

RULE 37 CASE NO. 0262307
District 09

**APPLICATION OF HEP OIL GP, L.L.C. FOR A RULE 37 EXCEPTION FOR THE
SADLER/PENN./FIELD UNIT LEASE, WELL NO. 111A, SANDUSKY, SOUTH (OIL
CREEK) FIELD, GRAYSON COUNTY, TEXAS**

APPEARANCES:

FOR APPLICANT:

Richard Jones
Anthony Cutia
Keith Felderhoff

APPLICANT:

HEP Oil GP, L.L.C.

FOR PROTESTANT:

Shirley Archer

PROTESTANT:

Lula Grace Pedigo Trust

PROPOSAL FOR DECISION

PROCEDURAL HISTORY

DATE APPLICATION FILED:

June 26, 2009

DATE OF NOTICE OF HEARING:

September 1, 2009

DATE OF HEARING:

October 20, 2009

HEARD BY:

James M. Doherty, Hearings
Examiner

Andres J. Trevino, Technical Examiner

DATE RECORD CLOSED:

October 28, 2009

DATE TRANSCRIPT RECEIVED:

November 9, 2009

DATE PFD CIRCULATED:

January 14, 2010

STATEMENT OF THE CASE

HEP Oil GP, L.L.C. ("HEP") requests a Rule 37 exception to recomplete the Sadler/Penn./Field Unit Lease, Well No. 111A ("SPU No. 111A"), in the Sandusky, South (Oil Creek) Field, Grayson County, Texas. The location of the SPU No. 111A, as disclosed by a surveyor's plat presented at the hearing, is 321 feet from the east line and 1,588 feet from the south

line of HEP's 50-acre lease and 1,013 feet from the west line and 1,588' from the south line of the Hartzog, E Survey, A-505 in Grayson County. Appendix 1 to this proposal for decision is a corrected copy of HEP Exhibit No. 13 which shows HEP's 50-acre lease (identified on the plat as the "Ramp Lease"), the location of the SPU No. 111A, an adjacent 50-acre unleased tract, and the location of certain "dry holes" in the area of the SPU No. 111A.¹ A Rule 37 exception is needed to recomplete the well in the Sandusky, South (Oil Creek) Field, because this field is subject to the statewide spacing rule providing for 467 foot spacing to lease lines. The application is opposed by the Lula Grace Pedigo Trust which owns a partial undivided mineral interest in an offset 50-acre tract that adjoins HEP's lease on the west.

DISCUSSION OF THE EVIDENCE

HEP Oil GP, L.L.C.

The SPU No. 111A currently is completed in the Sadler (Penn) Field, and HEP wishes to recomplete it in the Sandusky, South (Oil Creek) Field from which the well formerly produced during 1954-1957. The SPU No. 111A formerly was known as the D. A. McCoy No. 1A. The D. A. McCoy No. 1A was drilled by H. F. Gibson in April 1954 at a legal location on the 50-acre McCoy lease under Statewide Rules that at the time provided for 330 foot lease line spacing.² This well originally was completed in the Oil Creek Sand at a depth of 7,594 feet to 7,598 feet and produced 57,963 barrels of oil from the Sandusky, South (Oil Creek) Field from April 1954 until November 1957. In November 1957, Gibson recompleting the D. A. McCoy No. 1A up hole in the Sadler Penn Sand at a depth of 6,799 feet to 6,810 feet. The well was placed in the Sadler (Penn) Field and re-named the SPU No. 111A at that time.

Within five months after the D. A. McCoy No. 1A originally had been completed in the Oil Creek Sand in 1954, oil production declined. During the last month of production from this sand in November 1957, the well produced 4.03 barrels of oil per day. Historically, the Oil Creek Sand has been proven to be a strong water drive reservoir. HEP had no water production data for the D. A. McCoy No. 1A in 1957, but inferred that Gibson decided to recomplete the well to the Sadler

¹ The HEP Form W-1 described the location of the well as 300 feet from the east line and 1,500 feet from the north line of the lease and 1,013 feet from the west line and 1,588 feet from the south line of the survey. The Form W-1 location was erroneous, and the calls on HEP Exhibit No. 13 are the correct calls determined by a new survey of HEP's lease performed on September 9, 2009. This discrepancy is not significant because HEP is its own offset to the east, north, and south, and the Form W-1, associated plat, and notice of hearing contained no distance call to the west line of the HEP lease adjoined by the protestant's unleased tract. Protestant's tract to the west is 380 feet from the location of the proposed well, 80 feet further than the distance to the nearest lease line shown on the Form W-1 and notice of hearing. Protestant raised no issue regarding lack of notice of the well location.

² According to HEP, a 1954 survey put the surface location of the well 330' from the east line of the lease, as indicated on a plat filed by Gibson and the log header for the D. A. McCoy No. 1A. The 2009 survey that resulted in HEP Exhibit No. 13 indicates that the well is nine feet closer to the east line than disclosed by the 1954 survey.

Penn Sand because of declining oil production and increasing saltwater production. The SPU No. 111A has produced continuously from the Sadler (Penn) Field since 1957.

Prior to April 1954 when the D. A. McCoy No. 1A was drilled, L. O. McMillan drilled two dry holes on acreage in the same area, one in July 1951 to the south and the other in December 1953 to the west on the protestant's 50 acres, trying to find Oil Creek Sand production. After Gibson drilled the successful D. A. McCoy No. 1A in April 1954, Texaco drilled the E. C. Anderson NCT 2 No. 3 well to the east. All three of these surrounding wells were structurally lower than the D. A. McCoy No. 1A by 13 to 17 feet, too low structurally to make a well. All three tested mostly saltwater and were plugged as dry holes because they were too close to the water.

As shown by geological structure maps presented by HEP, there is a very small and well defined four way closure on the Oil Creek Sand around the SPU No. 111A. HEP wants to recomplate the SPU No. 111A to this sand to recover attic oil beneath HEP's lease. The top of the Oil Creek Sand in this well is at 6,852 feet subsea.

Calculated original oil in place ("OOIP") in the Oil Creek Sand in the area of the D. A. McCoy No. 1A, beneath HEP's lease and the 50-acre tract to the west was 357,420 stock tank barrels. The D. A. McCoy No. 1A, which is the only well that ever produced any of this OOIP, produced 57,930 barrels, or 16.2% of the OOIP, before the well watered out. The calculated drainage area of the D. A. McCoy No. 1A was 23.9 acres and the calculated drainage radius of the well was 575 feet.

No production has been had from the Oil Creek Sand in this area of the reservoir since 1957 when the D. A. McCoy No. 1A was recompleted to the Sadler Penn Sand. HEP believes that over a "shut-in" period of 52 years, this reservoir has re-stabilized back to original conditions. This theory has been tested and confirmed by the results of a workover of the Sandusky Oil Creek No. 903 ("SOC No. 903") which is about 6,250 feet to the northeast of the SPU No. 111A. As a result of the workover of the SOC No. 903, the Oil Creek reservoir was opened back up in this well after 30 years, and the reservoir exhibited pressure that was back to original reservoir conditions. The SOC No. 903 is currently producing.

Based on parameters from the SOC No. 903, HEP estimated remaining recovery from the Oil Creek Sand for the SPU No. 111A of 12,620 barrels of oil. Based on this estimate, HEP calculated that the SPU No. 111A, if recompleted in the Oil Creek Sand, will have a drainage area of 52 acres and a drainage radius of 268 feet. HEP does not believe that protestant's acreage to the west of HEP's lease will be affected because at its closest point it is 380 feet away from the surface location of the SPU No. 111A. In addition, the F. R. Banfield No. 1 drilled on protestant's acreage 349' from HEP's lease tested mostly wet in the Oil Creek Sand and was plugged as a dry hole, as were two other surrounding wells drilled at locations that were structurally higher than the Banfield well. The Banfield well was tested seven feet above the oil-water contact as it existed at the time, and HEP believes the oil-water contact has moved upward four to seven feet since that time as a result of production by the D. A. McCoy No. 1A.

There is no regular location on HEP's 50-acre lease under current field rules for the Sandusky, South (Oil Creek) Field because the lease is only about 700 feet wide. If a new well were drilled on HEP's lease 467 feet from protestant's acreage to the west, the well would be only about 233 feet from the east line of the lease. There is no existing well on HEP's lease producing from the Sandusky (Oil Creek) Field and no such well on protestant's acreage to the west. While HEP could drill a new well at an irregular location on its lease to recover the remaining reserves targeted by the proposed recompletion of the SPU No. 111A, it would be cost prohibitive and economically wasteful to do so. An AFE (Authority for Expenditure) and economic projection presented by HEP showed that the estimated cost to recomplete the SPU No. 111A to the Sandusky, South (Oil Creek) Field will be \$181,000 and the present worth of estimated reserves to be recovered discounted by 10% is \$465,480. Similar analyses presented by HEP for a new drill showed that the cost of drilling a new well on HEP's lease would be \$678,000, and HEP would realize a substantial loss given the present worth of the estimated reserves to be recovered. HEP believes that approval of the requested Rule 37 exception is necessary to prevent the waste of hydrocarbons.

Lula Grace Pedigo Trust

Shirley Archer is Trustee of the Lula Grace Pedigo Trust ("Trust"). The Trust is the owner of a partial undivided mineral interest in 50 acres adjoining HEP's lease to the west. The Trust's acreage currently is unleased, but was formerly leased to HEP in 2003. In November 2004, HEP offered to purchase the Trust's mineral interest, and because of this, Ms. Archer questioned HEP's evidence that condemns productive locations in the Sandusky, South (Oil Creek) Field on the Trust's tract.³ Ms. Archer stated that the Trust wants to protect its mineral interest, but she presented no technical evidence in rebuttal of HEP's case.

EXAMINERS' OPINION

If a substantial amount of oil will be produced by the proposed Rule 37 well that otherwise ultimately would be lost, a permit to drill the well may be justified under Rule 37 to prevent waste. *Hawkins v. Texas Co.*, 209 S.W.2d 338, 343 (Tex. 1948). An applicant seeking an exception to Rule 37 based on waste must show that: (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 these unusual conditions, hydrocarbons will be recovered by the well for which the exception is sought that would not be recovered by any existing well or by an additional well drilled at a regular location; and (3) the amount of otherwise unrecoverable oil is substantial.

The holdings in *Exxon Corporation v. The Railroad Commission of Texas*, 571 S.W.2d 497 (Tex. 1978) ("*Exxon*") and *Schlacter v. Railroad Commission of Texas*, 825 S.W.2d 737 (Tex.App.-

³ HEP asserted that this offer was made by former employees of HEP, most likely in contemplation of Ellenburger production. However, an Ellenburger well drilled on the Ramp Lease had disappointing results, and HEP lost interest in protestant's tract.

Austin 1992, writ denied) (“Schlacter”) are to the effect that a Rule 37 exception for an existing wellbore may be granted as necessary to prevent waste upon a showing that: (1) the existing wellbore will recover hydrocarbon reserves that cannot be produced by any other existing well; and (2) it is not economically feasible to drill at a regular location. The exception may be granted in these circumstances, even if drilling a new well at a regular location would recover the reserves recoverable by the existing wellbore. See *Schlacter*, *supra* at page 741. This is commonly referred to as the *Exxon* theory. In this kind of case, the existing wellbore is regarded as an “unusual condition” warranting the granting of an exception to prevent waste. To apply *Exxon*, it must appear that the existing wellbore was drilled and completed legitimately and in good faith, and not as a subterfuge to bolster a later Rule 37 exception. See *Exxon*, *supra* at page 501.

The examiners are of the opinion that HEP has proved that granting of the requested Rule 37 exception is necessary to prevent waste. Even if the small and well defined four way closure (structural high) in the Oil Creek Sand around the SPU No. 111A demonstrated by HEP’s structure maps and the existence of attic oil beneath HEP’s lease in this water drive reservoir are not themselves “unusual conditions,” then the existence of the SPU No. 111A wellbore satisfies the “unusual conditions” requirement of the waste test under *Exxon* and *Schlacter*.

If SPU No. 111A is recompleted to the Oil Creek Sand, it will recover hydrocarbons that cannot be produced by any other existing well. There is no existing well that will produce these hydrocarbons. It is not economically feasible to drill a new well to produce these hydrocarbons because the cost of such drilling would exceed the worth of the reserves to be recovered. There is no regular location in the Sandusky, South (Oil Creek) Field on HEP’s lease or, as far as HEP’s Exhibit No. 13 shows, on protestant’s acreage, because both tracts are too narrow to accommodate current 467 foot lease line spacing. Even if regular locations existed on surrounding acreage, the only evidence suggests that such locations would be too low structurally to reasonably recover the reserves that are expected to be recovered if the SPU No. 111A is recompleted. The SPU No. 111A wellbore was drilled at its present location in good faith. This well, formerly known as the D. A. McCoy No. 1A, was drilled in 1954 at a time when the 330 foot statewide spacing rule made the location of the well regular to surrounding lease lines according to a 1954 survey of the well location.⁴ The D. A. McCoy No. 1A produced 57,930 barrels of oil from the Sandusky (Oil Creek) Field from 1954 to 1957. The well was recompleted in the Sadler (Penn) Field in 1957 and has produced continuously from this field since that time. There is no evidence that the D. A. McCoy No. 1A was drilled at its present location as a subterfuge to bolster a request made 54 years later for a Rule 37 exception to recomplete the well back into the Sandusky, South (Oil Creek) Field, particularly since the current lease line spacing rule was adopted several years after the well was drilled.

⁴ The 2009 survey of HEP’s lease disclosed that the surface location of the well is 321 feet from the east line where HEP is its own offset, suggesting that the well originally was drilled nine feet closer to the east line than allowed by the 330 foot spacing rule in effect in 1954. However, according to HEP, a 1954 survey put the well 330 feet from the east line, and apparently H. F. Gibson relied on this survey when the well was drilled in 1954.

Based on the record in this case, the examiners recommend adoption of the following Findings of Fact and Conclusions of Law.

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).
2. HEP Oil GP, L.L.C. ("HEP") seeks an exception to Statewide Rule 37 to recomplete the Sadler/Penn./Field Unit Lease, Well No. 111A ("SPU No. 111A") in the Sandusky, South (Oil Creek) Field, Grayson County, Texas.
3. The location of the SPU No. 111A is 321 feet from the east line and 1,588 feet from the south line of HEP's 50-acre lease and 1,013 feet from the west line and 1,588 feet from the south line of the Hartzog, E Survey, A-505, in Grayson County, Texas.
4. A Rule 37 exception is needed to recomplete the SPU No. 111A in the Sandusky, South (Oil Creek) Field because this field is subject to the statewide spacing rule providing for 467 foot spacing to lease lines.
5. The HEP application is opposed by the Lula Grace Pedigo Trust ("Trust"), which owns a partial undivided mineral interest in an offset 50-acre tract that adjoins HEP's lease on the west and is unleased. The location of the SPU No. 111A is 380 feet from the Trust's tract at its closest point.
6. The SPU No. 111A formerly was known as the D. A. McCoy No. 1A ("McCoy #1A"). The McCoy #1A was drilled by H. F. Gibson in 1954 in the center of the 50-acre McCoy Lease. Based on a 1954 survey, the well was shown to be at a regular location, 330' from the nearest lease line to the east, under the statewide spacing rule then in effect which provided for 330 foot lease line spacing. The current lease line spacing rule providing for 467 foot lease line spacing was adopted about eight years after the McCoy #1A was drilled.
7. The McCoy #1A originally was completed in the Oil Creek Sand at a depth of 7,594 feet to 7,598 feet. Between April 1954 and November 1957, the well produced 57,963 barrels of oil from the Sandusky, South (Oil Creek) Field.
8. Historically, the Oil Creek Sand has been proven to be a strong water drive reservoir.
9. In November 1957, H. F. Gibson recompleted the McCoy #1A up hole in the Sadler Penn Sand, most likely due to declining oil production and increasing saltwater production. The well was placed in the Sadler (Penn) Field and re-named the SPU No. 111A at that time. The well has produced continuously from the Sadler (Penn) Field since 1957.

10. No production has been had from the Oil Creek Sand in the area of the SPU No. 111A since 1957. A recent workover of the Sandusky Oil Creek No. 903 about 6,250 feet northeast of the SPU No. 111A opened back up the Oil Creek reservoir after 30 years of no production, and the reservoir exhibited pressure that was back to original reservoir conditions.
11. In July 1951 and December 1953, L. O. McMillan drilled two dry holes on acreage in the same area, one to the south of the SPU No. 111A location and one to the west on the 50 acres now owned by the Trust (F. R. Banfield No. 1), trying to find Oil Creek Sand production. After the successful McCoy #1A was drilled, Texaco drilled the E. C. Anderson NCT 2 No. 3 to the east. All three of these surrounding wells were structurally lower than the McCoy #1A by 13 to 17 feet, too low structurally to make a well. All three tested mostly saltwater and were plugged as dry holes.
12. The top of the Oil Creek Sand in the SPU No. 111A is at 6,852 feet subsea. Structure maps on top of the Oil Creek Sand show that there is a very small and well defined four way closure on the Oil Creek Sand around the SPU No. 111A that is structurally high to the surrounding acreage. HEP wishes to recompleting the SPU No. 111A to the Oil Creek Sand to recover attic oil beneath HEP's lease.
13. Calculated original oil in place in the Oil Creek Sand in the area of the McCoy #1A, beneath HEP's lease and the 50-acre tract to the west was 357,420 stock tank barrels. The McCoy #1A is the only well that ever produced any of this oil, and it recovered 57,930 barrels or 16.2% of the original oil in place. HEP estimates that the oil-water contact in the reservoir moved up four to seven feet as a result of this production.
14. Based on parameters from the Sandusky Oil Creek No. 903, estimated remaining recovery from the Oil Creek Sand for the SPU No. 111A, if recompleting as proposed, is 12,620 barrels of oil. Based on this estimate, the SPU No. 111A, when recompleting in the Oil Creek Sand, will have a drainage area of about 52 acres and a drainage radius of about 268 feet.
15. It is not likely that recompleting of the SPU No. 111A in the Oil Creek Sand will materially affect the Trust's 50 acres to the west of HEP's lease because the Trust's acreage is 380 feet from the location of the SPU No. 111A. In addition, the F. R. Banfield No. 1 drilled on the Trust's 50 acres in 1953 349 feet from HEP's lease tested mostly wet in the Oil Creek Sand and was plugged as a dry hole. The Banfield well was tested seven feet above the oil-water contact as it existed in 1953, and the oil-water contact likely has moved upward since that time based on production by the McCoy #1A.
16. There are no existing wells that will recover the oil that will be recovered by the SPU No. 111A if it is recompleting in the Oil Creek Sand.

17. There are no regular locations on HEP's lease, on the Trust's acreage, or on other surrounding acreage where additional wells might be drilled to recover the oil that will be recovered by the SPU No. 111A if recompleted in the Oil Creek Sand.
18. The estimated cost to recomplete the SPU No. 111A to the Oil Creek Sand is \$181,000. The present worth of estimated reserves to be recovered by this well upon recompletion, discounted by 10%, is \$465,480.
19. Drilling of a new well on HEP's lease to recover the estimated 12,620 barrels of currently recoverable oil beneath the lease in the Oil Creek Sand would be cost prohibitive and economically wasteful. The estimated cost to drill such a well is \$678,000, significantly more than the present worth of the reserves to be recovered.

CONCLUSIONS OF LAW

1. Proper notice of hearing was timely issued by the Railroad Commission to 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. Granting of the Rule 37 exception requested by HEP Oil GP, L.L.C. is necessary to prevent the waste of hydrocarbons.
 - a. Unusual reservoir conditions exist beneath HEP's lease.
 - b. The existing wellbore of the SPU No. 111A is an unusual condition under the holdings in *Exxon Corporation v. The Railroad Commission of Texas*, 571 S.W.2d 497 (Tex. 1978) and *Schlacter v. Railroad Commission of Texas*, 825 S.W.2d 737 (Tex.App.-Austin 1992, writ denied).
 - c. When recompleted, the SPU No. 111A will recover a substantial amount of oil that will not be recovered by any existing well or any additional wells drilled at regular locations.

RECOMMENDATION

The examiners recommend that the application of HEP Oil GP, L.L.C. for a Rule 37 exception to recomplete the SPU No. 111A in the Sandusky, South (Oil Creek) Field be granted as necessary to prevent waste of hydrocarbons.

Respectfully submitted,

James M. Doherty
Hearings Examiner

Andres J. Trevino
Technical Examiner