

**FORM
INSP**

Rev
X/15

**State of Colorado
Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Inspection Date:

11/09/2018

Submitted Date:

11/16/2018

Document Number:

690100899

FIELD INSPECTION FORM

Loc ID _____ Inspector Name: Maclaren, Joe On-Site Inspection 2A Doc Num: _____

Status Summary:

- THIS IS A FOLLOW UP INSPECTION
- FOLLOW UP INSPECTION REQUIRED
- NO FOLLOW UP INSPECTION REQUIRED

Operator Information:

OGCC Operator Number: 10000
Name of Operator: BP AMERICA PRODUCTION COMPANY
Address: 380 AIRPORT RD
City: DURANGO State: CO Zip: 81303

Findings:

- 3 Number of Comments
- 1 Number of Corrective Actions
- Corrective Action Response Requested

ANY CORRECTIVE ACTION(S) FROM PREVIOUS INSPECTIONS THAT HAVE NOT BEEN ADDRESSED ARE STILL APPLICABLE

Contact Information:

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Inspected Facilities:

| Facility ID | Type | Status | Status Date | Well Class | API Num | Facility Name | Insp Status |
|-------------|------------------|--------|-------------|------------|---------|---------------------------|-------------|
| 458834 | SPILL OR RELEASE | AC | 11/07/2018 | | - | Thomas Jacquez E1 PW Line | EG |

General Comment:

Engineering integrity inspection performed on November 8th/ 9th, 2018 in response to initial form 19 spill report Doc #401825843 received by COGCC on 11/05/2018 that outlines: BP notified of produced water pipeline release by landowner. Pipeline was isolated and release stopped at 10AM on 11/4/18. Containment and recovery operations underway. Details of observations made and actions required identified during this field inspection are available in the flowline section of this report. Photos uploaded can be accessed at end of report.

Inspected Facilities

Facility ID: 458834 Type: SPILL OR API Number: - Status: AC Insp. Status: EG

Flowline

| #1 | Type: Non-Well Site | of Lines |
|----|---------------------|----------|
|----|---------------------|----------|

Flowline Description

Flowline Type: Non-Well Site Size: 6" Material: Fiberglass
 Variance: Age: 20+ Yrs Contents: Produced Water

Integrity Summary

Failures: Other Spills: Yes Repairs Made: Yes
 Coatings: H2S: No Cathodic Protection:

Pressure Testing

Witnessed: Test Result: Charted:

COGCC Rules (check all that apply)

1101. Installation and Reclamation 1102. Operations, Maintenance, and Repair 1103. Abandonment

Comment: COGCC Integrity Inspector met with BP America and contract personnel on location on 11/08-09/2018. The area where the produced water flowline failure occurred along with the point/ path of fluid release was observed prior to excavation. Cleanup and remediation efforts were observed in progress during this field inspection. During this field inspection, BP contract crews excavated and exposed approximately 80 linear feet of 6" fiberglass PW flowline in the area of the release. Two failures were identified on two separate (29'6") fiberglass pipe joints (either side of bell connection); (2) cracks (appear to be tensile stress cracks) formed near the 12 o'clock position where the pipe was being supported on a sandbag positioned in the trench bottom. The failures are similar in appearance and located approximately 15' apart/ at on sand bags. The line failures were located on and near the top of the steep slope; the pipe appeared to be in an "overbent" condition in the area of the failures. The flowline returns to a horizontal position at the hill top where it ties into a valve can located approximately 115' SW of the area of release. An isolation valve in the valve can was used to shut in the flowline and stop the fluid release. A second isolation valve is located on the east side of the Animas River. Crews continued work to expose the flowline upslope to the valve can; BP personnel on site continued to evaluate the extent of damage and make preparations for repairs.

Corrective Action: Provide information outlined below in writing to COGCC Engineering Integrity Group for review (pertaining to compliance of COGCC series 1100 flowline regulations):

Date: 01/16/2019

- 1) Final determination of root cause of failure(s) resulting in this release
- 2) Detailed description of all flowline repairs and/ or replacement work completed
- 3) Measures taken to prevent failure(s) from reoccurring at this location
- 4) Description of method(s) used to determine the extent/ endpoint of damage (downslope) along this flowline
- 5) Summary of all available historical monitoring data (integrity/ leak detection) for this section of flowline (SCADA, Pressure testing, etc.)
- 6) General assessment of the current integrity condition of all fiberglass pipe in service across the BP field
- 7) Measures taken to identify similar (high risk) areas across BP field where fiberglass flowline failures may occur
- 8) Conduct flowline pressure testing (post repair/ integrity confirmation) prior to returning this PW flowline to service.
- 9) Provide Integrity confirmation data (pressure testing charts/ data) to COGCC staff

COGCC Comments

| Comment | User | Date |
|--|----------|------------|
| <p>Additional key points of information obtained during this field inspection:</p> <ul style="list-style-type: none"> • This section of produced water gathering flowline services BP's "Amoco Heritage field" • Approximately 18 wells tie in to this 6" produced water gathering flowline • This flowline transports approximately 80-100 bbls produced water per day to the QQ water transfer station • Operating pressure is relatively low (gravity feed down slope/ max op pressure 40 PSI) • The 6" fiberglass flowline was constructed/ installed around the summer of 1991 (Flint for Amoco) • An 8" carbon steel natural gas gathering pipeline located adjacent to (same trench) the 6" fiberglass line was abandoned in place in 2014 (compressor station decommissioned) • A geotechnical contractor has been hired by BP to conduct an evaluation of the soils/ slope stability along the ROW in the area of the failures | maclarej | 11/16/2018 |

Attached Documents

You can go to COGCC Images (<https://cogcc.state.co.us/weblink/>) and search by document number:

| Document Num | Description | URL |
|--------------|----------------------|---|
| 401842755 | INSPECTION SUBMITTED | http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=4647783 |
| 690100905 | Inspection Photo Log | http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=4647749 |
| 690100906 | BP Photos | http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=4647750 |