CHRISTI CRADDICK, CHAIRMAN DAVID PORTER, COMMISSIONER RYAN SITTON, COMMISSIONER



# RAILROAD COMMISSION OF TEXAS HEARINGS DIVISION

OIL AND GAS DOCKET NO. 01-0289578

THE APPLICATION OF GOOODRICH PETROLEUM COMPANY FOR AN EXCEPTION TO STATEWIDE RULE 32 FOR THE GPC GEMINI NO 2H FACILITY, BRISCOE RANCH (EAGLEFORD) FIELD, FRIO COUNTY, TEXAS

**HEARD BY:** 

Brian Fancher, P.G. - Technical Examiner

Marshall F. Enquist - Legal Examiner

**HEARING DATE:** 

July 15, 2014

**RECORD CLOSED:** 

August 18, 2014

**SUBMISSION DATE:** 

March 25, 2015

CONFERENCE DATE:

April 8, 2015

**APPEARANCES:** 

REPRESENTING:

APPLICANT:

Kelli Kenney Darrell Knight Goodrich Petroleum Company

# **EXAMINERS' REPORT AND RECOMMENDATION**

#### STATEMENT OF THE CASE

This application is unprotested, and Applicant was the only party present at the hearing. Goodrich Petroleum Company ("Goodrich") requests an exception to flare casing-head gas from its GPC Gemni No. 2H Facility ("Facility"), pursuant to 16 Tex. Admin. Code §3.32. Goodrich seeks authority to flare 2,500,000 cubic feet of gas per day ("2,500 MCFGD") from the Facility in the subject field for two years beginning on June 22, 2014.

On July 17 and July 31, 2014, the Examiners issued letters to Goodrich seeking further clarification of its position in the subject application. On July 23 and August 18, 2014, respectively, Goodrich submitted its responses to the Examiners' letters, effectively closing the record on August 18, 2014.

## **DISCUSSION OF THE EVIDENCE**

Mr. Darrell Knight, Goodrich's Vice President of Production Operations, testified as an expert on behalf of Applicant. In his role at Goodrich, Mr. Knight is responsible for the installation of all production facilities and pipelines. In addition, Mr. Knight oversees all production throughout the life of each producing well.

## Applicable Rules

Generally, 16 Tex. Admin. Code §3.32 ("SWR 32") governs the utilization for legal purposes of natural gas produced under the jurisdiction of the Railroad Commission. Titled "Exceptions," SWR 32(h) states:

Requests for exceptions for more than 180-days and for volumes greater than 50 mcf of hydrocarbon gas per day shall be granted only in a final order signed by the commission.

#### Application History

The subject wells are classified as oil wells. Production from the wells contains casinghead gas due to dissolution of hydrocarbons from the liquid phase (oil) once removed from the subject field in the subsurface and brought to the surface.

Mr. Knight testified that on December 13, 2013, the GPC Gemini Lease, Well No. 2H (API No. 42-163-33739) was completed in the subject field. On December 17, 2013, the 2H well was tested for initial potential and resulted with 549 barrels of oil per day ("BOPD"), 265 MCFGD, 1,224 barrels of water per day ("BWPD"), and a gas-oil ratio ("GOR") of 482 stock barrels per standard cubic foot of gas. <sup>1</sup>

On December 12, 2013, the GPC Gemini Lease, Well No. 3H (API No. 42-163-33759) was completed in the subject field. On December 24, 2013, the 3H well was tested for initial potential, which resulted with 384 BOPD, 812 MCFGD, 631 BWPD, and a GOR of 2,114.<sup>2</sup>

On April 28, 2014, the GPC Gemini Lease, Well No. 4H (API No. 42-163-33821) was granted a drilling permit in the subject field. Mr. Knight testified that the 4H well was spud on April 29, 2014. Subsequently, the 4H well was completed on July 8, 2014, with initial production on July 9, 2014. No production history was submitted for the 4H well.<sup>3</sup>

On April 28, 2014, the GPC Gemini Lease, Well No. 5H (API No. 42-163-33823) was granted a drilling permit in the subject field. Mr. Knight testified that the 5H well was spud on May 2, 2014. Thereafter, the 5H well was completed on July 10, 2014, with initial production on July 11, 2014. No production history was submitted for the 5H well.

<sup>&</sup>lt;sup>1</sup> Goodrich Exh. No. 1.

<sup>&</sup>lt;sup>2</sup> Goodrich Exh. No. 2.

<sup>&</sup>lt;sup>3</sup> Compare Goodrich Exh. No. 3 with testimony on audio recording at 4:50.

Subsequent to the completion of the 2H well, the Facility received four administrative approvals from the Oil and Gas Division to flare up to 222 MCFGD for a total of 180-days (Flare Permit No. 16249) expiring on June 22, 2014.<sup>4</sup> On May 30, 2014, Goodrich submitted its request for a hearing on the captioned docket.<sup>5</sup>

The surface locations of the subject wells are all located within close proximity to one another on a pad (the "Pad") comprised of roughly eight (8) acres. Immediately offsetting the Pad to the northeast is Goodrich's GPC Gemini Facility II (i.e., the Facility). The Pad and the Facility are connected by flowline to the GPC Gemini Facility I, which is located roughly 1.3 miles to the northeast. Mr. Knight testified that the casinghead gas produced from the subject wells is routed to the Facility from the Pad, then the gas is transported by flowline to the Gemini I Facility where it is metered and sold to Frio LaSalle Pipeline, LP ("Frio"). Frio is a subsidiary of TexStar Midstream Services, LP.

Mr. Knight testified that the gas flared from the subject wells takes place at one flare point located on the Facility. Goodrich seeks to increase its flaring authority to 2,500 MCFGD at the Facility for a period of two years, based on the added production from Well Nos. 3H, 4H, and 5H. Mr Knight stated that the Facility handled 96,344 BO and 288,736 MCFG between November 2013 and May 2014, of which 186,363 MCFG was sold to market and 85,697 MCFG was flared. During May 2014, Goodrich flared roughly 1,150 MCFGD from the Facility.<sup>7</sup>

Mr. Knight testified that once produced gas from the Facility is delivered to Frio at its interconnecting point on the Gemini I Facility, the gas is routed to Frio's nearby Lancaster Treating Facility ("Lancaster Plant") where it later piped to market. Mr. Knight stated that Frio is a third-party company hired by Goodrich to handle its produced gas.

At the Lancaster Plant, the gas is treated to remove hydrogen-sulfide ("H<sub>2</sub>S") and carbon dioxide impurities through amine processes. Mr. Knight stated that upstream of Goodrich lies acreage produced by Cabot [Cabot Oil & Gas Corp], where produced gas containing over 5,000 parts per million H<sub>2</sub>S is delivered into the Frio pipeline and routed to the Lancaster Plant. As a result, the Lancaster Plant has experienced *force majeure* shutdowns due to operational failures in its amine treatment processes. Mr. Knight asserted that during times when the Lancaster Plant is shutdown, Goodrich is forced to flare the casinghead gas produced by its subject wells in order to continue to produce oil. Mr. Knight stated that the Lancaster Plant experienced *force majeure* shutdowns in December 2013, April 2014, and May 2015. By letter dated May 12, 2014, Frio informed Goodrich that its Lancaster Plant will be shutdown due to a failure of the plant's amine reboiler; and, the duration of the plant's shutdown was unknown at the time. Mr. Knight stated

<sup>&</sup>lt;sup>4</sup> Goodrich Exh. No. 5 – Based on calendar date comparison, Goodrich's authority to flare for 180 days spanned from December 24, 2013 through June 22, 2014.

<sup>&</sup>lt;sup>5</sup> Goodrich Exh. No. 6.

<sup>&</sup>lt;sup>6</sup> Goodrich Exh. No. 8 – Aerial map. The Examiners estimate the well pad containing the subject wells is comprised of roughly eight acres by measuring the 2H/3H/4H/5H Facility (colored pink on the exhibit) to be 350,000 square feet, and dividing it by 46,560 square feet (i.e., the square footage of one acre of land).

<sup>&</sup>lt;sup>7</sup> Goodrich Exh. No. 11 – The Examiners took the summation of 16,932 MCF and 17,593 MCF and divided by 30 days.

<sup>&</sup>lt;sup>8</sup> Testimony at 11:35.

that the Lancaster Plant was shutdown from May 10 through May 29, 2014. Mr. Knight testified that Goodrich has no other gas sales option other than Frio. 10

#### Goodrich's Argument

At the hearing, the Examiners inquired whether any harm would come to the subject wells as a result of their being shut-in. In other words, when the Lancaster Plant is shutdown for the reasons above would the subject wells be harmed if they were shut-in. In response, Mr. Knight testified that the wells would likely be unharmed, but Goodrich would incur an economic burden by not producing the wells.<sup>11</sup>

As a result, Goodrich seeks relief in the captioned docket pursuant to SWR 32(f)(2)(D), which states:

The commission or the commission's delegate may administratively grant or renew an exception to the requirements of limitations of this subsection subject to the requirements of subsection (h)...if the operator of a well or production facility presents information to show the necessity for the release. Necessity for the release includes, but is not limited to the following:

(D) For casinghead gas only, the unavailability of a gas pipeline or other marketing facility, or other purposes and uses authorized by law;

Goodrich alleges that all casinghead gas produced from the subject wells is plumbed in a manner that is capable of being sold to market. However, in order to continue to produce oil from the subject wells during times when the Lancaster Plant is inoperable (i.e., the unavailability of a marketing facility), Goodrich seeks its stated relief. Goodrich believes its request in the immediate case is reasonable, pursuant to SWR 32.

#### FINDINGS OF FACT

- 1. Goodrich Petroleum Company ("Goodrich") requests an exception to flare casing-head gas from its GPC Gemni No. 2H Facility ("Facility"), pursuant to 16 Tex. Admin. Code §§3.32(h) and 3.32(f)(2)(D).
- 2. Goodrich seeks authority to flare 2,500,000 cubic feet of gas per day ("2,500 MCFGD") from the Facility in the subject field for two years beginning on June 22, 2014.
- 3. Goodrich's GPC Gemini Lease, Well No. 2H (API No. 42-163-33739) was completed in the subject field on December 12, 2013. The 2H well encountered initial potential test results of 549 barrels of oil per day ("BOPD"), 265 MCFGD, 1,224 barrels of water per day ("BWPD"), and a gas-oil ratio ("GOR") of 482 stock barrels per standard cubic foot of gas.

<sup>&</sup>lt;sup>9</sup> Compare Goodrich Exh. No. 9 with testimony at 12:55.

<sup>10</sup> Testimony at 18:00.

<sup>11</sup> Testimony at 37:55.

- 4. On December 12, 2013, the GPC Gemini Lease, Well No. 3H (API No. 42-163-33759) was completed in the subject field. On December 24, 2013, the 3H well was tested for initial potential, which resulted with 384 BOPD, 812 MCFGD, 631 BWPD, and a GOR of 2,114.
- 5. On April 28, 2014, the GPC Gemini Lease, Well No. 4H (API No. 42-163-33821) was granted a drilling permit in the subject field. Mr. Knight testified that the 4H well was spud on April 29, 2014. Subsequently, the 4H well was completed on July 8, 2014, with initial production on July 9, 2014.
- 6. On April 28, 2014, the GPC Gemini Lease, Well No. 5H (API No. 42-163-33823) was granted a drilling permit in the subject field. Mr. Knight testified that the 5H well was spud on May 2, 2014. Thereafter, the 5H well was completed on July 10, 2014, with initial production on July 11, 2014.
- 7. Beginning on December 24, 2013, Goodrich received four administrative approvals from the Oil and Gas Division to flare up to 222 MCFGD from the Facility for a total of 180-days (Flare Permit No. 16249) expiring on June 22, 2014.
- 8. During the time frame Goodrich's Flare Permit No. 16249 was in effect, the GPC Gemini Lease, Well Nos. 4H and 5H were not completed in the subject field.
- 9. On May 30, 2014, Goodrich submitted its request for a hearing on the captioned docket to the Commission.
- 10. During May 2014, Goodrich flared roughly 1,150 MCFGD from the Facility.
- 11. All produced casinghead gas from the subject wells is routed to the Facility.
- 12. The Facility is connected by flowline on the subject lease to a pipeline operated by Frio LaSalle Pipeline, LP ("Frio") at Goodrich's Gemini I Facility.
- 13. All produced casinghead gas routed from the Facility is sent to Frio's Lancaster Plant.
- 14. The Lancaster Plant is intermittently shutdown and unable to accept casinghead gas produced from the subject wells and routed through the Facility.
- 15. Goodrich's necessity to flare gas from the subject wells results from the shutdown periods experienced at the Lancaster Plant.
- 16. Approval of the subject application is reasonable and appropriate, pursuant to 16 Tex. Admin. Code §3.32.

# **CONCLUSIONS OF LAW**

- 1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas Tex. Nat. Res. Code §81.051.
- 2. Legally sufficient notice has been provided to all affected persons.
- 3. The requested authority to flare up to 2,500 MCFGD of casing-head gas derived from the Briscoe Ranch (Eagleford) Field, Frio County, Texas at Goodrich's GPC Gemini 2H Facility for a period of two years beginning on June 22, 2014, satisfies the requirements of Title 16 TAC §3.32.

#### **EXAMINERS' RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission grant an exception to flare casing-head gas from the GPC Gemini 2H Facility at a rate of up to 2,500 MCFGD for two years beginning on June 22, 2014.

Respectfully submitted,

Brian Fancher, P.G.

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Technical Examiner

Marshall F. Enquist Legal Examiner

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