# Attachment 3

## Well Completion Operations Log

# Reese Hollow 117-1HU Completion Operations

| | |
|---|---|
| Well Location: | 41.800212, -77.959567 |
| US Well Number: | 37-105-21864 |
| Date and Time of Flowback Onset: | September 25, 2017; 2:00 PM |
| Date and Time of Each Attempt to Direct Flowback to a Separator: | September 28, 2017; 7:15 PM |
| Date and Time Well was Shut in and Flowback Equipment Permanently Disconnected OR Date and Time of Startup of Production: | October 2, 2017; 9:45 AM |
| Duration of Flowback (hr): | 157.5 |
| Duration of Recovery (hr) [2]: | 86.5 |
| Type of Recovery [3]: | Routed to the gas flow line |
| Description of Why All the Types of Recovery Are Technically Infeasible [4]: | NA |
| If Recovery is Technically Infeasible and Exception [5] from Combustion Claimed: | NA |
| Exception Claimed: | NA |
| Start Date: | NA |
| End Date: | NA |
| Reason for exception: | NA |
| Duration of Combustion (hr): | 0 |
| Duration of Venting (hr): | 0 |
| Reason for Venting in Lieu of Capture or Combustion: | NA |
| Separator Located Onsite During Entire Flowback Period: | Yes |

[1] Initial Flowback is the period which begins at the onset of flowback and ends when it is technically feasible for a separator to function.

[2] Not required for wildcat well, delineation well, non-wildcat low pressure well, or non-delineation low pressure well.

[3] Types of recovery:

Routed to the gas flow line or collection system,
Re-injected into the well or another well,
Used as an onsite fuel source, or
Used for another useful purpose that a purchased fuel or raw material would serve.

[4] Examples of information to be included in description of recovery being technically infeasible:

Name and location of the nearest gathering line and technical considerations preventing routing to this line,
Capture, re-injection, and reuse technologies considered and aspects of gas or equipment preventing use as a fuel onsite, and
Technical considerations preventing use of recovered gas for other useful purpose that a purchased fuel or raw material would serve.

[5] Types of exceptions:

Conditions that may result in a fire hazard or explosion, or
Where high heat emissions may negatively impact tundra, permafrost, or waterways.

# Reese Hollow 117-2HU Completion Operations

| | |
|---|---|
| Well Location: | |
| US Well Number: | 37-105-21865 |
| Date and Time of Flowback Onset: | September 20, 2017; 11:30 AM |
| Date and Time of Each Attempt to Direct Flowback to a Separator: | October 17, 2017; 3:00 PM |
| Date and Time of Each Occurrence of Returning to Initial Flowback [1]: | October 17, 2017; 11:00 AM |
| Date and Time Well was Shut in and Flowback Equipment Permanently Disconnected OR Date and Time of Startup of Production: | October 25, 2017; 9:00 AM |
| Duration of Flowback (hr): | 310 |
| Duration of Recovery (hr) [2]: | 186 |
| Type of Recovery [3]: | Routed to the gas flow line |
| Description of Why All the Types of Recovery Are Technically Infeasible [4]: | NA |
| If Recovery is Technically Infeasible and Exception [5] from Combustion Claimed: | NA |
| Exception Claimed: | NA |
| Start Date: | NA |
| End Date: | NA |
| Reason for exception: | NA |
| Duration of Combustion (hr): | 0 |
| Duration of Venting (hr): | 0 |
| Reason for Venting in Lieu of Capture or Combustion: | NA |
| Separator Located Onsite During Entire Flowback Period: | Yes |

[1] Initial Flowback is the period which begins at the onset of flowback and ends when it is technically feasible for a separator to function.

[2] Not required for wildcat well, delineation well, non-wildcat low pressure well, or non-delineation low pressure well.

[3] Types of recovery:

Routed to the gas flow line or collection system,
Re-injected into the well or another well,
Used as an onsite fuel source, or
Used for another useful purpose that a purchased fuel or raw material would serve.

[4] Examples of information to be included in description of recovery being technically infeasible:

Name and location of the nearest gathering line and technical considerations preventing routing to this line,
Capture, re-injection, and reuse technologies considered and aspects of gas or equipment preventing use as a fuel onsite, and
Technical considerations preventing use of recovered gas for other useful purpose that a purchased fuel or raw material would serve.

[5] Types of exceptions:

Conditions that may result in a fire hazard or explosion, or
Where high heat emissions may negatively impact tundra, permafrost, or waterways.

# Reese Hollow 117-3HU Completion Operations

| | |
|---|---|
| Well Location: | 41.800210, -77.959560 |
| US Well Number: | 37-105-21866 |
| Date and Time of Flowback Onset: | October, 12, 2017 11:45 AM |
| Date and Time of Each Attempt to Direct Flowback to a Separator: | October, 12, 2017 9:30 PM |
| Date and Time Well was Shut in and Flowback Equipment Permanently Disconnected OR Date and Time of Startup of Production: | October, 17, 2017 9:30 AM |
| Duration of Flowback (hr): | 117.75 |
| Duration of Recovery (hr) [2]: | 108 |
| Type of Recovery [3]: | Routed to the gas flow line |
| Description of Why All the Types of Recovery Are Technically Infeasible [4]: | NA |
| If Recovery is Technically Infeasible and Exception [5] from Combustion Claimed: | NA |
| Exception Claimed: | NA |
| Start Date: | NA |
| End Date: | NA |
| Reason for exception: | NA |
| Duration of Combustion (hr): | 0 |
| Duration of Venting (hr): | 0 |
| Reason for Venting in Lieu of Capture or Combustion: | NA |
| Separator Located Onsite During Entire Flowback Period: | Yes |

[1] Initial Flowback is the period which begins at the onset of flowback and ends when it is technically feasible for a separator to function.

[2] Not required for wildcat well, delineation well, non-wildcat low pressure well, or non-delineation low pressure well.

[3] Types of recovery:

Routed to the gas flow line or collection system,
Re-injected into the well or another well,
Used as an onsite fuel source, or
Used for another useful purpose that a purchased fuel or raw material would serve.

[4] Examples of information to be included in description of recovery being technically infeasible:

Name and location of the nearest gathering line and technical considerations preventing routing to this line,
Capture, re-injection, and reuse technologies considered and aspects of gas or equipment preventing use as a fuel onsite, and
Technical considerations preventing use of recovered gas for other useful purpose that a purchased fuel or raw material would serve.

[5] Types of exceptions:

Conditions that may result in a fire hazard or explosion, or
Where high heat emissions may negatively impact tundra, permafrost, or waterways.

# Reese Hollow 117-4HU Completion Operations

| | |
|---|---|
| Well Location: | 41.800199, -77.959619 |
| US Well Number: | 37-105-21867 |
| Date and Time of Flowback Onset: | October, 2, 2017 12:00 PM |
| Date and Time of Each Attempt to Direct Flowback to a Separator: | October, 4, 2017 10:00 AM |
| Date and Time Well was Shut in and Flowback Equipment Permanently Disconnected OR Date and Time of Startup of Production: | October, 12, 2017 9:00 AM |
| Duration of Flowback (hr): | 237 |
| Duration of Recovery (hr) [2]: | 191 |
| Type of Recovery [3]: | Routed to the gas flow line |
| Description of Why All the Types of Recovery Are Technically Infeasible [4]: | NA |
| If Recovery is Technically Infeasible and Exception [5] from Combustion Claimed: | NA |
| Exception Claimed: | NA |
| Start Date: | NA |
| End Date: | NA |
| Reason for exception: | NA |
| Duration of Combustion (hr): | 0 |
| Duration of Venting (hr): | 0 |
| Reason for Venting in Lieu of Capture or Combustion: | NA |
| Separator Located Onsite During Entire Flowback Period: | Yes |

[1] Initial Flowback is the period which begins at the onset of flowback and ends when it is technically feasible for a separator to function.

[2] Not required for wildcat well, delineation well, non-wildcat low pressure well, or non-delineation low pressure well.

[3] Types of recovery:

Routed to the gas flow line or collection system,
Re-injected into the well or another well,
Used as an onsite fuel source, or
Used for another useful purpose that a purchased fuel or raw material would serve.

[4] Examples of information to be included in description of recovery being technically infeasible:

Name and location of the nearest gathering line and technical considerations preventing routing to this line,
Capture, re-injection, and reuse technologies considered and aspects of gas or equipment preventing use as a fuel onsite, and
Technical considerations preventing use of recovered gas for other useful purpose that a purchased fuel or raw material would serve.

[5] Types of exceptions:

Conditions that may result in a fire hazard or explosion, or
Where high heat emissions may negatively impact tundra, permafrost, or waterways.