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# RAILROAD COMMISSION OF TEXAS **HEARINGS DIVISION**

## **OIL & GAS DOCKET NO. 01-0303205**

COMPLAINT OF COMSTOCK OIL & GAS LP CONCERNING THE PROPER PERMITTING OF ATLAS EAGLE FORD OPERATING CO., LLC (OPERATOR NO. 036554) OF THE PANCHO EAST UNIT, WELL NO. B2H, DRILLING PERMIT NO. 812122; AND THE PANCHO EAST UNIT, WELL NO. B4H, DRILLING PERMIT NO. 812124, EAGLEVILLE (EAGLE FORD-1) FIELD, ATASCOSA COUNTY, TEXAS

#### OIL & GAS DOCKET NO. 01-0303954

APPLICATION OF ATLAS EAGLE FORD OPERATING CO., LLC (OPERATOR NO. 036554) TO AMEND ITS DRILLING PERMIT TO INCLUDE AN OFF-LEASE PENETRATION POINT FOR THE PANCHO EAST UNIT, WELL NO. B2H, DRILLING PERMIT NO. 812122, PURSUANT TO RULE 2 OF THE FIELD RULES FOR THE **EAGLEVILLE (EAGLE FORD-1) FIELD, ATASCOSA COUNTY, TEXAS** 

#### **OIL & GAS DOCKET NO. 01-0304062**

APPLICATION OF ATLAS EAGLE FORD OPERATING CO., LLC (OPERATOR NO. 036554) TO AMEND ITS DRILLING PERMIT TO INCLUDE AN OFF-LEASE PENETRATION POINT FOR THE PANCHO EAST UNIT, WELL NO. B4H, DRILLING PERMIT NO. 812124, PURSUANT TO RULE 2 OF THE FIELD RULES FOR THE EAGLEVILLE (EAGLE FORD-1) FIELD, ATASCOSA COUNTY, TEXAS

#### PROPOSAL FOR DECISION

**EXAMINERS:** 

Jennifer Cook – Administrative Law Judge Paul Dubois - Technical Examiner

#### PROCEDURAL HISTORY:

**Hearing Dates:** 

April 7, 27, 2017

Transcript Received:

April 24 and May 12, 2017

Post-hearing Briefing Deadline and Close of Record: June 20, 2017

Proposal for Decision Issued:

September 11, 2017

For Atlas Eagle Ford Operating Co.,

#### **APPEARANCES:**

For Comstock Oil & Gas LP -

Mr. David Gross Gross & Nelson

LLC -

Mr. John Hicks

Scott, Douglass & McConnico

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#### I. Statement of the Cases

Three docketed cases are presented together in this Proposal for Decision ("PFD") because they have common facts, parties and legal issues.

In the first case (Oil & Gas Docket No. 01-0303205), Comstock Oil & Gas LP ("Comstock" or "Complainant") filed a complaint ("Complaint") asserting Atlas Eagle Ford Operating Co., LLC ("Atlas" or "Applicant") has drilled two horizontal wells with off-lease penetration points without authorization to drill the off-lease penetration points and without providing notice to Comstock, the offset operator, as required. Comstock requests the wells be shut-in.

In the second and third case (Oil & Gas Docket Nos. 01-0303954 and 01-0304062), after the Complaint was filed, Applicant filed two applications ("Applications") requesting to amend the drilling permits for the two horizontal wells at issue to allow for the off-lease penetration points. Comstock objects to the authorization of the off-lease penetration points, necessitating a hearing for the requested permit amendments. The two wells at issue are in the Pancho East Unit ("Atlas Unit"), Well Nos. B2H and B4H (referred to as "B2H," "B4H" and collectively as "Wells"), in the Eagleville (Eagle Ford-1) Field, in Atascosa County.

Complainant asserts Applicant violated Commission rules by not providing notice to Complainant of the proposed off-lease penetration points and not obtaining authorization to drill off-lease penetration points for the Wells before the Wells were drilled. Complainant claims Applicant cannot after the fact obtain authorization. According to Complainant, the off-lease penetration points are not necessary to prevent waste or protect correlative rights. Comstock complains one of the Wells is too close to a Comstock well and the other will inhibit future development of Comstock's tract due to the section of the wellbore's intrusion into Comstock's tract.

Atlas acknowledges it did not provide the required notice to Comstock. Atlas explains it was inadvertent and due to miscommunication within Atlas and Atlas' limited experience with the regulatory requirements for off-lease penetration points. Atlas asserts the Wells' off-lease penetration points are necessary to prevent waste and protect correlative rights due to an increased productive drainhole length and Comstock is not harmed by the off-lease penetration points.

The Examiners find the off-lease penetration points are necessary to prevent waste and protect correlative rights. There is insufficient evidence Comstock is harmed by the presence of the Wells or shutting-in the Wells will provide any remedy to Comstock. The Examiners respectfully submit this PFD and recommend the Commission deny Complainant's request to shut-in the Wells. The Examiners further recommend the Commission grant Applicant's request to amend the Wells' permits to allow for the off-lease penetration points.

#### II. Jurisdiction and Notice<sup>1</sup>

Sections 81.051 and 81.052 of the Texas Natural Resources Code provide the Commission with jurisdiction over all persons owning or engaged in drilling or operating oil or gas wells in Texas and the authority to adopt all necessary rules for governing and regulating persons and their operations under the jurisdiction of the Commission.

On March 3, 2017, the Hearings Division of the Commission sent a Notice of Hearing for the Complaint via first-class mail to Applicant and Complainant setting a hearing date of April 7, 2017.<sup>2</sup> Shortly thereafter, on March 13, 2017, the Hearings Division sent a Notice of Hearing for the Applications via first-class mail to Applicant and Complainant setting a hearing date also of April 7, 2017, so these cases could be heard at the same time.<sup>3</sup> Consequently, all parties received more than 10 days' notice. Both notices contained (1) a statement of the time, place, and nature of the hearing; (2) a statement of the legal authority and jurisdiction under which the hearing is to be held; (3) a reference to the particular sections of the statutes and rules involved; and (4) a short and plain statement of the matters asserted.<sup>4</sup> The hearing was held on April 7, 2017, as noticed. The hearing was recessed at the end of the day on April 7 and resumed at the agreed date of April 27, 2017. Applicant and Complainant appeared and presented evidence on both hearing dates.

### III. Applicable Legal Authority

At issue in these cases is whether the Wells' off-lease penetration points should be authorized. According to Commission rule, the penetration point is defined as the point where the drainhole penetrates the top of the correlative interval. In addition to adopting rules of general applicability, the Commission issues orders adopting field rules to address issues specific to the field. The Commission has issued an order adopting field rules regarding off-lease penetration points for the Eagleville (Eagle Ford-1) Field, the applicable field in this case. The field rules contain the following provisions outlining the conditions to be met by an applicant seeking a well permit with an off-lease penetration point:

For any well permitted in this field, the penetration point need not be located on the same lease, pooled unit or unitized tract on which the well is permitted and may be located on an Offsite Tract. When the penetration point is located on such Offsite Tract, the applicant for such a drilling permit must give 21 days' notice by certified mail, return receipt requested to the mineral owners of the Offsite Tract. For the purposes of this rule, the mineral owners of the Offsite Tract are (1) the designated operator; (2) all lessees

<sup>&</sup>lt;sup>1</sup> The hearing transcript in this case is referred to as "Tr. Vol. [volume no.] at [pages:lines]." Complainant's exhibits are referred to as "Complainant Ex. [exhibit no(s).]." Applicant's exhibits are referred to as "Applicant Ex. [exhibit no(s).]."

<sup>&</sup>lt;sup>2</sup> See Notice of Hearing issued March 3, 2017 in Oil & Gas Docket No. 01-0303205.

<sup>&</sup>lt;sup>3</sup> See Notice of Hearing issued March 13, 2017 in Oil & Gas Docket Nos. 01-0303954 and 01-0304062.

<sup>&</sup>lt;sup>4</sup> See TEX. GOV'T CODE §§ 2001.051, 052; 16 TEX. ADMIN. CODE §§ 1.45, 1.48.

<sup>&</sup>lt;sup>5</sup> See, e.g., 16 Tex. Admin. Code § 3.86(a)(8).

<sup>&</sup>lt;sup>6</sup> R.R. Comm'n of Tex. v. WBD Oil & Gas Co., 104 S.W.3d 69, 69-70 (Tex. 2003).

of record for the Offsite Tract where there is no designated operator; and (3) all owners of unleased mineral interests where there is no designated operator or lessee. In providing such notice, applicant must provide the mineral owners of the Offsite Tract with a plat clearly depicting the projected path of the entire wellbore. In the event the applicant is unable, after due diligence, to locate the whereabouts of any person to whom notice is required by this rule, the applicant must publish notice of this application pursuant to the Commission's Rules of Practice and Procedure. If any mineral owner of the Offsite Tract objects to the location of the penetration point, the applicant may request a hearing to demonstrate the necessity of the location of the penetration point of the well to prevent waste or to protect correlative rights. Notice of Offsite Tract penetration is not required if (a) written waivers of objection are received from all mineral owners of the Offsite Tract; or, (b) the applicant is the only mineral owner of the Offsite Tract. To mitigate the potential for well collisions, applicant shall promptly provide copies of any directional surveys to the parties entitled to notice under this section, upon request.7

According to these field rules, an applicant is required to give 21 days' notice to affected offset operators. If an offset operator objects, an applicant can request a hearing to show the off-lease penetration points are necessary to prevent waste or protect correlative rights.

While Statewide Rule 86 requires the first and last take point of a horizontal well be contained within the drilling unit, effective February 1, 2016, it was amended to generally allow for off-lease penetration points if certain conditions are met.<sup>8</sup> Specifically, Statewide Rule 86 contains the following provisions outlining the conditions to be met by an applicant seeking a well permit with an off-lease penetration point:

If the penetration point on the proposed horizontal drainhole is located on an offsite tract, the following conditions shall be met prior to submission of the application to drill:

- (A) The applicant shall give written notice by certified mail, return receipt requested, to all mineral owners of any offsite tracts through which the proposed wellbore path traverses from the point of penetration. The notice shall identify the proposed well, include a plat clearly depicting the projected path of the entire wellbore, and allow the party notified not less than 21 days to object to the proposed offsite tract penetration. Notice of offsite tract penetration is not required if:
  - (i) written waivers of objection are received by the applicant from all mineral owners of any offsite tracts and the waivers are attached to

 <sup>&</sup>lt;sup>7</sup> See Tex. R.R. Comm'n, Final Order Amending Field Rules for the Eagleville (Eagle Ford-1) Field, Atascosa, Dimmit, Frio, Gonzales, La Salle, McMullen, Wilson and Zavala Counties, Texas, Oil and Gas Docket No. 01-0297472 (February 28, 2011).
<sup>8</sup> 16 Tex. Admin. Code § 3.86(d)(6).

the drilling permit application; or

- (ii) the applicant is the only mineral owner of any offsite tracts.
- (B) For purposes of this subsection, the mineral owners of any offsite tracts through which the proposed wellbore path traverses from the point of penetration include:
  - (i) the designated operator;
  - (ii) all lessees of record for any offsite tracts which have no designated operator; and
  - (iii) all owners of unleased mineral interests where there is no designated operator or lessee.
- (C) In the event the applicant is unable after due diligence to locate the whereabouts of any person to whom notice is required by this subsection, the applicant shall publish notice of this application pursuant to Chapter 1 of this title (relating to Practice and Procedure).
- (D) If any mineral owner of an offsite tract objects to the location of the penetration point, the applicant may request a hearing to demonstrate the necessity of the location of the penetration point of the well to prevent waste or to protect correlative rights.
- (E) If any person specified in subparagraph (B) of this paragraph did not receive notice as required in subparagraph (A) of this paragraph, that person may request a hearing. If the Commission determines at a hearing that the applicant did not provide the notice as required by subparagraph (A) of this paragraph, the Commission may cancel the permit.
- (F) To mitigate the potential for wellbore collisions, the applicant shall provide copies of any directional surveys to the parties entitled to notice under this section, upon request, within 15 days of the applicant's receipt of a request.<sup>9</sup>

Like the field rules at issue in this case, Statewide Rule 86 requires the applicant to give 21 days' notice to the affected offsite operator or obtain written waiver of objection from the offsite operator. If an affected operator does object, the applicant can request a hearing to show the off-lease penetration point is necessary to prevent waste or protect correlative rights. In this case, because the affected offset operator objects, Atlas requests a hearing and asserts the off-lease penetration points are necessary to prevent waste and protect correlative rights.

<sup>&</sup>lt;sup>9</sup> 16 Tex. Admin. Code § 3.86(g).

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Additionally, if the required notice is not provided, Statewide Rule 86(g)(E) provides the Commission can cancel the permit. Comstock was not provided required notice and requests that the Commission cancel the permits and require the Wells to be shut-in.

#### IV. Discussion of Evidence

Complainant provided the testimony of two witnesses and twenty-four exhibits. Applicant provided the testimony of two witnesses and thirty-one exhibits.

Comstock's initial complaint covered five wells, all of which were drilled with off-lease penetration points without authority. Atlas drilled the five wells with penetration points on the tract north of Atlas' leased tract. At the time the wells were drilled, Comstock was the northern immediate offsetting operator for all five wells. Between the time the wells were drilled and the hearing, Comstock has released some of its acreage to the north. Comstock is now the north offset operator as to two of the wells, the Pancho East B2H and B4H. Consequently, Comstock amended its complaint at the hearing to be limited to the two Wells instead of five.<sup>10</sup>

At the hearing, Atlas presented waivers for the three wells Comstock no longer complains of, thus removing the need for a hearing on those requested well permit amendments. The Hearings Division docketed cases for those three wells were dismissed and the applications for those wells were remanded to Commission permitting staff for administrative consideration.<sup>11</sup>

## A. Summary of Complainant's Evidence and Argument

Complainant asserts Applicant violated Commission rules by not providing notice to Complainant of the proposed off-lease penetration points and not obtaining authorization to drill off-lease penetration points for the Wells before the Wells were drilled. Complainant asserts Applicant cannot after the fact obtain authorization. Complainant asserts the off-lease penetration points are not necessary to prevent waste or protect correlative rights. Comstock complains one of the Wells is too close to a Comstock well and the other will inhibit future development of Comstock's tract due to the section of the wellbore's intrusion into Comstock's tract.

<sup>&</sup>lt;sup>10</sup> Tr. Vol. 1 at 13:1 to 13:12.

<sup>11</sup> Tr. Vol. 1 at 13:19 to 15:15; Atlas Ex. 1; Tex. R.R. Comm'n, Application of Atlas Eagle Ford Operating Co., LLC (Operator No. 036554) to Amend Its Drilling Permit to Include an Off-Lease Penetration Point for the Pancho West Unit, Well No. A1H, Drilling Permit No. 812108, Pursuant to Rule 2 for the Field Rules for the Eagleville (Eagle Ford-1) Field, Atascosa County, Texas, Oil and Gas Docket No. 01-0304031 (April 18, 2017); Application of Atlas Eagle Ford Operating Co., LLC (Operator No. 036554) to Amend Its Drilling Permit to Include an Off-Lease Penetration Point for the Pancho West Unit, Well No. A3H, Drilling Permit No. 812110, Pursuant to Rule 2 for the Field Rules for the Eagleville (Eagle Ford-1) Field, Atascosa County, Texas, Oil & Gas Docket No. 01-0304039 (April 18, 2017); Application of Atlas Eagle Ford Operating Co., LLC (Operator No. 036554) to Amend Its Drilling Permit to Include an Off-Lease Penetration Point for the Pancho West Unit, Well No. A5H, Drilling Permit No. 812112, Pursuant to Rule 2 for the Field Rules for the Eagleville (Eagle Ford-1) Field, Atascosa County, Texas, Oil & Gas Docket No. 01-0304041 (April 18, 2017) (orders dismissing cases from Commission Hearings Division and remanding applications to be administratively processed).

Comstock's first witness was Rhonda Kaschmitter, Regulatory Manager for Comstock's parent company, Comstock Oil & Gas, LP. She has been the Regulatory Manager since June 2007 and has performed Commission regulatory work since approximately 1987.<sup>12</sup>

Comstock provided a plat of Comstock's Commission designated lease at issue, the NWR Lease, when the Wells were initially drilled. It shows Atlas' leased tract immediately south of the NWR Lease and shows the five wells drilled with off-lease penetration points. Comstock also provided a plat of its current lease, which reflects some of the original leased tract has been released by Comstock. The released section is a western portion of the original leased tract such that the two Wells on the Pancho East Unit are the only wells at issue.

Comstock provided a compilation of nine permit applications filed by Atlas on November 19, 2015, permitting nine wells on its Pancho acreage immediately to the south of Comstock's NWR acreage. In every application, the applied-for penetration point is 100 feet south of Atlas' northern unit boundary and the applied-for first take point is indicated to be approximately 330 feet south of their north unit boundary. The same plat was used for all nine applications showing nine parallel horizontal wells within Atlas' Pancho units. In the same plat was used for all nine applications showing nine parallel horizontal wells within Atlas' Pancho units. In the same plat was used for all nine applications showing nine parallel horizontal wells within Atlas' Pancho units.

Comstock provided well completion information for the nine wells. Only five of the applied-for wells have been drilled. The two Wells at issue have spud dates in August 2016, drilling end dates between August 25 and September 13, 2016, and a completion date of November 8, 2016. The other three drilled wells have similar time frames from spud date to completion date. Commission Form W-2 completion reports for all five wells were filed on December 19, 2016.<sup>17</sup>

Comstock provided a compilation of drilling permit amendment applications for the five drilled wells—including the two Wells at issue—submitted by Atlas on October 5, 2016, still identifying the Wells as having no off-lease penetration points. These applications divided Atlas' commission designated lease into two leases, the West Pancho and the East Pancho Units where previously it had been one lease. It also amended the permit to show a penetration point and a top take point both 100 feet south of their north line. The plats that were attached to these amended permit applications show a potential subsurface easement and back-build area identified 500 feet north of Atlas' lease boundary and 500 feet within the southernmost portion of Comstock's NWR lease. The easement is approximately 47.59 acres and was granted by Comstock's lessor and the surface and mineral owner, Charlotte Ranch Investors, Ltd. Comstock has leased the mineral interests where the easement is located. The substantial interests where the easement is located.

<sup>12</sup> Tr. Vol. 1 at 27:19 to 31:6.

<sup>&</sup>lt;sup>13</sup> Comstock Ex. 1.

<sup>&</sup>lt;sup>14</sup> Comstock Ex. 1A; Tr. Vol. 1 at 31:7 to 35:9.

<sup>&</sup>lt;sup>15</sup> Comstock Ex. 2, 9.

<sup>&</sup>lt;sup>16</sup> Tr. Vol. 1 at 35:13 to 38:11.

<sup>&</sup>lt;sup>17</sup> Tr. Vol. 1 at 38:12 to 41:6; Comstock Ex. 3.

<sup>&</sup>lt;sup>18</sup> Comstock Ex. 4, 10.

<sup>&</sup>lt;sup>19</sup> Tr. Vol. 1 at 41:10 to 46:16.

Ms. Kaschmitter testified on December 27, 2016 Comstock received a letter from Atlas dated December 21, 2016, requesting a waiver of the off-lease penetration points for the Wells. Ms. Kaschmitter noted the letter was dated two days after Atlas filed completion reports for the Wells showing no off-lease penetration points. She further testified this letter was the first time Comstock became aware of drilling activity by Atlas on or near Comstock's NWR lease. She also noted the letter states Atlas is "proposing" the Wells even though the Wells had already been drilled with off-lease penetration points. In a letter to Atlas dated January 11, 2017, Comstock declined to provide the waiver and informed Atlas that Comstock planned to pursue regulatory action through the Commission. Also on January 11, Comstock filed a letter with the Commission Hearings Division initiating this Complaint case against Atlas complaining of the off-lease penetration points and Comstock's lack of notice. Comstock requests the Wells be shutin.

Comstock provided additional amended permit applications for the Wells filed by Atlas on or about March 2, 2017, containing plats showing the off-lease penetration points and requesting a hearing for approval of the penetration points due to Comstock's objection. The penetration point for the B2H is located 87 feet north of Atlas' northern unit boundary. The first take point for the B2H is 105 feet south of Atlas' north unit boundary, making the distance between the penetration point and the first take point of 192 feet. The wellbore path between the well pad and the penetration point, as depicted on the plat, traces straight north and slightly west past the penetration point area and then turns south to the penetration point. The penetration point for the B4H is located 252 feet north of Atlas' northern unit boundary and the first take point is located 105 feet south of the north unit boundary. The path between the surface location and the penetration point traces to the northeast and then turns back straight south to the penetration point. These plats also show the potential subsurface easement back-build area. The Wells extend onto Comstock's acreage within that potential subsurface easement / back-build area identified on the plats. The plats.

The parties interchangeably refer to a portion of a horizontal wellbore between the surface location and approximately the first take point (including the penetration point) going in the opposite direction that the well is intended to be drilled and turning back toward the first take point and which can be located off-lease as the negative section, the kickback and/or the back-drilled section of the wellbore. Comstock provided an enlarged view of the southern boundary of Comstock's NWR Lease and the northern boundary of the Atlas Unit, focusing on the Wells' negative sections. The B2H was back-drilled 453 feet onto Comstock's NWR Lease with a penetration point 87 feet from the southern unit

<sup>20</sup> Tr. Vol. 1 at 46:17 to 49:9; Comstock Ex. 5

<sup>&</sup>lt;sup>21</sup> Comstock Ex. 6.

<sup>&</sup>lt;sup>22</sup> Comstock Ex. 7.

<sup>&</sup>lt;sup>23</sup> Tr. Vol. 1 at 49:10 to 51:23.

<sup>&</sup>lt;sup>24</sup> Comstock Ex. 8, 11.

<sup>&</sup>lt;sup>25</sup> Tr. Vol. 1 at 51:24 to 59:5; Comstock provided companion exhibits 9, 10 and 11 which contain only the plats from the drilling permit and amendment applications for the five wells that were drilled.

<sup>&</sup>lt;sup>26</sup> See, e.g., Tr. Vol. 2 at 25:17 to 31:4.

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boundary. The B4H was back-drilled 461 feet onto Comstock's NWR Lease with a penetration point 252 feet from the southern NWR Lease boundary.<sup>27</sup>

Ms. Kaschmitter testified a portion of the back-drilled section of the B4H wellbore is close to Comstock's Well No. 2H (the "Comstock 2H" or "2H") on the NWR Lease. According to Comstock's surveyors, at one of the closest locations, there is 82 feet between the B4H wellbore path and the 2H's surface location.<sup>28</sup>

Ms. Kaschmitter testified Comstock does plan to drill an additional well on its NWR Lease that would be located ideally directly in between the Comstock 2H and Comstock's Well No. 1H ("Comstock 1H" or "1H"). This is approximately along the same line as the wellbore for Atlas' B2H just north of the B2H, similar to the proximity of the B4H to Comstock's 2H.<sup>29</sup>

Comstock provided the applicable field rules which contain the procedure for off-lease penetration points.<sup>30</sup> The pertinent field rule provision language for off-lease penetration points has been the same for all times relevant to this case. Ms. Kaschmitter noted the rule specifies if an operator plans to have a penetration point off-lease, it is required to notify the affected offset operator. The notice must include a plat showing the projected path of the entire wellbore.<sup>31</sup>

Ms. Kaschmitter testified as to her recollection of the purpose of the provisions requiring notice to the affected offset operators. The notice is required to inform affected offset operators of plans to penetrate on their lease, and give them the opportunity to determine how or if they will be impacted and protect existing wellbores. She testified if Comstock is going to drill a well close to another well, the drilling engineers ask her to obtain the drilling directional surveys for those offsetting wells, which she provides so the engineers can prepare anti-collision plans.<sup>32</sup>

On cross-examination, Ms. Kaschmitter acknowledged if there were back-drilled sections but the penetration points were not off-lease and inside the boundary of Atlas' unit, there would be no regulatory or notice requirement to the affected off-lease operator regarding the negative wellbore sections.<sup>33</sup>

Comstock's second witness was Mr. Forrest Drew Whittington, a registered professional engineer. He has been employed by Comstock for three years and his focus is in South Texas. His registration is in petroleum engineering; he obtained a petroleum engineering degree in 2011. The NWR Lease is within his area of responsibility for Comstock. The two wells on the NWR Lease were drilled before Mr. Whittington became employed by Comstock.<sup>34</sup>

<sup>&</sup>lt;sup>27</sup> Tr. Vol. 1 at 59:6 to 62:6.

<sup>&</sup>lt;sup>28</sup> Tr. Vol. 1 at 62:7 to 62:25.

<sup>&</sup>lt;sup>29</sup> Tr. Vol. 1 at 63:1 to 64:13.

<sup>30</sup> Comstock Ex. 13 at 3-4, 14 at 2-3.

<sup>&</sup>lt;sup>31</sup> Tr. Vol. 1 at 64:14 to 67:12.

<sup>&</sup>lt;sup>32</sup> Tr. Vol. 1 at 67:13 to 69:23.

<sup>&</sup>lt;sup>33</sup> Tr. Vol. 1 at 95:4 to 96:3.

<sup>&</sup>lt;sup>34</sup> Tr. Vol. 1 at 70:10 to 71:15, 98:11 to 99:3.

Comstock provided a Google Earth aerial photo of the surface location pads for the Wells and the Comstock 2H. The Wells were drilled from the same surface location pad and the productive horizontal drainholes were drilled from the north to the south; the pad is slightly south of the northern unit boundary. The 2H was drilled from the south to the north, such that the Comstock 2H pad is slightly north of the southern NWR unit boundary and to the northeast of the Wells' surface pad.35 Mr. Whittington testified Comstock has plans to drill a third well on the NWR Lease equidistant between the 1H and 2H with the surface location being on the southern boundary of the lease as close to the fence line as possible. He stated the well would ideally be drilled straight down vertically with the horizontal section at a lateral going to the north. He testified Comstock cannot drill the well without considering the risk of collision with the B2H. He stated Comstock will have to modify its plans to drill a new well based on the negative section of the B2H. He said Comstock would have to adjust the well location, either move it to the north and lose some lateral length, or move it to the east or west, which will make for a more difficult drill plan. He said Comstock would potentially still lose some lateral length if directional work is necessary to avoid collision with the B2H. To avoid the 453 feet incursion of the B2H, he claims the potential well's penetration and first take point would be further north. He provides a "ballpark" estimate that without the B2H negative incursion, Comstock could have landed a first take point approximately 200 feet from the lease southern boundary, which he surmises Comstock would not be able to do now.36

Mr. Whittington also testified about the closeness of the B4H to Comstock's 2H. He said Comstock does an anti-collision plan before drilling near another well and had an anti-collision plan ("Comstock Plan") performed by a directional drilling company for the B4H in comparison to the location of the Comstock 2H.<sup>37</sup> According to the Comstock Plan, at the closest point, the center of the BH4 wellbore is 84.7 feet from the center of the 2H wellbore. He also discussed what the Comstock Plan refers to as "distance between ellipses." The ellipses take into account there may be some error in the accuracy of the tools and provide a margin of error anywhere within that ellipse the actual center might be. For two wells, each is given an ellipse. In the Comstock Plan, the closest distance between the edges of ellipses for the B4H and the 2H is 18.9 feet. He testified Comstock uses 200 feet as the minimum distance it will drill between two wells.<sup>38</sup>

Mr. Whittington testified if the B2H back-drilled section was not on Comstock's tract, Comstock would be able to drill its third well with a first take point approximately 200 feet from the southern unit boundary. Due to the B2H, Comstock will have to modify its drilling plan and move the proposed well approximately the 87 feet the B2H extends into Comstock's unit to allow for 200 feet of separation, which is approximately 100 feet. He testified the well will be more expensive to drill due to the necessity of an anti-collision directional drilling report. He testified Comstock has no interest in drilling the well with a negative or off-lease wellbore section.<sup>39</sup>

<sup>35</sup> Comstock Ex. 15.

<sup>&</sup>lt;sup>36</sup> Tr. Vol. 1 at 71:16 to 77:18.

<sup>&</sup>lt;sup>37</sup> Comstock Ex. 16

<sup>38</sup> Tr. Vol. 1 at 77:19 to 83:3.

<sup>&</sup>lt;sup>39</sup> Tr. Vol. 1 at 83:4 to 84:9.

On cross examination, Mr. Whittington acknowledged he has not drilled any wells in the Eagle Ford area. Comstock does not have a date set for drilling a third well on the NWR Lease and the only planning thus far is just early directional work, however no documentation of directional work was provided. For the proposed third NWR Lease well, Mr. Wittington further acknowledged there is no pad site and it is not on the drilling schedule. An Authority for Expenditure (AFE) with an analysis of the well's economics has not been done and Mr. Whittington does not currently know if a third well on the NWR Lease would be economical.

Mr. Whittington explained why Comstock would not contemplate back-building a well to the south to put the first take point as close to the lease line as possible. The extra cost for the back-drill and the directional work would only gain a marginal amount of actual lateral and Comstock does not think it is worth the cost. Comstock prefers a straight hole. This is Comstock's practice in the Eagleville (Eagle Ford-1) Field. He testified because wells in this field require a broad artificial lift, doing higher deviations in the wellbore causes rod failures and greatly increases operational costs throughout the life of a well.<sup>42</sup>

Mr. Whittington disagrees with the amount of back-drilling Atlas claims to need to reach its desired first take point. Atlas does not perforate the bend of the wellbore and places its first take point at approximately 90 degrees—at the end of the bend. He testified frequently perforations do begin in the bend of a horizontal well. He provided examples of Comstock wells showing perforations in the bend and at less than 90 degrees. He provided examples of how he believes Atlas could have minimized its back-drilling if it had perforated in the bend of the Wells at less than 90 degrees.<sup>43</sup>

#### B. Summary of Applicant's Evidence and Argument

Atlas acknowledges it did not provide the required notice to Comstock. Atlas explains it was inadvertent and due to miscommunication within Atlas and Atlas' limited experience with the regulatory requirements for off-lease penetration points. Atlas asserts the Wells' off-lease penetration points are necessary to prevent waste and protect correlative rights due to the increased drainhole length. Atlas claims Comstock is not harmed by the off-lease penetration points.

Atlas' first witness was Casey Ott. He is employed by Titan Energy, which is the parent company of Atlas. He is a land manager for Atlas and his responsibility is over all of Titan's assets in Texas.<sup>44</sup>

Atlas provided a pictorial depiction of its acreage showing the five currently drilled wells on the Pancho units in relation to the current NWR Lease and the two wells on that

<sup>&</sup>lt;sup>40</sup> Tr. Vol. 1 at 99:7 to 99:16, 108:15 to 109:2.

<sup>&</sup>lt;sup>41</sup> Tr. Vol. 1 at 108:15 to 109:2.

<sup>&</sup>lt;sup>42</sup> Tr. Vol. 1 at 99:11 to 101:22.

<sup>&</sup>lt;sup>43</sup> Tr. Vol. 2 at 98:4 to 124:2; Comstock Ex. 20-24.

<sup>&</sup>lt;sup>44</sup> Tr. Vol. 1 at 112:9 to 112:23.

lease. <sup>45</sup> It provided a memorandum of the subsurface easement agreement granting Atlas the right to back drill up to 500 feet north of the Atlas Unit boundary into the NWR Lease tract and effective January 1, 2016. <sup>46</sup> It provided a Partial Release of Oil and Gas Lease which releases a western portion of the original tract for the NWR Lease back to the lessor, Charlotte Ranch Investors, Ltd. ("Charlotte Ranch"). Charlotte Ranch is also the lessor granting Atlas the subsurface easement. <sup>47</sup> Atlas provided a memorandum describing the contractual lease agreement between Charlotte Ranch and Petro Edge Energy IV, LLC ("Petro") granting Petro the right to operate the portion of the NWR tract released from Comstock. <sup>48</sup> Petro provided waivers for the other three wells drilled on the Pancho tract triggering removal of issues regarding those wells from this case. <sup>49</sup>

Mr. Ott explained why the drilling permit applications for the Wells did not contain off-lease penetration points and why the required notice was not provided for the off-lease penetration points. He is the person who negotiated the subsurface easement. His team at Atlas wanted to maximize the effective lateral for the Wells. To achieve that purpose, the engineer wanted to build a negative section and to do so. Atlas would need a subsurface easement. These are the first five off-lease penetration point permits Atlas has obtained. Mr. Ott testified when Atlas was drilling the Wells, it was cognizant of the NWR Lease wells, obtained as-drilled surveys of those wells and performed an anticollision analysis to prevent collisions. When the Wells were initially on the drill plan, Atlas had not acquired the subsurface easement so the permit applications did not contain offlease penetration points. When the drilling engineers made the drilling plan which included the off-lease penetration points, they did not communicate this information to the persons responsible for performing the regulatory work. For regulatory purposes, the engineers were focused on ensuring the first take point was a regular location in that it complied with spacing rules. They were not aware of the regulatory penetration point requirements. The mistake was discovered after Atlas filed the completion reports for the Wells and Commission staff called and notified Atlas that the as-drilled plats did not match the permits due to the off-lease penetration points. After discovering the problem, Atlas notified Comstock via the December 21, 2016 letter and requested waivers. Mr. Ott testified because it was close to the holiday season and many people take time off work, he called a representative of Comstock, Cynthia English, to let Comstock know the letter was coming.50

Atlas' second witness was Rick Johnston, a registered engineer in Texas and consultant.<sup>51</sup>

<sup>&</sup>lt;sup>45</sup> Tr. Vol. 1 at 113:6 to 114:2; Atlas Ex. 3.

<sup>&</sup>lt;sup>46</sup> Tr. Vol. 1 at 114:16 to 115:5; Atlas Ex. 4. Comstock provided a copy of the actual agreement as Comstock Ex. 17. The agreement requires Atlas to coordinate with Comstock prior to drilling to ensure Atlas' wells do not interfere with Comstock's. Comstock Ex. 17 at 3, ¶ 7. Mr. Ott testified he is not aware of Atlas coordinating with Comstock before drilling the Wells. Tr. Vol. 1 at 128:9 to 128:24.

<sup>&</sup>lt;sup>47</sup> Tr. Vol. 1 at 116:3 to 117:2; Atlas Ex. 5.

<sup>&</sup>lt;sup>48</sup> Tr. Vol. 1 at 117:5 to 118:2; Atlas Ex. 6.

<sup>&</sup>lt;sup>49</sup> Atlas Ex. 1.

<sup>&</sup>lt;sup>50</sup> Tr. Vol. 1 at 118:3 to 123:6; Atlas Ex. 7.

<sup>&</sup>lt;sup>51</sup>Tr. Vol. 1 at 133:22 to 134:3.

Mr. Johnston prepared a study of the wells in the area. He presented a map he compiled using mapping data from the Railroad Commission showing all wells within a five-mile radius of the Wells so he could develop a predictive tool of expected performance for wells in this area.<sup>52</sup> He used production data and completion information on those wells to perform a decline curve analysis. He provided a least-squares regression comparing production to completed drainhole length to provide an estimated ultimate recovery of a foot of completed drainhole length. Based on this information, he estimates a well in this area produces 26 barrels of oil per foot of completed drainhole. He also calculated a weighted average recovery per foot for the 117 wells in the five-mile radius. The weighted average recovery is 27 barrels per foot, which he noted is comparable to his least-squares regression calculation.<sup>53</sup>

Mr. Johnston used Commission completion records for the B2H and B4H to determine the perforated interval.<sup>54</sup> For the B2H he testifies the off-lease penetration point added 87 feet to the productive drainhole that otherwise would not have been possible. For the B4H he testifies the off-lease penetration point added 252 feet to the productive drainhole that otherwise would not have been possible. He uses 87 and 252 feet because that is the distance between the penetration point and the northern Atlas Unit boundary—i.e. how far the penetration point is offsite. Estimating each foot adds 26 barrels of oil to the estimated recovery of the well, he estimates the off-lease penetration point adds 2,262 barrels of oil to the B2H's ultimate recovery and 6,552 additional barrels for the B4H. <sup>55</sup> He explained as follows:

So the way Atlas drills their wells is they use a bend rate of 12 degrees per hundred. So if they had not had the penetration off-lease and they were to redrill the well such that the penetration point would be one foot on their lease, it would cause the first take point, because they're not going to perforate until they get lateral at a 90-degree angle, it would cause the first take point to move down by the distance that the penetration point is off the lease. So for the B2H, it's 87 feet. And then for the B4H, that distance is 252 feet. So those are the values that I've included on Exhibit 14. You multiply those by the 26 barrels per foot and what that shows is that they've recovered – or they will ultimately recover on the order of about 8 or 9,000 barrels incrementally for both wells as a result of having the off-lease penetration point and having a longer completion drain hole length. 56

Mr. Johnston also provided an estimated added recovery due to the ability to back-drill into northern offset tract—the NWR Lease tract. He estimates a necessary 12-degree per hundred-foot build rate in the curve takes 475 feet to go from vertical to horizontal which is where Atlas puts its first perforation. If Atlas did not back-drill off-lease, the bend of the well would have to be moved to be contained within the Atlas Unit lease lines. The first take point would have to be moved from approximately 100 feet south of the unit

<sup>&</sup>lt;sup>52</sup> Tr. Vol. 1 at 134:4 to 136:7.

<sup>&</sup>lt;sup>53</sup> Atlas Ex. 8-11; Tr. Vol. 1 at 136:8 to 151:18.

<sup>&</sup>lt;sup>54</sup> Tr. Vol. 1 at 151:19 to 153:4; Atlas Ex. 12, 13.

<sup>&</sup>lt;sup>55</sup> Tr. Vol. 1 at 153:5 to 157:8; Atlas Ex. 14.

<sup>&</sup>lt;sup>56</sup> Tr. Vol. 1 at 153:19 to 154:10.

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boundary to approximately 475 feet from the boundary, for a loss of about 370 feet. This amounts to 9,620 barrels of oil per well that would not be recovered due to the lost drainhole length.<sup>57</sup> Mr. Johnston also provided a volumetric calculation and estimates the total recoverable oil under the Atlas Unit is 3,945,052 barrels.<sup>58</sup>

Atlas provided an anti-collision report ("Atlas Plan") for the Wells it had prepared on August 5, 2016, prior to drilling the Wells. Like the Comstock Plan, the Atlas Plan, contains a comparison between the B4H and the Comstock 2H. In the Atlas Plan, the closest distance between the center of the B4H wellbore to the center of the 2H wellbore is approximately 88 feet at a depth of about 8400 feet. This is comparable to the Comstock Plan, which shows the closest distance at 84 feet apart at a depth of about 8300. Atlas provided the Atlas Plan to show the drillers were cognizant of the 2H and acted in a way to prevent collision. Mr. Johnston testified in his experience, a distance of 84 to 89 feet is not particularly close. He testified Atlas' drilling manager had the same opinion, which is why Atlas proceeded with its drilling plan after obtaining the Atlas Plan.

Mr. Johnston also testified in his opinion the B2H should not cause much if any problem for Comstock to drill a third well on the NWR Lease just north of the B2H.<sup>61</sup> In his opinion, due in part to state-of-the-art drilling technology and available anti-collision resources, there are a variety of different options available for Comstock to maximize the completable drainhole of a new well and avoid the back-drill of the B2H.<sup>62</sup> He provided several alternative drilling options he asserts Comstock could consider.<sup>63</sup>

He noted Comstock's wells do not compete for reserves with the Wells. The production intervals of the Wells are completely within the Atlas Unit. The reservoir at issue requires fracture stimulation and there is no drainage. He provided decline curves for the Comstock wells to show there has been no interference from the production of the Atlas Wells.<sup>64</sup>

Atlas provided Commission Drilling Permit (W-1) Query Results showing approximately 1700 off-lease penetration point drilling permits have been filed. For the Eagle Ford Commission fields (including the Eagle Ford-1 and Eagle Ford 2) there have been 177 off-lease drilling permits filed. The only five drilled by Atlas are the five on Atlas' Pancho units, two of which are the subject of this case; the other three were originally part of this case, but waivers were obtained and the other three wells were dismissed from this case. Mr. Johnston testified these five wells were Atlas' first wells with off-lease penetration points; this testimony was offered to help explain why Atlas failed to follow notice procedures and adhere to other off-lease penetration point requirements regarding the Wells.<sup>65</sup>

<sup>&</sup>lt;sup>57</sup> Tr. Vol. 1 at 157:9 to 159:12; Atlas Ex. 15.

<sup>&</sup>lt;sup>58</sup> Tr. Vol. 1 at 159:13 to 167:25; Atlas Ex. 16.

<sup>&</sup>lt;sup>59</sup> Tr. Vol. 1 at 168:13 to 172:8; Atlas Ex. 17.

<sup>&</sup>lt;sup>60</sup> Tr. Vol. 1 at 174:21 to 175:19.

<sup>&</sup>lt;sup>61</sup> Tr. Vol. 1 at 172:9 to 174:13.

<sup>&</sup>lt;sup>62</sup> Tr. Vol. 1 at 188:19 to 189:2; Tr. Vol. 2 at 10:23 to 25:16.

<sup>63</sup> See Tr. Vol. 2 at 45:20 to 48:18; Atlas Ex. 28.

<sup>64</sup> Tr. Vol. 1 at 175:20 to 176:6; Atlas Ex. 8.

<sup>&</sup>lt;sup>65</sup> Tr. Vol. 1 at 176:7 to 179:13; Atlas Ex. 18.

Mr. Johnston provided a historical perspective regarding off-lease penetration points. He explained originally the penetration point was significant because horizontal wells were originally drilled with an open-hole lateral such that the beginning of the productive interval was the point the wellbore penetrated the desired reservoir. Specifically, he testified:

Initially, the first field in which horizontal wells was -- were drilled was the Pearsall Austin Chalk field. The first horizontal wells in the chalk included running casing going lateral in the Chalk, running casing and cementing it and then drilling an open hole lateral. So the penetration point and the terminus point was important because you had an open hole lateral. Some of these laterals they would drill to the top of the Chalk, run casing, cement it, and then they would drill the lateral. So the penetration point would be the first point from which you could take production all the way out to the end of the lateral.

The next big field that followed would be -- well the Chalk fields between Pearsall south of San Antonio over to the Giddings Austin Chalk. So when -- as time went on, the Commission adopted Rule 86, and that's why the original Rule 86 was keyed to penetration point and terminus because all of the horizontals that were being drilled were open hole.

The next big field where there was horizontal drilling was the Barnett Shale, and the horizontal wells up there were completed with casing run in the lateral and cemented, and then the wells being stimulated. So the importance of the penetration point, once you had the lateral cased and cemented, it became less important. What became more important is where are your perforations, where are your take points.<sup>66</sup>

He explained what followed were many Commission hearings for off-lease penetration points to maximize lateral productive interval lengths while still complying with spacing rules. Hearings were necessary because off-lease penetration points did not comply with Commission rules at the time. He provided an example of a case involving such a hearing, in which the examiners found off-lease penetration points were necessary to prevent waste by allowing a longer productive lateral that also complies with spacing rules.<sup>67</sup> Ultimately, field rules were amended to allow for off-lease penetration points to allow operators to prevent waste by putting the first take point as close to the lease line as possible. He testified the Commission consistently granted exceptions to allow off-lease penetration points for this reason.<sup>68</sup>

Mr. Johnston provided plats of the Comstock 2H, the 2BH and the 4BH. He provided a combined plat highlighting the length of the wellbores in the field correlative

<sup>&</sup>lt;sup>66</sup> Tr. Vol. 1 at 180:10 to 181:11.

<sup>&</sup>lt;sup>67</sup> Atlas Ex. 19.

<sup>&</sup>lt;sup>68</sup> Tr. Vol. 1 at 179:14 to 184:24.

interval (from penetration point to terminus). He explained and his plats show the distance between the penetration point of the 2H and the penetration point of the B4H is approximately 600 feet. He concludes these two wells are a substantial distance apart by the time that each well reaches the correlative interval of the subject Commission designated field, the Eagleville (Eagle Ford-1) Field.<sup>69</sup>

Atlas provided Commission records showing information about approximately four other Comstock wells drilled in the Eagleville (Eagle Ford-1) Field that have a back-drilled section and off-lease penetration points. At las also provided Commission records showing approximately nine Comstock permits with unpermitted off-lease penetration points. As Mr. Johnston explained, the applications were submitted with on-lease penetration points and amended to correctly reflect off-lease penetration points after the wells were drilled. He said this demonstrates the insignificance operationally and mechanically of an off-lease penetration point. He said drillers are generally not particularly concerned about off-lease penetration points and it is not uncommon for operators to fix the permit after drilling the wells. During cross examination, Mr. Johnston acknowledged that for all of these Comstock permits with off-lease penetration points, Comstock was the only affected offset operator.

Mr. Johnston provided a graph for each of the Wells comparing the vertical depth of the well to the distance from the Atlas unit north boundary. The graphs show the Wells were drilled vertically for approximately 4,000 feet before starting the back-drill operation. The Wells crossed the northern unit boundary at approximately 5,000 feet, started making the bend and then turned back toward the lease at about 8800 feet.<sup>73</sup>

Mr. Johnston testified Atlas' goal is for the first take point—that is one-hundred feet from the lease line to comply with spacing rules—to be the best first take point for maximizing production of the well. In this case, the off-lease penetration points and backdrilling for the Wells were necessary to get the most productive first take-point. He further explained that is why industry has adopted field rules to allow off-lease penetration points to maximize production. He testified a first take point a hundred feet from the lease line that is not in the target zone of the well may recover something; however, it may not maximize recovery. In this case, he testified the Lower Eagle Ford is much more productive than the Upper Eagle Ford, such that a first take point in the Lower Eagle Ford is expected to be more productive. Therefore, Atlas perforates its first take point for the Wells at approximately 88-90 degrees, toward the end of the wellbore bend. To do otherwise, he said would be to leave behind the productive recoverable hydrocarbons from the Lower Eagle Ford. He testified the Wells off-lease penetrations points were necessary to prevent waste and protect correlative rights.<sup>74</sup>

<sup>&</sup>lt;sup>69</sup> Tr. Vol. 2 at 10:23 to 25:16; Atlas Ex. 21.

<sup>&</sup>lt;sup>70</sup> Tr. Vol. 2 at 25:17 to 31:4.

<sup>&</sup>lt;sup>71</sup> Tr. Vol. 2 at 31:5 to 40:24; Atlas Ex. 23-25.

<sup>&</sup>lt;sup>72</sup> Tr. Vol. 2 at 62:18 to 64:11.

<sup>&</sup>lt;sup>73</sup> Tr. Vol. 2 at 40:25 to 45:19; Atlas Ex. 26-27.

<sup>&</sup>lt;sup>74</sup> Tr. Vol. 2 at 151:23 to 152:20.

#### V. Examiners' Analysis

The Examiners recommend the Commission deny Comstock's request to have the Wells ordered shut-in. The Examiners further recommend the Commission grant Atlas' request to approve and amend the Well permits to include the off-lease penetration points.

# A. The Examiners find the off-lease penetration points are necessary to prevent waste and recommend the permits be amended to allow for the off-lease penetration points.

When an applicant seeks a drilling permit with an off-lease penetration point but the affected offset operator objects, according to Commission rules and field rules, the applicant can request a hearing to demonstrate the off-lease penetration point is necessary to prevent waste and protect correlative rights. The Examiners find Atlas provided sufficient evidence to demonstrate the off-lease penetration points for the Wells are necessary to prevent waste and protect correlative rights.

Applicant provided evidence of estimated total recoverable reserves for the Atlas unit. Applicant performed a volumetric calculation and estimates potential recoverable reserves under Atlas' unit of 3,945,052 barrels. Comstock did not provide evidence disputing this estimate. The Examiners find sufficient evidence there are substantial recoverable reserves under the Atlas Unit.

Atlas also performed a study of similar wells in the area and provided an estimate of the barrels of oil produced over the Well's lifetime per foot of drainhole length. His estimate is 26 barrels per feet for each of the Wells. His estimate is based on two types of analysis: a least squares regression analysis resulting in an estimated 27 feet and a weighted average calculation resulting in 26 feet. Comstock did not provide any contradicting calculations. Comstock did assert the calculations may contain inaccuracies because Atlas did not consider whether the wells studied had perforations in the bend of the wellbore when Atlas compiled Commission completion records to calculate the studied wells' drainhole length. Comstock provided no evidence of what the impact to the 26 feet estimate would be if the information were considered. Atlas acknowledges it is an estimate. The Examiners find Atlas provided sufficient information that 26 feet is a reasonable estimate.

Atlas claims if it were unable to drill off-lease penetration points, the first take points for the Wells would have to be moved further south from the unit northern boundary to allow for the penetration points to be on-lease; this would shorten the Wells' productive intervals. Atlas estimates that would cause a loss of productive drainhole of 87 feet for the B2H and 252 feet for the B4H. The estimates are based on the distance in feet that the Wells' penetration points are currently off-lease (i.e. the distance between Atlas' unit northern boundary and the location of the penetration points). For this estimate, Atlas would still have to back-drill into Comstock's leased tract. Atlas further estimates if the entire back-drilled portion as well as the penetration points were contained within Atlas'

leased tract, there would be a loss of productive drainhole length of 370 for each of the Wells. This is based on the estimated 475 feet needed to back-drill less the 100 feet the Wells' first take point are currently from the lease line to comply with spacing requirements. Comstock did not provide estimates disputing these calculations. Comstock did assert Atlas' estimate of lengths required to move the penetration points and back-drilling could be less. The Examiners find Atlas provided sufficient evidence its estimates are reasonable. The Examiners decline to second-guess Atlas' determination of the optimal well drilling plan for the Wells.

Using Atlas' estimated 26 barrels of oil produced from each foot of productive drainhole, Atlas estimates 87 barrels lost from the B2H and 2,262 barrels lost from the B4H if the off-leases penetration points are required to be on-lease. Atlas estimates 9,620 barrels lost (370 feet at 26 barrels per foot) from each of the Wells if the back-drill is also contained within Atlas' unit. The chart below is a summary of Atlas' calculations.

#### Well Lost drainhole Lost oil recovery Lost drainhole Lost oil recovery length if if penetration length if if penetration penetration points points and backpoints on-lease penetration points on-lease and back-drill drill on-lease on-lease B2H 87 ft. 2,262 bbl 370 ft. 9.620 bbl B4H 252 ft. 370 ft. 6,552 bbl 9.620 bbl Total 339 ft. 740 ft. 8,814 bbl 19,240 bbl

**Summary of Atlas' estimated lost hydrocarbons** 

Based on these calculations, Atlas asserts there will be waste if the off-lease penetration points are not allowed—an estimated 8,814 barrels of oil if the penetration points are required to be on-lease. The Examiners find Atlas has provided sufficient evidence the off-lease penetration points are necessary to prevent waste and protect correlative rights.

# B. The Examiners do not recommend the permits be canceled or the Wells be shut-in.

Comstock asserts it did not get the required notice and requests the Wells be shutin. The parties agree Comstock is the affected offsite operator and was not provided the required notice. All parties and the Examiners agree Atlas should have provided the required notice. The Examiners find Comstock failed to provide sufficient evidence the Wells should be ordered shut-in.

Comstock's complaint is the B4H was drilled too close to the Comstock 2H and the back-drill of the B2H on Comstock's leased tract is going to interfere with Comstock's ability to build an optimal third well on its lease. Comstock's complaint centers around impacts due to the back-drill; Comstock does not complain about the points of penetration into the correlative interval or provide any evidence those points will cause interference with Comstock's operation of its lease. Further, Comstock does not complain the off-lease

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penetration points (or the accompanying back-drilling) cause any drainage from Comstock's leased tract.

Regarding Comstock's complaint the B4H was drilled too close to Comstock's 2H, Comstock provided no evidence of any damage to the 2H or potential future damage to the 2H. Both parties agree no collision occurred during the drilling of the B4H. Comstock also provides no evidence or information as to any benefit, such as prevention of waste, that will be gained by Comstock if the B4H were to be shut-in.

Regarding Comstock's complaint the negative section of the B2H in Comstock's leased tract will inhibit Comstock's ability to drill a third well, the evidence shows Comstock's plan to drill a third well is preliminary and uncertain. Comstock does not yet know if a third well will be economic. Comstock provided no drilling plans for a third well and acknowledged there are no current plans to drill it. Atlas asserts Comstock would be able to drill an optimal well given the current state of drilling and anti-collision technology. The Examiners find Comstock failed to provide evidence of a substantive and specific plan to drill a third well and consequently failed to demonstrate it would suffer waste or other damage due to the off-lease penetration point of the B2H. The evidence of any potential future damage is speculative. The Examiners need not opine or second-guess Comstock's evaluation of what such an optimal plan would be. Further, Comstock provided no information or evidence as to how shutting in the B2H would alleviate any potential future damage to Comstock.

The Examiners find based on the evidence provided, the Wells' off-lease penetration points are necessary to prevent waste and protect correlative rights. The Examiners find there was insufficient evidence to warrant ordering the Wells shut-in.

# VI. Recommendation, Proposed Findings of Fact and Proposed Conclusions of Law

Based on the record in this case and evidence presented, the Examiners find the Wells' off-lease penetration points are necessary to prevent waste and protect correlative rights. The Examiners find insufficient evidence in the record for a basis to shut-in the Wells. The Examiners recommend Atlas' requested permit amendments be granted and Comstock's request to have the Wells shut-in be denied.

## **Findings of Fact**

1. In Oil & Gas Docket No. 01-0303205, Comstock Oil & Gas LP ("Comstock" or "Complainant"), filed a complaint ("Complaint") asserting Atlas Eagle Ford Operating Co., LLC ("Atlas" or "Applicant") has drilled two horizontal wells with offlease penetration points without authorization to drill off-lease penetration points and without providing notice to Comstock, the affected offset operator, as required. Comstock requests the wells be shut-in.

- 2. In Oil & Gas Docket Nos. 01-0303954 and 01-0304062, after the Complaint was filed, Applicant filed two applications ("Applications") requesting to amend the drilling permits for the two horizontal wells at issue to allow for the off-lease penetration points.
- 3. Comstock is the affected offsite operator and objects to the authorization of the off-lease penetration points, necessitating a hearing for the requested permit amendments. The two wells at issue are the in the Pancho East Unit ("Atlas Unit"), Well Nos. B2H and B4H (referred to as "B2H," "B4H" and collectively as "Wells"), in the Eagleville (Eagle Ford-1) Field, in Atascosa County.
- 4. On March 3, 2017, the Commission sent a Notice of Hearing for the Complaint via first-class mail to Applicant and Complainant setting a hearing date of April 7, 2017. Shortly thereafter, on March 13, 2017, the Commission sent a Notice of Hearing for the Applications via first-class mail to Applicant and Complainant setting a hearing date also of April 7, 2017, so these cases could be heard at the same time. Consequently, all parties received more than 10 days' notice. Both notices contained (1) a statement of the time, place, and nature of the hearing; (2) a statement of the legal authority and jurisdiction under which the hearing is to be held; (3) a reference to the particular sections of the statutes and rules involved and (4) a short and plain statement of the matters asserted. The hearing was held on April 7, 2017, as noticed. The hearing was recessed at the end of the day on April 7 and resumed at the agreed date of April 27, 2017. Applicant and Complainant appeared and presented evidence on both hearing dates.
- 5. Applicant performed a volumetric calculation and estimates potential recoverable reserves under Atlas' Unit of 3,945,052 barrels.
- 6. There are substantial recoverable reserves under the unit.
- 7. Atlas performed a study of similar wells in the area and provided an estimate of the barrels of oil produced over the studied wells' lifetime per foot of productive drainhole length. Atlas' estimate is based on two types of analysis: a least squares regression analysis resulting in an estimated 27 feet and a weighted average calculation resulting in 26 feet.
- 8. The estimate of the barrels of oil produced over each of the Well's lifetime per foot of productive drainhole length is 26 barrels.
- 9. Atlas claims if it were unable to drill off-lease penetration points, the first take points for the Wells would have to be moved further south from the unit northern boundary to allow for the penetration points to be on-lease; this would shorten the Wells' productive intervals. Atlas estimates that would cause a loss of productive drainhole of 87 feet for the B2H and 252 feet for the B4H. The estimates are based on the distance in feet that the Wells' penetration points are currently off-lease (i.e. the distance between Atlas' unit northern boundary and the location of the

penetration points). For this estimate, Atlas would still have to back-drill into Comstock's leased tract.

- 10. If the B2H were required to be drilled with on-lease penetration points, the B2H productive drainhole length would decrease an estimated 87 feet.
- 11. If the B4H were required to be drilled with on-lease penetration points, the B4H productive drainhole length would decrease an estimated 252 feet.
- 12. Atlas estimates if the entire back-drilled portion as well as the penetration points were contained within the Atlas Unit, there would be a loss of productive drainhole length of 370 for each of the Wells. This is based on the estimated 475 feet needed to back-drill less the 100 feet the Wells' first take point are currently from the lease line to comply with spacing requirements.
- 13. If the Wells were required to be drilled with the entire back-drilled portion as well as the penetration points contained within the Atlas Unit, each of the Wells' productive drainhole length would decrease an estimated 370 feet.
- 14. Using Atlas' estimated 26 barrels of oil produced from each foot of productive drainhole, Atlas estimates 87 barrels lost from the B2H and 2,262 barrels lost from the B4H if the off-leases penetration points are required to be on-lease. Atlas estimates 9,620 barrels lost (370 feet at 26 barrels per foot) from each of the Wells if the back-drill is also contained within the Atlas Unit.
- 15. A chart of pertinent estimates—including the estimated lost hydrocarbons if the Wells were to be drilled with on-lease penetration points—is:

Well	Lost drainhole length if penetration points on-lease	Lost oil recovery if penetration points on-lease	Lost drainhole length if penetration points and back-drill on-lease	Lost oil recovery if penetration points and back-drill on-lease
B2H	87 ft.	2,262 bbl	370 ft.	9,620 bbl
B4H	252 ft.	6,552 bbl	370 ft.	9,620 bbl
Total	339 ft.	8,814 bbl	740 ft.	19,240 bbl

- 16. If the B2H were required to be drilled with on-lease penetration points, there would be an estimated 2,262 barrels of lost oil reserves recovery.
- 17. If the B4H were required to be drilled with on-lease penetration points, there would be an estimated 6,552 barrels of lost oil reserves recovery.
- 18. If the Wells were required to be drilled with on-lease penetration points, there would be waste of an estimated 8,814 barrels of lost oil.

- 19. The Wells off-lease penetration points are necessary to prevent waste and protect correlative rights.
- 20. There is insufficient evidence canceling the permits and requiring the Wells to be shut-in will prevent waste or protect correlative rights.
- 21. There is insufficient evidence the Wells' off-lease penetration points have or will cause damage to Comstock.

#### **Conclusions of Law**

- 1. Proper notice of hearing was timely issued to appropriate persons entitled to notice. See, e.g., Tex. Gov't Code §§ 2001.051, .052; 16 Tex. Admin. Code §§ 1.42, 1.45.
- 2. The Commission has jurisdiction in this case. See, e.g., Tex. NAT. Res. Code § 81.051.
- 3. The Wells off-lease penetration points are necessary to prevent waste and protect correlative rights.
- 4. The Wells should not be ordered shut-in and the Wells' permits should not be canceled.
- 5. Comstock's request to cancel the Wells' permits and order the Wells shut-in should be denied.
- 6. Atlas' request to amend the Wells' permits to include and approve the Wells' off-lease penetration points should be granted.

#### Recommendations

The Examiners find the Wells' off-lease penetration points are necessary to prevent waste and protect correlative rights. The Examiners find insufficient evidence in the record for a basis to shut-in the Wells. The Examiners recommend Atlas' requested permit amendments be granted and Comstock's request to have the Wells shut-in be denied.

Respectfully,

Jennifer Cook

Administrative Law Judge

Paul Dubois

**Technical Examiner**