



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

November 9, 2016

Rule 37 Case No. 0298989
Status No. 811982

The Application of Waggoner, W.T. Estate for an Exception to Statewide Rule 37 for the Waggoner Minnas Creek J Lease, Well No. J-1, Billie Jo (Caddo) Field, Wilbarger County, Texas.

PROPOSAL FOR DECISION

APPEARANCES:

FOR APPLICANT:

David Nelson, Attorney
J. Todd Thomas, Wagoner Ranch Oil Manager
Steve Towns, Consultant
Marc Halbert, Geologist

APPLICANT:

Waggoner, W.T. Estate
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PROTESTANT:

Lloyd Muennink, Attorney
Glenn Weatherbee, President
Michael Stowbridge, Geologist

REPRESENTING:

Southern Expl. Inc.
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PROCEDURAL HISTORY

APPLICATION FILED:

November 16, 2015

NOTICE OF HEARING:

April 11, 2016

HEARD BY:

Marshall Enquist - Administrative Law Judge
Paul Dubois - Technical Examiner

HEARING DATE :

May 9, 2016

TRANSCRIPT RECEIVED:

May 25, 2016

PFD CIRCULATION DATE:

November 9, 2016

STATEMENT OF THE CASE

Waggoner, W.T. Estate (“Waggoner Estate” or “Applicant”), seeks an exception to Statewide Rule 37 for its Minnas Creek J Lease, Well No. 1, Billie Jo (Caddo) Field, Wilbarger County, Texas. The Minnas Creek J Lease drillsite tract totals 20 acres. The proposed drillsite is only 150 feet west of the common leaseline between the Waggoner Estate fee land and the adjacent Relinquishment Act tract, which is also owned by the Waggoner Estate as to the surface. The Relinquishment Act tract is the site of the State of Texas SEI Well No. 23, operated by Southern Exploration, Inc. (“Southern Exploration” or “Protestant”). The State of Texas SEI Well No. 23 is only 88 feet east of the common leaseline. Southern Exploration protests this application because the competing wells would only be 279 feet apart in a strong water-drive reservoir, possibly leading to both wells watering out before the optimal recovery of hydrocarbons is complete.

The Relinquishment Act tract came into being upon the discovery of a “vacancy” between the A. Huston Survey, A-460 and the John Calhoun Survey, A- 940. Waggoner Estate purchased the vacancy tract from the State of Texas under the Relinquishment Act. It thereby became the “owner of the soil” and the leasing agent for the State of Texas of any minerals on or under the tract. As the State’s leasing agent, Waggoner Estate is entitled to 50% of the delay rentals, royalty and bonus due on any well drilled on the Relinquishment Act land. The remaining 50% of the royalty and bonus goes to the State of Texas. The vacancy tract is known as the O.A. Lindsey/S.J. Russell Survey, A-2081.

The Waggoner Estate Exhibit 10 established the parties required to receive notice of the present hearing. Notice is required for parties within 467 feet of the proposed location, which is half of the 933 foot between-well spacing distance. Notice was provided to four parties: Penmoy Oil Company, Southern Exploration, Wilder & Underwood and Trice Production Co. Only Southern Exploration appeared in protest.

The Billie Jo (Caddo) Field is on County Regular Rules. At the depths between 2001 feet and 3000 feet, the depth of the proposed well, the County Regular Rules require 330 foot leaseline spacing and 933 foot between well spacing on 20-acre units.

The proposed well location is 150 feet from the east line of the lease and 505 feet from the north line of the lease, and 1075 feet from the south line of the survey and 150 feet from the east line of the survey, being the O.A. Lindsey Survey, A-2081.

DISCUSSION OF THE EVIDENCE

Waggoner Estate’s Evidence

The Waggoner Estate bases its case on prevention of waste. The proposed location, 150 feet from the leaseline, is necessary to recover oil from a unique reservoir feature, a high point on structure that lies under the Waggoner Estate fee land as opposed to the Relinquishment Act tract. The Waggoner Estate believes its proposed well will recover attic oil from the Billie Jo (Caddo) Field (“Caddo”), in

the amount of 60,000 to 70,000 barrels, oil that cannot be recovered by any other well.

The Waggoner Estate has access to 150 to 200 square miles of 3-D seismic shot on the ranch since 1992. According to the Waggoner Estate interpretation of the 3-D seismic, there is a high point in the Caddo at the location of their proposed well. On its Exhibit 4, a log cross-section going through five well logs and the site of the Waggoner Minnas Creek Well No. J-1, the Waggoner Estate interprets a structural high that it shares with the Southern Exploration Well No. 23. This interpretation is reached through a combination of well control and 3-D seismic interpretation. The structural high on the log section is slightly higher, perhaps only five to six feet, at the proposed location of the Minnas Creek Well No. J-1 than at the location of the State of Texas SEI Well No. 23. As the Waggoner Estate correlates the logs, the top of the Caddo in the Southern Exploration Well No. 23 is at a subsea elevation of 2841 and the top of the Caddo at the proposed location of the Minnas Creek Well No. J-1 is at a subsea depth of 2835, giving the proposed Well No. J-1 a structural advantage of six feet.

Using 3-D seismic to construct a Time Map (see attached Exhibit I) along an arbitrary line (Arbitrary Line 1) through the same wells as on Exhibit 4, the Waggoner Estate plots bright high spots on the top of the Caddo that coincide with the location of the Southern Exploration Well No. 3 and the proposed Waggoner Estate Well No. J-1. The Time Map through the arbitrary line indicates the location of the proposed Well No. J-1 is slightly higher than the location of the State of Texas SEI Well No. 23.

Using the 3-D seismic information in conjunction with the well logs, and converting time to depth, the Waggoner Estate produced an isopach map (see attached Exhibit II) of the top of the Caddo, again showing a structural high encompassing both the Southern Exploration Well No. 23 and the proposed Waggoner Estate Well No. J-1. The Southern Exploration Well No. 23 is shown slightly below the -2840 isopach line, at -2841 feet, while the proposed Well No. J-1 is shown near the center of the high defined by the -2840 isopach line, at an approximate depth of -2835 feet. This is the Waggoner Estate's evidence that its proposed well will be six feet higher than the State of Texas SEI Well No. 23. The Waggoner Estate believes that if it were required to drill at a regular location, it would be moving off the top of the structure, approaching the -2840 isopach line, thereby losing access to attic oil.

In previous hearings¹ held in September, 2013, Southern Exploration applied to permit two wells, the State of Texas SEI Well No. 24 and the State of Texas SEI Well No. 26. The permits were granted in August 2014. The Waggoner Estate offered one of Southern Exploration's exhibits from the previous hearings as its Exhibit No. 7 (see attached Exhibit III). The Southern Exploration exhibit also showed the location of its existing Well No. 23 at a structural high, on the edge of a subsea -2840 isopach contour line. The -2840 isopach line laps slightly over the lease line to a location very near the proposed Waggoner Estate Well No. J-1. The Waggoner Estate believes that Southern Exploration's own isopach map from 2013 supports drilling its Well No. J-1 at 150 feet off the lease line and that the isopach map also indicates that drilling the proposed well at a regular location would result in the well

¹ Rule 37 Case No. 0283553 (Well No. 26) and Rule 37 Case No. 0283554 (Well No. 24).

dropping down structure, thereby rendering recovery of the attic oil under the Waggoner Estate land impossible.

The proration schedule for the Billie Jo (Caddo) Field demonstrates there are only two operators currently producing the field: Pinnacle Operating operates the Waggoner A-101, which has a potential of five barrels of oil per day and Southern Exploration, Inc. operates the State of Texas SEI Well No. 23, which has a potential of 20 barrels of oil per day.

The Waggoner Estate looked at production from other Caddo fields in the area. Two fields, the S&K (Caddo) Field and the Paradise (Caddo) Field produced 1.1 million barrels and 1.6 million barrels, respectively. The Billie Jo (Caddo) Field has produced 0.6 million barrels to date. Production from the individual wells in each field is highly dependent upon their placement on structure. The Waggoner estate believes the applied-for location of Well No. J-1 could recover 60,000 to 70,000 barrels of attic oil. The Waggoner Estate asserts that if it is not granted a Rule 37 exception and is forced to back away from the lease line and drill at a regular location (330 feet), the well would recover only 10,000 to 15,000 barrels of oil, which would not be an economically viable well. The Waggoner Estate believes a regular location for its well would prevent recovery of the attic oil, which would not be recovered by either the Waggoner Minnas Creek J Lease, Well No. J-1 or the State of Texas SEI Well No. 23.

In this proceeding, there are two different interpretations, geologically and geophysically, drawn from the same seismic data. The Waggoner Estate has shown that there is attic oil present and that recovering that oil will prevent waste. The Waggoner Estate denies that drilling a well on an offsetting lease, its own, can be described as a failure to protect the interests of the State of Texas on an adjacent lease. With this application, the Waggoner Estate is merely trying to protect its own interests and ensure the recovery of attic oil that no other well can recover.

Southern Exploration's Evidence

On cross-examination of the Waggoner Estate's witnesses, Southern Exploration established that its Well No. 23 and the proposed Waggoner Estate Well No. J-1 would be only 279 feet apart. Referring to Waggoner Estate Exhibit 5, counsel for Southern Exploration argued that Well No. J-1 could be moved west to a regular location 330 feet off the lease line and still remain within the -2840 contour. The witness for the Waggoner Estate agreed, but noted moving to a regular location would deprive Well No. J-1 of the structural advantage gained by moving to the center of the area contained within the contour. He also noted that moving to the center of the structure could add six feet and perhaps as much as nine feet of additional height, as indicated by the color change on the map.

Counsel for Southern Exploration maintained that Waggoner Estate Exhibit 6, with its Arbitrary Line 1, should be disregarded as it was an arbitrary exhibit, as opposed to the kind of factual exhibits the Commission requires to make its decisions.

Southern Exploration argued that putting two wells into the same reservoir only 279 feet apart would cause coning and lead to both wells watering out sooner than if a single well were in the

reservoir. The witness for Waggoner Estate agreed this was true and that the downdip well would water out first. Counsel for Southern Exploration also noted that, under the Relinquishment Act, when the interests of the "owner of the soil" conflict with the interests of the State of Texas, the "owner of the soil" must put the State's interests above his own. Counsel then questioned whether the Waggoner Estate, in requesting a permit for its proposed Well No. J-1, was putting its own interests above those of the State of Texas. The witness for the Waggoner Estate replied that he was protecting the owners of the mineral interests under the Waggoner Estate.

In its direct case, Southern Exploration presented the testimony of Mike Stowbridge, geologist for Southern Exploration. Mr. Stowbridge testified that he would never advocate drilling two wells only 279 feet apart in a strong water-drive reservoir. The two wells would draw twice the volume of one well and thereby draw the water more quickly, watering out both wells prematurely. Mr. Stowbridge presented his own seismic Time Map, Southern Exploration Exhibit 2, showing that both wells, Well No. 23 and Well No. J-1, were within the same time contour line of the map (see attached Exhibit IV). That contour line orients east-west. Mr. Stowbridge demonstrated that the Waggoner Estate could move the location of its Well No. J-1 to the west northwest and remain within the highest contour line at a regular location, that is, 330 feet from the lease line. This would also place the Well No. J-1 435 feet from the Well No. 23, reducing the coning effect (drawing water) that would be detrimental to the production of both wells. Mr. Stowbridge stated that the Southern Exploration time contour map was prepared very carefully over several months, while the Waggoner Estate Exhibit No. 5 is just a quick-look seismic. Mr. Stowbridge stated that a colleague of his believes seismic is only accurate to within 30 feet. Mr. Stowbridge believes it can be more accurate than that with careful work, but does not think it can be accurate within 10 feet, the distance between contour lines on the Waggoner Estate Exhibit 5. Mr. Stowbridge believes the Rule 37 application should be denied because a grant would cause the watering out of both wells prematurely, causing waste rather than preventing it.

Southern Exploration's second witness, Mr. Weatherbee, is President of the company. He noted that the seismic relied on by both sides came from Southern Exploration, as the Waggoner Estate requires that any seismic shot on its surface be provided to it.

He reiterated Mr. Stowbridge's concerns about two wells being permitted only 279 feet apart in a strong water-drive reservoir. According to Southern Exploration's seismic interpretation at the time it applied for its permit, the State of Texas SEI Well No. 23 was placed 88 feet off the common lease line for structural advantage. Southern Exploration requested a Rule 37 exception for that well because the State of Texas tract owned by the Waggoner Estate is only 500 feet wide. When the field rules require 330 foot lease line spacing, and you have a tract only 500 feet wide, a lease line spacing exception is necessary. Mr. Weatherbee stated his conviction that drilling the proposed Waggoner Well No. J-1 will not only ruin the State of Texas SEI Well No. 23, but will also ruin the proposed well. Even 3-D seismic has limits to its accuracy, and within those limits there is little difference between the contour lines derived by the Waggoner Estate in its Exhibit 5 and Southern Exploration in its Exhibit 2. The Waggoner Estate is trying to dodge the limitations of seismic by referring to color shading between the contours. Mr. Weatherbee does not believe seismic is accurate to the degree of being able to distinguish a five or six foot structural advantage as the Waggoner Estate asserts.

If the Waggoner Estate contour projection is correct, then the downdip well, the State of Texas SEI Well No. 23 is going to water out immediately. Southern Exploration does not mind the Waggoner Estate getting a legal location for its well and sharing the revenues in that way. However, the State of Texas SEI Well No. 23 produces only 25 to 30 BO a day with 300 to 400 barrels of saltwater. If the proposed Waggoner Estate well does have a slight structural advantage, the State of Texas SEI Well No. 23 will water out almost immediately. If the two wells are actually very near the same structural elevation, the combined draw from the two wells will cause both wells to water out prematurely, resulting in waste and ending the revenue stream to both the State of Texas and the Waggoner Estate.

Mr. Weatherbee does not think the Waggoner Estate application makes economic sense, but states the application may be in reaction to previous events. At the time the State of Texas SEI Well No. 23 was permitted, the Waggoner Estate had wanted to pool their acreage with the State of Texas acreage, with each side contributing acreage. The General Land Office refused that arrangement, saying that they were already giving Waggoner Ranch 50% of the royalty and bonus for acting as agent for the State. The General Land Office refused to pool the land under any circumstances as the full 20 acres required by the spacing rule were available from the State's Relinquishment Act tract.

Southern Exploration believes the Waggoner Estate is required to act in the State's best interests, but will not be doing so if it permits and drills the proposed Well No. J-1. The effect would be just the opposite, destroying the State's interest.

Under cross-examination, Mr. Stowbridge noted the seismic for Southern Exploration Exhibit 2 was run in 2010. The contour lines on Exhibit 2 are millisecond lines, but those lines are roughly eight to ten feet apart, so they are comparable to the Waggoner Estate's isopach maps built using 10-foot contour lines. The maps from both parties show structural highs, although they disagree as to the exact location and extent of those highs. Those disagreements are within the normal range of interpretation to be expected when different geologists or geophysicists examine the seismic data. Mr. Stowbridge stated, "There's no two geologists that will map it the same, I don't think."² The geophysical interpretation in Southern Exploration Exhibit 2 shows that the Waggoner Estate could move its proposed well to a location 330 feet off the common lease line and remain within the time contour equivalent in structural height to the Southern Exploration Well No. 23. The exhibit also shows that moving the well location much further than that would be a move downstructure to the south, north and west.

In a previous hearing held in September, 2013, Mr. Stowbridge testified to the Commission as to the map that is now Waggoner Estate Ex. 7, showing that there were three structural high points, one which had been accessed by the State of Texas SEI Well No. 23, and two others with attic oil that could only be accessed by SEI Well Nos. 24 and 26. At that time, Well Nos. 24 and 26 were expected to recover 60,000 to 70,000 BO each. Mr. Stowbridge testified that these figures were not just based on recovery from the Caddo, but from the Ellenburger as well. The Commission did not grant the

² Transcript, p. 141, lines 15-16.

Ellenburger zone, possibly because the Ansel (Ellenburger) Field was two miles away to the southeast and on a completely different structure. Although the Commission granted the permits for Southern Exploration Well Nos. 24 and 26 in the Caddo, the wells were not drilled because the permit exclusion of the Ellenburger Field decreased the wells' economic viability. One well could have been drilled, and used as a saltwater disposal well if oil production did not pay for the well, but Southern Exploration did not drill either well and does not plan to drill those wells.

On cross examination, Mr. Weatherbee was asked if the State of Texas SEI Well No. 23 couldn't have been moved farther east, away from the common lease line. Mr. Weatherbee answered that the well could have been moved farther east and still drained the top of the structure, but that at the time of application, the State of Texas SEI Well No. 23 was placed to best access the Palo Pinto and Ellenburger Fields, in addition to the Caddo. Mr. Weatherbee noted that the high in the Caddo is only about five acres in extent, which would not be a lot of reserves, and certainly not enough to support two wells. He also stated that the seismic data, in his opinion, does not support the inference that there is an attic structure holding attic oil.

Southern Exploration closed by arguing that the Waggoner Estate has based its case on the prevention of waste, but that the subject Caddo Field will be watered out quickly with two wells only 279 feet apart drawing from a productive interval that already produces 300 to 400 barrels of saltwater per day while producing only 25 to 30 barrels of oil per day. The Waggoner Estate's proposed well will actually cause waste rather than prevent it. The seismic data indicates the top of the structure is flat, which does not support the Waggoner Estate's theory that there is attic oil in place that can only be recovered by the proposed Waggoner Estate Well No. J-1. Southern Exploration believes the Waggoner Estate application should be denied and the proposed well drilled at a regular location to prevent the immediate coning of saltwater which will destroy both wells.

ALJ's and Technical Examiner's Opinion

An applicant seeking an exception to Rule 37 based on waste must demonstrate that: (1) unusual conditions, different from conditions in adjacent parts of the field, exist on the tract for which the exception is sought; and (2) as a result of these conditions, a substantial volume of hydrocarbons will be recovered by the well for which a permit is sought that would not be recovered by any existing well or by additional wells drilled at regular locations. *Hawkins v. Texas Co.*, 209 S.W.2d 338, 343-44 (Tex. 1948).

The seismic interpretation offered by the Waggoner Estate demonstrates, through the use of color gradation in its isopach contour map, that their proposed Well No. J-1 will be structurally higher than the existing State of Texas SEI Well No. 23. The structural advantage may be slight, in the range of 5 to 6 feet.

Southern Exploration asserts that the Waggoner Estate's estimated top of the Caddo Formation at the location of the proposed Waggoner Estate Well No. J-1 (at a subsea depth of -2835 feet) is erroneous. The Waggoner Estate's interpretation yields a six foot structural advantage for its Well No.

J-1 over the State of Texas SEI Well No. 23. Southern Exploration asserts that the top of the Caddo Formation occurs at a depth of -2840, which yields an insignificant structural advantage of only one foot.

A contour line represents a locus of all points for which the contoured attribute values are equal. In this case, the -2840 contour line represents all points on the mapped surface that are at a depth of 2840 feet subsea. For a continuous mapped surface, a point that is not on a particular contour line is either at a shallower or deeper subsea depth. It may be possible, as Southern Exploration contends, that all points within closed contour line are at the same depth as the contour line. This, however, is unlikely in the present instance because the evidence offered by both parties indicates gentle undulations in the top of the Caddo Formation in the area, with local highs and lows evident.

The evidence in the record indicates that the top of the Caddo Formation in this area is smooth and continuous. That is, as the top of the Caddo Formation increases in height and crosses over the -2840 foot depth, the mapped surface continues to some shallower depth, but not high enough to cause the interpretation of a shallower contour interval (-2830). The ALJ and Technical Examiner conclude that the Waggoner Estate's interpretation (-2835 feet) is reasonable and supported by both parties evidence.

Exhibit No. 5 delineates a contour at -2840 surrounding the site of the proposed Well No. J-1, with the natural inference that a well placed in the approximate center of that contour gains a few feet of structural advantage over a well outside the contour. The State of Texas SEI Well No. 23 is shown at a depth of -2841, or one foot below the -2840 contour line. Although the structural advantage of the proposed Waggoner Estate Well No. J-1 may be slight, it will recover hydrocarbons that cannot be recovered by the State of Texas SEI Well No. 23.

The Waggoner Estate Exhibit No. 6, with its Seismic Time Map, shows that the State of Texas SEI Well No. 23 and the proposed Well No. J-1 are at almost the same depth, although there is a slightly higher bump in elevation for the proposed Well No. J-1. Arbitrary Line 1 on Waggoner Estate Exhibit No. 6 supports the interpretation of structural highs on Waggoner Estate Exhibit No. 5.

The isopach structure map demonstrates that the productivity of wells is determined by their location on the structural highs which are scattered through the area. These localized structural highs are an unusual condition different from conditions in adjacent parts of the field. The Waggoner Estate estimates that drilling the high point on structure will result in the recovery of 60,000 to 70,000 barrels of oil, a substantial volume of hydrocarbons.

Southern Exploration has argued that the Waggoner Estate is not acting in the best interests of the State of Texas, as required by the Relinquishment Act, by attempting to permit its applied-for Well No. J-1. The Waggoner Estate has previously acted as the leasing agent for the State of Texas by leasing to Southern Exploration the lands on which the State of Texas SEI Well No. 23 is located. As a result, the Waggoner Estate receives one half of the royalty due on production from the State of Texas SEI Well No. 23.

As written, the Relinquishment Act³ appeared to relinquish 15/16 of the mineral estate to the owner of School and Asylum Lands sold by the State. In *Greene v. Robison*, 8 S.W.2d 655 (Tex. 1928), the court determined that the entirety of the mineral estate remained vested in the State of Texas and the surface owner, or “owner of the soil”, was designated the agent of the State in leasing the minerals. In return for acting as the agent of the State, the “owner of the soil” was entitled to one half of the delay rentals, bonus and royalty negotiated on behalf of the State. Under its leasing guidelines⁴ published by the Texas General Land Office, the “owners of the soil” are considered fiduciaries of the State:

The owners of the soil owe a fiduciary duty to the State. They must act in the best interest of the State and must fully disclose any fact’s affecting the State’s interest. When the interests of the owner of the soil conflict with those of the State, the owner of the soil is obligated to put the State’s interest before his or her own personal interest.

The Waggoner Estate acted properly as the agent of the State in leasing the Relinquishment Act tract now described as the O.A. Lindsey Survey, Tract 3-A, A-2081 to Southern Exploration, Inc. in 2012. The ALJ has found no caselaw indicating that the Waggoner Estate is prohibited from subsequently leasing its own lands, owned in fee simple, adjacent to a Relinquishment Act tract in which the Waggoner Estate is the owner of the soil. The duty of the owner of the soil to act in the best interest of the State appear to be confined to the interior bounds of the Relinquishment Act tract.

The ALJ and Technical Examiner recommend that the application of the Waggoner Estate for a Statewide Rule 37 exception for its Waggoner Estate Minnas Creek J Lease, Well No.1 in the Billie Jo (Caddo) Field, Wilbarger County, Texas be approved based on prevention of waste.

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 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. In the present case, Rule 37 Case No. 0298989, the W.T. Waggoner Estate (“Waggoner Estate” or “Applicant”), seeks an exception to Statewide Rule 37 for the Waggoner Minnas Creek J Lease, Well No. J-1, Billie Jo (Caddo) Field, Wilbarger County, Texas.
3. The Field Rules for the Billie Jo (Caddo) Field require 330 foot leaseline spacing and 933 feet

³ See Vernon’s Ann. Civ. St. art. 5367 et seq., now codified under V.T.C.A., Tex. Nat. Res. Code §52.171 et seq.

⁴ Texas General Land Office Guidelines for Leasing Relinquishment Act Lands (revised 9/2015).

between wells on 20-acre units. These are the County Regular Rules at the depth from 2,001 to 3,000 feet in Wilbarger County.

4. The 20 acres designated as the unit for the Waggoner Minnas Creek J Lease are fee land owned by the W.T. Waggoner Estate, adjacent to and west of the O.A. Lindsey Survey, A-2081, a Relinquishment Act tract.
 - a. The W.T. Waggoner Estate is the owner of the O.A. Lindsey Survey, A-2081, and is thus the “owner of the soil” of that tract, with the duty to act as the State’s agent in the leasing of the minerals of that tract and an obligation to put the interests of the State ahead of its own when acting as leasing agent.
 - b. The W.T. Waggoner Estate fulfilled its duty as “owner of the soil” and leased the O.A. Lindsey Survey Survey, Tract 3-A, A-2081 to Southern Exploration in 2012.
 - c. The proposed Waggoner Minnas Creek J Lease, Well No. J-1 is located 150 feet west of the west boundary of the O.A. Lindsey Survey, A-2081, and is within a Statewide Rule 37 leaseline spacing distance of the O.A. Lindsey Survey, thus requiring an internal leaseline spacing exception.
5. Southern Exploration, Inc. (“Southern Exploration”) protested the Waggoner Estate’s application for the Waggoner Minnas Creek J Lease, Well No. J-1.
6. The proposed location of the Waggoner Minnas Creek J Lease, Well No. J-1 is 150 feet from the east line of the lease and 505 feet from the north line of the lease, and 1075 feet from the south line of the survey and 150 feet from the east line of the survey, being the O.A. Lindsey Survey, A-2081.
7. The Billie Jo (Caddo) Field is a strong water drive field. Hydrocarbons recoveries are greatest at structural highs within the field.
8. The Waggoner Estate has access to the 3-D seismic shot by the various operators that have leased Waggoner Ranch acreage. The 3-D seismic indicates a structural high in the Billie Jo (Caddo) Field at the location of the proposed Waggoner Minnas Creek J Lease, Well No. J-1.
 - a. Waggoner Estate Exhibit 5 demonstrates the proposed location of the Waggoner Minnas Creek J Lease, Well No. J-1 is within a contour line of -2840 feet, near the center of the broad area circumscribed by the -2840 contour, supporting an inference that there is additional elevation within the contour line. The exhibit places the bottom of the proposed Waggoner Minnas Creek J Lease, Well No. J-1 at -2835.
 - b. Waggoner Estate Exhibit 5 demonstrates the State of Texas SEI Well No. 23 is at a depth of -2841, or one foot below the -2840 contour line.

- c. The Waggoner Minnas Creek J Lease, Well No. J-1 will have a six foot structural advantage over the State of Texas SEI Well No. 23.
 - d. The Waggoner Minnas Creek J Lease, Well No. J-1 will recover hydrocarbons that cannot be recovered by the State of Texas SEI Well No. 23.
9. The Waggoner Minnas Creek J Lease, Well No. J-1 will recover 60,000 to 70,000 barrels of oil, a substantial quantity of hydrocarbons that cannot be recovered by any other well in the field.

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. Approval of a Rule 37 exception for the proposed location of the Waggoner Minnas Creek J Lease, Well No. J-1, as proposed by the Waggoner Estate, is necessary to prevent waste and the ultimate loss of hydrocarbons.
- 4. The W.T. Waggoner Estate has met its burden of proof and satisfied the requirements of Railroad Commission Statewide Rule 37 in the instant Rule 37 case.

RECOMMENDATION

The ALJ and Technical Examiner recommend that the application of the W.T. Waggoner Estate for a Statewide Rule 37 exception for the proposed location of the Waggoner Minnas Creek J Lease, Well No. J-1, Well No. 1, in the Billie Jo (Caddo) Field, Wilbarger County, be granted as necessary to prevent waste.

Respectfully submitted,



Marshall Enquist
ALJ



Paul Dubois
Technical Examiner