



# RAILROAD COMMISSION OF TEXAS

## OFFICE OF GENERAL COUNSEL

July 16, 2009

Rule 37 Case No. 0257324

---

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY FOR A RULE 37 EXCEPTION FOR THE REEVES UNIT, WELL NO. 268H, REEVES (SAN ANDRES) FIELD, YOAKUM COUNTY, TEXAS.

---

### APPEARANCES:

#### FOR APPLICANT:

Richard P. Marshall, Attorney  
Sara Austin, Geologist  
Bernard Lucas, Jr., Petroleum Engineer  
Victor Munding, Land Advisor

#### APPLICANT:

Devon Energy Production Company  
“  
“  
“

#### FOR PROTESTANT:

George Neale, Attorney  
Jim Yates, President & Reservoir Engineer  
Jennifer Harper, Vice-President

#### PROTESTANT:

Yucca Energy, Inc.  
“  
“

### PROPOSAL FOR DECISION

### PROCEDURAL HISTORY

APPLICATION FILED:	May 12, 2008
NOTICE OF HEARING:	July 17, 2008
HEARD BY:	Marshall Enquist - Hearings Examiner Richard Atkins - Technical Examiner
HEARING DATE :	August 21, 2008
TRANSCRIPT RECEIVED:	September 15, 2008
PFD CIRCULATION DATE:	July 16, 2009

### STATEMENT OF THE CASE

Devon Energy Production Company (“Devon” or “Applicant”), seeks an exception to Statewide Rule 37 to re-enter Well No. 268 and drill its proposed Well No. 268H, Reeves Unit, Reeves (San Andres) Field, Yoakum County, Texas. The proposed horizontal well begins at the regular location of the present Well No. 268, 333 feet south of the north line and 330 feet west of an internal lease line, proceeding WNW to a point 180 feet south of the north line and thence in a westerly direction parallel

to the north line to a point 150 feet east of the west line of the lease (see Attachment I).

The Reeves (San Andres) Field has field rules providing for a minimum of 330 feet from lease lines and 933 feet between wells, with 40 acre density. The proposed well requires a leaseline spacing exception as virtually the entire horizontal is less than 200 feet from the Yucca lease.

Protestant Yucca Energy, Inc. ("Yucca" or "Protestant") is the working interest owner in 80 acres lying directly north of the proposed horizontal producer on the Devon Reeves Unit. Yucca currently operates the Yucca Oberholtzer No. 1, which lies at a regular location north of the common leaseline.

Yucca objects to the irregular location of Devon's proposed horizontal producer, believing that it will drain the Yucca leasehold. Yucca believes that Devon can drill its horizontal producer at a location regular to the common leaseline, or as a dual lateral also regular to the leaseline from existing Devon Well No. 267.

Devon argues that its proposed re-entry and recompletion of Well No. 268 at a Rule 37 exception location is necessary to prevent the drainage of 48,000 BO from its secondary recovery waterflood unit.

#### **DEVON'S POSITION AND EVIDENCE**

The Reeves Field was discovered in 1957 and has been unitized and waterflooded since 1965. Devon is the current operator of the 6,840 acre Reeves Unit. Recovery without a waterflood was projected to be less than 10%. Recovery with a waterflood is expected to be 20% for the unit as a whole. The waterflood on the Reeves Unit has resulted in very good pressure maintenance, on the order of 2,000 psi, which is very near the original pressure. The unit as a whole is pressured above any of the surrounding tracts, so there is currently no oil migrating on to the unit.

The Reeves (San Andres) Field contains intervals R-1 through R-10. Intervals R-4 through R-6 are the main pay intervals for the bulk of the Reeves Unit. Devon primarily produces from the R-5 through R-9 in the subject portion of the field. Devon's expert witness, Bernard Lucas, testified that, although the unit averaged a 20% waterflood recovery factor, a 35% recovery figure for the waterflood applied to the limited area of the unit under review in this application:

A. (Lucas for Devon) The Reeves Unit waterflood has a varied waterflood recovery. You can imagine down dip to the southeast you are going to have zones that are proximal to water where even with waterflood, in like the R-6 zones, we may be getting only six percent recovery. In the updip regions we are getting in excess of 40 percent. So on average for the entire Reeves Unit, when we look at the oil in place all the way down to the free water level, we are talking about 20 percent recovery on average....  
(Transcript, p, 83, lines 17-25, p. 84, line 1.)

Q. (Examiner Atkins) Are you talking about an average recovery of 20 percent?

A. (Lucas for Devon) Yes sir.

Q. (Examiner Atkins) Because in that exhibit you're showing an average primary plus waterflood recovery of 35 percent, so that would be the total, correct?

A. (Lucas for Devon) In this area. And I am talking about primary plus secondary for the entire unit of 20 percent.

(Transcript, p. 84, lines 12-21.)

Well Nos. 267 and 268 are the northernmost wells on the west side of the Reeves Unit. Their EUR is expected to be 177,000 BO. Their remaining reserves as of July 1, 2008 were 50,000 BO. Devon proposes to re-enter Well No. 268, deviate WNW to a point 180 feet south of the north unit line and then run due west, parallel to the lease boundary with Yucca, to a point 150 feet east of the west unit line. Devon asserts that the deviation to a point 180 feet south of the unit boundary is necessary to avoid the possibility of drilling into another wellbore. If Devon drilled a horizontal producer due west from Well No. 268, it would necessarily pass through the vicinity of Well No. 267. The TOTCO surveys for Well No. 267 show a cumulative deviation of 166 feet. Therefore, the actual wellbore of Well No. 267 could be anywhere within this radius, deemed by Devon to be a "radius of uncertainty." To avoid the possibility of the wellbores intersecting, Devon proposes to drill its horizontal with a deviation to the northern extreme of this "radius of uncertainty" and then return to a westerly direction. There is no existing well on the northwest portion of the Reeves Unit and Devon claims the extension of the horizontal to that area will allow the recovery of an additional 12,000 BO that could not be economically recovered by a regularly-spaced vertical well.

In this portion of the Reeves Unit, Devon is using a line drive waterflood. Another horizontal well, Well No. 243H, is injecting from south of the proposed well and pushing oil to the north for recovery by the proposed well.

Devon has calculated the Original Oil in Place beneath each of several blocks (see Attachment 2) in the area relevant to this application and then applied the 35% recovery factor. With its applied-for Rule 37 exception location, Devon believes it will be able to recover 48,000 BO that would otherwise be pushed from a regular location onto the Yucca Oberholtzer Lease.

Four map areas are described by acreage and Original Oil in Place (OOIP): the Blue area, the Pink Area, the Purple Area and the Orange Area (see Attachment II). The Blue Area (101 acres) encompasses a portion of the Devon Reeves Unit and the entire Yucca Oberholtzer lease. It runs from just south of the Devon horizontal injector Well No. 243H to the north line of the Yucca Oberholtzer Lease. The OOIP for the Blue Area 1,262,399 BO, which multiplied by the 35% recovery factor yields 441,839 BO.

The Pink Area (68 acres) runs from just south of the horizontal injector Well No. 243H to the Reeves Unit line to the north. The OOIP for the Pink Area is 849,932 BO, which multiplied by the recovery factor of 35% yields 297,476 barrels of recoverable oil. Devon notes that the total cum of the "Pink Area" as of July, 2008 was 145,500 BO, or a 17.1% recovery. Devon's expert believes that this indicates this area has exceeded the expected primary recovery of 10% and that all the remaining oil is secondary recovery oil.

The Purple Area (59 acres) runs from just south of the horizontal injector Well No. 243H to the proposed Rule 37 location. The OOIP for the Purple Area is 737,441 BO, which multiplied by the recovery factor of 35% yields 258,104 barrels of recoverable oil.

The Orange Area (48 acres) runs from just south of the horizontal injector Well No. 243H to the regular location at Well No. 268. The OOIP for the Orange Area is 599,952 BO, which multiplied by the recovery factor of 35% yields 209,983 barrels of recoverable oil.

Devon asserts that, if a well is drilled at a regular location, any oil north of the regularly located horizontal well will be swept onto the Yucca Oberholtzer Lease, resulting in the loss to Devon of 87,493 BO. Devon claims that, if a well is drilled at the proposed Rule 37 location, Devon will only push 39,372 BO to the Yucca Oberholtzer lease, thus allowing Devon to produce 48,000 BO that would otherwise be recovered by the Yucca well. Devon also asserts that the drainage areas of Well Nos. 267 and 268 are in the shape of half-moons to the south due to pressure support moving north. According to Devon, any oil north of those wells will not be captured by Well Nos. 267 and 268.

Devon's petroleum engineer initially stated that all oil north of the proposed Rule 37 location would be swept off the Devon unit. Upon questioning by the examiners, he stated that during the flush production of the proposed horizontal, Devon might recover a portion of the 39,372 BO north of the proposed Rule 37 location, possibly as much as 11,355 BO as an upper limit. Devon emphasizes that all of the primary oil has already been recovered in this portion of the unit, so that any additional recovery will be secondary oil. If this oil is added to Devon's initial calculation of 48,000 BO saved, then the proposed location will allow Devon to produce 59,355 BO that would otherwise be produced by the Oberholtzer Lease. In this case, only 28,017 BO would be swept onto the Yucca Oberholtzer lease.

#### YUCCA'S POSITION AND EVIDENCE

Yucca has been trying to obtain the leasehold on the Oberholtzer Lease for many years and only recently succeeded. It drilled the Yucca Oberholtzer No. 1 at a location regular to the Devon unit in a good faith effort to capture remaining undeveloped reserves under the lease. Wells drilled by a prior operator on the lease, the Oberholtzer 1 and 2, are both plugged.

The Devon Energy Reeves Unit was designated an entity for density in Docket No. 8A-95,607. This allowed the operator of the unit to drill wells anywhere within the unit, as long as it respected the 330 foot leaseline spacing requirement. Yucca believes that Devon has many other sites within its unit that could be developed before it begins crowding the Yucca leaseline. Yucca also believes that the proposed Rule 37 location, only 180 feet from the common leaseline, will result in drainage of the Oberholtzer lease.

In the subject field, Yucca is producing the R-1 through R-5 intervals, preferring to perforate and stimulate only the upper section in order to produce less water. Devon proposes to drill its Rule 37 well through the R-5 and R-9 stringers, which Yucca believes will affect production from the Yucca Oberholtzer No. 1.

Yucca points out that Devon's "radius of uncertainty" problem in Well No. 267 can easily be resolved by running a directional survey and determining the exact location of the possibly deviated wellbore. Once this is established, it may be possible for Devon to drill its Well No. 268-H directly west at a regular location or bend its horizontal around the established location of Well No. 267. Alternatively, Yucca believes Devon could drill a dual lateral at a regular location from the existing Well No. 267 and recover any remaining oil on the western side of its unit.

Yucca points out a second problem with Devon's "radius of uncertainty" theory. Devon assumes that none of the 177,000 BO EUR that could be produced by Well Nos. 267 and 268 comes from the area north of the regular location line.

Q. (Neale for Yucca) So what do you think the drainage pattern looks like for the No. 267 and 268 wells? Have you done a study of that?

A. (Lucas for Devon) Just to note that our pressure support in the reservoir is moving in that direction. And if I was going to be looking at this, I would put your recovery at the limits of those wells. Basically anything beyond would be – to the extent that you could pull things down, you wouldn't get any secondary.

Q. So you're saying the drainage area is going to be a half-moon to the south?

A. Yes.

(Transcript, p. 87, lines 4-15)

Yucca argues that because Devon has not run a directional survey on Well Nos. 267 and 268, either could be bottomed within the northern limit of the 166 foot "radius of uncertainty". Thus, the two wells may eventually recover 177,000 BO from a point between the surface location of the two wells and the northern limit of the "radius of uncertainty". Devon admitted that it really did not know what portion of the 177,000 EUR for the two wells would come from the area north of the 330 foot line, but that it could potentially be some portion of the 87,000 BO Devon asserts will be lost to the Yucca Oberholtzer lease.

Yucca also argues that the between-well spacing for this field is 933 feet, which indicates that wells closer together than this will affect each other. If the Devon well drains 467 feet radially (467' is half of 933'), it will interfere with the existing Yucca well and a second well that Yucca proposes to drill at a regular location. If the proposed Devon Rule 37 well is approved, Yucca fears that drainage of its lease by Devon may cause the drilling of the planned Yucca Oberholtzer No. 2 to be economically unjustifiable. On cross-examination, Yucca admitted it had not done a study to quantify the primary recoverable oil on its lease and also had not done any drainage studies.

Yucca notes that Devon has presented a fair share calculation on only a small portion of its 6,840 acre Reeves Unit. Therefore, it is impossible to determine if Devon has already received its fair share of oil as to its unit as a whole. Yucca also believes that the proposed Rule 37 location is unreasonable. Therefore, the Devon Rule 37 application should be denied.

### EXAMINERS' OPINION

To establish entitlement 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 applicant must satisfy a two-pronged test: 1.) the applicant must show that it will not be afforded a reasonable opportunity to recover its fair share of hydrocarbons currently in place by drilling a well at a regular location; and 2.) the applicant must show that the proposed irregular location is reasonable.

It is the basic right of every landowner or lessee to a fair and reasonable chance to recover the oil and gas under their 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.*

Fair share is based on recoverable reserves on the entire lease or unit. Devon has not provided this calculation. Devon provided calculations of the recoverable reserves for only 68 acres of the 6,840 Reeves Unit, roughly 1% of the entire unit.

Devon states that its waterflood pressure maintenance program has successfully kept the reservoir pressure near its original level of 2,000 psi, higher than any of the surrounding tracts. Based on this fact, Devon states it is unlikely that there has been any migration of oil onto the Devon Reeves Unit during the time the waterflood has been in operation. However, this does not address primary recovery. During primary recovery, the Reeves Unit may have drained adjacent leases, capturing more than its fair share. Because Devon did not provide any information on its primary and secondary recovery in the 6,840 acre Reeves Unit versus total recoverable reserves in place, it is not possible to determine Devon's remaining fair share. Devon failed to demonstrate its fair share of recoverable reserves.

Devon initially argued that a regular location, assuming no recovery from north of that location, would push 87,493 BO to the Yucca Oberholtzer Lease. As discussed below, the examiners do not believe the assumption that the well will see no recovery from the north is accurate or reasonable. In addition, Yucca pointed out that the 87,000 barrel estimate would only be true if Devon was assuming Well Nos. 267 and 268 were bottomed directly on the 330 foot line. Devon had argued that there was a "radius of uncertainty" applicable to both wells, and Yucca established that Devon did not really know if the wells were bottomed at or some distance north of the 330 foot line. If they are bottomed north of the 330 foot line, even assuming no recovery from the north, then the two wells would recover at least some portion of the 87,493 BO that Devon insisted would be pushed to Yucca. Absent knowledge of the actual bottomhole locations of Well Nos. 267 and 268, Devon's figures relating to barrels of oil potentially lost to Yucca cannot be relied on.

In addition, Devon's argument that it would lose 87,493 BO to Yucca if required to drill its horizontal producer at a regular location is based on a calculation of original oil in place multiplied by a 35% recovery factor. Although Devon stated recovery varied from 6% to 40% across the unit, no underlying data supporting a 35% recovery factor in the limited 68 acre area of the applied-for well was

ever provided by Devon, which casts additional doubt on Devon's calculated loss of 87,493 BO to Yucca.

Devon initially insisted that it would not recover any reserves north of a producing well due to the waterflood front moving from the south. Then, under questioning by the examiners, Devon admitted that as much as 11,355 BO out of 39,372 BO would be recovered from the north by their proposed well, at least early in its life. This calculation was made on the spur of the moment by Devon, but the parameters for the calculation were not disclosed. Devon indicated that its proposed horizontal producer would not be an absolute pressure sink, and that the producer would not capture all of the pressure maintenance from the south.

Q. (Neale for Yucca) So the oil that is north of the proposed Rule 37 horizontal drainhole, what is going to happen to that oil if the proposed location is approved?

A. (Lucas for Devon) You know, the bulk of this oil is going to the north. The well lateral doesn't know – the differential across that lateral is very, very small initially, and the first molecule on the north side doesn't know its going to go north. Its going to go towards the lateral. But again, your pressure maintenance in this area and our existing injection patterns we are going to be displacing oil to the north. So within a given period of time after that well starts production, its going to see production just from the south.

Q. And the oil is going to move – the oil that is north of the Rule 37 location is going to move to the north because of the pressure maintenance from the south?

A. That is correct.

Q. And that is because the borehole is not going to capture all the pressure maintenance?

A. That is correct. And we think there is enough injection within Reeves Unit that is moving out to these fringe areas that even with the lateral there that is not going to prevent all drainage across that.

(Transcript, p. 71, lines 13-25, p. 72, lines 1-12, emphasis added)

Devon presented no calculation of the expected differential across the proposed drainhole, certainly not over time. The pressure sink created by the horizontal producer might capture all of the pressure maintenance energy or only a part of it. Devon presented no reliable evidence to contradict Yucca's assertion that the proposed Rule 37 horizontal will drain both north and south of its location. In fact, the above-quoted portion of the transcript indicates Devon is well aware that its proposed well will drain north of its location. Wells in this field will presumptively drain out at least 330 feet. Accordingly, a horizontal well located only 180 feet from a lease line will likely drain not only all of Devon's lease north of the well, but also significantly from Yucca's adjoining lease.

In order to prove its case, Devon must show that it cannot recover its fair share of recoverable reserves from a regular location. That is, it must negate the possibility that a well at a regular location will recover its fair share of recoverable reserves. A horizontal well located 330 feet from the lease line would drain both north and south of the wellbore. Devon did not negate the likelihood that a horizontal producing well at a regular location would recover its fair share of recoverable reserves.

Devon must also show that its proposed location is reasonable. Devon's lack of any data on the

expected differential across the drainhole leaves open the possibility that the proposed horizontal wellbore (as opposed to a vertical well) will capture all of the pressure maintenance energy and “pushed” oil from the south and might drain almost equally from the south and north, potentially encroaching upon and draining the Yucca Oberholtzer Lease which would lie only 180 feet away.

Due to Devon’s failure to demonstrate its fair share of recoverable reserves under the Reeves Unit, its failure to negate recovery of its fair share from a well at a regular location and its failure to demonstrate the reasonableness of the proposed Rule 37 location, the examiners recommend that this application be denied.

Based on the record in these dockets, 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 offset operators, all lessees of record for tracts that have no designated operator, and all owners of record of unleased mineral interests for each affected adjacent tract.
2. Devon Energy Production Company (“Devon” or “Applicant”), seeks an exception to Statewide Rule 37 to drill its proposed Reeves Unit, Well No. 268H, in the Reeves (San Andres) Field, in Yoakum County. Field rules for the Reeves (San Andres) Field are 330 foot leaseline spacing and 933 foot between-well spacing on 40 acre density.
3. Devon seeks a permit to re-enter the regularly located Reeves Unit Well No. 268, directionally deviate WNW to a point 180 feet south of the north unit line, and proceed thence in a westerly direction parallel to the unit line, terminating 150 feet from the westerly unit line.
4. The Devon Reeves Unit is a secondary recovery waterflood operation containing 6,840 acres.
5. Initial pressure in the Reeves (San Andres) Field was 2,000 psi at discovery in 1957 and a secondary recovery waterflood program on the Reeves Unit began in 1965, maintaining the original pressure. There is currently no pressure maintenance support coming from off the unit.
6. Devon did not prove the amount of its fair share of recoverable reserves under the Reeves Unit.
  - a. Fair share is based on an entire lease or unit, not selected portions thereof, but Devon did not calculate the recoverable reserves under the entire 6,840 acre unit.
  - b. Recoverable reserves were only calculated for a 68 acre area portion of the Reeves Unit in the area of the proposed Rule 37 exception well, representing roughly 1 percent of the entire Reeves Unit.
  - c. Recoverable reserves for the 68 acre area were calculated using a 35% “recovery factor” which was not proven to be accurate or reliable. Devon’s own evidence indicated the

recovery factor varied from 6% to 40% across the Reeves Unit.

- d. Use of a “recovery factor”, even if accurate, is not a valid method of calculating fair share when drainage of adjoining tracts during primary recovery has not been taken into account.
7. Devon’s calculation of the recoverable reserves north of Well Nos. 267 and 268 (87,493 BO) is unreliable:
    - a. The recovery factor used by Devon was not proven to be accurate or reliable.
    - b. The amount of recoverable reserves calculated by Devon assumed the wells were drilled as true verticals, exactly on the 330 foot spacing line.
    - c. Devon’s TOTCO surveys indicated the bottomhole of Well No. 268 was displaced as much as 166 feet from its surface location. Similarly, Devon does not know the true bottomhole location of Well No. 267.
    - d. If the bottomholes of Well Nos. 268 and 267 are north of their surface locations within the 166 “foot radius of uncertainty”, then their recoveries would directly impact and reduce Devon’s calculated loss of 87,493 BO to Yucca.
  8. Wells in this area will presumptively drain a distance of at least 330 feet. A horizontal well located only 180 feet from a lease line will likely drain across that lease line.
  9. A horizontal well located at a regular location, parallel to the common lease line with the Yucca Oberholtzer lease to the north, would recover oil pushed by Devon’s injectors, and oil on the Reeves Unit between the well and the lease line.
  10. A well at Devon’s proposed location, 180 feet south of the Yucca Oberholtzer Lease, is unreasonable, as a regularly located well will likely recover Devon’s fair share and the proposed well will drain the Yucca Oberholtzer lease.

**CONCLUSIONS OF LAW**

1. Proper notice of hearing was timely given to all persons legally entitled to notice.
2. All things have occurred to give the Commission jurisdiction to decide this matter.
3. An exception pursuant to Statewide Rule 37 to the Reeves (San Andres) Field rules regarding lease line spacing is necessary to permit drilling the applied-for well.
4. Devon did not show that an exception to Statewide Rule 37 was necessary to enable it to recover its fair share of recoverable reserves beneath the Reeves Unit.
5. Devon did not negate the possibility that a well at a regular location could recover its fair share of the recoverable reserves beneath the Reeves Unit.

6. Devon's proposed location is not reasonable.

**RECOMMENDATION**

Devon Energy Production Company has not established that it is entitled to a Rule 37 exception in order to prevent confiscation in the Reeves (San Andres) Field under its Reeves Unit in Yoakum County. The examiners therefore recommend that the subject application be denied in accordance with the attached final order.

Respectfully submitted,



---

Marshall Enquist  
Hearings Examiner



---

Richard Atkins  
Technical Examiner

(83270)

748 749

# ATTACHMENT I

RR Spikes in C/L Highway 213 and Highway 1780, NWC Section 750 bears N 2°55'24" E, 5274.1'

750 (83269)

752

## Rule 37 Case No. 0257324

752 751

1/2" Iron Rod, NWC Section 754 bears N 87°00'00" W, 10,857.8'

(148228)

### BLOCK D JOHN H. GIBSON SURVEY YOAKUM COUNTY, TEXAS

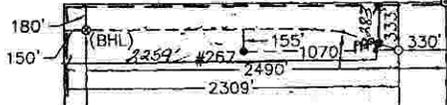
(133174)

N 3°00'33" E  
2652.3'

(145852)

(75834)

N 3°01'03" E - 52288.9'



Aluminum Cap marked "RPS 1890" in C/L of Co. Rd. 340 and Co. Rd. 435, accepted as the NWC Section 818 as Identified by J.N. Newton bears S 3°01'02" W - 5285.6' and S 87°01'53" E - 10,561.3'

(153457)

(85507)

(131393)

753

N 87°00'27" W - 5279.8'

"Reeves Unit"

1" Iron Pipe, detached at position of A.L. Harris 2" Iron Pipe, S2C Section 751, as Identified by W.K. Pearce in 1961 bears S 87°00'27" E, 5276.7'

(112341)

812 813

(85028)

(144629)

813 814

(87544)

#### LEGEND

- - Denotes Existing Well Bore
- - Denotes Proposed Deflection Point
- ⊙ - Denotes Proposed Bottom Hole Location
- - Denotes Producing Well Location
- ▼ - Denotes Injection Well Location
- - Denotes Calculated Corner this Survey
- (S-12345) - Denotes General Land Office File No.
- - - - - Denotes Unit Boundary Line

Date Surveyed: June 27, 2001  
Thru July 11, 2001



DESCRIPTION	COORDINATE TABLE	
	Plane Coordinate	Geodetic Coordinate
Reeves Unit #268 H ST1 Surface Location	X = 433,694.4 Y = 533,472.1	Longitude = 102°36'45.87" W Latitude = 33°01'41.78" N
Reeves Unit #268 H ST1 Deflection Point 1	X = 433,322.0 Y = 533,622.4	Longitude = 102°36'50.33" W Latitude = 33°01'43.08" N
Reeves Unit #268 H ST1 Deflection Point 2	X = 433,108.5 Y = 533,656.9	Longitude = 102°36'52.85" W Latitude = 33°01'43.32" N
Reeves Unit #268 H ST1 Bottom Hole Location	X = 431,546.7 Y = 533,741.0	Longitude = 102°37'11.22" W Latitude = 33°01'43.40" N

NOTE:

- Plane Coordinates and Bearings shown hereon are Lambert Grid and Conform to the "Texas Coordinate System", Texas North Central Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.
- Geodetic Coordinate shown hereon references the North American Datum of 1927, (Clarke Spheroid of 1866). Reference Stations - "POOL" (DQ0733) and "PEARCE RESET" (DP0644).
- See information filed in the office of this Surveyor which describes the reconstruction of this Section.

I HEREBY CERTIFY THAT THIS PLAN WAS MADE FROM NOTES TAKEN IN THE FIELD IN A BONAFIDE SURVEY MADE UNDER MY SUPERVISION.

J. FRANK NEWMAN TEXAS R.P.L.S. No. 5078  
MASON McDONALD TEXAS R.P.L.S. No. 4288  
R. CRAIG ALDERMAN TEXAS R.P.L.S. No. 5285

**WEST COMPANY**  
of Midland, Inc.

110 W. LOUISIANA, STE. 110  
MIDLAND TEXAS, 79701  
(432) 687-0865 - (432) 687-0868 FAX

The Reeves Unit #268 H ST1 is located approximately 18 miles Southeast of Plains, Texas.



### DEVON ENERGY PRODUCTION COMPANY, L.P.

Location of the  
**REEVES UNIT #268 H ST1**  
 Surface Location: 2303' FSL & 330' FEL  
 Deflection Point 1: 2434' FSL & 710' FEL  
 Deflection Point 2: 2457' FSL & 925' FEL  
 Bottom Hole Location: 2460' FSL & 2490' FEL  
 All in Section 752, Block D, John H. Gibson Survey  
 Yoakum County, Texas

Drawn By: LVA	Date: April 11, 2008
Scale: 1"=1000'	Field Book: 111 / 35-49, 54-63
Revision Date:	Quadrangle: Tokio SE
W.O. No: 2008-0409	Dwg. No.: L-2008-0409

Copyright 2008  
All Rights Reserved

ATTACHMENT II

Rule 37 Case No. 0257324

