by Acock Operating, Ltd. is necessary to prevent confiscation and protect the correlative rights of mineral owners and to avoid the waste of a substantial volume of oil.

## **RECOMMENDATION**

The examiners recommend that the application of Acock Operating, Ltd. for a Rule 37 exception for the Daugherty Unit, Well No. 2, in the Winnie, N. (FB-A, Intmd. SD) Field and Stowell (Crawford U-1) Field, Chambers County, Texas, be granted as necessary to prevent waste and prevent confiscation.

Respectfully submitted

Gene Montes

**Hearings Examiner** 

Richard D. Atkins Technical Examiner

d A. albus