

**FORM
INSP**

Rev
X/20

**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:

08/23/2021

Submitted Date:

08/25/2021

Document Number:

695300003

FIELD INSPECTION FORM

Loc ID _____ Inspector Name: Wheeler, Steven 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: 46290
Name of Operator: KP KAUFFMAN COMPANY INC
Address: 1675 BROADWAY, STE 2800
City: DENVER State: CO Zip: 80202

Findings:

- 4 Number of Comments
- 3 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:

Contact Name	Phone	Email	Comment
Schlagenhauf, Mark		mark.schlagenhauf@state.co.us	
MacLaren, Joe		joe.maclaren@state.co.us	
Knop, Max		mknop@kpk.com	
Wheeler, Steven		steven.wheeler@state.co.us	

Inspected Facilities:

Facility ID	Type	Status	Status Date	Well Class	API Num	Facility Name	Insp Status
453316	TANK BATTERY	AC	12/06/2017		-	Nessu 1,2,3,4,12,14,15,16 battery	EI
476987	SPILL OR RELEASE	CL	07/06/2021		-	NESSSU CONSOLIDATION	EG

General Comment:

Engineering Integrity inspection performed on August 23rd, 2021 in response to some of inspection report's #690101949 corrective actions. Inspection aimed at examining the repair of the flowline in response to spill ID #476987. The previous inspection reported a potential issue with the pre-tensioned misalignment of the previous repair. Engineer arrived on site, in a clearing within the cornfield, to a fenced excavation with two combined portions. The first, a larger and deeper excavation portion was roughly square to circular in shape to the south. The second, a more-shallow trench that connected north of the larger excavation. Engineer observed ~70' of replacement pipe entirely made of fiberglass; connected via a fiberglass fuse at the south tie-in and a clamped Gruvlok 90 degree elbow at the north tie-in. The north 90 degree tie-in turned from north to east and was perceived to be connected to an existing 3" coated carbon steel line. The south tie-in fuse was held in place with Victaulic-style clamp.

Three (3) capped flowline abandonments were observed: Two (2) 3" fiberglass and one (1) 1.5" PVC line. Additionally, two (2) 3" fiberglass lines were exposed inside of the excavation.

Details of the corrective actions identified during this field inspection are located in the flowline section of this report. Photo log uploaded.

Inspected Facilities

Facility ID: 453316 Type: TANK API Number: - Status: AC Insp. Status: EI

Flowline

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

Flowline Description

Flowline Type: <u>Non-Well Site</u>	Size: <u>3"</u>	Material: <u>Fiberglass</u>
Variance: <u>No</u>	Age: <u>New</u>	Contents: <u>Crude Oil</u>

Integrity Summary

Failures: <u>Other</u>	Spills: <u>Yes</u>	Repairs Made: <u>Yes</u>
Coatings: <u>No</u>	H2S: <u>No</u>	Cathodic Protection: <u>No</u>

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 Engineer was on site 8/23/2021. Inspection on this repair was requested by KPK after a previous repair of this Nesssu consolidation line, as a result of spill ID # 476987. The south tie-in appeared to have a kink or bowed tie-in that did not match the alignment of the existing stub.

Also observed was an unused pipe support in the deeper larger excavation area. Given the numerous abandonments, it is unclear whether this pipe support was intended for temporary use exclusively for this repair. If so, the pipe support was not secured to the pipe for such a tension-relief purpose for the south tie-in.

Corrective Action: Comply with COGCC rule 1102 Installation:
 (1) Embed pipe in a material that will both structurally support it (after proper compaction) and avoid inducing excess stresses on the pipe itself or the joints, which currently exist (1102.d.(10) and d.(12)).
 (2) Additionally, the backfill covering the pipe must ensure long-term stability from external loads, including the backfill installation itself (1102.e).
 (3) Contact COGCC Inspector with schedule of post repair pressure testing. Test to be witnessed by COGCC staff. Provide pressure testing charts for all (active) flowline(s) repaired; email to COGCC Inspector (See rule 1102.O).

Date: 09/30/2021

#2	Type: Non-Well Site	of Lines	
----	---------------------	----------	--

Flowline Description

Flowline Type: <u>Non-Well Site</u>	Size: <u>3"</u>	Material: <u>Fiberglass</u>
Variance: <u>No</u>	Age: <u>20+ Yrs</u>	Contents:

Integrity Summary

Failures: <u>Other</u>	Spills: <u>No</u>	Repairs Made: <u>Yes</u>
Coatings: <u>No</u>	H2S: <u>No</u>	Cathodic Protection: <u>No</u>

Pressure Testing

Witnessed:	Test Result:	Charted:
------------	--------------	----------

COGCC Rules(check all that apply)

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

<u>Comment:</u>	During field inspection six (6) flowlines were observed exposed in the excavation. First, the main 3" fiberglass line in question which was repaired. Three (3) flowlines had been capped and abandoned including two (2) 3" fiberglass lines (one northeast and one southwest of the repaired line) and one (1) 1.5" PVC line (also southwest of the repaired line). Both fiberglass caps were fused and held in place with Victaulic-style clamps. Additionally two (2) 3" fiberglass flowlines had been exposed along the west edge of the larger excavation. One (1) of these two additional fiberglass lines had been cut and resided open-ended.	
Corrective Action:	Comply with COGCC rule 1105 Abandonment; Repair all active flowlines intended for return to service; or Historically abandoned/ out of service flowlines exposed in the excavation must be abandoned per COGCC rule 1105 (ends sealed per 1105.e.4). Provide confirmation documentation of completion (photos) to COGCC Integrity Inspector and Engineer.	Date: <u>09/30/2021</u>

#3	Type: Non-Well Site	of Lines	
----	---------------------	----------	--

Flowline Description

Flowline Type: <u>Non-Well Site</u>	Size: <u>3"</u>	Material: <u>Fiberglass</u>
Variance: <u>No</u>	Age: <u>New</u>	Contents:

Integrity Summary

Failures:	Spills: <u>No</u>	Repairs Made: <u>Yes</u>
Coatings: <u>Yes External</u>	H2S: <u>No</u>	Cathodic Protection: <u>No</u>

Pressure Testing

Witnessed:	Test Result:	Charted:
------------	--------------	----------

COGCC Rules (check all that apply)

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

<u>Comment:</u>	At the north tie-in, light rust issues were observed. Observation included surface rust on bolts of the Gruvlok fitting and on existing carbon steel pipe, where light loss of coating has occurred. Given no visible cathodic protection, on carbon steel line, tape and/or thermal shrink wrap could alleviate problematic clamped fittings in buried service. Adjacent fields appear to utilize flood irrigation, so ground water saturation will continue to be a source of oxidation to non-coated steel as observed.	
Corrective Action:	Comply with COGCC rules 1104 and 1102.j Add tape and/or thermal shrink wrap (recommended by clamp manufacturer for buried service) to prevent future surface rust. Both clamp and exposed carbon steel pipe (minimum 6") should be covered or minimum recommended by clamp manufacturer.	Date: <u>09/30/2021</u>

Facility ID: 476987 Type: SPILL OR API Number: - Status: CL Insp. Status: EG

Attached Documents

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

Document Num	Description	URL
402792299	INSPECTION SUBMITTED	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=5515185
695300006	Photo Log	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=5515184