



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0318277

APPLICATION OF CONOCOPHILLIPS COMPANY (172232) FOR EXCEPTIONS TO STATEWIDE RULE 40 AND THE FIELD RULES FOR THE ANDECTOR (WICHITA ALBANY) (02596820) FIELD AND THE GOLDSMITH (CLEAR FORK) (35652062) FIELD, AS TO THE ACREAGE WITHIN THE BOUNDARY OF ITS GOLDSMITH ANDECTOR (21193) UNIT, ANDREWS AND ECTOR COUNTIES, TEXAS

Heard by: John L. Moore – Technical Examiner
Jennifer N. Cook – Administrative Law Judge

Hearing date: April 29, 2019

Conference Date: August 6, 2019

Appearances:

Jamie Nielson, Attorney
Jennifer Dixon, Regulatory Supervisor
Patrick Lambert, Engineer
Riley Nelson, Land Supervisor – East Permian
Sam Widmer, Sr. Regulatory Coordinator
Nolan Wildermuth, Landman

Representing:

ConocoPhillips Company

Examiners' Report and Recommendation

Statement of the Case

ConocoPhillips Company ("ConocoPhillips") operates the Goldsmith Andector Unit ("GANDU") in Andrews and Ector Counties. ConocoPhillips has filed an application for authority to assign acreage to various wells within the boundary of its Goldsmith Andector Unit ("GANDU") to the Andector (Wichita Albany) Field while that same acreage is also assigned to wells in the Goldsmith (Clear Fork) Field. ConocoPhillips also requests approval of a procedure to allow duplicate assignment of acreage to wells completed in the Goldsmith (Clear Fork) or Andector (Wichita Albany) Fields within the boundary of the GANDU. The correlative intervals for the two fields partially overlap. This application arises from the Commission's Oil and Gas Division practice that because of the partial overlap of correlative intervals, the assignment of the same acreage to wells in the

Goldsmith (Clear Fork) and Andector (Wichita Albany) Fields would be an impermissible double assignment of acreage that could only be allowed by an exception to Statewide Rule 40 (16 TAC § 3.40) and governing field rules.

Notice was given to all operators in the Goldsmith (Clear Fork) and Andector (Wichita Albany) Fields. The application is not protested. The Technical Examiner and Administrative Law Judge (collectively, "Examiners") recommend approval of the application.

Applicable Legal Authority

Statewide Rule 40(d) provides:

...acreage assigned to a well for drilling and development, or for allocation of allowable, shall not be assigned to any other well or wells completed or projected to be completed in the same field; such duplicate assignment of acreage is not acceptable.¹

Field Rule 3 for the Goldsmith (Clear Fork) Field provides, "No double assignment of acreage will be accepted."²

Field Rule 3 for the Andector (Wichita Albany) Field provides, "No double assignment of acreage will be allowed."³

Discussion of the Evidence

ConocoPhillips operates the GANDU in Andrews and Ector Counties. The GANDU is an 8,760-acre unit that was formed May 1, 1967, and revised June 1, 1969 (see Final Order Attachment B).⁴ The GANDU does not extend to all depths. The unit interval covers the Clearfork formation with a thin sections of the overlying Glorietta and underlying Wichita Albany formations.⁵ The depth interval covered by the GANDU is from 5,300 feet to 6,500 feet as shown on the log of the Frank A Well No. 2 (API No. 135-03125).⁶ The GANDU has been developed as a secondary recovery operation with production from the Clearfork formation. The unit wells are assigned to the Goldsmith (Clear Fork) Field. Almost all of the wells in GANDU are vertical wells.⁷ The correlative interval for the Goldsmith (Clear Fork) Field is defined as the interval between 5,040 feet

¹ Exhibit 1. Statewide Rule 40(e) has an exception prohibition against duplicate assignment of acreage for unconventional fracture treated (UFT) fields. That exception is not applicable to this case.

² Exhibit 2

³ Exhibit 3

⁴ Exhibits 13 and 14

⁵ Exhibits 13 and 16

⁶ Exhibits 16 and 18

⁷ Exhibit 12

and 7,329 feet, as shown the log of the C.A. Goldsmith Well No. 952, Section 15, Block 44, T-1-S T&P Survey, Ector County.⁸

ConocoPhillips owns most of the deeper oil and gas leasehold that lies below the GANDU.⁹ ConocoPhillips is developing the Wichita Albany formation on its leasehold that is deeper and both adjacent to and below the GANDU. These wells have been assigned to the Andector (Wichita Albany) Field. The correlative interval for the Andector (Wichita Albany) Field is defined as the interval from 6,466 feet and 7,374 feet, as shown the log of the Westland Oil Development Corporation, Cowden, R.B. Estate "2", Well No. 1, (API No. 135-35286), T-1-N, T&P RR Company Survey, Ector County.¹⁰

Field Rules and GANDU Unit Designated Interval

| | Goldsmith (Clearfork) Field | GANDU Unit Agreement | Andector (Wichita Albany) Field |
|-----------------------------|--|--|--|
| Designated Interval | 5,040 – 7,329 ft. | 5,300 -6,500 ft. | 6,466 – 7,374 ft. |
| Productive Formation | Clearfork | Clearfork | Wichita Albany |
| Comments | Field Interval Consolidated in 2006, Reference Well for Field Rules 7 miles from GANDU Unit | Formed in 1967, Waterflood, Vertical Wells | Fracture Treated, Horizontal Wells |

On January 30, 2019, The Commission's compliance Staff advised ConocoPhillips by email that,¹¹

All wells within the Goldsmith Andector Unit that are currently in the Wichita Albany formation are creating a SWR 40 violation with the Goldsmith Andector Unit wells that are in the Goldsmith (Clear Fork) field. The Andector (Wichita Albany) field is the same correlative interval as the Goldsmith (Clear Fork) field. . . .

All wells within the lease outline of the Goldsmith Andector Unit that are producing in the Wichita Albany formation will need to be field transferred into the Goldsmith (Clear Fork) field and placed in the Goldsmith Andector Unit 08/21193.

⁸ Exhibits 2, 16 and 17

⁹ Exhibit 12

¹⁰ Exhibits 3, 16 and 19

¹¹ Exhibit 9; Commission staff later concurred with ConocoPhillips that Lease No. 08/00221 did not need to be transferred because it is in the Andector (Ellenburger) Field (testimony of Mr. Widmer).

In response, ConocoPhillips representatives met with Commission compliance Staff and determined that the issues raised in the January 30, 2019 Staff directive could be addressed by application for exceptions to Statewide Rule 40 and the governing field rules to allow duplicate assignment of acreage within the GANDU.

ConocoPhillips presented a list of current wells (completed, drilled, and being drilled) in the Andector (Wichita Albany) Field within the boundary of the GANDU which per Commission Staff practice require exceptions to Statewide Rule 40 and the field rules to allow duplicate assignment of acreage (see Final Order Attachment A).¹² From a regulatory standpoint, ConocoPhillips cannot assign all the listed wells to the Goldsmith (Clear Fork) Field and transfer them into the GANDU because the more restrictive Goldsmith (Clear Fork) Field lease-line spacing would cause multiple violations of the minimum lease-line spacing requirements.¹³ In addition, it is not possible from a land perspective to add Andector (Wichita Albany) Field wells into the GANDU.¹⁴ The GANDU ownership interests are different from the ownership in the ConocoPhillips leasehold that is being developed in the deeper Wichita Albany formation. There is no process by which the listed Andector (Wichita Albany) wells could be moved into the GANDU because the ownership in those wells are not part of the GANDU (which preceded the Wichita Albany development by decades). The GANDU would have to be dissolved and new unit agreement negotiated and agreed to by the current GANDU and deeper Wichita Albany interests. Such a process is not feasible given that the GANDU alone has over 1000 royalty owners and more than twenty (20) working interest owners.

The GANDU is a waterflood of the Clearfork Formation. The base of the unitized formation as defined by the unit agreement contains a few feet of the Wichita Albany Formation.¹⁵ The GANDU's Goldsmith (Clear Fork) Field wells produce from a separate stratigraphic interval from the Andector (Wichita Albany) Field wells that ConocoPhillips has drilled, and will drill, within the boundary of the GANDU. These two producing zones within the boundary of the GANDU are not in communication. The isolation between the producing zones is caused by an impermeable limestone barrier across the GANDU at least 50 feet thick.¹⁶ The effectiveness of the barrier is demonstrated by the absence of any production response in the GANDU's vertical wells completed in the Goldsmith (Clear Fork) Field when deeper horizontal wells are completed and stimulated in the Andector (Wichita Albany) Field within the boundary of the GANDU.¹⁷ ConocoPhillips Exhibit 20 is a graph of production history and fluid height above the pump (a proxy for pressure)

¹² Exhibit 10

¹³ Testimony of ConocoPhillips Senior Regulatory Coordinator Mr. Sam Widmer; Goldsmith (Clear Fork) field rules require all wells be located at least 330 feet from lease lines. Some Andector (Wichita Albany) horizontal wells have first or last take points less than that distance as allowed by the field rules. Such wells would not be compliant with the Goldsmith (Clear Fork) spacing rules.

¹⁴ Testimony of ConocoPhillips Landman Mr. Nolan Wildermuth

¹⁵ Exhibits 13, 16 and 18. The discussion of the geology, reservoir engineering, production plans and costs and revenue generated are based on the testimony of ConocoPhillips Reservoir Engineer Mr. Patrick Lambert.

¹⁶ Exhibit 19

¹⁷ Exhibit 20

versus time for a Clearfork vertical producing well within GANDU. If there was communication (i.e., a lack of impermeable barrier between the two producing zones) between the Clearfork and Wichita Albany producing zones, a predictable production and fluid level response would be seen.¹⁸ The graph shows that when a horizontal well located only 175 feet away was completed and stimulated within the Wichita Albany, there was no resulting change in production from the vertical well nor an increase in fluid height above the vertical well pump.

ConocoPhillips has invested about \$65 million in existing Andector (Wichita Albany) wells within the boundary of the GANDU (i.e., the wells listed on Exhibit 10). Unless the application is approved, those wells will not be able to be produced.¹⁹ The resulting daily loss in production would be about 3,500 barrels of oil equivalent per day ("BOE/day").

ConocoPhillips plans to drill 20 additional Wichita Albany wells in the next five years within the boundary of the GANDU at a cost of about \$100 million.

The recovery of Wichita Albany reserves available to the wells currently drilled (Exhibit 10) and those planned by ConocoPhillips will not occur unless the application is granted such that acreage may concurrently be assigned to wells in the Goldsmith (Clear Fork) and Andector (Wichita Albany) Fields. GANDU wells completed in the Clearfork formation cannot produce reserves from the Wichita Albany formation. Similarly, wells completed in the Wichita Albany formation within the boundary of the GANDU cannot produce reserves from the overlying Clearfork formation. Moreover, the reserves from either field within the boundary of the GANDU cannot be produced from a regular location on adjacent property.

ConocoPhillips proposes a process to address future wells to be completed in the Goldsmith (Clear Fork) Field or Andector (Wichita Albany) Field and to which an operator wants to assign acreage that has already been assigned to a well in the other field. The following proposed application process provides for exceptions to Statewide Rule 40 and the field rules for the Goldsmith (Clear Fork) Field and Andector (Wichita Albany) Field to allow duplicate assignment of acreage for drilling and development or allocation of allowable within the geographic boundary of the GANDU:

- (1) To apply for duplicate assignment of acreage within the geographic limits of the Goldsmith Andector Unit ("GANDU") as depicted on the plat that is Attachment B, the Operator shall file with its drilling permit application remarks or a written certification that duplicate assignment of acreage is required because an existing deed, lease, or other contract*

¹⁸ Mr. Lambert testified that the model showing the expected increase in vertical well production and fluid height above pump was derived from the company's experience in the Bakken Formation of North Dakota where communication between producing zones did exist and the completion and stimulation of horizontal wells in one zone increased the production and fluid level above pump in existing vertical wells.

¹⁹ Testimony of Mr. Widmer; Exhibit 9

confines the Operator to a distinct depth interval within the geographic limits of the GANDU.

- (2) Ten (10) business days prior to the filing of the drilling permit application, all drilling permit applicants shall provide written notice to each commission-designated operator of any well shown on the RRC map at the time of the drilling permit application that satisfies the following criteria: (1) the other operator's well is assigned to either the Goldsmith (Clear Fork) Field or Andector (Wichita Albany) Field, (2) the other operator's well is geographically located within one-half mile of applicant's proposed well, and (3) the other operator's well falls within the geographic limits of the GANDU. The notice shall include a copy of the drilling permit application and a copy of the plat showing the well's proposed location. The obligations of this subsection 2 shall be applicable to any Operator proposing wells on a lease, pooled unit, production sharing unit or allocation well where such lease, pooled unit, production sharing unit or allocation well covers less than all depths.*
- (3) The applicant shall provide copies of the well's as-drilled survey plat and any directional surveys to any party entitled to notice as described in subsection 2 above, within 15 days of receipt by applicant of such written request.*
- (4) If within 10 days of the date notice is sent, a filed written objection to the application is received by the Commission from any party entitled to notice as described in subsection 2 above, the complainant may request a hearing, at which the complainant will bear the burden of proof to show that the proposed application will result in waste and/or harm to correlative rights.*

The Commission approved a similar process for Statewide Rule 40 exceptions for various leased tracts in the Phantom (Wolfcamp) Field in Oil and Gas Docket No. 08-0312439 (*Application of Rio Oil and Gas (Permian) II, LLC, for Exceptions to Statewide Rule 40 for Various Leased Tracts in the Phantom (Wolfcamp) Field, Reeves County, Texas. Final Order August 21, 2018*).

Based upon the evidence and argument presented, the Examiners recommend approval of the application and adoption of the following findings of fact and conclusions of law.

Findings of Fact

1. ConocoPhillips filed an application for authority to assign acreage to various wells within the boundary of its Goldsmith Andector Unit ("GANDU") to the Andector (Wichita Albany) Field while that same acreage is also assigned to wells in the Goldsmith (Clear Fork) Field.

- a. The existing wells for which ConocoPhillips requests authority are listed on Attachment A to the Final Order in this docket.
- b. ConocoPhillips also requests approval of the following procedure to allow duplicate assignment of acreage to wells completed in the Goldsmith (Clear Fork) or Andector (Wichita Albany) Fields within the boundary of the GANDU:
 - (1) *To apply for duplicate assignment of acreage within the geographic limits of the Goldsmith Andector Unit ("GANDU") as depicted on the plat that is Attachment B, the Operator shall file with its drilling permit application remarks or a written certification that duplicate assignment of acreage is required because an existing deed, lease, or other contract confines the Operator to a distinct depth interval within the geographic limits of the GANDU.*
 - (2) *Ten (10) business days prior to the filing of the drilling permit application, all drilling permit applicants shall provide written notice to each commission-designated operator of any well shown on the RRC map at the time of the drilling permit application that satisfies the following criteria: (1) the other operator's well is assigned to either the Goldsmith (Clear Fork) Field or Andector (Wichita Albany) Field, (2) the other operator's well is geographically located within one-half mile of applicant's proposed well, and (3) the other operator's well falls within the geographic limits of the GANDU. The notice shall include a copy of the drilling permit application and a copy of the plat showing the well's proposed location. The obligations of this subsection 2 shall be applicable to any Operator proposing wells on a lease, pooled unit, production sharing unit or allocation well where such lease, pooled unit, production sharing unit or allocation well covers less than all depths.*
 - (3) *The applicant shall provide copies of the well's as-drilled survey plat and any directional surveys to any party entitled to notice as described in subsection 2 above, within 15 days of receipt by applicant of such written request.*
 - (4) *If within 10 days of the date notice is sent, a filed written objection to the application is received by the Commission from any party entitled to notice as described in subsection 2 above, the complainant may request a hearing, at which the complainant will bear the burden of proof to show that the proposed application will result in waste and/or harm to correlative rights.*

2. Notice of the April 29, 2019 hearing on the application was issued to all operators listed on the Commission's proration schedules for the Goldsmith (Clear Fork) Field and Andector (Wichita Albany) Field.
3. No protests to the application were filed with the Commission.
4. The GANDU is an 8,760-acre waterflood unit developed by vertical wells located in Andrews and Ector Counties.
5. The GANDU was formed by execution of a unit agreement effective May 1, 1967 and revised June 1, 1969 to its current size and configuration.
6. The GANDU unit interval includes the entire the Clearfork formation in addition to thin portions of the overlying Glorietta formation and underlying Wichita Albany formation. The depth interval covered by the GANDU is from 5,300 feet to 6,500 feet as shown on the log of the Frank A Well No. 2 (API No. 135-03125).
7. The GANDU creates a horizontal severance of ownership at its base.
8. The correlative interval for the Goldsmith (Clear Fork) Field is defined as the interval between 5,040 feet and 7,329 feet, as shown the log of the C.A. Goldsmith Well No. 952, Section 15, Block 44, T-1-S T&P Survey, Ector County.
9. ConocoPhillips is developing the Wichita Albany formation on its leasehold that is deeper and within the boundary of the GANDU. These horizontal, fracture treated wells are assigned to the Andector (Wichita Albany) Field.
10. The correlative interval for the Andector (Wichita Albany) Field is defined as the interval from 6,466 feet and 7,374 feet, as shown the log of the Westland Oil Development Corporation, Cowden, R.B. Estate "2", Well No. 1, (API No. 135-35286), T-1-N, T&P RR Company Survey, Ector County.
11. There is overlap of the correlative intervals for the Goldsmith (Clear Fork) and Andector (Wichita Albany) Fields.
12. By email dated January 30, 2019, the Commission's compliance staff advised ConocoPhillips that because of the overlapping field correlative intervals, the company's Andector (Wichita Albany) wells within the boundary of the GANDU must be transferred into the Goldsmith (Clear Fork) Field and placed in the GANDU (Lease No. 08-21193). The email stated the assignment of acreage to the Andector (Wichita Albany) Field wells located within the GANDU was a violation of Statewide Rule 40
13. Wells producing from the Andector (Wichita Albany) Field cannot be placed into

the GANDU.

- a. The GANDU participants consist of over 1,000 royalty interest owners and more than 20 working interest owners. The GANDU's ownership interests are different from the ownership in the underlying Wichita Albany formation producing interval.
 - b. The field rules for the Goldsmith (Clear Fork) Field require wells be located at least 330 feet from lease lines. Some Andector (Wichita Albany) Field horizontal wells have first or last take points less than 330 feet from lease lines as allowed by the field rules. These wells would not be compliant with the Goldsmith (Clear Fork) Field spacing rules.
14. The GANDU's Goldsmith (Clear Fork) Field wells produce from a separate stratigraphic interval from the Andector (Wichita Albany) Field wells within the boundary of the GANDU.
 15. The Clear Fork and Wichita Albany producing zones within the boundary of the GANDU are not in communication. The isolation between the producing zones is caused by an impermeable limestone barrier across the GANDU at least 50 feet thick
 16. Unless the application is approved, the existing Andector (Wichita Albany) Field wells within the boundary of the GANDU (Attachment A to the Final Order) will not be able produce and ConocoPhillips will not be able to recover its fair share of hydrocarbons from its leasehold within the boundary of the GANDU. The cumulative daily loss of production would be 3,500 BOE/day.
 17. In the next five years, ConocoPhillips plans to drill and complete 20 wells in the Andector (Wichita Albany) Field within the boundary of the GANDU. The wells will not be able to produce unless the application is approved, and ConocoPhillips will not be able to recover its fair share of hydrocarbons from its leasehold within the boundary of the GANDU.
 18. GANDU wells completed in the Clearfork formation cannot produce reserves from the Wichita Albany formation.
 19. Wells completed in the Wichita Albany formation within the boundary of the GANDU cannot produce reserves from the Clear Fork formation.
 20. Reserves from the Clearfork formation and the Wichita Albany formation cannot be produced from a regular location on property adjacent to the GANDU.
 21. At the hearing, ConocoPhillips agreed on the record that the Final Order in this docketed case is to be final and effective when a Master Order relating to this

Final Order is signed.

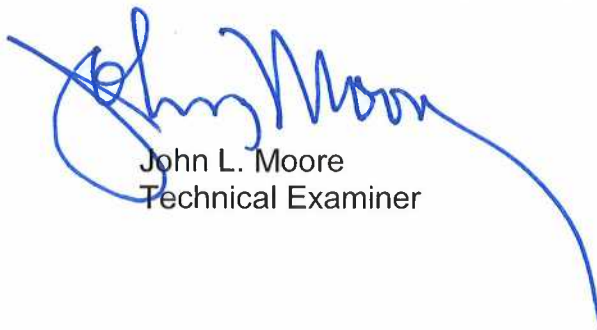
Conclusions of Law

1. Proper notice of hearing was timely issued to persons entitled to notice. Tex. Gov't. Code §§ 2001.051 and 2001.052; Tex. Admin. Code §§ 1.42 and 1.45.
2. The Commission jurisdiction in this case. Tex. Nat. Res. Code § 81.051.
3. Approval of ConocoPhillips' application is necessary to prevent waste, protect correlative rights and promote the orderly development of the fields.
4. Pursuant to Tex. Gov't. Code § 2001.144(a)(4)(A) and by agreement of ConocoPhillips, ConocoPhillips has waived the right to file a motion for rehearing and the Final Order in this case can be final and in effect on the date the Master Order relating to this Final Order is signed.

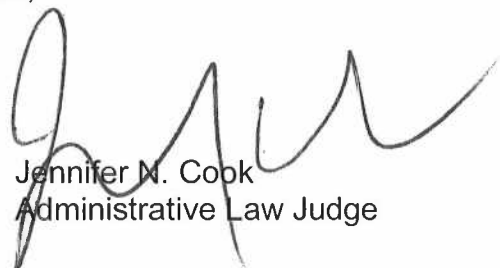
Examiners' Recommendation

The Examiners recommend the Commission enter an order approving the application of ConocoPhillips Company to assign acreage to the wells listed on Attachment A to the Final Order to the Andector (Wichita Albany) Field and approving ConocoPhillips' proposed procedure to allow assignment of the same acreage within the boundaries of the GANDU to wells in the Goldsmith (Clear Fork) Field and Andector (Wichita Albany) Field.

Respectfully submitted,



John L. Moore
Technical Examiner



Jennifer M. Cook
Administrative Law Judge