



# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

**OIL AND GAS DOCKET NO. 08-0289072**

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**THE APPLICATION OF LINN OPERATING, INC. FOR AN EXCEPTION TO 16 TAC §3.32 FOR THE DYER LEASE, SPRABERRY (TREND AREA) FIELD, MARTIN COUNTY, TEXAS**

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**OIL AND GAS DOCKET NO. 08-0289073**

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**THE APPLICATION OF LINN OPERATING, INC. FOR AN EXCEPTION TO 16 TAC §3.32 FOR THE GASKINS LEASE, SPRABERRY (TREND AREA) FIELD, MARTIN COUNTY, TEXAS**

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**OIL AND GAS DOCKET NO. 08-0289074**

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**THE APPLICATION OF LINN OPERATING, INC. FOR AN EXCEPTION TO 16 TAC §3.32 FOR THE ALLAR I LEASE, SPRABERRY (TREND AREA) FIELD, MARTIN COUNTY, TEXAS**

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**OIL AND GAS DOCKET NO. 08-0289075**

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**THE APPLICATION OF LINN OPERATING, INC. FOR AN EXCEPTION TO 16 TAC §3.32 FOR THE ELROD STEWART 10 CTB, SPRABERRY (TREND AREA) FIELD, HOWARD COUNTY, TEXAS**

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**OIL AND GAS DOCKET NO. 08-0289076**

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**THE APPLICATION OF LINN OPERATING, INC. FOR AN EXCEPTION TO 16 TAC §3.32 FOR THE FEASTER CTB, SPRABERRY (TREND AREA) FIELD, MARTIN COUNTY, TEXAS**

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**HEARD BY:** Brian Fancher, P.G. – Technical Examiner  
Michael Crnich – Legal Examiner

**REVIEWED BY:** Cecile Hanna – Legal Examiner

**HEARING DATE:** July 18 & August 26, 2014

**RECORD CLOSED:** November 3, 2014

**SUBMISSION DATE:** January 28, 2015

**CONFERENCE DATE:** February 10, 2015

**APPEARANCES:**

**REPRESENTING:**

**APPLICANT:**

D. Davin McGinnis  
James Clark, P.E.

Linn Operating, Inc.

### **EXAMINERS' REPORT AND RECOMMENDATION**

#### **STATEMENT OF THE CASE**

LINN Operating, Inc. ("LINN") was the only party present at the public hearing held on July 18, 2014, to consider the above captioned dockets. At the July 18<sup>th</sup> hearing, counsel on behalf of LINN requested the following: (1) to consolidate the applications into a joint record; and (2) to continue the subject proceeding so that LINN may have sufficient time to gather further data to support its direct case.

On August 26, 2014, the hearing was reconvened. In summary, pursuant to 16 Tex. Admin. Code §3.32, LINN seeks authority to flare casing-head gas for one year from each of the subject leases in the following manner:

1. Dyer Lease: 1,500,000 cubic feet of gas ("1,500 MCFG") per month;
2. Gaskins Lease: 1,500 MCFG per month;
3. Allar I Lease: 2,000 MCFG per day;
4. Elrod Stewart 10 CTB: 1,500 MCFG per month;
5. Feaster CTB: 375 MCFG per day.

At the August 26<sup>th</sup> hearing, the Examiners requested further data from LINN with regard to the following: (1) the geographic location of each flare stack, respective to each captioned docket; and (2) daily flaring tabulations for each lease or Central Tank Battery ("CTB"). On November 3, 2014, LINN submitted late-filed exhibits. The Examiners closed the evidentiary record. The applications are unopposed and the Examiners recommend that they be approved.

### DISCUSSION OF THE EVIDENCE

Mr. James (Jim) Clark, P.E., a consulting engineer, testified on behalf of LINN as an expert in petroleum engineering.

#### Applicable Rules

In general, 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.

Although Statewide Rule 32 provides no notice provision, LINN submitted a service list of operators for each captioned docket made of all operators that immediately offset each subject lease. Accordingly, all offset operators for each captioned docket were provided notice and an opportunity to participate in the hearing.

In order to determine the necessity for an exception to flare casing-head gas, SWR 32(f)(2) states:

[...] Necessity for the release includes, but is not limited to, the following situations...

In the subject applications, LINN argues that the necessity to flare casing-head is needed due to the unavailability of a gas pipeline or other marketing facility, other purposes and uses authorized by law, pursuant to SWR 32(f)(2)(D).<sup>1</sup>

#### LINN’s General Argument

The subject applications contain one common issue – each of the subject leases is connected to a gas sales pipeline; however, the produced casing-head gas contains hydrogen-sulfide (“H<sub>2</sub>S”) at concentrations above the gas sales pipeline’s quality standard.<sup>2</sup> As a result, LINN has chosen to flare the casing-head gas in order to continue to produce the liquid hydrocarbons from wells on the subject leases. Otherwise, the production wells would unavoidably be shut-in.<sup>3</sup>

In an attempt to mitigate the high-H<sub>2</sub>S concentrations, so that it may sell the produced casing-head gas, LINN has tried several remedies which include implementation of: (1) down-hole H<sub>2</sub>S scavenger; (2) surface-based amine units; and/or, (3) surface-based H<sub>2</sub>S scavenger

<sup>1</sup> Discussion at 53:28 of audio recording.

<sup>2</sup> Compare testimony at 7:20 of audio recording with Linn Exh. No. 7 (DCP Pipeline H<sub>2</sub>S limit of 4 ppm).

<sup>3</sup> Testimony at 13:35.

towers.<sup>4</sup> The most economic method depends on the stabilized casing-head gas rate and H<sub>2</sub>S concentration.<sup>5</sup>

The H<sub>2</sub>S concentrations fluctuate depending on the rate of casing-head gas produced from the wells at a given time. LINN continues to work towards lowering the H<sub>2</sub>S concentrations from incoming production streams on the subject leases, but seeks authority to flare beyond 180-days in order to provide it with greater flexibility in determining a durable solution to sell the H<sub>2</sub>S-laced casing-head gas at acceptable levels.

### Allar I Lease

LINN seeks authority to flare up to 2,000 MCFGD from the Allar I Lease (Lease ID No. 08-39566) (“Allar”) for a time period of one year beginning on May 30, 2014. The geographic location of the flare-stack, which serves the entire lease, is near the Allar’s Well No. 1 (API No. 42-317-35363).<sup>6</sup>

LINN received two administrative approvals from the Oil and Gas Division to flare casing-head gas for 90-days on the Allar as follows (Flare Permit No. 16112):

	<u>Volume (MCFGD)</u>	<u>Effective Date</u>	<u>Expiration Date</u>
1.	2,100	2/27/14	4/13/14
2.	2,100	4/14/14	5/29/14

Mr. Clark testified that LINN’s administrative authority to flare on the Allar expired on May 29, 2014. While Statewide Rule 32 provides operators the ability to flare for up to 180-days administratively, LINN submitted its hearing request on May 6, 2014. Thus, LINN opted for only half of the available administrative flaring authority instead of the full 180-days. LINN indicated that it chose to request a hearing on the subject application because it was aware that it would need more than 180-days of flaring authority.<sup>7</sup>

The Allar consists of 320-acres and contains eight (8) producing wells. Seven of the eight wells down-hole commingle production from a combination of the Spraberry (Trend Area), Spraberry (Trend Area Strawn), STA (Atoka), the Hill Ranch (Miss), and/or the Petty 48 (Upper Strawn) Fields. Individual production rates from the Allar’s eight wells span from 13 to 68 barrels of oil per day (“BOPD”) and 5 to 1,682 MCFGD. Mr. Clark testified that the first seven wells completed on the Allar produce H<sub>2</sub>S volumes below four (4) parts per million (“ppm”). All casing-head gas produced from those seven wells is sold to DCP Pipeline.<sup>8</sup>

However, the Allar’s eighth well, Well No. 1P (API No. 42-317-38873) (“1P well”), produces up to 4,000 ppm of H<sub>2</sub>S. LINN submitted a copy of the completion report (“W-2”) for the 1P well dated April 9, 2014. The April 9<sup>th</sup> W-2 indicates that the 1P well was tested for

<sup>4</sup> Linn Exh. No. 1.

<sup>5</sup> Testimony at 8:40.

<sup>6</sup> Compare testimony at 31:50 with LINN Exh. No. 3.

<sup>7</sup> Discussion from 19:00 to 26:30.

<sup>8</sup> LINN Exh. No. 7.

initial potential (“IP”) on January 25, 2014, and the test results included: 498 BOPD and 1,884 MCFGD. Mr. Clark testified that the high-H<sub>2</sub>S volumes encountered in the 1P well were not expected. Though LINN chose to monitor the 1P well’s H<sub>2</sub>S concentrations to determine whether or not the high-H<sub>2</sub>S would decrease to rates comparable to the Allar’s seven remaining wells (*i.e.* less than 4 ppm), it did not.

Since the January 25<sup>th</sup> IP test, the 1P well’s production has steadily declined. By June 2014, the 1P well produced about 68 BOPD and 1,700 MCFGD. Mr. Clark stated that the 1P well produces about 40% of the Allar’s total oil production and 96% of its casing-head gas production.<sup>9</sup> Mr. Clark testified that the 1P well’s stabilized gas rate and H<sub>2</sub>S concentration are too high for down-hole isolation and/or down-hole H<sub>2</sub>S scavenger treatment.<sup>10</sup> In July 2014, LINN installed an H<sub>2</sub>S scavenger tower at the Allar. However, due to poor economics LINN has replaced the scavenger tower with an amine unit. Mr. Clark testified that the amine unit has been ordered by LINN and is planned to be installed.<sup>11</sup>

In summary, LINN seeks flaring authority for the Allar only for the time period until the H<sub>2</sub>S issue is resolved. LINN alleges that flaring is necessary only because of the high H<sub>2</sub>S-level in the 1P well. Mr. Clark testified that once LINN resolves the high-H<sub>2</sub>S in the 1P well all of the Allar’s gas will be sold to market. However, if an unexpected increase in H<sub>2</sub>S concentration occurs, and the amine unit is unable to effectively remove the H<sub>2</sub>S, then LINN would have the authority to flare the high H<sub>2</sub>S-bearing gas.<sup>12</sup>

### Gaskins Lease

Originally, LINN sought to flare up to 500 MCFGD of commingled casing-head gas (Surface Commingle Permit No. 6417) that originates from the Gaskins Lease (Lease ID No. 08-38976) and the Gaskins A Lease (Lease ID No. 43245) (the “Gaskins”).<sup>13</sup> On November 3, 2014, however, LINN amended its original request and now seeks to flare up to 1,500 MCFGD per month for one year from the Gaskins. The geographic location of the Gaskins’ flare-stack, which serves the Gaskins and Gaskins A Leases, is near the Gaskins Lease, Well No. 3801 (API No. 42-317-35278).<sup>14</sup>

LINN received four consecutive administrative approvals from the Oil and Gas Division to flare casing-head gas for a total 180-days on the Gaskins. Beginning on May 17, 2013 and ending on November 16, 2013, LINN was administratively granted authority to flare up to 739 MCFGD (Flare Permit No. 13525). LINN’s administrative authority to flare casing-head gas on the Gaskins expired on November 16, 2013. On May 6, 2014, LINN requested a hearing on the subject application.

The Gaskins’ collectively contain eleven wells. All of the Gaskins’ wells down-hole commingle the Spraberry (Trend Area) Field with either the Spraberry (Penn.), Spraberry (Trend

<sup>9</sup> Testimony at 15:50.

<sup>10</sup> Testimony at 16:24 and 35:10.

<sup>11</sup> Testimony at 17:00.

<sup>12</sup> Discussion from 39:37 to 51:00.

<sup>13</sup> LINN Exh. No. 19 – Request.

<sup>14</sup> LINN Exh. No. 15a.

Area Strawn), STA (Atoka), and/or Cedar Flats (Miss.) Fields. Ten of the Gaskins' eleven wells produce H<sub>2</sub>S at concentrations below 30 ppm (*i.e.*, the sales pipeline's specifications for acceptance of incoming sour-gas). However, the Gaskins A, Well No. 381 ("A381 well") produces H<sub>2</sub>S at 100 ppm. As of June 2014, the Gaskins produced roughly 200 BOPD and 0 MCFGD.<sup>15</sup> Mr. Clark testified that LINN has effectively lowered the H<sub>2</sub>S concentrations seen in the A381 well by introducing down-hole scavenger through the well's production annulus.

On November 3, 2014, LINN submitted correspondence that also included late-filed exhibits of the following: (1) Exhibit 15a - a plat of the Dyer that shows the location of the flare stack; and (2) Exhibit 18a - a daily flare tabulation from April 1, 2014 through September 30, 2014. In its November 3<sup>rd</sup> correspondence, LINN indicated that the scavenger employed in the A381 well has successfully reduced the H<sub>2</sub>S levels to meet pipeline sales specifications. However, LINN has experienced infrequent, unexpected, and unpredictable fluctuations in H<sub>2</sub>S concentrations that resulted in the need to flare. For example, the Gaskins flared 68, 283, 273, 256, 318, and 296 MCFGD from August 7<sup>th</sup> to 12<sup>th</sup>, respectively, for a total of 1,494 MCFG during August 2014. According to LINN, due to these unforeseen circumstances LINN requests authority to flare 1,500 MCFG per month (50 MCFGD in a 30 day period) from May 28, 2014 through May 28, 2015.

#### Dyer Lease

Originally, LINN sought to flare up to 1,000 MCFGD on the Dyer Lease (Lease ID No. 08-39631) (the "Dyer").<sup>16</sup> On November 3, 2014, however, LINN amended its original request and now seeks to flare up to 1,500 MCFG per month for one year from the Dyer. The geographic location of the Dyer's flare-stack, which serves the entire lease, is near the Dyer's Well No. 3301 (API No. 42-317-38698).<sup>17</sup>

LINN received two administrative approvals from the Oil and Gas Division to flare casing-head gas for a total of 60-days on the Dyer. From April 8 through the May 28, 2014, LINN was administratively granted authority to flare up to 150 MCFGD (Flare Permit No. 14543). Mr. Clark testified that LINN's administrative authority to flare on the Dyer expired on May 28, 2014. On May 6, 2014, LINN requested a hearing on the subject application.

The Dyer is made of 321-acres and contains eight (8) producing wells. Six of the eight wells down-hole commingle production from a combination of the Spraberry (Trend Area), Spraberry (Trend Area Strawn), STA (Atoka), and/or the Hill Ranch (Miss) Fields. Individual production rates from the Dyer's eight wells span from 4 to 61 BOPD and 2 to 225 MCFGD. Mr. Clark testified that the first seven wells completed on the Dyer produce H<sub>2</sub>S volumes below 30 ppm. All casing-head gas produced from those seven wells is sold to WTG Pipeline.<sup>18</sup>

Notwithstanding the first seven wells, the Dyer's eighth well, Well No. 33D (API No. 42-317-38698) (the "33D well"), currently produces up to 1,400 ppm of H<sub>2</sub>S. Mr. Clark testified

<sup>15</sup> LINN Exh. No. 18.

<sup>16</sup> LINN Exh. No. 13 - Request.

<sup>17</sup> LINN Exh. No. 9a.

<sup>18</sup> LINN Exh. No. 13 - Martin County, Texas.

that although the 33D well originally produced H<sub>2</sub>S concentrations below 30 ppm, the well's H<sub>2</sub>S concentration steadily increased over time and has stabilized.

LINN submitted a copy of the 33D well's W-2, dated April 2, 2014. The April 2<sup>nd</sup> W-2 indicates that the 33D well was tested for IP on December 23, 2013, and the test results included: 498 BOPD and 1,884 MCFGD. Mr. Clark testified that the high-H<sub>2</sub>S volumes encountered in the 1P well were not expected. Though LINN chose to monitor the 33D well's produced H<sub>2</sub>S concentrations in hopes that it would eventually fade, it did not.

Since the December 23<sup>rd</sup> IP test, the 33D well's production has declined. By June 2014, the 33D well produced about 130 BOPD and 130 to 150 MCFGD. On August 5, 2014, LINN installed an H<sub>2</sub>S scavenger tower on the Dyer. Mr. Clark testified that the purpose of LINN's request in the subject application is to offer it the authority to flare in times of need. Mr. Clark stated that although the Dyer's scavenger tower is installed, LINN is continually working to determine the optimal amount of H<sub>2</sub>S scavenger necessary for employment to effectively remove the H<sub>2</sub>S from the gas stream prior to sales.

On November 3, 2014, LINN submitted correspondence that also included late-filed exhibits of the following: (1) Exhibit 9a - a plat of the Dyer that shows the location of the flare stack; and (2) Exhibit 12a - a daily flare tabulation from April 1, 2014 through September 30, 2014. In its November 3<sup>rd</sup> correspondence, LINN indicated that the installed scavenger tower is successfully reducing the H<sub>2</sub>S levels to meet pipeline sales specifications. However, LINN has experienced infrequent, unexpected, and unpredictable fluctuations in H<sub>2</sub>S concentrations that resulted in the need to flare. For example, the Dyer flared 82, 97, 97, and 146 MCFGD on September 21<sup>st</sup>, 22<sup>nd</sup>, 23<sup>rd</sup>, and 30<sup>th</sup> for a total of 422 MCFG during September 2014. According to LINN, due to these unforeseen circumstances LINN requests authority to flare 1,500 MCFG per month (50 MCFGD in a 30 day period) from May 28, 2014 through May 28, 2015.

#### Elrod Stewart 10 Central Tank Battery ("CTB")

Originally, LINN sought to flare up to 500 MCFGD of commingled casing-head gas (Surface Commingle Permit No. 6283) that originates from the Elrod Stewart 10 Lease (Lease ID No. 40578) and the Coconut 10 Lease (Lease ID No. 39507) ("Elrod 10 CTB").<sup>19</sup> On November 3, 2014, however, LINN amended its original request and now seeks to flare up to 1,500 MCFG per month for one year from the Elrod 10 CTB. The geographic location of the Elrod 10 CTB's flare-stack is near the Elrod 10 Lease, Well No. 1 (API No. 42-227-36366).<sup>20</sup>

LINN received two consecutive administrative approvals from the Oil and Gas Division to flare casing-head gas for a total 40-days from the Feaster CTB. Beginning on April 8, 2014 and ending on May 28, 2014, LINN was administratively granted authority to flare up to 261 MCFGD (Flare Permit No. 14541). LINN's administrative authority to flare casing-head gas from the Elrod 10 CTB expired on May 28, 2014. On May 6, 2014, LINN requested a hearing on the subject application.

<sup>19</sup> LINN Exh. No. 32 - Request.

<sup>20</sup> LINN Exh. No. 28a.

Collectively, five wells send their production to the Elrod 10 CTB (four wells exist on the Elrod Stewart 10 Lease and one well exists on the Coconut Lease). All of the Elrod 10 CTB's wells down-hole commingle the Spraberry (Trend Area) Field with either the STA (Atoka), Petty 48 (Upper Strawn), and/or Hill Ranch (Miss) Fields. Four of the five wells produce H<sub>2</sub>S at concentrations below 30 ppm. However, the Elrod Stewart 10 Lease, Well No. 10P (API No. 42-227-36740) produces H<sub>2</sub>S at 300 ppm. As of June 2014, the combined production from the Elrod Stewart 10 and Coconut Leases at the Elrod 10 CTB was roughly 60 BOPD and 15 MCFGD.

On November 3, 2014, LINN submitted correspondence that also included late-filed exhibits of the following: (1) Exhibit 28a - a plat of the Elrod 10 Lease that shows the location of the flare stack; and (2) Exhibit 31a - a daily flare tabulation from April 1, 2014 through September 30, 2014. In its November 3<sup>rd</sup> correspondence, LINN indicated that it installed a scavenger tower on September 2, 2014, and has successfully reduced the H<sub>2</sub>S levels from the offending wells to meet pipeline sales' specifications. However, LINN indicated that it may experience infrequent, unexpected, and unpredictable fluctuations in H<sub>2</sub>S concentrations that resulted in the need to flare (such as the Gaskins). According to LINN, due to potential unforeseen circumstances LINN requests authority to flare 1,500 MCFG per month (50 MCFGD in a 30 day period) from May 28, 2014 through May 28, 2015.

#### Feaster CTB

Originally, LINN sought to flare up to 500 MCFGD of commingled casing-head gas (Surface Commingle Permit No. 6279) that originates from the Thunderbolt Lease (Lease ID No. 42176) and the Feaster Lease (Lease ID No. 40578) ("Feaster CTB").<sup>21</sup> On November 3, 2014, however, LINN amended its original request and now seeks to flare up to 375 MCFGD from the Feaster CTB. The geographic location of the Feaster CTB's flare-stack is near the Feaster Lease, Well No. 39K (API No. 42-317-36492).<sup>22</sup>

LINN received two consecutive administrative approvals from the Oil and Gas Division to flare casing-head gas for a total 40-days from the Feaster CTB. Beginning on April 8, 2014 and ending on May 28, 2014, LINN was administratively granted authority to flare up to 230 MCFGD (Flare Permit No. 14542). LINN's administrative authority to flare casing-head gas from the Feaster CTB expired on May 28, 2014. On May 6, 2014, LINN requested a hearing on the subject application.

Collectively, seven wells send their production to the Feaster CTB (three wells exist on the Feaster Lease and four wells exist on the Thunderbolt Lease). All of the Feaster CTB's wells down-hole commingle the Spraberry (Trend Area) Field with either the Paul Page (Atoka), STA (Atoka), Spraberry (Penn.), Spraberry (Trend Area Strawn), Petty 48 (Upper Strawn), Hill Ranch (Miss), and/or Cedar Flats (Miss.) Fields. Five of the Feaster CTB's seven wells produce H<sub>2</sub>S at concentrations below 30 ppm (*i.e.*, the sales pipeline's specifications for acceptance of incoming sour-gas). However, the Feaster, Well Nos. 39L and 39M produce H<sub>2</sub>S at 1,800 ppm and

<sup>21</sup> LINN Exh. No. 26 - Request.

<sup>22</sup> LINN Exh. No. 21a.

650ppm, respectively. As of June 2014, the combined production from the Feaster and Thunderbolt Leases at the Feaster CTB was roughly 125 BOPD and 275 MCFGD.

On November 3, 2014, LINN submitted correspondence that also included late-filed exhibits of the following: (1) Exhibit 21a - a plat of the Feaster Lease that shows the location of the flare stack; and (2) Exhibit 25a - a daily flare tabulation from April 1, 2014 through September 30, 2014. In its November 3<sup>rd</sup> correspondence, LINN indicated that despite installing an H<sub>2</sub>S scavenger tower the week of August 26, 2014, its results have been unsatisfactory thus far. Furthermore, LINN indicated that it will continue to explore for a viable H<sub>2</sub>S scavenger operation; however, in the interim it seeks flaring authority to flare 375 MCFGD for one year from the Feaster CTB. LINN's daily flaring tabulation through September 2014 indicates that the Feaster CTB flares up to roughly 361 MCFGD.

### FINDINGS OF FACT

1. LINN Operating, Inc. ("LINN") seeks an exception to 16 Texas Admin. Code §3.32 to flare casing-head gas from the Dyer Lease (Lease ID No. 08-39631), Gaskins Lease (Surface Commingle Permit No. 6417), Allar I Lease (Lease ID No. 08-39566), Elrod Stewart 10 Central Tank Battery ("CTB") (Surface Commingle Permit No. 6283), and the Feaster CTB (Surface Commingle Permit No. 6279) ("the subject leases") for a period of one year in the following manner:
  - a. Dyer Lease: 1,500 MCFG per month;
  - b. Gaskins Lease: 1,500 MCFG per month;
  - c. Allar I Lease: 2,000 MCFG per day;
  - d. Elrod Stewart 10 CTB: 1,500 MCFG per month;
  - e. Feaster CTB: 375 MCFG per day.
  
2. The subject applications' Notice of Hearing were provided to all immediate offsetting operators adjacent to the subject leases.
  
3. LINN received administrative authority to flare the listed casing-head gas volume that corresponds with each of the subject leases during the following time frames:
  - a. Dyer Lease: 04/08/14 through 05/28/14; 150 MCFG per day
  - b. Gaskins Lease: 05/17/13 through 11/16/13; 739 MCFG per day
  - c. Allar I Lease: 02/27/14 through 05/29/14; 2,100 MCFG per day
  - d. Elrod Stewart 10 CTB: 04/08/14 through 05/28/14; 261 MCFG per day
  - e. Feaster CTB: 04/08/14 through 05/28/14; 230 MCFG per day
  
4. LINN's administrative authority to flare from each of the subject leases expired on the following days:
  - a. Dyer Lease: May 28, 2014
  - b. Gaskins Lease: November 16, 2013
  - c. Allar I Lease: May 29, 2014

- d. Elrod Stewart 10 CTB: May 28, 2014
  - e. Feaster CTB: May 28, 2014
5. LINN submitted a hearing request to the Commission on the subject applications on May 6, 2014.
6. Each of the subject leases is connected to a gas market pipeline operated by a named third-party operator ("sales pipeline").
7. The production wells on the subject leases have produced the corresponding range of hydrocarbon volumes in barrels of oil per day ("BOPD") and MCF, and hydrogen-sulfide ("H<sub>2</sub>S") concentrations in parts per million ("ppm"), respectively:
- a. Dyer Lease: 4 to 61 BOPD; 2 to 225 MCFGD; 1,400 ppm H<sub>2</sub>S
  - b. Gaskins Lease: 10 to 30 BOPD; 24 to 95 MCFGD; 1000 ppm H<sub>2</sub>S
  - c. Allar I Lease: 11 to 68 BOPD; 5 to 1,682 MCFGD; 4,000 ppm H<sub>2</sub>S
  - d. Elrod Stewart 10 CTB: 6 to 33 BOPD; 19 to 53 MCFGD; 300 ppm H<sub>2</sub>S
  - e. Feaster CTB: 8 to 31 BOPD; 12 to 123 MCFGD; 1,800 ppm H<sub>2</sub>S
8. Each of the subject leases gathers hydrocarbon production, which contains concentrations of H<sub>2</sub>S bearing casing-head gas.
9. The following list of H<sub>2</sub>S scavenger operations have been installed on the corresponding subject lease:
- a. Dyer Lease:
  - b. Gaskins Lease:
  - c. Allar I Lease:
  - d. Elrod Stewart 10 CTB:
  - e. Feaster CTB:
10. Without the employment of H<sub>2</sub>S scavenger, each of the subject leases is unable to sell 100% of the produced casing head gas due to the casing-head gas containing H<sub>2</sub>S concentrations that are beyond the limit of acceptance for the sales pipeline's gas quality standards.
11. Each of the subject leases contains a flare stack that serves the respective lease, and the flare stack for each of the subject leases is located near the proximity of the well listed for each of the subject leases, as follows:
- a. Dyer Lease: Well No. 3301 (API No. 42-317-38698)
  - b. Gaskins Lease: Well No. 3801 (API No. 42-317-35278)
  - c. Allar I Lease: Well No. 1 (API No. 42-317-35363)
  - d. Elrod Stewart 10 CTB: Well No. 1 (API No. 42-227-36366)
  - e. Feaster CTB: Well No. 39K (API No. 42-317-36492)

12. LINN's requests for exception to flare in the subject applications for a period of one year at volumes greater than 50 MCFG per day is supported by the lack of a readily available sales pipeline's ability to accept H<sub>2</sub>S bearing casing-head gas during instances when H<sub>2</sub>S scavenger is not effectively administered to H<sub>2</sub>S casing-head gas on the subject leases.
13. 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 casing-head gas for a period of one year, as described in Finding of Fact No. 1 satisfies the requirements of Title 16 TAC §§3.32(f)(2)(D) and 3.32(h).

### EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission grant exceptions to flare up casing-head gas from the subject leases as described in Finding of Fact No. 1 above.

Respectfully submitted,



Brian Fancher, P.G.  
Technical Examiner



Cecile Hanna  
Legal Examiner