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RAILROAD COMMISSION OF TEXAS OFFICE OF GENERAL COUNSEL

RULE 37 CASE NO. 0219416 DISTRICT 10

APPLICATION OF VASTAR RESOURCES FOR AN EXCEPTION TO STATEWIDE RULES 37 AND 38 TO RECOMPLETE WELL NO. A190, ON THE HEFLEY LEASE IN THE BUFFALO WALLOW (MORROW) FIELD, HEMPHILL COUNTY, TEXAS

APPEARANCES:

FOR APPLICANT:

Mike McElroy - Attorney William D. Siddens - Engineer Philip N. Trumbly - Geologist

FOR PROTESTANTS:

Flip Whitworth - Attorney
Rick Johnston - Consulting Petroleum Engineer
W. N. McKinney, Jr. - Consulting Geologist
David Johnson - Land Manager
Carl Lang

APPLICANT:

Vantar Resources, Inc.

PROTESTANTS:

Zephyr Lone Star Operating Company, L.L.C.

PROPOSAL FOR DECISION

PROCEDURAL HISTORY

APPLICATION FILED: NOTICE OF HEARING: HEARD BY:

HEARING DATE: TRANSCRIPT DATE: PFD CIRCULATION DATE: May 15, 1998
May 22, 1998
Daniel W. Ortman - Hearings Examiner
Margaret Allem - Technical Examiner
July 23 and 24, 1998
August 4 and 5, 1998
December 7, 1998

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STATEMENT OF THE CASE

Vastar Resources, Inc. ("Vastar" or "applicant") seeks an exception to Statewide Rules 37 and 38 to recomplete Well No. A190 (the "subject well") on Section 90 of the Herley Lease in the Buffalo Wallow (Morrow) Field. Well No. A190 was drilled in 1968 and produces from the Buffalo Wallow (Hunton 19600) Field. Well No. A190 is located 1134 feet from the nearest lease-line and approximately 738 feet from Vastar's second well on Section 90, Well No. 2-90. Well No. 2-90 was drilled in 1972 and produces from sandstones in the upper Morrow section and is carried in the Buffalo Wallow (Morrow) Field. The Buffalo Wallow (Morrow) Field requires a minimum spacing of 1867 feet to the nearest lease-line and 3735 feet between wells on 640 acres. The Buffalo Wallow (Morrow) Field was originally recognized by the Commission in 1969 with a correlative interval from the top of the uppermost producing sand in the Morrow to the base of the Morrow Formation.

Section 90 of the Hefley Lease (the "subject tract" or the "subject lease") is composed of 640 acres as outlined on the plat attached to the Form W-1 (Application for Permit to Drill, Deepen, Plug Back, or Re-Enter) submitted by Vastar (see Attachment A). The subject tract is approximately square and locations regular to lease-lines are available.

Vastar's application is protested by Zephyr Lone Star Operating Co., L.L.C. ("Zephyr"). Zephyr operates wells on offset tracts to the south and west. On July 7, 1998 Zephyr filed an application to amend the field rules to exclude the sands in the Lower Morrow section from the Buffalo Wallow (Morrow) Field. Zephyr requested consolidation of the field rule hearing with the hearing on Vastar's Rule 37 and 38 applications. As a result of a prehearing conference, Vastar agreed not to offer evidence of Vastar's fair share in the Lower Morrow sand and the parties agreed to proceed with separate hearings.

POSITIONS OF THE PARTIES

Applicant Vastar's position:

Vastar stratigraphic cross-section demonstrates that the Buffalo Wallow (Morrow) Field is composed of potentially productive sandstones in the Upper and the Lower Morrow. Vastar contends that the Upper Morrow sand contains two sandstones, the Bradstreet and the Puryear, which are separate reservoirs. Vastar believes that its Well No. A190 produces from the Puryear Sand only.

Vastar argued that it is necessary to plug back Well No. A190 from the deeper Buffalo Wallow (Hunton 19600) Field to recover its fair share of reserves underlying the subject tract in the Buffalo Wallow (Morrow) Field. Vastar believes the Lower Morrow sand is a salvage zone only. If Vastar's application is granted Vastar plans to plug back Well No. A190 and test the Lower Morrow sand. If the Lower Morrow sand is not commercial, Vastar plans to plug back the well again and produce from a sand in the Upper Morrow.

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Vastar compared the economics of recompleting its Well No. A190 with the economics of drilling a new well and concludes that drilling a new well is not economic. Vastar argues it will suffer economic waste if its applications are not granted.

In addition, Vastar argues that the requested exceptions are necessary to prevent waste in the Bradstreet Sand of the Upper Morrow and in the Lower Morrow sand if its application is not granted.

Protestant Zephyr's position:

Zephyr agrees that all the sands in the Morrow Formation including the Bradstreet and the Puryear sandstones are within the designated interval of the Buffalo Wallow (Morrow) Field However, Zephyr argues that Vastar's Well No. 2-90 may already be producing from both the Bradstreet sandstone and the Puryear sandstone. Hence, Zephyr argues, exceptions to Rules 37/38 are not necessary to allow Vastar an opportunity to recover its fair share.

Zephyr argues that Vastar's Well No. 2-90 has afforded Vastar a reasonable opportunity to recover the original reserves underlying the subject tract and Vastar has already recovered more than the original gas in place. Zephyr argues that recompleting Well No. A190 in the Bradstreet sandstone will allow Vastar to confiscate reserves currently existing under Zephyr's offisetting tracts. Zephyr also argues that a location regular to lease-lines is available on the subject tract from which Vastar may reasonably expect to recover the same amount, or more, of reserves currently underlying the subject tract. Zephyr argues that drilling a well at a location regular to lease-lines would be economic and therefore recompleting Well No. A190 will result in a well producing at a location which is not reasonable.

Zephyr has no objection to Vastar's plan to recomplete Well No. A190 in sandstones in the Lower Morrow but argues that Vastar has alternatives which would not require exceptions to Rules 37 and 38. Vastar may recomplete Well No. A190 to add perforations in the Lower Morrow by filing a Form W-1 (Application for Permit to Drill, Deepen, Plug Back, or Re-Enter) designating the target field as the Buffalo Wallow, N (Morrow Lo) Field. If Vastar is correct that the Bradstreet sand has never been perforated in Section 90 then Vastar may rework Well No. 2-90 to add perforations in the Bradstreet. Zephyr argues that Vastar will not suffer confiscation or waste if the instant application is denied.

DISCUSSION OF THE EVIDENCE

Vastar's evidence:

Vastar offered a structure map of the Buffalo Wallow (Morrow) Field and a stratigraphic cross-section of its well logs to demonstrate that production from the Upper Morrow is from two sandstones, the Brackstreet and the Puryear. The Brackstreet and Puryear sandstones are separated by

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at least 100 feet of shale in most places and are considered separate reservoirs.

The Morrow is predominantly a shale formation but it is punctuated with channel sands. The Bradstreet and Puryear sandstones are highly lenticular and cross-sections show the sands pinchingout in various directions. Both sandstones are amalgamations of channel sands with multiple channels that were incised into previous channels. The Puryear thins to the morth and thackens to the south. Vastar provided one isopach for the Puryear and one for the Bradstreet to throw the reservoir volume used in calculating its fair share. The depositional environment was less sand-rich during Bradstreet time than in Puryear time and the channel geometry is simpler.

According to Vastar, Well No. 2-90 was successfully completed in two separate lenses of the Puryear sandstone; from 13,403 to 13,418 feet and from 13,462 to 13,470 feet. Well 2-90 has produced 11.4 Bcf but production has declined to 121 Mcf/d. When Unocal drilled Well No. 2-90 it lost 500 barrels of mud into what the drilling reports indicate to be the Bradstreet Sand. The well was sidetracked but Unocal was again unsuccessful in completing the well in the Bradstreet. Unocal ran a slotted liner in the sidetrack but it was plugged with dry barite. Several attempts were made to bail, jet or flush the barite but Unocal was not able to log the Bradstreet sandstone. After these unsuccessful attempts to complete in the Bradstreet, Unocal came up the hole and perforated the Puryear. Vastar believes that the barite the sidetrack encountered was the remainder after the 500 barrels of lost mud which had dehydrated and that the Bradstreet sandstone is permanently damaged in Well No. 2-90.

Vastar wants to recomplete Well No. A190 to perforate the Bradstreet sandstone which it contends has never been produced by any well in Section 90. Vastar contends that unless it can perforate Well No. A190 in the Bradstreet sandstone it does not have a reasonable opportunity to recover its fair share of the remaining reserves. Vastar believes that the technical problems which were encountered when Well No. 2-90 was originally drilled, would still prevent the well from being recompleted in the Bradstreet sandstone.

Waste of known reserves will occur, according to Vastar, if it is not allowed to recomplete Well No. A190. There is no well now on Section 90 that is producing from or can be recompleted in the Bradstreet sandstone of the Buffalo Wallow (Morrow) Field, according to Vastar, except for the subject well. Some of the reserves from underneath Section 90 can be drained by wells on an offsetting tract but not all of the reserves can be recovered by such wells because the nearest Bradstreet well is over a mile from parts of Section 90. The amount of the remaining reserved that would be unrecovered and thus wasted in the Bradstreet (absent this application) are far from able to support a new well.

Only one well has previously been completed in the Lower Morrow section of the Buffalo Wallow (Morrow) Field. This well was located about four miles from the subject area, was lower on structure than Section 90, but despite completion problems, produced 0.1 BCF during the early 1970's. When Well No. A190 was drilled, mading shows indicated gas was present in the Lower Morrow sand. According to Vastar, the Lower Morrow sand pinches out just to the east of Well No.

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A190 and thus unless Well No. A190 is recompleted to the Lower Morrow sands any gas in the Lower Morrow sand of Section 90 would be unrecovered. Zephyr has no objection to Vastar's recompleting Well No. A190 to the Lower Morrow sand only, but noted that there is a separate Lower Morrow field, the Buffalo Wallow N (Morrow Lo) Field, only 2 ½ miles from Well No. A190.

All the wells currently in the Buffalo Wallow (Morrow) Field are completed only in the Puryear sandstones and/or the Bradstreet sandstone. Vastar agreed that both are part of the Buffalo Wallow (Morrow) Field and to prove confiscation it must show that the currently recoverable reserves in Section 90 (from both sandstones) is greater than the expected ultimate recovery of its existing well. Vastar believes that there is no well completed in the Bradstreet sandstone in Section 90 and that Zephyr has no well completed in the Puryear sandstone on Section 89. Therefore, Vastar based on part of its confiscation case on adding the reserves in both sandstones, though it admitted that assuming no net drainage between these two sections and any other wells is probably incorrect. Vastar made a separate argument based on original recoverable reserves in both sandstones, and another case based on the current recoverable reserves in the Bradstreet alone. (Vastar estimates that its Well No. 2-90 will recover an additional 1.5 Bef from the Puryear sandstone and assumes that this equals the current Puryear reserves underneath Section 90.)

Vastar's isopach maps reflect 7712 acre-fect of original reservoir in the Bradstreet and 6251 acre-feet of original reservoir in the Puryear Sand. Vastar estimates that 15.3 Bcf of recoverable reserves were originally in place in the sandstones of the Upper Morrow sand, 9.4 Bcf in the Bradstreet and 5.9 Bcf in the Puryear. The existing well is ultimately expected to recover 12.9 Bcf. Using the original recoverable gas-in-place numbers, Vastar believes that 2.4 Bcf of its original fair share (in both sandstones of the Upper Morrow) will be unrecovered by Vastar's existing well.

Vastar's estimate of <u>current</u> reserves under Section 90 is 2.9 Bcf in the Bradstreet, and 1.5 Bcf in the Puryear. Obviously, the existing well cannot recovery any of the <u>current</u> reserves in the Bradstreet as it is currently perforated.

Vastar estimates that 3.1 Bcf of recoverable reserves are necessary to risk drilling a well on Section 90. Vastar contends the cost to recomplete Well No. A190 is approximately \$250,000 and the cost to drill a new well is \$1,900,000. Vastar argues that it is not economic to drill a well at a location regular to lease-lines. Thus, Vastar argues, drilling a new well on Section 90 to perforate in the Bradstreet is not a prudent investment. Vastar argues that if it is not granted exceptions to Rule 37 and Rule 38 to recomplete Well No. A190, it will not be able to recover its fair share of the remaining gas in the Upper Morrow because it will not be able to do so economically.

Zephyr's evidence:

According to Zephyr, the sands were deposited by submarine flows from the Amarillo Mountains just to the south. The sands are not fluvial because they contain thick, chert-pebble conglomerates. The Morrow section thins as it approaches Section 90, which is located on the

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highest part of the structure. Zephyr's isopach maps show similar sand channels in the Bradstreet and Puryear to those mapped by Vastar, but the productive sands are much thinner than those interpreted by Vastar. Zephyr's volumetric calculations also used an 8% porosity cutoff in comparison to the 6% used by Vastar, resulting in Zephyr's conclusion, based on its own geologic maps, that there was much less gas originally underneath Section 90 than Vastar believed.

Zephyr also calculated the volume of gas originally present under Section 90 using Vastar's geologic maps. When Zephyr applied its volumetric parameters, including an average porosity of 13% instead of the 11% used by Vastar and 92.5% recovery factor, to the generous 14,332 acre-feet determined by Vastar's geologist, Zephyr calculated 6.2 Bcf remaining in the Bradstreet and 1.3 Bcf remaining in the Puryear. Zephyr's calculation of 7.5 Bcf of remaining gas is more than a sufficient volume to justify drilling a new well.

Zephyr indicated an area in which Vastar could drill a new well and encounter thicker pay about 2400 feet to the east of Well No. A190. If Vastar shut-in Well No. 2-90, the estimated production from this location would be 1 MMcf/d from the Puryear and 1 MMcf/d from the Bradstreet which would be economic. Zephyr also disputes Vastar's estimate of the cout of a new well because Sonat recently completed a \$1,100,000 well in the nearby Allison Parks (Morrow Up) Field at 14,900 feet. Zephyr concludes that drilling a new well to the east of Well No. A190 is a reasonable investment. According to Zephyr, such a well could ultimately recover much of the 7.5 Bcf of remaining gas from Section 90.

However, Zephyr believes that it may not be necessary to recomplete or drill any new well in Section 90 for Vastar to be able to produce its fair share from the Upper Morrow sand. Zephyr's engineer testified that if Vastar is correct and the Bradstreet is not producing in Section 90, then Well No. 2-90 could be reworked and Bradstreet perforations added to those now present in that well. Technology, particularly in coiled tubing, has improved significantly since Well No. 2-90 was drilled and Zephyr testified that for only about \$25,000 it might be possible to Vastar to begin producing the remaining reserves Vastar believes to be present in the Bradstreet.

EXAMINERS' OPINION

Unocal originally drilled Well No. 2-90 in 1972. Unocal clearly believed that the Bradstreet was present as a separate sandstone. After two unsuccessful attempts to complete Well No. 2-90 in the Bradstreet, Unocal completed the well in the Puryear sandstone. Well No. 2-90, now operated by Vastar, produces from two sands which are separate lenses in the Puryear but not from the deeper Bradstreet (see Attachment B).

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The Commission may grant exceptions to Rules 37 and 38 to prevent waste (or to prevent confiscation). Vastar's witness testified that reserves would be wasted if Well No. A190 were not recompleted in the Lower Morrow. Vastar's witness testified that 1.5 Bcf of gas would be wasted in the Upper Morrow sand if Vastar's application is not approved.

An applicant for an exception to Rules 37 and 38 based on waste must show three elements:

- 1. That unusual conditions, different from conditions in adjacent parts of the field, exist under the tract for which the exception is sought;
- 2. That, as a result of the unusual conditions, hydrocarbons will be recovered by the well for which an exception is sought that would not be recovered by any existing well or by additional wells drilled at a regular location; and
- That the volume of hydrocarbons which will be recovered if the exception is granted is substantial.

Vastar's witness's testimony establishes that a well at a location regular to lease-lines could recover the existing reserves underlying the subject tract in the Upper Morrow. Vastar adduced no proof of unusual conditions on or underlying the subject tract (except for the existing wellbore) in the Upper Morrow sand. Vastar's witness admitted that no unusual geologic conditions underlying the subject tract which would prevent existing or future wells from recovering hydrocarbons underlying the subject tract:

Question: [D]o you have an opinion whether there is any geologic impediment that would prevent the Zephyr well in Section 89 form draining the Bradstreet reservoir beneath Section 90?

Answer: No, there is no geologic impediment.

Vastar has not met its burden of proof of prevention of waste for the Upper Morrow sand of the Buffalo Wallow (Morrow) Field.

Vastar argues that the existence of Well No. A190 is an unusual condition sufficient to support its application for an exceptions to Rules 37 and 38 to recomplete Weii No. A190 in the Lower Morrow sand to prevent waste. An existing wellbore may be one factor to consider when in a Rule 37/38 proceeding and is further considered infra. But the existing wellbore alone is not an unusual geologic condition underlying the subject tract which will justify granting an exception to Rules 37/38 based on waste. The existing wellbore will not prevent existing or future wells on Section 90, or offsetting tracts, from recovering hydrocarbors from the Upper (or Lower) Morrow sands. Even if Vastar had shown that a substantial volume of hydrocarbors will be recovered if the

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requested exceptions are granted, Vastar did not demonstrate that these reserves will go unrecovered if the exceptions are denied.

Granting an exception to Rules 37/38 is not necessary to prevent waste of hydrocarbons in the Lower Morrow nor in the Upper Morrow and therefore is not necessary to prevent waste in the Buffalo Wallow (Morrow) Field.

Confiscation:

To obtain an exception to Statewide Rules 37 and 38 to prevent confiscation, applicant must show, absent the exception, it will be denied a reasonable opportunity to recover its fair share, or its equivalent in kind. Denial of Vastar's application to recomplete Well No. A 190 is not confiscation if drilling a well at a location regular to lease-lines (or a less irregular location) will provide Vastar a reasonable opportunity to recover hydrocarbons remaining in place under the subject tract. Denial of Vastar's application to recomplete Well No. A 190 is not confiscation if Vastar's existing well provides it a reasonable opportunity to recover its fair share of reserves remaining under the subject lease.

Vastar argued that an exception is necessary to allow recovery of its fair share. Vastar's witness estimated that the original gas recoverable from the Puryear sand is 5.9 Bef and from the Bradstreet sand is 9.4 Bef. Vastar estimates that its Well No. 2-90 will recover 12.9 Bef leaving 2.4 Bef of unrecovered reserves underlying the subject tract. Vastar's witness stated that wome gas would be drained by existing wells and admitted that his estimates of Vastar's fair share of gas underlying the subject tract is based on the original, not current, gas in place.

Question: [T]hat is current recoverable gas in place, inn't it, or original?

Answer: That is original gas in place.

The definition used by Vastar's witness is, again, not appropriate to a Rule 37/38 proceeding based on confiscation. Vastar's fair share is based on the current, not original, gas in place. Vastar did not show that the requested exception is necessary to allow Vastar a reasonable opportunity to recover its fair share of current recoverable reserves. Drilling a well at a location regular to lease lines will allow Vastar a reasonable opportunity to recover its fair share.

Vastar argues alternatively, that 2.9 Bcf of current gas reserves will be confiscated from the Bradstreet sandstone if its exception is not granted. But Vastar's witness admitted, on questioning from Zephyr's counsel, that recovery factor used by Zephyr (92%) is more reasonable than the value used by Vastar (90%).

Zephyr's isopach maps reflect similar shapes to Vastar's maps but Zephyr estimates the current recoverable reserves underlying the subject tract using reasonable values for porosity and recovery factor. Based on Vastar's geologic maps, Zephyr estimates the recoverable reserves under

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Section 90 to be 7.5 Bcf.

Vastar argues that it is not economic to drill a new well on Section 90. Vastar testified that 3.1 Bcf of estimated reserves are necessary to risk drilling a new well on Section 90 and that Vastar would not drill a well for 2.4 Bcf which it believes will be unrecovered from the Bradstreet and Puryear by its existing Well No. 2-90. But drilling a new well may recover far more reserves than 2.4 Bcf. A well drilled at the location suggested by Zephyr is reasonably expected to encounter the same, or more, net pay than Well No. 2-90. A well drilled at a location regular to lease-lines would reasonably be expected to recover reserves which would otherwise be recovered by Well No. 2-90. Recompleting Well No. A190 would be more profitable than drilling a new well. But profitability is not, and never has been, the standard to determine if a location is a reasonable location. Vastar failed to show that a regular location is not a reasonable location.

Zephyr suggests that if another well is needed, a location regular to lease-lines exists at which a well may be drilled and recover 7.5 Bcf.. Zephyr argues that the reserves recoverable by a well at an alternate location regular to lease-lines exceeds the amount of recoverable reserves (3.1 Bcf). Vastar estimates is necessary to justify drilling a new well. Zephyr's estimate of reserves shows that a well at its proposed location will reasonably be expected to recover the same amount of reverves as the proposed recompletion and drain less reserves from offsetting tracts. A location regular to lease-lines is a reasonable location and drilling a well at a location regular to lease-lines will allow Vastar a reasonable opportunity to recover its fair share. Granting Vastar's applications for an exception to Rule 37 is not necessary to prevent confiscation. Granting an exception to Rule 38 may be necessary to prevent confiscation but the proposed location is not a reasonable location.

Economic Waste and Economic Confiscation:

The Supreme Court has upheld an exception to Rule 37 which will allow a well at an irregular location to be recompleted to recover hydrocarbons which would otherwise be wasted. Exxon Corporation v. Railroad Commission of Texas, 571 S.W.2d 497, 500 (Tex. 1978).

Vastar argues that denying its application will cause it economic waste but cites no authority, other than Exxon in support of its proposition. Vastar argues that a prudent operator would not drill a well if the operator has the option of recompleting Well No. A190. But a prudent operator would seek to maximize profits and maximum profitability is not, and never has been, sufficient to justify granting an exception to Rule 37 or Rule 38.

Exxon does not explicitly recognize Vastar's theory of economic waste. Under Exxon, waste or confiscation are elements of Vastar's burden of proof, but Vastar's evidence, discussed infra, does not demonstrate that hydrocarbons will be wasted or confiscated if its application is denied. Exxon suggests that the Commission may properly consider economic necessity as the basis for granting an exception to Rules 37 and 38. Id at 502. But granting Vastar's application is not economically necessary. Reworking Well No. 2-90 to add perforations in the Bradstreet sand is an

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alternative reasonably expected to allow Vastar to recover its fair share from the subject tract. Recompleting Well No. A190 in the Buffalo Wallow, N (Morrow Lo) Field under Statewide Field Roles will allow it to recover existing reserves in the Lower Morrow sand. Applicant suffers no confiscation if an alternative exists which would allow it a reasonable opportunity to recover its fair share. Without proof of waste, or confiscation, Vastar's application must be denied. Deaping Vastar's application may decrease the profitability of Vastar's investment in the subject tract but denying Vastar's application will not result in confiscation, or waste, of hydrocarbons.

CONCLUSION:

Vastar may recomplete Well No. A190 in the Lower Morrow sand by filing a completed Form W-1 (Application to Drill, Deepen, Plug Back or Re-Enter) with the Commission identifying the target field as the Buffalo Wallow, N (Morrow Lo) Field. In the alternative, Vastar may recomplete Well No. 2-90 in the appearmost Bradstreet sand by filing a new completion report with the Commission. The applied-for exceptions to Rules 37 and Rule 38 to recomplete Well No. A190 are not necessary to prevent confiscation or prevent waste of hydrocarbons underlying the subject tract.

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

FINDINGS OF FACT

- At least 10 days notice of this hearing was given to the designated operator, all lessees of record for tracts that have a designated operator, and all owners of unleased mineral interests for each tract adjacent to the Hefley Lease, Section 90 ("subject lease" and "subject tract") and each tract nearer to the proposed well location than the prescribed minimum distance.
- 2. The application for exceptions to Statewide Rules 37 and 38 were filed with the Commission by Vastar Resources, Inc. ("Vastar" or "applicant") on Form W-1 (Application to Drill. Deepen, Plug Back or Re-Enter) on May 15, 1998.
- 3. Vastar seeks exceptions to Statewide Rules 37 and 38 to recomplete Well No. A190 (the "subject well") on the Hefley Lease, (the "subject lease") in the Buffalo Wallow (Morrow) Field. The Buffalo Wallow (Morrow) Field requires spacing of 1867 feet to the nearest lease line and 3735 feet between wells on 640 acres. Well No. A190 is located 1965 feet FSL and 1134 feet FWL of the survey.
- 4. Vastar operates two producing wells on the subject lease, Wells No. A190 and 2-90. Well No. A190 currently was completed in the Buffalo Wallow (Hunton 19600) Field in 1963. The surface location of Well No. A190 is 738 feet from Well No. 2-90.

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- 5. Locations regular to lease-lines exist on the subject tract. A well drilled at a location regular to lease-lines may reasonably be expected to recover the same amount of reserves, from the Upper Morrow, as recompleting Well No. A190 in the Upper Morrow. A location regular to lease-lines is a reasonable location.
- 6. No unusual geologic conditions underlie the subject tract.

CONCLUSIONS OF LAW

- Proper notice of hearing was timely issued by the Railroad Commission to the appropriate persons legally entitled to notice.
- All things necessary to the Commission attaining jurisdiction over the subject matter and the parties in this hearing have been performed.
- 3(a). Well No. A190 is not an unusual condition which is sufficient to support an exception to Rules 37 or 38 based on waste.
- 3(b). Approval of a permit to recomplete Well No. A190 into the Berlialo Wallow (Morrow) Field is not necessary to prevent waste of hydrocarbons underlying the subject tract.
- 4. Approval of a permit to recomplete Well No. A190 into the Buffalo Wallow (Morrow) Field is not necessary to prevent confiscation of hydrocarbons underlying the subject tract.
- 5. Approval of a permit to recomplete Well No. A190 into the Buffalo Wallow (Morrow) Field is not economically necessary to prevent waste or confiscation of hydrocarbons currently underlying the subject tract.

EXAMINER'S RECOMMENDATION

The examiners recommend that Vastar Resource Inc.'s application for exceptions to Statewide Rule 37 and Statewide Rule 38 to drill recomplete its existing well A 190 into the Buffalo Wallow (Morrow) Field be DENIED.

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Technical Examine

Respectfully submitted

King with

Hearings Examiner