District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

> > **NFO Permit**

Form C-129 Revised August 1, 2011

Submit one copy to appropriate District Office

No. _____(For Division Use Only)

APPLICATION FOR EXCEPTION TO NO-FLARE RULE 19.15.18.12

(See Rule 19.15.18.12 NMAC and Rule 19.15.7.37 NMAC)

| A. | Applicant: WPX Energy Production, LL | <u>.c</u> | |
|---|--|--|--|
| | whose address is: P.O. Box 640, Aztec, NM | <u>1 87410,</u> | |
| hereby requests an exception to Rule 19.15.18.12 until <u>11/6/17</u> , for the following described tank battery (or LACT): | | | |
| | Name of Lease: Chaco 2308-09A #146H API-30-045-35498 Name of Pool: Nageezi Gallup | | |
| | Location of Battery: Unit Letter A Section 09 Township 23N Range 8W | | |
| | Number of wells producing into battery2_ | | |
| В. | Based upon oil production of $\underline{62}$ barrels per day, the estimated volume | | |
| | of gas to be flared is 180 MCF/D; Value: \$51 | | |
| C. | Name and location of nearest gas gathering facility: OCT 18 2017 | | |
| | Beeline, Sec 16, T23N, R08W | | |
| D. | DistanceBUILTEstimated cost of connection | | |
| E. | This exception is requested for the following reasons: Flare for reserve recovery operations | | |
| WPX Energy requests authorization to flare the <i>Chaco 2308-09A #146H</i> for 2 weeks starting <u>10/23/17-11/6/17</u> due to a work over/clean out job on the Chaco 2308-09A #146H. | | | |
| I hereby certify that the rules and regulations of the Oil Conservation | | OIL CONSERVATION DIVISION | |
| | | Approved Until 11/20/17 | |
| | | Approved Until | |
| | | and Delle | |
| | | By Offendon Donate | |
| Printed Name & Title:LACEY GRANILLO- PERMIT TECH III Title | | Title Deputy Oil & Gas Inspector, District #3 | |
| E-mail Address: lacey.granillo@wpxenergy.com | | Date to lao la | |
| Date: 10/17/1 | 17 Telephone No. (505) 333-1816 | | |

^{*} Gas-Oil ratio test may be required to verify estimated gas volume.



September 15, 2017

OCT 2 3 2017

Mr. Charlie Perrin EMNRD District 3 1000 Rio Brazos Road Aztec NM 87410

Dear Mr. Perrin,

We at WPX appreciate your concern regarding unnecessary flaring. We also believe our dedication to building infrastructure and facilities prior to drilling wells demonstrates our concern for minimizing flaring as well. However, there are special circumstances which arise occasionally that may necessitate flaring. Our commitment to drill longer laterals, which minimizes surface impact while fully developing the resource, has some unintended consequences. We are beginning to understand that bridges periodically form in these longer laterals, effectively sealing the remainder of the lateral from the producing wellbore and reducing the reserves in the wellbore. Those reserves at the toe end of the wellbore will be forever lost unless the bridge in the wellbore is cleaned out, which is an easier operation when done sooner rather than later. In other words, the longer the bridges remain in the wellbore, the more difficult they can become to remove.

Earlier in 2017, WPX used a coiled tubing unit on the West Lybrook 703H for this very reason. The results were nearly disastrous, as the coiled tubing became stuck from the bridging material and the wellbore was nearly lost. Coiled tubing has a lower flow rate for cleaning out the wellbore and removing debris, thereby increasing the chance of sticking. Coiled tubing also has a much lower tensile strength for pulling when the tubing becomes stuck, which can result parted tubing remaining in the wellbore and subsequent abandoning of the wellbore. As a result of the 703H incident, WPX believes utilizing a work over rig with stick pipe is the safest, most effective way to clean out these bridges, returning the lost reserves without undue risk of losing the wellbore.

The West Lybrook 752H was cleaned out over the weekend of September 9th, and attached to this letter you will see the dramatic improvement in production which reflects the reserves that will be recovered due to removing the bridges in the wellbore.

The unfortunate consequence of using stick pipe is that oxygen is introduced into the wellbore when the pipe connections are made. This oxygen will not dissipate if the wellbore is shut in, but rather will induce downhole corrosion and additional long-term operational issues. We also have observed that this oxygen migrates via faulting in the reservoir to offset wellbores, which increases their oxygen content and may require flaring for some of the wells offsetting the workover operation. If the high oxygen content gas is simply sent down the pipeline to the plant, it creates a dangerous potential for corrosion downstream, and can result in the entire gathering system being shut in. This would mean either flaring all the wells on the system or shutting them in. The only solution to effectively eliminate the oxygen post workover is to flare the gas until the oxygen content drops to a safe level. The typical amount of time to flare and eliminate the oxygen content post-cleanout is usually from 2 to 7 days. The flare request being made also includes any wells that may potentially see oxygen migration in addition to the well that is being worked on. There is no certainty that all these wells



need to be flared, but WPX wants to be prepared for that potential should the need arise. The team will be diligently testing and monitoring for oxygen content during the workover operation to prevent any operational issues. We certainly appreciate your understanding as we work to recover these lost reserves in the longer laterals we have drilled.

Sincerely,

Marcia Brueggenjohann

Reservoir Engineering Manager, San Juan

WPX Energy

attachment