



April 29, 2022

Schuyler Hamilton
Crestone Peak Resources Operating, LLC
1801 California Street #2500
Denver, CO 80202

Subject: Third Party Flowline Abandonment-in-place Verification Letter

Oster 43-28
(Location ID: 332725)
40.281382, -104.66104
NESE 28 4N65W
Weld County, Colorado

Dear Mr. Hamilton,

This letter shall serve as verification that an Apex Companies LLC (Apex) Field Geologist, working under the supervision of a Professional Engineer registered with the State of Colorado, was present during the abandonment-in-place of the Crestone Peak Resources off-location flowline, Oster 43-28 (COGCC Location ID: 332725), located in Weld County, Colorado. A pre-abandonment notice under Form 44 (Off-Location Flowline Report) Document Number 402823308 was approved on November 15, 2021. The Apex Field Geologist observed that the abandonment requirements of Rule 1105.e.(1)-(4) were met including:

1. Evacuate the flowline or crude oil transfer line of any hydrocarbons or produced water to ensure the line is safe and inert;
2. Deplete the flowline or crude oil transfer line to atmospheric pressure;
3. Cut the flowline's or crude oil transfer line's risers to three (3) feet below grade or to the depth of the flowline or crude oil transfer line, whichever is shallower; and
4. Seal the ends of the flowline or crude oil transfer line below grade;

Observations

On January 20, 2022, an Apex Field Geologist was dispatched to the Oster 43-28 location to observe the depletion of the flowline to atmospheric pressure (Rule 1105.e.2), evacuation of any remaining hydrocarbons or produced water from the flowline (Rule 1105.e.1) and flushing with freshwater of approximately 950 feet of 2.5-inch flowline. Each riser end of the flowline was uncapped and the flowline allowed to deplete to atmospheric pressure. The pipe was then made safe and inert by flushing 32 barrels of fresh water through the full length of flowline until clear water was observed at the receiving end, evacuating any remaining hydrocarbons or produced water from the flowline.

Following flushing activities, Apex observed the flowline being cut (Rule 1105.e.3) and sealed (Rule 1105.e.4) at both ends of abandonment, ends A and B. The flowline was cut at the utility depth, approximately 3-feet at both End A and End B. Both ends of the off-location portion of flowline then had threads cut into the outside surface, and a threaded cap was installed and sealed with black tape.

Sincerely,
Apex Companies, LLC



Dan Delahunty, P.E., CPESC
Program Manager



Attachments:

1. Flowline Abandon-in-Place Checklist
2. Flowline AIP Diagram
3. Photolog



Flowline Abandon-in-place Checklist

Project Manager: Ryan Finley and Maggie Graham

Site Name(s): Oster 43-28

Location ID: 332725

Inspector's Name: Alex Ahmadian

Lat/Long: 40.281382, -104.66104

Abandonment Date: 1/20/2022 Time Onsite: 9:05 Time Offsite: 10:50

Flowline Information

Type: Steel with fusion bond coating

Length: Approximately 950 feet

Diameter: 2.5 inches

Condition: Good

Coating: Green Jacket

Other: No asbestos containing material

Requirements to be verified (COGCC 1105 e. #1-4)

- Evacuate the flowline or crude oil transfer line of any hydrocarbons or produced water to ensure the line is safe and inert.
 - Start time/date: 9:30; 1/20/2022
 - End time/date: 10:10; 1/20/2022
 - Volume of fresh water used: 32 barrels
 - Collect photos (see photolog)
- Deplete the flowline or crude oil transfer line to atmospheric pressure
 - Date/Time Uncapped
 - End A (Wellhead): 10:14; 1/20/2022
 - End B (Separator): 10:12; 1/20/2022
- Cut the flowline's or crude oil transfer line's risers to three (3) feet below grade or to the depth of the flowline or crude transfer line, whichever is shallower.
 - Depth of Flowline:
 - End A (Wellhead): 3 feet
 - End B (Separator): 3 feet



- Location of cut end
 - End A (Wellhead): 40.281737, -104.660982
 - End B (Separator): 40.279404, -104.6612536
- Photos collected and labeled during cutting, and threading activities at each end (see photolog)
- Seal the ends of the flowline or crude transfer line below grade
 - End A (Wellhead)
 - Method: Capping
 - Type: Threaded
 - Date/Time: 10:43; 1/20/2022
 - End B (Separator)
 - Method: Capping
 - Type: Threaded
 - Date/Time: 10:23; 1/20/2022
 - Collected time-stamped photos of each sealed end (see photolog).



Oster 43-28
(Location ID: 332725)
"Flowline Abandon-in-Place
Map"



End A cut and cap
location

End B cut and cap
location

Legend

- Abandoned in Place Flowline Ends
- Abandoned in Place Flowline Path



Description:

Hydro-vacuum truck for flushing flowline at End A



Latitude: 40.279319
Longitude: -104.661434
Elevation: 1470.92±1 m
Accuracy: 6.2 m
Azimuth: 271° (W)
Pitch: -36.4° (-0.9°)
Time: 01-20-2022 09:35

Description:

Hydro-vacuum hose connected to End A of flowline.

**Description:**

Hydro-vacuum truck gauge at End B, displaying number of barrels flushed through flowline.



Description:

End B of flowline, cut and threaded.



Latitude: 40.279514
Longitude: -104.661414
Elevation: 1465.99±2 m
Accuracy: 6.1 m
Azimuth: 220° (SW)
Pitch: -45.2° (-4.7°)
Time: 01-20-2022 10:23
Note: South

Description:

Cut, threaded, capped, and taped End B.



Latitude: 40.281756
Longitude: -104.660977
Elevation: 1466.7±6 m
Accuracy: 14.5 m
Azimuth: 73° (E)
Pitch: -50.6° (-2.3°)
Time: 01-20-2022 10:44
Note: Wellhead

Description:

Cut, threaded, capped, and taped End A.