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AUG 13 2018

PUBLIC SERVICE
COMMISSION

Gwen R. Pinson
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40601

**Louisville Gas and
Electric Company**
State Regulation and Rates
220 West Main Street
P.O. Box 32010
Louisville, Kentucky 40232
www.lge-ku.com

Rick E. Lovekamp
Manager Regulatory
Strategy/Policy
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August 13, 2018

**RE: Louisville Gas and Electric Company Alleged Failure to Comply with
KRS 278.495, 807 KAR 5:022, and 49 C.F.R. Part 192
Case No. 2017-00119**

Dear Ms. Pinson:

Enclosed please find a copy of Louisville Gas and Electric Company's finalized Incident Report submitted to the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration concerning the September 17, 2014 incident which was the subject of the above referenced case. This report contains updated information concerning the root cause of the pipeline failure.

Should you have any questions regarding the enclosed, please contact me at your convenience.

Sincerely,

Rick E. Lovekamp

NOTICE: This report is required by 49 CFR Part 191. Failure to report can result in a civil penalty not to exceed 100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed \$1,000,000 as provided in 49 USC 60122.

OMB NO: 2137-0522
EXPIRATION DATE: 8/31/2020



U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

Original Report
Date:

10/17/2014

No.

20140107 - 30781

(DOT Use Only)

INCIDENT REPORT - GAS TRANSMISSION AND GATHERING PIPELINE SYSTEMS

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0522. All responses to this collection of information are mandatory. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

INSTRUCTIONS

Important: Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at <http://www.phmsa.dot.gov/pipeline/library/forms>.

PART A - KEY REPORT INFORMATION

Report Type: (select all that apply)	Original:	Supplemental:	Final:
		Yes	Yes
Last Revision Date:	08/10/2018		
1. Operator's OPS-issued Operator Identification Number (OPID):	11824		
2. Name of Operator	LOUISVILLE GAS & ELECTRIC CO		
3. Address of Operator:			
3a. Street Address	220 W MAIN ST, PO BOX 32010		
3b. City	LOUISVILLE		
3c. State	Kentucky		
3d. Zip Code:	40202		
4. Local time (24-hr clock) and date of the Incident:	09/17/2014 16:51		
5. Location of Incident:			
Latitude:	38.37078		
Longitude:	-85.5905		
6. National Response Center Report Number (if applicable):	1095646		
7. Local time (24-hr clock) and date of initial telephonic report to the National Response Center (if applicable):	09/17/2014 19:10		
8. Incident resulted from:	Unintentional release of gas		
9. Gas released: (select only one, based on predominant volume released)	Natural Gas		
- Other Gas Released Name:			
10. Estimated volume of commodity released unintentionally - Thousand Cubic Feet (MCF):	7,000.00		
11. Estimated volume of intentional and controlled release/blowdown - Thousand Cubic Feet (MCF)			
12. Estimated volume of accompanying liquid release (Barrels):			
13. Were there fatalities?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			
13d. Workers working on the right-of-way, but NOT associated with this Operator			
13e. General public			
13f. Total fatalities (sum of above)			
14. Were there injuries requiring inpatient hospitalization?	Yes		
- If Yes, specify the number in each category:			
14a. Operator employees	0		
14b. Contractor employees working for the Operator	1		
14c. Non-Operator emergency responders	0		
14d. Workers working on the right-of-way, but NOT associated with this Operator	0		
14e. General public	0		
14f. Total injuries (sum of above)	1		
15. Was the pipeline/facility shut down due to the incident?	Yes		
- If No, Explain:			

- If Yes, complete Questions 15a and 15b: (use local time, 24-hr clock)	
15a. Local time and date of shutdown	09/17/2014 20:29
15b. Local time pipeline/facility restarted	09/19/2014 03:35
- Still shut down? (* Supplemental Report Required)	
16. Did the gas ignite?	No
17. Did the gas explode?	No
18. Number of general public evacuated:	100
19. Time sequence (use local time, 24-hour clock):	
19a. Local time operator identified Incident- effective 10-2014, changed from "Incident" to "failure"	09/17/2014 16:51
19b. Local time operator resources arrived on site	09/17/2014 16:51
PART B - ADDITIONAL LOCATION INFORMATION	
1. Was the origin of the Incident onshore?	Yes
- Yes (Complete Questions 2-12)	
- No (Complete Questions 13-15)	
If Onshore:	
2. State:	Kentucky
3. Zip Code:	40059
4. City	Prospect
5. County or Parish	Oldham County
6. Operator designated location	Survey Station No.
	Specify: 69,872
7. Pipeline/Facility name:	Ballardsville
8. Segment name/ID:	Segment 14.0 (HWY 42)
9. Was Incident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Incident :	Pipeline Right-of-way
11. Area of Incident (as found) :	Underground
	Specify: Exposed due to excavation
	Other - Describe:
	Depth-of-Cover (in): 48
12. Did Incident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing -	
Cased/ Uncased:	
- If Railroad crossing -	
Cased/ Uncased/ Bored/drilled	
- If Road crossing -	
Cased/ Uncased/ Bored/drilled	
- If Water crossing -	
Cased/ Uncased	
Name of body of water (If commonly known):	
Approx. water depth (ft) at the point of the Incident:	
Select:	
If Offshore:	
13. Approx. water depth (ft) at the point of the Incident:	
14. Origin of Incident:	
- If "In State waters":	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- If "On the Outer Continental Shelf (OCS)":	
- Area:	
- Block #:	
15. Area of Incident:	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Is the pipeline or facility: - Interstate - Intrastate	Intrastate
2. Part of system involved in Incident:	Onshore Pipeline, Including Valve Sites
3. Item involved in Incident:	Other
- If Pipe - Specify:	
3a. Nominal diameter of pipe (in):	
3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	

3d. Pipe specification:	
3e. Pipe Seam – Specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Incident – Specify:	
- If Other, Describe:	
- If Weld, including heat-affected zone – Specify:	
- If Other, Describe:	
- If Valve – Specify:	
- If Mainline – Specify:	
- If Other, Describe:	
3i. Mainline valve manufacturer:	
3j. Year of manufacture:	
- If Other, Describe:	mechanical coupling
4. Year item involved in Incident was installed:	1998
5. Material involved in Incident:	Carbon Steel
- If Material other than Carbon Steel or Plastic – Specify:	
6. Type of Incident involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other – Describe:	
- If Rupture - Select Orientation:	
- If Other – Describe:	
Approx. size: in. (widest opening):	
by in. (length circumferentially or axially):	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Class Location of Incident:	Class 3 Location
2. Did this Incident occur in a High Consequence Area (HCA)?	Yes
- If Yes:	
2a. Specify the Method used to identify the HCA:	Method2
3. What is the PIR (Potential Impact Radius) for the location of this Incident? Feet:	165
4. Were any structures outside the PIR impacted or otherwise damaged due to heat/fire resulting from the Incident?	No
5. Were any structures outside the PIR impacted or otherwise damaged NOT by heat/fire resulting from the Incident?	No
6. Were any of the fatalities or injuries reported for persons located outside the PIR?	No
7. Estimated Property Damage :	
7a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 6-2011, "paid/reimbursed by the Operator" removed	\$ 52,000
Estimated cost of gas released unintentionally – effective 6-2011, moved to item 7f	
Estimated cost of gas released during intentional and controlled blowdown – effective 6-2011, moved to item 7g	
7b. Estimated cost of Operator's property damage & repairs	\$ 262,000
7c. Estimated cost of Operator's emergency response	\$ 60,000
7d. Estimated other costs	\$ 950,000
Describe:	restoration/re-light effort
7e. Property damage subtotal (sum of above)	\$ 1,324,000
Cost of Gas Released	
7f. Estimated cost of gas released unintentionally	\$ 30,709
7g. Estimated cost of gas released during intentional and controlled blowdown	\$ 0
7h. Total estimated cost of gas released (sum of 7.f & 7.g above)	\$ 30,709
Total of all costs	\$ 1,354,709

PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Incident (psig):	250.00
2. Maximum Allowable Operating Pressure (MAOP) at the point and time of the Incident (psig):	400.00
Added 10-2014 2a. MAOP established by 49 CFR section:	192.619(c)
- If Other, specify:	
3. Describe the pressure on the system or facility relating to the Incident:	Pressure did not exceed MAOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Incident operating under an established pressure restriction with pressure limits below those normally allowed by the MAOP?	No
- If Yes - (Complete 4a and 4b below)	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	Yes
- If Yes - (Complete 5a. - 5e. below):	
5a. Type of upstream valve used to initially isolate release source:	Manual
5b. Type of downstream valve used to initially isolate release source:	Manual
5c. Length of segment isolated between valves (ft):	35,500
5d. Is the pipeline configured to accommodate internal inspection tools?	No
- If No - Which physical features limit tool accommodation? (select all that apply)	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	Yes
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	Yes
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No
- If Yes, which operational factors complicate execution? (select all that apply)	
- Excessive debris or scale, wax, or other wall build-up	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other	
- If Other, Describe:	
5f. Function of pipeline system:	Transmission Line of Distribution System
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Incident?	Yes
- If Yes:	
6a. Was it operating at the time of the Incident?	Yes
6b. Was it fully functional at the time of the Incident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations) assist with the detection of the Incident?	Yes
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Incident?	Yes
7. How was the Incident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other - Describe:	
7a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 7, specify:	Operator employee
8. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Incident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)

- If No, the operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: <i>(provide an explanation for why the operator did not investigate)</i>	The incident was a result of a mechanical coupling failure and not any control room issues.
- If Yes, Describe investigation result(s) <i>(select all that apply)</i> :	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue	
- Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above –	
Describe:	

PART F - DRUG & ALCOHOL TESTING INFORMATION

1. As a result of this Incident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
1a. How many were tested:	4
1b. How many failed:	0
2. As a result of this Incident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
2a. How many were tested:	4
2b. How many failed:	0

PART G - APPARENT CAUSE

Select only one box from PART G in the shaded column on the left representing the APPARENT Cause of the Incident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Incident in the narrative (PART H).

Apparent Cause:	G6 - Equipment Failure
G1 - Corrosion Failure - only one sub-cause can be picked from shaded left-hand column	
Corrosion Failure – Sub-cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: <i>(select all that apply)</i>	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other	
- If Other – Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: <i>(select all that apply)</i>	
- Field examination	
- Determined by metallurgical analysis	
- Other	
- If Other – Describe:	
4. Was the failed item buried under the ground?	

- If Yes:	
4a. Was failed item considered to be under cathodic protection at the time of the incident?	
- If Yes, Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the incident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the incident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- If Other, Describe:	
7. Cause of corrosion <i>(select all that apply)</i> :	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following <i>(select all that apply)</i> :	
- Field examination	
- Determined by metallurgical analysis	
- Other	
- If Other, Describe:	
9. Location of corrosion <i>(select all that apply)</i> :	
- Low point in pipe	
- Elbow	
- Drop-out	
- Other	
- If Other, Describe:	
10. Was the gas/fluid treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Incident" (from PART C, Question 3) is Pipe or Weld.	
14. Has one or more internal inspection tool collected data at the point of the Incident?	
14a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage Tool	Most recent year run:
- Ultrasonic	Most recent year run:
- Geometry	Most recent year run:
- Caliper	Most recent year run:
- Crack	Most recent year run:
- Hard Spot	Most recent year run:
- Combination Tool	Most recent year run:
- Transverse Field/Triaxial	Most recent year run:
- Other	Most recent year run:
- If Other, Describe:	
15. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?	
- If Yes,	

Most recent year tested:	
Test pressure (psig):	
16. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Incident:	
Most recent year conducted:	
- If Yes, but the point of the Incident was not identified as a dig site:	
Most recent year conducted:	
17. Has one or more non-destructive examination been conducted at the point of the Incident since January 1, 2002?	
17a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	Most recent year examined:
- Guided Wave Ultrasonic	Most recent year examined:
- Handheld Ultrasonic Tool	Most recent year examined:
- Wet Magnetic Particle Test	Most recent year examined:
- Dry Magnetic Particle Test	Most recent year examined:
- Other	Most recent year examined:
If Other, Describe:	
G2 - Natural Force Damage - only one sub-cause can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Incident generated in conjunction with an extreme weather event?	
6a. If yes, specify: (select all that apply):	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage only one sub-cause can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Previous Damage Due to Excavation Activity: Complete Questions 1-5 ONLY IF the "Item Involved in Incident" (From Part C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Incident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	Year:
- Ultrasonic	Year:
- Geometry	Year:
- Caliper	

	Year:	
- Crack		
	Year:	
- Hard Spot		
	Year:	
- Combination Tool		
	Year:	
- Transverse Field/Triaxial		
	Year:	
- Other:		
	Year:	
	Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?		
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?		
- If Yes:		
	Most recent year tested:	
	Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?		
- If Yes, and an investigative dig was conducted at the point of the Incident:		
	Most recent year conducted:	
- If Yes, but the point of the Incident was not identified as a dig site:		
	Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Incident since January 1, 2002?		
5a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:		
- Radiography		
	Year:	
- Guided Wave Ultrasonic		
	Year:	
- Handheld Ultrasonic Tool		
	Year:	
- Wet Magnetic Particle Test		
	Year:	
- Dry Magnetic Particle Test		
	Year:	
- Other		
	Year:	
	Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.		
6. Did the operator get prior notification of the excavation activity?		
6a. If Yes, Notification received from (select all that apply):		
- One-Call System		
- Excavator		
- Contractor		
- Landowner		
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.		
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?		
8. Right-of-Way where event occurred (select all that apply):		
- Public		
	- If Public, Specify:	
- Private		
	- If Private, Specify:	
- Pipeline Property/Easement		
- Power/Transmission Line		
- Railroad		
- Dedicated Public Utility Easement		
- Federal Land		
- Data not collected		
- Unknown/Other		
9. Type of excavator :		
10. Type of excavation equipment :		
11. Type of work performed :		
12. Was the One-Call Center notified? - Yes - No		

12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption: (hours)	
17. Description of the CGA-DIRT Root Cause (select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, then one predominant second level CGA-DIRT Root Cause as well):	
- Predominant first level CGA-DIRT Root Cause:	
- If One-Call Notification Practices Not Sufficient, Specify:	
- If Locating Practices Not Sufficient, Specify:	
- If Excavation Practices Not Sufficient, Specify:	
- If Other/None of the Above, Explain:	
G4 - Other Outside Force Damage - only one sub-cause can be selected from the shaded left-hand column	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete Questions 3-7 ONLY IF the "Item Involved in Incident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Incident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	Most recent year run:
- Ultrasonic	Most recent year run:
- Geometry	Most recent year run:
- Caliper	Most recent year run:
- Crack	Most recent year run:
- Hard Spot	Most recent year run:
- Combination Tool	Most recent year run:
- Transverse Field/Triaxial	Most recent year run:
- Other:	Most recent year run:
	Describe:
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
	Most recent year tested:
	Test pressure (psig):
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Incident :	

Most recent year conducted:		
- If Yes, but the point of the Incident was not identified as a dig site:		
Most recent year conducted:		
7. Has one or more non-destructive examination been conducted at the point of the Incident since January 1, 2002?		
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:		
- Radiography		
Most recent year conducted:		
- Guided Wave Ultrasonic		
Most recent year conducted:		
- Handheld Ultrasonic Tool		
Most recent year conducted:		
- Wet Magnetic Particle Test		
Most recent year conducted:		
- Dry Magnetic Particle Test		
Most recent year conducted:		
- Other		
Most recent year conducted:		
Describe:		
- If Intentional Damage:		
8. Specify:		
- If Other, Describe:		
- If Other Outside Force Damage:		
9. Describe:		
G5 - Pipe, Weld, or Joint Failure		Use this section to report material failures ONLY IF the "Item Involved in Incident" (from PART C, Question 3) is "Pipe" or "Weld."
Only one sub-cause can be selected from the shaded left-hand column		
Pipe, Weld or Join Failure – Sub-Cause:		
1. The sub-cause shown above is based on the following (<i>select all that apply</i>):		
- Field Examination		
- Determined by Metallurgical Analysis		
- Other Analysis		
- If "Other Analysis", Describe		
- Sub-cause is Tentative or Suspected; Still Under Investigation (<i>Supplemental Report required</i>)		
- If Construction-, Installation- or Fabrication		
2. List contributing factors: (<i>select all that apply</i>)		
- Fatigue or Vibration related:		
Specify:		
- If Other, Describe:		
- Mechanical Stress		
- Other		
- If Other, Describe:		
- If Environmental Cracking-related:		
3. Specify:		
- If Other, Describe:		
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.		
4. Additional Factors (<i>select all that apply</i>):		
- Dent		
- Gouge		
- Pipe Bend		
- Arc Burn		
- Crack		
- Lack of Fusion		
- Lamination		
- Buckle		
- Wrinkle		
- Misalignment		
- Burnt Steel		
- Other		
- If Other, Describe:		
5. Has one or more internal inspection tool collected data at the point of		

the Incident?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	Most recent year run:
- Ultrasonic	Most recent year run:
- Geometry	Most recent year run:
- Caliper	Most recent year run:
- Crack	Most recent year run:
- Hard Spot	Most recent year run:
- Combination Tool	Most recent year run:
- Transverse Field/Triaxial	Most recent year run:
- Other	Most recent year run:
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
	Most recent year tested:
	Test pressure (psig):
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Incident:	
	Most recent year conducted:
- If Yes, but the point of the Incident was not identified as a dig site:	
	Most recent year conducted:
8. Has one or more non-destructive examination(s) been conducted at the point of the Incident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	Most recent year conducted:
- Guided Wave Ultrasonic	Most recent year conducted:
- Handheld Ultrasonic Tool	Most recent year conducted:
- Wet Magnetic Particle Test	Most recent year conducted:
- Dry Magnetic Particle Test	Most recent year conducted:
- Other	Most recent year conducted:
Describe:	
G6 - Equipment Failure - only one sub-cause can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- If Malfunction of Control/Relief Equipment:	
1. Specify:	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	

- Stopple/Control Fitting	
- Pressure Regulator	
- ESD System Failure	
- Other	
- If Other, Describe:	
- If Compressor or Compressor-related Equipment:	
2. Specify:	
- If Other, Describe:	
- If Threaded Connection/Coupling Failure:	
3. Specify:	
- If Other, Describe:	
- If Non-threaded Connection Failure:	
4. Specify:	Other
- If Other, Describe:	mechanical coupling
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure <i>(select all that apply)</i>	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	Yes
- Manufacturing defect	
- Loss of electricity	
- Improper installation	Yes
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported gas/fluid	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	Yes
- Thermal stress	
- Other	
- If Other, Describe:	
G7 – Incorrect Operation - only one sub-cause can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Underground Gas Storage, Pressure Vessel, or Cavern Allowed or Caused to Overpressure:	
1. Specify:	
- If Other, Describe:	
- If Other Incorrect Operation:	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Incident related to: <i>(select all that apply)</i>	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Incident:	
5. Was the task(s) that led to the Incident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Incident Cause - only one sub-cause can be selected from the shaded left-hand column	
Other Incident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	

2. Specify:	
PART - H NARRATIVE DESCRIPTION OF THE INCIDENT	
The pipeline was excavated so modifications could be made to allow passage of in line inspection tools. Within the excavation, a mechanical coupling was exposed. Shortly thereafter, the pipeline separated from the mechanical coupling, which resulted in a release of gas. No ignition or explosion occurred. Repairs were made promptly and the pipeline was returned to service on September 19, 2014.	
PART I - PREPARER AND AUTHORIZED SIGNATURE	
Preparer's Name	Peter Clyde
Preparer's Title	Manager Gas Regulatory Compliance
Preparer's Telephone Number	502-364-8715
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Preparer's Facsimile Number	502-217-2535
Authorized Signature Title	Associate General Counsel
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Date	08/10/2018