NOTICE: This report is required by 49 CFR Part 191. Failure to report can result in a civil penalty as provided in 49 USC 60122.

Form Approved 1/22/2020 OMB NO: 2137-0635 Expires: 5/31/2024



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

## INCIDENT REPORT – GAS TRANSMISSION AND GATHERING SYSTEMS

Rep	REPORT_RECEIVED_DATE ort Date
REPO	ORT_NUMBER
	LEMENTAL_NUMBER
No.	
	(DOT Use Only)

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 2137-0635. Public reporting for this collection of information is estimated to be approximately 12 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer PHMSA Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue. SE. Washington, D.C. 20590

and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this 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 <a href="http://www.phmsa.dot.gov/pipeline/library/forms">http://www.phmsa.dot.gov/pipeline/library/forms</a> .		
PART A – KEY REPORT INFORMATION   Report Type: (select all that apply)   Original   Supplemental   Final REPORT_TYPE		
A1. Operator's OPS-issued Operator Identification Number (OPID): / / / / OPERATOR_ID  A2. Name of Operator: <u>auto-populated based on OPID</u> NAME  A3. Address of Operator:		
A3a. Street Address: <u>auto-populated based on OPID</u> A3b. City: <u>auto-populated based on OPID</u> A3c. State: <u>auto-populated based on OPID</u> A3d. Zip Code: <u>auto-populated based on OPID</u> OPERATOR_STREET_ADDRESS OPERATOR_CITY_NAME OPERATOR_STATE_ABBREVIATION OPERATOR_POSTAL_CODE		
A4. Earliest local time (24-hr clock) and date an incident reporting criteria was met:		
TIME_ZONE  A4a. Time Zone for local time (select only one) O Alaska O Eastern O Central O Hawaii-Aleutian O Mountain O Pacific.		
A4b. Daylight Saving in effect? O Yes O No DAYLIGHT_SAVINGS_IND		
A5. Location of Incident:  Latitude: / / / . / / / LOCATION_LATITUDE  Longitude: - / / / / . / / / LOCATION_LONGITUDE		
A6. Gas released: (select only one, based on predominant volume released)    Natural Gas		

		INJURY IND
A10. Were there fatalities? O Yes O No FATALITY_IND  If Yes, specify the number in each category:	A11. Were there injuries requiring inpatient hoself Yes, specify the number in each category	spitalization? O Yes O No
A10a Operator employees	A11a. Operator employees	<u>                                     </u>
A10b. Contractor employees  WIM_EMP_FATALITIES  A10b. Contractor employees  working for the Operator	A11b. Contractor employees working for the Operator	NUM_CONTR_INJURIES
NUM_CONTR_FATALITIES A10c. Non-Operator	A11c. Non-Operator emergency responders	NUM_ER_INJURIES
NUM ER FATALITIES	A11d. Workers working on the	<u> </u>
A10d. Workers working on the right-of-way, but NOT NUM WORKER FATALITIES associated with this Operator / / / / /	right-of-way, but NOT associated with this Operator	NUM_WORKER_INJURIE
A10e. General public / / / / /	A11e. General public	NUM_GP_INJURIES   <u>                                    </u>
NUM_GP_FATALITIES A10f. Total fatalities (sum of above) calculated FATAL	A11f. Total injuries (sum of above)	calculated INJURE
ACCIDENT_IDENTIFIER		
A12. What was the Operator's initial indication of the Failure? (selection of the Failure) (selection)		
☐ SCADA-based information (such as alarm(s), alert(s), even ☐ Static Shut-in Test or Other Pressure or Leak Test	u(s), and/or volume calculations)	
	Local Operating Personnel, including contractor	ors
	Ground Patrol by Operator or its contractor	
	Notification from Emergency Responder Other ACCIDENT_DETAILS	
A12a. If "Controller", "Local Operating Personnel, including conselected in Question 12, specify the following: (select only one	ntractors", "Air Patrol", or "Ground Patrol by Ope	erator or its contractor" is
	ring for the Operator	
A13. Local time Operator identified failure / / / /	INCIDENT_IDENTIFIED_	DATETIME
A13. Local time Operator identified failure  SYSTEM_PART_INVOLVED  A14. Part of system involved in Incident: (select only one)  Belowground Storage, Including Associated Equipment and Piping  Aboveground Storage, Including Associated Equipment and Piping  Onshore Compressor Station Equipment and Piping  Onshore Regulator/Metering Station Equipment and Piping  Onshore Pipeline, Including Valve Sites  Offshore Platform, Including Riser and Riser Bend		
A15. Operational Status at time Operator identified failure (select or		
O Post-Construction Commissioning STATUS_WHEN_IDENTIFIED	ED	
O Post-Maintenance/Repair O Routine Start-Up		
O Routine Shutdown		
O Normal Operation, includes pauses during maintenance		
O Idle SHUTDOWN DUE ACCIDENT IND		
, , , , , , , , , , , , , , , , , , , ,	WN_EXPLAIN	
If Yes, complete Questions A16.a and A16.b: (use local time,	SHUIDOWN_DATEITME	
A16a. Local time and date of shutdown / / / Hour	<u>/                                    </u>	LL_SHUTDOWN_IND
RESTART_DATETIME  A16b. Local time pipeline/facility restarted / / / / Hour	<u>, , , , , , , , , , , , , , , , , , , </u>	Still shut down*  pplemental Report required
If A12. = Notification from Emergency Responder, skip A17. A17a. Did the operator communicate with Local, State, or Federal I	COMMUN	NICATION_STATE_FED_IND O Yes O No
If No. skip A17h and c	ARTY INITIATED COMMUNICATION	
A17b. Which party initiated communication about the incident?		y Responder
A17c. Local time of initial Operator and Local/State/Federal Emerg		
ON_SITE_DATETIME	/ / / / / <u>[ / / / </u>	<u>/ / /</u>
Ho	our <u>                                     </u>	ır
A19 reserved		

A20a. Local time (24-hr clock) and date of initial operator report to the National Response Center:
/ / / / / / / / / / / / / / / / NRC_RPT_DATETIME Hour Month Day Year
A20b. Initial Operator National Response Center Report Number NRC_RPT_NUM OR O NRC Notification Required But Not Made
A20c. Additional NRC Report numbers submitted by the operator: <u>ADDITIONAL_NRC_REPORT_NUMBERS</u>
A21. Did the gas ignite? O Yes O No IGNITE_IND
If A21 = Yes, then answer A21a through d:
A21a. Local time of ignition / / / / / / / / / / / / / / / / / / /
A21b. How was the fire extinguished? HOW_EXTINGUISHED O Operator/Contractor O Local/State/Federal Emergency Responder O Allowed to burn out O Other, specify:
GAS_CONSUMED_BY_FIRE_IN_MCF A21c. Estimated volume of gas consumed by fire (mcf): (must be less than or equal to A7.)
A21d. Did the gas explode? O Yes O No EXPLODE_IND
If A14. is "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend", answer A22a through f  UPSTREAM_OPRTNL_CNTRL_DETAIL.  A22a. Initial action taken to control flow upstream of failure location O Valve Closure O Operational Control - mandatory text field  If Valve Closure, answer A22.b and c:  UPSTREAM_VALVE_CLOSE_DATETIME  A22b. Local time of final upstream valve closure  UPSTREAM_VALVE_TYPE_IND  A22c. Type of upstream valve used to complete upstream isolation of release source:
DOWNSTREAM_ACTION_TAKEN  O Manual O Automatic O Remotely Controlled DOWNSTREAM_OPRTNL_CNTRL_DETAIL  A22d. Initial action taken to control flow downstream of failure location O Valve Closure O Operational Control - mandatory text field  If Valve Closure, answer A22e and f.:  DOWNSTREAM_OPRTNL_CNTRL_DETAIL  O Remotely Controlled DOWNSTREAM_OPRTNL_CNTRL_DETAIL  O Valve Closure O Operational Control - mandatory text field
A22e. Local time of final downstream valve closure
A23. Number of general public evacuated: / / / / / / / NUM_PUB_EVACUATED

PART B – ADDITIONAL LOCATION INFORMATION
B1. Was the origin of the Incident onshore? Auto-populated based on A14 ON_OFF_SHORE  O Yes (Complete Questions B2-B11) O No (Complete Questions B12-B14)
B1a. Pipeline/Facility name:PIPE_FAC_NAME
B1b. Segment name/ID:SEGMENT_NAME
If Onshore:
ONSHORE_STATE_ABBREVIATION ONSHORE_POSTAL_CODE B2. State: / / / B3. Zip Code: / / / / / - / / / /
B4 ONSHORE_CITY_NAME
B6. Operator designated location: <i>(select only one)</i> ☐ Milepost <i>(specify in shaded area below)</i>
DESIGNATED_LOCATION ☐ Survey Station No. (specify in shaded area below) ☐ Not Applicable (B7 will not accept data)
DESIGNATED_NAME
B7. ////
B8. Was Incident on Federal land, other than the Outer Continental Shelf (OCS)? O Yes O No
B9. Location of Incident: (select only one)
INCIDENT_AREA_TYPE B10. Area of Incident (as found): (select only one)
Belowground storage or aboveground storage vessel, including attached appurtenances
☐ Underground ➡ Specify: O Under soil O Under a building O Under pavement O Exposed due to excavation
O Exposed due to loss of cover O In underground enclosed space (e.g., vault) O Other INCIDENT_AREA_DETAILS
B10a. Depth-of-Cover (in): /_ /,/ / / / DEPTH_OF_COVER OTHER UNDERGROUND FACILITIES
B10.b. Were other underground facilities found within 12 inches of the failure location? O Yes O No
☐ Aboveground ➡ Specify: O Typical aboveground facility piping or appurtenance O Overhead crossing
O In or spanning an open ditch O Inside a building O Inside other enclosed space O Other INCIDENT_AREA_DETAILS
☐ Transition Area ➡ Specify: O Soil/air interface O Wall sleeve O Pipe support or other close contact area
O Other INCIDENT_AREA_DETAILS CROSSING
B11 Did Incident occur in a crossing? O Yes O No If Yes specify type:
☐ Bridge crossing Specify: ○ Cased ○ Uncased BRIDGE_CROSSING_IND, BRIDGE_TYPE ☐ Railroad crossing (select all that apply) ○ Cased ○ Uncased ○ Bored/drilled RAILROAD_CROSSING_IND, RAILROAD_TYPE
☐ Road crossing (select all that apply) ○ Cased ○ Uncased ○ Bored/drilled ROAD CROSSING IND, ROAD TYPE
☐ Water crossing WATER_CROSSING_IND, WATER_TYPE  Specify: ○ Cased ○ Uncased
Name of body of water, if commonly known:  WATER_NAME WATER_DEPTH
Approx. water depth (ft) at the point of the Incident: / /,/ / / OR O <u>Unknown</u>
(select only one of the following) ○ Shoreline/Bank/Marsh crossing  WATER SUBTYPE ○ Below water, pipe in bored/drilled crossing
O Below water, pipe buried below bottom (NOT in bored/drilled crossing) O Below water, pipe on or above bottom CROSSING_100_FEET
Is this water crossing 100 feet or more in length from high water mark to high water mark?  O Yes O No
If Offshore:  OFF WATER DEPTH
B12. Approximate water depth (ft.) at the point of the Incident: / /,/ / / / OFF ACCIDENT ORIGIN
B13. Origin of Incident: OFFSHORE STATE ABBREVIATION, OFF INSTATE AREA OFF INSTATE BLOCK  In State waters Specify: State: / / / Area: Block/Tract #: / _ / _ / _ / _ /
OCS TYPE  Nearest County/Parish: OFFSHORE_COUNTY_NAME
☐ On the Outer Continental Shelf (OCS) ) (select only one) O OCS – Alaska O OCS- Atlantic
O OCS-Gulf of Mexico O OCS – Pacific  Area: OFF_OCS_AREA Block/Tract #: / / / / OFF_OCS_RLOCK
Area: OFF_OCS_AREA Block/Tract #: //_/ OFF_OCS_BLOCK OFF_AREA_ACCIDENT_TYPE B14. Area of Incident: (select only one)
☐ Shoreline/Bank/Marsh crossing or shore approach
☐ Below water, pipe buried or jetted below seabed
☐ Below water, pipe on or above seabed
☐ Splash Zone of riser
☐ Portion of riser outside of Splash Zone, including riser bend☐ Platform

PART C – ADDITIONAL FACILITY INFORMATION	
C1. Is the pipeline or facility: PIPE_FACILITY_TYPE  Interstate  Intrastate	
C2. Material involved in Incident: (select only one) MATERIAL_INVO	DLVED
☐ Material other than Carbon Steel or Plastic 🖒 *Specify:	MATERIAL_DETAILS
C3. Item involved in Incident: (select only one) ITEM_INVOLVED  PIPE_TYPE  □ Pipe ⇒ Specify: ○ Pipe Body ○ Pipe Seam	C3a. Nominal Pipe Size: /_ / /./ / /
' '	E_WELD_IND
If C2. is Carbon Steel  C3b. Wall thickness (in):   PIPE_WALL_THICKNESS	PIPE SMYS
C3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	<u> </u>
C3d. Pipe specification: PIPE_SEAM_TYPE  PIPE_SPECIFICATION	OR O Unknown
C3e. Pipe Seam → Specify: O Longitudinal ERW - High Fr O Longitudinal ERW - Low Fr O Longitudinal ERW – Unkno O Spiral Welded O Lap W	equency O Continuous Welded O Furnace Butt Welded wn Frequency
C3f. Pipe manufacturer:PIPE_MANUFACTURER	OR O Unknown
O Extruded Polyethylene	Coal Tar  O Asphalt O Polyolefin O Cold Applied Tape O Paint None O Other PIPE_COATING_DETAILS
C3h. Coating field applied? O Yes O No O Unknown	
O Polyamide (PA) O Cell O Unknown O Other: C3j. If Plastic ⇒ Specify Standard Dimension Ratio (SDR): /	Polypropylene (PP) O Acrylonitrile Butadiene Styrene (ABS) ulose Acetate Butyrate (CAB) mandatory text field PLASTIC_DETAILS WT_PLASTIC_UN KNOWN_IND
MATERIAL_PE_PIPE_CODE PE / / / / /	or O Unknown PLASTIC_PE_UNKNOWN_IND
□ Weld/Fusion, including heat-affected zone ⇒ WELD_SUI  Specify: ○ Pipe Girth Weld ○ Pipe Plastic Fusion ○ Other  If Pipe Girth Weld is selected, complete items C3.a through h abo  Are any of the C3b through h values different on either side of the  If Yes, enter the different value(s) below:  □ DIFF_GIRTH_WELD_WALL_THICK  C3I. Wall thickness (in): / /./ / /  C3m. SMYS (Specified Minimum Yield Strength) of pipe (psi)	Butt Weld O Fillet Weld  Ne.  girth weld? O Yes O No DIFFERENT_GIRTH_WELD_IND  NESS  DIFF_GIRTH_WELD_SMYS
C3n. Pipe specification: DIFF_GIRTH_WELD_SPECIFICATIODIFF_GIRTH_WELD_SEAM_TYPE C3o. Pipe Seam   ⇒ Specify: O Longitudinal ERW - High Free Seam   → Specify: O Longitudinal ERW - High Free Seam   → Specify: O Longitudinal ERW - High Free Seam   → Specify: O Longitudinal ERW - High Free Seam   → Specify: O Longitudinal ERW - High Free Seam   → Specification: DIFF_GIRTH_WELD_SPECIFICATION   → Specification: DIFF_GIRTH_WELD_SPECI	equency O Single SAW O Flash Welded
O Longitudinal ERW - Low Frequency O DSAW O Furnace Butt Welded O Spiral Welded O Lap O Seamless O Other, describe: DIFF_GIRTH_V	O Continuous Welded O Longitudinal ERW – Unknown Frequency Welded VELD_SEAM_DETAIL
	ar O Asphalt O Polyolefin O Extruded Polyethylene
O Epoxy other than FBE O Cold Applied Tape O I  C3r. Coating field applied? O Yes O No O Unknow  DIFF_GIRTH_WELD_CTNG_APPLD_IND  If Plastic Pipe Fusion is selected, complete items C3.a and c3.i th	

VALVE_TYPE  Valve_oveluding Regulator/Central Valves
□ Valve, excluding Regulator/Control Valves  ○ Mainline ⇒ Specify: ○ Butterfly ○ Check ○ Gate ○ Plug ○ Ball ○ Globe ○ Other
VALVE_MAINLINE_TYPE  C3s. Mainline valve manufacturer: VALVE_MANUFACTURER  OR O Unknown
O Relief Valve
O Auxiliary or Other Valve
☐ <b>Compressor</b> , including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.
☐ <b>Meter</b> , including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.
☐ Scraper/Pig Trap, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.
☐ <b>Odorization System</b> , including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.
☐ Filter/Strainer/Separator, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.
☐ <b>Dehydrator/Drier/Treater/Scrubber</b> , including auxiliary piping, connections, valves, and equipment, but excluding product drain lines
and tubing.
Regulator/Control Valve, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.
☐ Pulsation Bottle or Drip/Drip Collection Device ☐ Cooler or Heater, including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.
Repair Sleeve or Clamp
☐ Hot Tap Equipment
☐ Tap Fitting (stopple, thread-o-ring, weld-o-let, etc.)
☐ Flange Assembly, including Gaskets
☐ <b>ESD System</b> , including auxiliary piping, connections, valves, and equipment, but excluding product drain lines and tubing.
☐ Drain Lines
☐ Tubing, including Fittings
C3t. Tubing material (select only one): TUBING_MATERIAL
□ Stainless steel
☐ Carbon steel☐ Copper☐ Coppe
□ Other
C3u. Type of tubing (select only one): TUBING_TYPE
□ Rigid
□ Flexible
☐ Instrumentation, including Programmable Logic Controllers and Controls
☐ Underground Gas Storage or Cavern
Other ITEM_INVOLVED_DETAILS INSTALLATION YEAR
Other ITEM_INVOLVED_DETAILS INSTALLATION YEAR
Other ITEM_INVOLVED_DETAILS INSTALLATION YEAR
C4. Year item involved in Incident was installed: INSTALLATION YEAR  C5. Year item involved in Incident was manufactured: INSTALLATION YEAR  C6. Year item involved in Incident was manufactured: INSTALLATION YEAR  C7. Year item involved in Incident was manufactured: INSTALLATION YEAR  C8. Year item involved in Incident was manufactured: INSTALLATION YEAR  C9. O Unknown
C4. Year item involved in Incident was installed:  C5. Year item involved in Incident was manufactured:    NSTALLATION YEAR   OR O Unknown   MANUFACTURED YEAR   OR O Unknown   OR O Unkno
C4. Year item involved in Incident was installed:
Other
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:
C4. Year item involved in Incident was installed:

PART D – ADDITIONAL CONSEQUENCE INFORMATION
D1. Class Location of Incident: (select only one)  CLASS_LOCATION_TYPE  Class 1 Location
☐ Class 3 Location
□ Class 4 Location COULD_BE_HCA  D2. Did this Incident occur in a High Consequence Area (HCA)? □ No □ DETERMINATION_METHOD □ Yes ➡ D2.a Specify the Method used to identify the HCA: ○ Method 1(Class Location) ○ Method 2 (PIR)
PIR_RADIUS NOT_FLAMMABLE_IND  D3. What is the PIR (Potential Impact Radius) for the location of this Incident? / /,/ / / feet or O Not Flammable  HEAT DAMAGE IND
D4. Were any structures outside the PIR impacted or otherwise damaged by heat/fire resulting from the Incident?  D5. Were any structures outside the PIR impacted or otherwise damaged NOT by heat/fire resulting from the Incident?  D6. Were any of the fatalities or injuries (A11 only) reported for persons located outside the PIR?  D7. O No  D8. Were any of the fatalities or injuries (A11 only) reported for persons located outside the PIR?  O Yes  O No  If Yes, Describe the cause of the fatalities or injuries:  FATAL_INJURE_CAUSE
D13. If D2. Is No, answer D13a.  DID OCCUR IN MCA IND
D13a. Did this incident occur in a Moderate Consequence Area (MCA)? O Yes O No
If D13a. is Yes, answer D13b.
D13b. Select each of the items below that were present within the potential impact circle:
O 5 or more buildings intended for human occupancy MCA_BUILDNG_HUMAN_OCCUPY_IND
O Paved surface for a designated interstate, freeway, expressway, or other principal 4-lane arterial roadway  MCA_PAVED_SURFACE_FREEWAY_IND
MCA_FAVED_SURFACE_FREEWAI_IND
D7. Estimated Property Damage: EST_COST_OPER_PAID
D7a. Estimated cost of public and non-Operator private property damage \$ / / / /,/ / / /,/ / / / EST COST PROP DAMAGE
D7b. Estimated cost of Operator's property damage & repairs \$/ / / /./ / /./ / //
D7c. Estimated cost of emergency response \$\frac{\text{EMERGENCY}}{} \frac{}{} \f
D7d. Estimated other costs EST COST OTHER \$ / / / /,/ / / /
Describe: EST_COST_OTHER_DETAILS
D7e. Total estimated property damage (sum of above) \$ calculated
D7e. Total estimated property damage (sum of above) \$ calculated  Cost of Gas Released
Cost of Gas Released
Cost of Gas Released  Cost of Gas in \$ per thousand standard cubic feet (mcf):   GAS_COST_IN_MCF  D7f. Estimated cost of gas released unintentionally  EST_COST_GAS_RELEASED  EST_COST_INTENTIONAL RELEASE  \$ calculated
Cost of Gas Released  Cost of Gas in \$ per thousand standard cubic feet (mcf):   D7f. Estimated cost of gas released unintentionally  D7g. Estimated cost of gas released during intentional and controlled blowdown  \$\text{COST_IN_MCF}\$  \$\text{EST_COST_GAS_RELEASED}\$  \$\text{calculated}\$  \$\text{calculated}\$
Cost of Gas Released  Cost of Gas in \$ per thousand standard cubic feet (mcf):   GAS_COST_IN_MCF  D7f. Estimated cost of gas released unintentionally  EST_COST_GAS_RELEASED  EST_COST_INTENTIONAL_RELEASE \$ calculated  D7g. Estimated cost of gas released during intentional and controlled blowdown \$ calculated  D7h. Total estimated cost of gas released (sum of 7.f & 7.g above) \$ calculated
Cost of Gas Released  Cost of Gas in \$ per thousand standard cubic feet (mcf):   GAS_COST_IN_MCF  D7f. Estimated cost of gas released unintentionally  D7g. Estimated cost of gas released during intentional and controlled blowdown  D7h. Total estimated cost of gas released (sum of 7.f & 7.g above)  D7i. Estimated Total Cost (sum of D7e and D7h)  PRPTY  \$ calculated
Cost of Gas Released  Cost of Gas in \$ per thousand standard cubic feet (mcf):   GAS_COST_IN_MCF  D7f. Estimated cost of gas released unintentionally  EST_COST_GAS_RELEASED  EST_COST_INTENTIONAL_RELEASE \$ calculated  D7g. Estimated cost of gas released during intentional and controlled blowdown \$ calculated  D7h. Total estimated cost of gas released (sum of 7.f & 7.g above) \$ calculated
Cost of Gas Released Cost of Gas in \$ per thousand standard cubic feet (mcf): GAS_COST_IN_MCF D7f. Estimated cost of gas released unintentionally D7g. Estimated cost of gas released during intentional and controlled blowdown D7h. Total estimated cost of gas released (sum of 7.f & 7.g above)  D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY \$ calculated D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY \$ calculated  Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. If a person is included in A11, do not include them in D8.  NUM_PERSONS_HOSP_NOT_OVNGHT D8. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:
Cost of Gas Released  Cost of Gas in \$ per thousand standard cubic feet (mcf): GAS_COST_IN_MCF  D7f. Estimated cost of gas released unintentionally EST_COST_GAS_RELEASED  D7g. Estimated cost of gas released during intentional and controlled blowdown \$ calculated  D7h. Total estimated cost of gas released (sum of 7.f & 7.g above) \$ calculated  D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY \$ calculated  Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. If a person is included in A11, do not include them in D8.  NUM_PERSONS_HOSP_NOT_OVNGHT  D8. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:  If a person is included in D8, do not include them in D9.
Cost of Gas Released Cost of Gas in \$ per thousand standard cubic feet (mcf): GAS_COST_IN_MCF D7f. Estimated cost of gas released unintentionally D7g. Estimated cost of gas released during intentional and controlled blowdown D7h. Total estimated cost of gas released (sum of 7.f & 7.g above)  D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY \$ calculated D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY \$ calculated  Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. If a person is included in A11, do not include them in D8.  NUM_PERSONS_HOSP_NOT_OVNGHT D8. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:
Cost of Gas Released  Cost of Gas in \$ per thousand standard cubic feet (mcf):  D7f. Estimated cost of gas released unintentionally  D7g. Estimated cost of gas released during intentional and controlled blowdown  D7h. Total estimated cost of gas released (sum of 7.f & 7.g above)  D7i. Estimated Total Cost (sum of D7e and D7h)  PRPTY  \$ calculated  Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. If a person is included in A11, do not include them in D8.  NUM_PERSONS_HOSP_NOT_OVNGHT  D8. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:  If a person is included in D8, do not include them in D9.  D9. Estimated number of persons with injuries requiring treatment by EMTs at the site of incident:  NUM_INJURED_TREATED_BY_EMT  Buildings Affected
Cost of Gas Released  Cost of Gas in \$ per thousand standard cubic feet (mcf):  D7f. Estimated cost of gas released unintentionally D7g. Estimated cost of gas released during intentional and controlled blowdown D7h. Total estimated cost of gas released (sum of 7.f & 7.g above)  D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY \$ calculated D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY \$ calculated  Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. If a person is included in A11, do not include them in D8.  D8. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:  If a person is included in D8, do not include them in D9.  D9. Estimated number of persons with injuries requiring treatment by EMTs at the site of incident:  NUM_INJURED_TREATED_BY_EMT  Buildings Affected  D10. Number of residential buildings affected (evacuated or required repair or gas service interrupted):  NUM_RESIDENT_BUILDING_AFFCTD
Cost of Gas in \$ per thousand standard cubic feet (mcf):  D7f. Estimated cost of gas released unintentionally  EST_COST_GAS_RELEASED  D7g. Estimated cost of gas released during intentional and controlled blowdown  D7h. Total estimated cost of gas released (sum of 7.f & 7.g above)  D7i. Estimated Total Cost (sum of D7e and D7h)  PRPTY \$ calculated  D7i. Estimated Total Cost (sum of D7e and D7h)  PRPTY \$ calculated  Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. If a person is included in A11, do not include them in D8.  NUM_PERSONS_HOSP_NOT_OVNGHT  D8. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:  If a person is included in D8, do not include them in D9.  D9. Estimated number of persons with injuries requiring treatment by EMTs at the site of incident:  NUM_INJURED_TREATED_BY_EMT  Buildings Affected  D10. Number of residential buildings affected (evacuated or required repair or gas service interrupted):  NUM_RESIDENT_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  WILDLIFE_IMPACT_IND
Cost of Gas Released  Cost of Gas in \$ per thousand standard cubic feet (mcf):  D7f. Estimated cost of gas released unintentionally  EST_COST_IN_MCF  EST_COST_IN_ELEASED  EST_COST_INTENTIONAL_RELEASE  D7g. Estimated cost of gas released during intentional and controlled blowdown  \$ calculated  D7h. Total estimated cost of gas released (sum of 7.f & 7.g above)  \$ calculated  D7i. Estimated Total Cost (sum of D7e and D7h)  PRPTY \$ calculated  Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. If a person is included in A11, do not include them in D8.  NUM_PERSONS_HOSP_NOT_OVNGHT  D8. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:  If a person is included in D8, do not include them in D9.  D9. Estimated number of persons with injuries requiring treatment by EMTs at the site of incident:  NUM_INJURED_TREATED_BY_EMT  Buildings Affected  D10. Number of residential buildings affected (evacuated or required repair or gas service interrupted):  NUM_RESIDENT_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  WILDLIFE_IMPACT_IND  D12. Wildlife impact:  O Yes O No
Cost of Gas Released Cost of Gas in \$ per thousand standard cubic feet (mcf): GAS_COST_IN_MCF D7f. Estimated cost of gas released unintentionally D7g. Estimated cost of gas released during intentional and controlled blowdown D7h. Total estimated cost of gas released (sum of 7.f & 7.g above) D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY Calculated D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY Calculated D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY Calculated D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY Calculated Injured Persons not included in A11. The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. If a person is included in A11, do not include them in D8.  NUM_PERSONS_HOSP_NOT_OVNGHT D8. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:  If a person is included in D8, do not include them in D9.  D9. Estimated number of persons with injuries requiring treatment by EMTs at the site of incident:  NUM_INJURED_TREATED_BY_EMT  Buildings Affected  D10. Number of residential buildings affected (evacuated or required repair or gas service interrupted):  NUM_RESIDENT_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  WILDLIFE_IMPACT_IND  D12. Wildlife impact:  O Yes O No D12a. If Yes, specify all that apply:
Cost of Gas Released Cost of Gas in \$ per thousand standard cubic feet (mcf):  D7f. Estimated cost of gas released unintentionally D7g. Estimated cost of gas released during intentional and controlled blowdown D7h. Total estimated cost of gas released (sum of 7.f & 7.g above) D7i. Estimated Total Cost (sum of D7e and D7h) D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY Calculated D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY Calculated D7i. Estimated Total Cost (sum of D7e and D7h) PRPTY Calculated D7i. Estimated In A11. If a person is included in A11, do not include them in D8.  NUM_PERSONS_HOSP_NOT_OVNGHT D8. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:  If a person is included in D8, do not include them in D9.  D9. Estimated number of persons with injuries requiring treatment by EMTs at the site of incident:  NUM_INJURED_TREATED_BY_EMT  Buildings Affected  D10. Number of residential buildings affected (evacuated or required repair or gas service interrupted):  NUM_RESIDENT_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  PISH/AQUATIC_IMPACT_IND
Cost of Gas Released Cost of Gas in \$ per thousand standard cubic feet (mcf):  D7f. Estimated cost of gas released unintentionally D7g. Estimated cost of gas released during intentional and controlled blowdown D7h. Total estimated cost of gas released (sum of 7.f & 7.g above) Cost INTENTIONAL RELEASE D7g. Estimated Total Cost (sum of D7e and D7h) D7h. Total estimated Total Cost (sum of D7e and D7h) PRPTY Coalculated D7h. Estimated Total Cost (sum of D7e and D7h) PRPTY Coalculated D7h. If a person so included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. If a person is included in A11, do not include them in D8.  NUM PERSONS HOSP NOT OVNGHT D8. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:  If a person is included in D8, do not include them in D9.  D9. Estimated number of persons with injuries requiring treatment by EMTs at the site of incident:  NUM_INJURED_TREATED_BY_EMT  Buildings Affected  D10. Number of residential buildings affected (evacuated or required repair or gas service interrupted):  NUM_RESIDENT_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  NUM_BUSINESS_BUILDING_AFFCTD  D12. Wildlife impact:  Yes O No D12a. If Yes, specify all that apply:  FISH_AQUATIC_IMPACT_IND

E1. Estimated pressure at the point and time of the Incident (psig):
E1a. Estimated gas flow in pipe segment at the point and time of the incident (MSCF/D):
E2. Maximum Allowable Operating Pressure (MAOP) at the point and time of the Incident (psig): / / / / / / MOP_PSIG
E2a. MAOP established by 49 CFR section: MOP_CFR_SECTION  □ 192.619 (a)(1) □ 192.619 (a)(2) □ 192.619 (a)(3) □ 192.619 (a)(4) □ 192.619 (c) □ 192.619 (d)  □ 192.624 (c)(1) □ 192.624 (c)(2) □ 192.624 (c)(3) □ 192.624 (c)(4) □ 192.624 (c)(5) □ 192.624 (c)(6)  □ Other Specify Other: MOP_CFR_SECTION_DETAILS
E2b. Date MAOP established:  MAOP_REVERSAL_FLOW_IND  Month  Day  Year  E2c. Was the MAOP in E2a and b established in conjunction with a reversal of flow direction? O Yes O No O Bi-Directional ACCIDENT_PRESSURE  E3. Describe the pressure on the system or facility relating to the Incident: (select only one)  Pressure did not exceed MAOP  Pressure exceeded MAOP, but did not exceed the applicable allowance in §192.201  Pressure exceeded the applicable allowance in §192.201
E4. 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? PRESSURE_RESTRICTION_IND
□ No □ Yes ➡ (Complete E4.a and E4.b below) EXCEED_RESTRICTION_IND
E4a. Did the pressure exceed this "established pressure restriction?"  O Yes  O No  PHMSA RESTRICTION IND
E4b. Was this pressure restriction mandated by PHMSA or the State? O PHMSA O State O Not mandated
GAS_REQUIRED_ODORIZED_IND  E5. Was the gas at the point of failure required to be odorized in accordance with §192.625? O Yes O No  If yes, Was the gas at the point of failure odorized in accordance with §192.625? O Yes O No GAS_ODORIZED_IND
If A14. is "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend", answer E6 through E8.
If A14. is "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend", answer E6 through E8.  E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL INSPECTION IND  E7 Is the pipeline configured to accommodate internal inspection tools?  ☐ Yes ☐ No ➡ Which physical features limit tool accommodation? (select all that apply)
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL INSPECTION IND  E7 Is the pipeline configured to accommodate internal inspection tools?  Yes  No S Which physical features limit tool accommodation? (select all that apply)  DIAMETER_CHANGE_IND  O Changes in line pipe diameter
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL INSPECTION IND  E7 Is the pipeline configured to accommodate internal inspection tools?  Yes  No S Which physical features limit tool accommodation? (select all that apply)  DIAMETER_CHANGE_IND  Changes in line pipe diameter  UNSUITABLE_MAINLINE_IND  Presence of unsuitable mainline valves
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL INSPECTION IND  E7 Is the pipeline configured to accommodate internal inspection tools?  Yes  No S Which physical features limit tool accommodation? (select all that apply)  DIAMETER_CHANGE_IND  Changes in line pipe diameter  UNSUITABLE_MAINLINE_IND  Presence of unsuitable mainline valves  TIGHT_MITERED_IND  Tight or mitered pipe bends
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL INSPECTION IND  E7 Is the pipeline configured to accommodate internal inspection tools?  Yes  No > Which physical features limit tool accommodation? (select all that apply)  DIAMETER_CHANGE_IND  Changes in line pipe diameter  UNSUITABLE_MAINLINE_IND  Presence of unsuitable mainline valves  TIGHT_MITERED_IND  Tight or mitered pipe bends  OTHER_RESTRICTIONS_IND  Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)  EXTRA_THICK_WALL_IND  Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL_INSPECTION_IND  E7 Is the pipeline configured to accommodate internal inspection tools?  Yes  No > Which physical features limit tool accommodation? (select all that apply)  DIAMETER_CHANGE_IND  Changes in line pipe diameter  UNSUITABLE_MAINLINE_IND  Presence of unsuitable mainline valves  TIGHT_MITERED_IND  Tight or mitered pipe bends  OTHER_RESTRICTIONS_IND  Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)  EXTRA_THICK_WALL_IND  Other Describe: INTERNAL_INSPECTION_DETAILS
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL INSPECTION IND  E7 Is the pipeline configured to accommodate internal inspection tools?  Yes  No S Which physical features limit tool accommodation? (select all that apply)  DIAMETER_CHANGE_IND  Changes in line pipe diameter  UNSUITABLE_MAINLINE_IND  Presence of unsuitable mainline valves  TIGHT_MITERED_IND  Tight or mitered pipe bends  OTHER_RESTRICTIONS_IND  Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)  EXTRA_THICK_WALL_IND  Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)  OTHER_INSPECTION_IND  OCHER_INSPECTION_IND  OCHER_TO DESCRIBE:  INTERNAL_INSPECTION_DETAILS  OPERATION COMPLICATIONS IND
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL_INSPECTION_IND  E7 Is the pipeline configured to accommodate internal inspection tools?  Yes  No > Which physical features limit tool accommodation? (select all that apply)  DIAMETER_CHANGE_IND  Changes in line pipe diameter  UNSUITABLE_MAINLINE_IND  Presence of unsuitable mainline valves  TIGHT_MITERED_IND  Tight or mitered pipe bends  OTHER_RESTRICTIONS_IND  Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)  EXTRA_THICK_WALL_IND  Other Describe: INTERNAL_INSPECTION_DETAILS
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL INSPECTION IND  E7 Is the pipeline configured to accommodate internal inspection tools?  Yes  No S Which physical features limit tool accommodation? (select all that apply)  DIAMETER CHANGE IND  Changes in line pipe diameter  UNSUITABLE MAINLINE IND  Presence of unsuitable mainline valves  TIGHT MITERED IND  Tight or mitered pipe bends  OTHER RESTRICTIONS IND  Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)  EXTRA_THICK_WALL_IND  EXTRA_THICK_WALL_IND  Other S Describe:  INTERNAL_INSPECTION_DETAILS  OPERATION_COMPLICATIONS_IND  E8 For this pipelline, are there operational factors which significantly complicate the execution of an internal inspection tool run?
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):    INTERNAL INSPECTION IND
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL INSPECTION IND  E7 Is the pipeline configured to accommodate internal inspection tools?  Yes  No S Which physical features limit tool accommodation? (select all that apply)  DIAMETER_CHANGE_IND Changes in line pipe diameter  UNSUITABLE_MAINLINE_IND TIGHT_MITERED_IND Tight or mitered pipe bends  OTHER_RESTRICTIONS_IND Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)  EXTRA_THICK_WALL_IND Other S Describe: INTERNAL_INSPECTION_DETAILS OPERATION_COMPLICATIONS_IND  E8 For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?  No Yes S Which operational factors complicate execution? (select all that apply)  EXCESSIVE_DEBRIS_IND EXCESSIVE_DEBRIS_IND Low operating pressure(s)
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):    INTERNAL INSPECTION IND
E6. Length of segment between upstream and downstream shut-off valves closest to failure location (ft):  INTERNAL INSPECTION IND  E7 Is the pipeline configured to accommodate internal inspection tools?  Yes  No S Which physical features limit tool accommodation? (select all that apply)  DIAMETER_CHANGE_IND Changes in line pipe diameter  UNSUITABLE_MAINLINE_IND TIGHT_MITERED_IND Tight or mitered pipe bends  OTHER_RESTRICTIONS_IND Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)  EXTRA_THICK_WALL_IND Other S Describe: INTERNAL_INSPECTION_DETAILS OPERATION_COMPLICATIONS_IND  E8 For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?  No Yes S Which operational factors complicate execution? (select all that apply)  EXCESSIVE_DEBRIS_IND EXCESSIVE_DEBRIS_IND Low operating pressure(s)

E10 Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the   No SCADA_IN_PLACE_IND	Incident?
☐ Yes ➡ E10.a Was it operating at the time of the Incident? ☐ Yes ☐ No SCADA_OPERATING	G_IND
E10.b Was it fully functional at the time of the Incident? O Yes O No SCADA_FUNCTION	AL_IND
E10.c Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculati the initial indication of the Incident?  O Yes  O No SCADA_DETE	,
E10.d Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) ass confirmed discovery of the Incident?  O Yes  O No SCADA_CON	
INVESTIGATION_STATUS  E11 Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contribution incident? (select only one)	ng factor to the
☐ Yes, but the investigation of the control room and/or controller actions has not yet been completed by the operato (Supplemental Report required)	
☐ No, the facility was not monitored by a controller(s) at the time of the Incident	
☐ No, the operator did not find that an investigation of the controller(s) actions or control room issues was necessary (provide an explanation for why the operator did not investigate):  INVESTIGATION_STATUS_DETAILS	/ due to:
Yes, specify investigation result(s): (select all that apply)	
O Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operat	or) and other
factors associated with fatigue <a href="INVEST_SCHEDULE_IND">INVEST_NO_SCHEDULE_IND</a> O Investigation did NOT review work schedule rotations, continuous hours of service (while working for the original service).	Operator) and
other factors associated with fatigue (provide an explanation for why not):INVEST_NO_SCHEDULE_IND_D	ETAILS
O Investigation identified no control room issues <pre>INVEST_NO_CONTROL_ROOM_IND</pre>	
O Investigation identified no controller issues INVEST_NO_CONTROLLER_IND	
O Investigation identified incorrect controller action or controller error INVEST_INCORRECT_ACTION_IND O Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved or	tu-    / - )
O Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved or response INVEST FATIGUE IND	ontroller(s)
O Investigation identified incorrect procedures INVEST_INCORRECT_PROCEDURE_IND	
O Investigation identified incorrect control room equipment operation	

PART G – APPARENT CAUSE  CAUSE, CAUSE DETAILS	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. Enter
CAUSE, CAUSE_DETAILS	secondary, contributing, or root causes of the Incident in Part K – Contributing Factors.
G1 - Corrosion Failure – only o	ne <b>sub-cause</b> can be picked from shaded left-hand column
☐ External Corrosion	Results of visual examination: VISUAL_EXAM_RESULTS     O Localized Pitting O General Corrosion     O Other
GALVANIC_CORROSION_IND, ATMOSPHERE_CORROSION_IND, STRAY_CURRENT_CORROSION_IND,	2. Type of corrosion: (select all that apply)  O Galvanic O Atmospheric O Stray Current O Microbiological O Selective Seam O Other OTHER_CORROSION_IND, CORROSION_TYPE_DETAILS
	2a. If 2 is Stray Current, specify O Alternating Current O Direct Current AND
	2b. Describe the stray current source: STRAY_CURRENT_DETAILS  2. The type(a) of correction collected in Outside 2 is based on the following: (collect all that
	The type(s) of corrosion selected in Question 2 is based on the following: (select all that apply) FIELD EXAM BASIS IND METALLURGICAL BASIS IND O Field examination O Determined by metallurgical analysis O Other OTHER_BASIS_IND, CORROSION_BASIS_DETAILS
	4. Was the failed item buried or submerged? UNDERGROUND_LOCATION  O Yes   → 4a. Was failed item considered to be under cathodic protection at the time of the incident? UNDER_CATHODIC_PROTECTION_IND
	O Yes   → Year protection started: /_ / / / / /  O No  CATHODIC_PRO_START_YEAR  SHIELDING_EVIDENT  4b. Was shielding, tenting, or disbonding of coating evident at the point of
	the incident?  O Yes O No
	CATHODIC_SURVEY_TYPE  4c. Has one or more Cathodic Protection Survey been conducted at the point of the incident? (select all that apply), on a convey a convey and apply are conveyed as the point of the incident?
CP_ANNUAL	SURVEY_IND O Yes, CP Annual Survey   Most recent year conducted: 7 / 1 / 1 / CLOSE INTERVAL SURVEY YEAR
CLOSE_INTERVAL	SURVEY_IND O Yes, CP Annual Survey   Most recent year conducted: / / / / / /  SURVEY_IND O Yes, Close Interval Survey   Most recent year conducted: / / / / /  OTHER CP SURVEY YEAR  SURVEY_IND O Yes, Other CP Survey   Most recent year conducted: / / / / /  Most recent year conducted: / / / / /  Most recent year conducted: / / / / /
OTHER_CI	Describe other CP survey  OTHER_CP_SURVEY_DETAILS  O No
	EXTERNALLY_COATED  ○ No ⇒ 4d. Was the failed item externally coated or painted? ○ Yes ○ No
	PRIOR_DAMAGE  5. Was there observable damage to the coating or paint in the vicinity of the corrosion?  O Yes O No O N/A Bare/Ineffectively Coated Pipe
☐ Internal Corrosion	Results of visual examination: INT_VISUAL_EXAM_RESULTS     O Localized Pitting O General Corrosion O Not cut open     O Other INT_VISUAL_EXAM_DETAILS
INT_CORRO	7. Cause of corrosion: (select all that apply)  SIVE_COMMODITY_IND, INT_WATER_ACID_IND, OGICAL_IND, IND  O Corrosive Commodity O Water drop-out/Acid O Microbiological O Erosion  O Other INT_OTHER_CORROSION_IND, INT_CORROSION_TYPE_DETAILS
INT LOW POINT PIPE LOC IND	8. The cause(s) of corrosion selected in Question 7 is based on the following: (select all that apply) INT_FIELD_EXAM_BASIS_IND
INT_LOW_FORNT_FIFE_LOC_IND INT_ELBOW_LOC_IND INT_DEAD_LEG_LOC_IND INT_DEAD_LEG_LOC_IND —	9. Location of corrosion: <i>(select all that apply)</i> O Low point in pipe O Elbow O Drop-out O Dead-Leg O Other INT_OTHER_LOC_IND, CORROSION_LOCATION_DETAILS
	CORROSION INHIBITORS  10. Was the gas/fluid treated with corrosion inhibitors or biocides? O Yes O No  CORROSION LINING  11. Was the interior coated or lined with protective coating? O Yes O No
	Were cleaning/dewatering pigs (or other operations) routinely utilized?     O Not applicable - Not mainline pipe     O Yes     O No CLEANING_DEWATERING
	13. Were corrosion coupons routinely utilized? CORROSION_COUPONS  O Not applicable - Not mainline pipe  O Yes  O No

G2 - Natural Force Damage - only one sub-cause can be picked from shaded left-hand column NATURAL FORCE TYPE		
ARTH SUBTYPE . Specify: O Earthquake O Subsidence O Landslide O Other NF_OTHER_DETAILS		
HEAVY_RAINS_SUBTYPE       NF_OTHER_DETAILS         . Specify: O Washout/Scouring       O Flotation       O Mudslide       O Other		
LIGHTNING_SUBTYPE  . Specify: O Direct hit O Secondary impact such as resulting nearby fires		
TEMPERATURE_SUBTYPE  Specify: O Thermal Stress O Frost Heave O Frozen Components O Other NF_OTHER_DETAILS		
Describe: NF_OTHER_DETAILS		
Complete the following if any Natural Force Damage sub-cause is selected.  NF EXTREME WEATHER IND  6. Were the natural forces causing the Incident generated in conjunction with an extreme weather event? O Yes O No		
ICANE_IND NF_TROPICAL_STORM_IND NF_TORNADO_IND  O Hurricane O Tropical Storm O Tornado  O Other NF_OTHER_IND, NF_EXTREME_WEATHER_DETAILS		

ONE_CALL_NOTIFIED_IND  7. Was the One-Call Center notified? O Yes O No If No, skip to question 11
*7a. If Yes, specify ticket number: / / / / / / / / / / / / / / / ONE_CALL_TICKET_NUM
*7b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:  ONE_CALL_CENTER_NAME
LOCATOR_TYPE  8. Type of Locator:  O Utility Owner  O Contract Locator  O Data not collected  O Unknown/Other  VISIBLE MARKS
9. Were facility locate marks visible in the area of excavation? O No O Yes O Data not collected O Unknown/Other
FACILITIES_MARKED  10. Were facilities marked correctly?  O No O Yes O Data not collected O Unknown/Other
SERVICE_INTERRUPTION 11. Did the damage cause an interruption in service? O No O Yes O Data not collected O Unknown/Other
16a. If Yes, specify duration of the interruption: //_/ hours SERVICE_INTERRUPTION_HOURS
ROOT_CAUSE  12. 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, the one predominant second level CGA-DIRT Root Cause as well):
ONE_CALL_SUBTYPE  ☐ One-Call Notification Practices Not Sufficient: (select only one)
O No notification made to the One-Call Center
O Notification to One-Call Center made, but not sufficient
O Wrong information provided
LOCATING_SUBTYPE  □ Locating Practices Not Sufficient: (select only one)
O Facility could not be found/located
O Facility marking or location not sufficient
O Facility was not located or marked
O Incorrect facility records/maps
EXCAVATION_SUBTYPE  □ Excavation Practices Not Sufficient: (select only one)
O Excavation practices not sufficient (other)
O Failure to maintain clearance
O Failure to maintain the marks
O Failure to support exposed facilities
O Failure to use hand tools where required
O Failure to verify location by test-hole (pot-holing)
O Improper backfilling
One-Call Notification Center Error
☐ Abandoned Facility
□ Deteriorated Facility
□ <u>Previous Damage</u>
☐ <u>Data Not Collected</u>
Other / None of the Above (explain) ROOT_CAUSE_OTHER

G4 - Other Outside Force Damage - only one sub-cause can be picked from shaded left-hand column OUTSIDE_FORCE_TYPE			
☐ Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Incident			
☐ Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation	VEHICLE_SUBTYPE  1. Vehicle/Equipment operated by: (select only one) O Operator O Operator's Contractor O Third Party If this sub-section is picked, please complete questions 5-11 below		
☐ Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring	Select one or more of the following IF an extreme weather event was a factor:     OSF_HURRICANE_IND OSF_TROPICAL_STORM_IND OSF_TORNADO_IND     O Hurricane O Tropical Storm O Tornado     OHeavy Rains/Flood O Other OSF_OTHER_WEATHER_IND,		
☐ Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation	OSF_HEAVY_RAINS_IND OSF_OTHER_WEATHER_DETAILS		
☐ Electrical Arcing from Other Equipment or Facility			
☐ Previous Mechanical Damage NOT Related to Excavation			
☐ Intentional Damage	Specify: INTENTIONAL_SUBTYPE     O Vandalism		
☐ Other Outside Force Damage	4. Describe: OSF_OTHER_DETAILS		
Complete the following if Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation sub-cause is selected.  DRIVER_ISSUED_CITATION_IND  5. Was the driver of the vehicle or equipment issued one or more citations related to the incident?  O Yes  O No  O Unknown  If 5 is Yes, what was the nature of the citations (select all that apply)  5a. Excessive Speed			
Estimated speed of the vehicle at the time of impact (miles per nour)?     VEHICLE TYPE     8. Type of vehicle? (select only one)    O Motorcycle/ATV    O Passenger Car    O Small Truck    O Bus    O Large Truck			
O Roadway O Driv	· · · · · · · · · · · · · · · · · · ·		
PROTECTIONS_INSTALLED_IND	amaged pipeline facility (in feet):		
If 11. is Yes, specify type of protection (select all that apply):  11a. Bollards/Guard Posts			

## Use this section to report material failures ONLY IF the "Item Involved in G5 - Material Failure of Pipe or Weld Incident" (from PART C, Question 3) is "Pipe" or "Weld." PWJF FAILURE TYPE Only one **sub-cause** can be picked from shaded left-hand column ☐ Other Analysis OTHER\_ANALYSIS\_IND, OTHER\_ANALYSIS\_DETAILS ☐ Field Examination ☐ Determined by Metallurgical Analysis STILL UNDER INVEST IND Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required) FATIGUE VIBR RELATED 1, **FATIGUE VIBR RELATED 2** ☐ Design-, Construction-, Installation-, 2. List contributing factors: (select all that apply) or Fabrication-related ☐ Fatigue- or Vibration-related: FAILURE\_SUBTYPE\_1, FAILURE\_SUBTYPE\_2 O Mechanically-induced prior to installation (such as during transport of pipe) ☐ Original Manufacturing-related O Mechanical Vibration (NOT girth weld or other welds O Pressure-related formed in the field) O Thermal O Other FATIGUE\_VIBR\_RELATED\_OTHER\_1, FATIGUE\_VIBR\_RELATED\_OTHER\_2 MECHANICAL\_STRESS\_1, MECHANICAL\_STRESS\_2 ☐ Mechanical Stress ☐ Other OTHER\_FACTOR\_1, OTHER\_FACTOR\_2 OTHER\_FACTOR\_DETAILS 1, OTHER FACTOR DETAILS 2 O Stress Corrosion Cracking 3. Specify: O Sulfide Stress Cracking ■ Environmental Cracking-related O Hydrogen Stress Cracking O Hard Spot STRESS DETAILS O Other \_ Complete the following if any Material Failure of Pipe or Weld sub-cause is selected. ADDITIONAL ADDITIONAL ADDITIONAL ADDITIONAL ADDITIONAL ADDITIONAL LACK \_DENT\_IND, \_GOUGE\_IND \_PIPE\_BEND \_ARC\_BURN\_ \_CRACK\_IND \_FUSION\_IND ĪND IND O Arc Burn O Crack O Lack of Fusion 4. Additional factors (select all that apply): O Dent O Gouge O Pipe Bend ADDITIONAL\_ ADDITIONAL ADDITIONAL PWF\_ADDITIONAL ADDITIONAL BURNT LAMINATION\_ BUCKLE\_IND WRINKLE\_IN \_STEEL\_IND MISALIGN IND O Lamination O Buckle O Wrinkle O Misalignment O Burnt Steel O Other PWF\_ADDITIONAL\_OTHER\_IND, ADDITIONAL\_OTHER\_DETAILS 5. Post-construction pressure test value (psig) /\_ / OR O Unknown ${\color{red} \mathbf{POST\_CONSTR\_PRESSURE\_TEST\_VAL}}$

G6 - Equipment Failure - only  EQ_FAILURE_TYPE	one <b>sub-cause</b> can be picked from shaded left-hand column		
☐ Malfunction of Control/Relief Equipment	1. Specify: (select all that apply) CONTROL_VALVE_IND, INSTRUMENTATION_IND, SCADA_IND, COMMUNICATIONS_IND BLOCK_VALVE_IND, CHECK_VALVE_IND, RELIEF_VALVE_IND, POWER_FAILURE_IND STOPPLE_CONTROL_FITTING_IND, PRESSURE_REGULATOR_IND		
	O Control Valve O Instrumentation O SCADA O Communications O Block Valve O Check Valve O Relief Valve O Power Failure O Stopple/Control Fitting O Pressure Regulator O ESD System Failure ESD_SYSTEM_ O Other OTHER_CONTROL_RELIEF_IND, FAILURE_IND		
	OTHER_CONTROL_RELIEF_DETAILS		
☐ Compressor or Compressor-related Equipment	OTHER_PUMP_IND  2. Specify: O Seal/Packing Failure O Body Failure O Crack in Body O Appurtenance Failure O Pressure Vessel Failure O Other OTHER_PUMP_DETAILS		
☐ Threaded Connection/Coupling Failure	OTHER_STRIPPED_IND  3. Specify: O Pipe Nipple O Valve Threads O Mechanical Coupling O Threaded Pipe Collar O Threaded Fitting O Other OTHER_STRIPPED_DETAILS		
☐ Non-threaded Connection Failure	OTHER_NON_THREADED_IND  4. Specify: O O-Ring O Gasket O Seal (NOT compressor seal) or Packing O OtherOTHER_NON_THREADED_DETAILS		
☐ Defective or Loose Tubing or Fitting			
☐ Failure of Equipment Body (except Compressor), Vessel Plate, or other Material			
☐ Other Equipment Failure	5. Describe: EQ_FAILURE_DETAILS		
Complete the following if any Equipment Fa	ilure sub-cause is selected.		
6. Additional factors that contributed to the eq. O Excessive vibration ADDITIO	uipment failure: (select all that apply) NAL_VIBRATION_IND		
O Overpressurization ADDITIO	NAL_OVERPRESSURE_IND		
	ADDITIONAL_SUPPORT_IND		
_	ADDITIONAL_DEFECT_IND		
,	ADDITIONAL_ELECTRICITY_IND		
	ADDITIONAL_INSTALLATION_IND		
	ADDITIONAL_IMPROPER_MNTNCE_IND		
•	ufacturer for tubing and tubing fittings) ADDITIONAL_MISMATCH_IND		
_	ADDITIONAL_DISSIMILAR_IND		
	compatibility issues with transported gas/fluid ADDITIONAL_BREAKDOWN_IND		
O Valve vault or valve can contribut			
<b>^</b>	ADDITIONAL_ALARM_IND		
	EQ_ADDITIONAL_MISALIGN_IND		
_	EQ_ADDITIONAL_THERMAL_IND ADDITIONAL_EROSION_WEAR_IND		
O OtherEQ_ADDITIONA			

OPERATION_TYPE  G7 - Incorrect Operation - only one sub-cause can be picked from shaded left-hand column		
☐ Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage		
☐ Underground Gas Storage, Pressure Vessel, or Cavern Allowed or Caused to Overpressure	OVERFLOW_OTHER_IND  1. Specify: O Valve Misalignment O Incorrect Reference Data/Calculation O Miscommunication O Inadequate Monitoring O Other OVERFLOW_OTHER_DETAILS	
☐ Valve Left or Placed in Wrong Position, but NOT Resulting in an Overpressure		
☐ Pipeline or Equipment Overpressured		
☐ Equipment Not Installed Properly		
☐ Wrong Equipment Specified or Installed		
☐ Other Incorrect Operation	2. Describe: OPERATION_DETAILS	
Complete the following if any Incorrect Oper	ation sub-cause is selected.	
3. Was this Incident related to: (select all that apply)  O Inadequate procedure O No procedure established O Failure to follow procedure  RELATED_INADEQUATE_PROC_IND  RELATED_NO_PROC_IND  RELATED_FAILURE_FOLLOW_IND		
4. What category type was the activity that caused the Incident: CATEGORY_TYPE  O Construction O Commissioning O Decommissioning O Right-of-Way activities O Routine maintenance O Other maintenance O Normal operating conditions O Normal operating conditions (observed operations or emergencies)		
5. Was the task(s) that led to the Incident ident	OPERATOR_QUALIFICATION_IND  tified as a covered task in your Operator Qualification Program? O Yes O No	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)? QUALIFIED_INDIVIDUALS  O Yes, they were qualified for the task(s) O No, but they were performing the task(s) under the direction and observation of a qualified individual O No, they were not qualified for the task(s) nor were they performing the task(s) under the direction and observation of a qualified individual		
G8 – Other Incident Cause -	only one <b>sub-cause</b> can be picked from shaded left-hand column	
☐ Miscellaneous	1. Describe: MISC_DETAILS	
☐ Unknown	2. Specify: O Investigation complete, cause of Incident unknown  Mandatory comment field: INCIDENT_UNKNOWN_COMMENTS  O Still under investigation, cause of Incident to be determined*  (*Supplemental Report required)	

Complete the following if the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld and the "Cause" (from Part G) is:
Corrosion (any subCause in Part G1); or
Previous Damage due to Excavation Activity (subCause in Part G3); or
Previous Mechanical Damage NOT Related to Excavation (subCause in Part G4); or
Material Failure of Pipe or Weld (any subCause in Part G5)

**PART J - INTEGRITY INSPECTIONS** 

J1.	COLLECTED DATA IND  Have internal inspection tools collected data at the point of the Incident?
_	O Yes O No  J1a. If Yes, for each tool and technology used provide the information below for the most recent and previous tool runs:  AXIAL_MAGNETIC_FLX_LKG_IND
O	Axial Magnetic Flux Leakage  Most recent run Year: _AXIAL_RECENT_YEAR  AXIAL_RECENT_YEAR  AXIAL_RECENT_YEAR
	AXIAL KUNI PRUPUL METHUD
	Most recent run Propulsion Method (select only one): O Free Swimming O Tethered  AXIAL_RCNT_ATTUNED_DETECT
	Most recent run Attuned to Detect (select only one): O Metal Loss O Hard Spots O Girth Weld Anomalies
	O Other Describe: AXIAL_RCNT_ATND_DTCT_DTLS  If Metal Loss, specify (select only one): O High Resolution  O Standard Resolution AXIAL_RCNT_ATND_DTCT_METAL  O Standard Resolution AXIAL_RCNT_ATND_DTCT_METAL
	O Other Describe: <u>AXIAL_RCNT_ATT_DT_METAL_DTLS</u>
	Previous run Year: AXIAL_PREVIOUS_YEAR  AXIAL_PREV_PROPUL_METHOD
	Previous run Propulsion Method (select only one): O Free Swimming O Tethered  AXIAL PREV ATTUNED DETECT
	Previous run Attuned to Detect (select only one): O Metal Loss O Hard Spots O Girth Weld Anomalies
	O Other Describe: <u>AXIAL_PREV_ATND_DTCT_DTLS</u>
	If Metal Loss, specify (select only one): O High Resolution O Standard Resolution AXIAL_PREV_ATND_DTCT_METAL
0	CIR_TRN_WAVE_MGN_FLX_LKG_IND Circumferential/Transverse Wave Magnetic Flux Leakage
	Most recent run Year: CIRC_WAVE_RECENT_YEAR
	Most recent run Propulsion Method (select only one): O Free Swimming O Tethered CIRC_WV_RCNT_PROPUL_METHOD
	Most recent run Resolution (select only one): O High Resolution O Standard Resolution CIRC_WV_RCNT_RESOLUTION
	O Other Describe: <a href="mailto:circ_wv_rcnt_resolution_dtls">CIRC_wv_rcnt_resolution_dtls</a>
	Previous run Year: <u>CIRC_WV_PREVIOUS_YEAR</u>
	Previous run Propulsion Method (select only one): O Free Swimming O Tethered CIRC_WV_PREV_PROPUL_METHOD
	Previous run Resolution (select only one): O High Resolution O Standard Resolution CIRC_WV_PREV_RESOLUTION
	O Other Describe: <a href="CIRC_WV_PREV_RESOLUTION_DTLS">CIRC_WV_PREV_RESOLUTION_DTLS</a>
0	Ultrasonic ULTRASONIC_IND
	Most recent run Year: <u>ULTRASONIC_RECENT_YEAR</u>
	Most recent run Propulsion Method (select only one): O Free Swimming O Tethered <u>ULTRASONIC_RCNT_PROPUL_METHOD</u>
	Most recent run Attuned to (select only one)  O Wall Measurement O Crack  ULTRASONIC_RCNT_ATTUNED
	O Other Describe: <u>ULTRA_RCNT_ATTUNEDD_DTLS</u>
	If Attuned to Wall Measurement, most recent run Metal Loss Resolution (select only one): <a "="" 10.1007="" doi.org="" href="https://www.utra.gov.nepsi.g&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Previous run Propulsion Method (select only one): O Free Swimming O Tethered ULTRA PREV PROPUL METHOD&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Most recent run Attuned to (select only one)  O Wall Measurement O Crack  ULTRA_PREV_ATTUNED&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;O Other Describe: &lt;u&gt;ULTRA_PREV_ATTUNED&lt;/u&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;If Attuned to Wall Measurement, most recent run Metal Loss Resolution (select only one): UTRA PREV ATT METL RESOLUTION&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;O Standard Resolution O Other Describe: &lt;a href=" https:="" journal.com="">UTRA_PREV_ATT_METL_RESOLUTION</a>
$\circ$	Geometry/Deformation GEOMETRY_DEFORMATION_IND
0	Most recent run Year: GEOMETRY_RECENT_YEAR
	Most recent run Propulsion Method (select only one): O Free Swimming O Tethered
	Most recent run Resolution (select only one):  O High Resolution O Standard Resolution GEOMETRY_RCNT_RESOLUTION
	O Other Describe: GEOMETRY_RCNT_RESOLUTION_DTLS
	Most recent run Measurement Cups (select only one): O Inside ILI Cups O No Cups GEOMETRT_RCNT_MEASUR_CUPS
	Previous run Year: GEOMETRY_PREVIOUS_YEAR GEOMETRY_PREV_PROPUL_METHOD
	Provious run Propulaion Method (sologt only one): O Free Swimming O Tethorod
	Previous run Resolution (select only one):  O Free Swiffining O Fethered  GEOMETRY_PREV_RESOLUTION  O Standard Resolution
	O Other Describe: <u>GEOMETRY_PREV_RESOLUTION_DTLS</u>
	Previous run Measurement Cuns (select only one): O Inside II I Cuns O No Cuns GEOMETRT PREV MEASUR CUPS

EMAT_IND
O Electromagnetic Acoustic Transducer (EMAT)
Most recent run Year:  EMAT_RECENT_YEAR  EMAT_RECENT_YEAR  EMAT_RECT PROPUL METHOD
Most recent run Propulsion Method (select only one): O Free Swimming O Tethered
Previous run Year: <u>EMAT_PREVIOUS_YEAR</u> <u>EMAT_PREV_PROPUL_METHOD</u>
Previous run Propulsion Method (select only one): O Free Swimming O Tethered
CPCM IND
O Cathodic Protection Current Measurement (CPCM)
Most recent run Year: <a href="mailto:cpcm_recent_year">CPCM_RECENT_YEAR</a> <a href="mailto:cpcm_recent_year">CPCM_RECEN</a>
Most recent run Propulsion Method (select only one): O Free Swimming O Tethered
Previous run Year: <a href="mailto:cpcm_previous_year">CPCM_previous_year</a> <a href="mailto:cpcm_previous_year">CPCM_previous_year</a> <a href="mailto:cpcm_previous_year">CPCM_previous_year</a>
Previous run Propulsion Method (select only one): O Free Swimming O Tethered
OTHER_TOOL_TECH_IND
O Other, specify tool: OTHER_TOOL
Most recent run Year: OTHER_RECENT_YEAR OTHER_RCNT_PROPUL_METHOD
Most recent run Propulsion Method (select only one): O Free Swimming O Tethered
Previous run Year: OTHER_PREVIOUS_YEAR OTHER PREV PROPUL METHOD
Previous run Propulsion Method (select only one): O Free Swimming O Tethered
Answer J1b only when the cause is:
Previous Damage due to Excavation Activity (subCause in Part G3); or
Previous Mechanical Damage NOT Related to Excavation (subCause in Part G4) INSP_COMPL_BEFORE_DAMAGE_IND
J1b. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? O Yes O No
HAS HYDRTST_CONDUC BEFORE IND  J2. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?
(initial post construction pressure test is NOT reported here)
HYDRTST_MOST_RCNT_YEAR HYDRTST_MOST_RCNT_PRESSURE  ○ Yes  Most recent year tested: / / / / / / Sest pressure (psig): / / / / / / / / /
O No
DIRECT ASMNT CONDUCTED
J3. Has Direct Assessment been conducted on the pipeline segment?  DIRECT_ASMNT_AT_PNT_ACCDNT_YR
O Yes, and an investigative dig was conducted at the point of the Accident   → Most recent year conducted:
O Yes, but the point of the Accident was not identified as a dig site   → Most recent year conducted: // / / / /
O No DIRECT_ASMNT_PNT_NOT_IDNTF_YR
If Yes, J3a. For each type, indicate the year of the most recent assessment:
External Corrosion Direct Assessment (ECDA)
Internal Corrosion Direct Assessment (ICDA)            ASMNT_ICDA_RCNT_YEAR, ASMNT_ICDA_RCNT_IND   Stress Corrosion Cracking Direct Assessment (SCCDA)           ASMNT_SCCDA_RCNT_YEAR, ASMNT_SCCDA_RCNT_IND
Confirmatory Direct Assessment ASMNT CONFIRMATORY RCNT YEAR, ASMNT CONFIRMATORY RCNT IND
Other, specify type: ASMNT_OTHER_TYPE // / ASMNT_OTHER_RCNT_YEAR, ASMNT_OTHER_RCNT_IND
J4. Has one or more non-destructive examination been conducted prior to the Incident at the point of the Incident since January 1, 2002?
O Yes O No NON_DESTRUCTIVE_EXAM_IND
J4a. If Yes, for each examination conducted, select type of non-destructive examination and indicate most recent year the examination was
conducted:  EXM RADIOGRAPHY RCNT YEAR, EXM RADIOGRAPHY RCNT IND
O Radiography
O Guided Wave Ultrasonic FXM_WAVE_ULTRASONIC_RCNT_VEAR, EXM_WAVE_ULTRASONIC_RCNT_IND
O Handheld Ultrasonic Tool  // EXM_HANDL_ULTRASONIC_RCNT_YEAR, EXM_HANDL_ULTRASONIC_RCNT_IND  // EXM_WET_MGNT_PARTCL_RCNT_YEAR, EXM_WET_MGNT_PARTCL_RCNT_IND
O Wet Magnetic Fature Test
O bry wagnetic ratio rest
O Other, specify type <u>EXM_OTHER_TYPE</u> / / / / EXM_OTHER_RCNT_YEAR EXM_OTHER_RCNT_IND

## PART K - CONTRIBUTING FACTORS The Apparent Cause of the accident is contained in Part G. Do not report the Apparent Cause again in this Part K. If Contributing Factors were identified, select all that apply below and explain each in the Narrative: **External Corrosion** Pipe/Weld Failure EXTRNL\_COR\_GALVANIC\_IND ☐ External Corrosion, Galvanic PWF DESIGN IND □ Design-related EXTRNL COR ATMOSPHERIC IND EXTRNL COR ATMOSPHERIC IND EXTRNL COR STRAY CURRENT IND PWF CONSTRUCTION IND ☐ Construction-related EXTRNL COR STRAY CURRENT IND EXTERNL COR MICROBIOLOGIC IND External Corrosion, Microbiologically Induced EXTRNL COR SELECTIVE SEAM IND Selective Seam Selective Seam PWF\_INSTALLATION\_IN ☐ Installation-related PWF\_FABRICATION\_IND □ Fabrication-related □ Original Manufacturing-related PWF\_MANUFACTURING\_IND □ Original Manufacturing-related PWF\_ENV\_STRESS\_CORROSION\_IND ☐ External Corrosion, Selective Seam □ Environmental Cracking-related Stress Corrosion Cracking PWF ENV SULFIDE STRESS IND □ Environmental Cracking-related Sulfide Stress Cracking PWF ENV HYDROGEN STRESS IND □ Environmental Cracking-related Hydrogen Stress Cracking PWF ENV HARD SPOT IND Internal Corrosion $INTRNL\_COR\_CORROSIVE\_CMDTY\_IND$ □ Internal Corrosion, Corrosive Commodity INTRNL COR WTR DRPOUT ACID IND □ Internal Corrosion, Water drop-out/Acid INTRNL COR MICROBIOLOGIC IND □ Internal Corrosion, Microbiological ☐ Environmental Cracking-related, Hard Spot INTRNL COR EROSION IND ☐ Internal Corrosion, Erosion Equipment Failure EQF CONTROL RELEAF IND **Natural Forces** NF EARTH MOVEMENT IND ☐ Malfunction of Control/Relief Equipment \_\_EQF\_COMPRESSOR\_IND ☐ Earth Movement, NOT due to Heavy Rains/Floods □ Compressor or Compressor-related Equipment EQF\_THREADED\_COUPLING\_IND NF\_HEAVY\_RAINS\_IND ☐ Heavy Rains/Floods ☐ Threaded Connection/Coupling Failure ☐ Non-threaded Connection Failure ☐ EQF\_NON\_THREADED\_IND ☐ EQF\_DEFECTIVE\_FITTING\_IND ☐ Lightning NF LIGHTNING IND NF\_TEMPERATURE\_IND □ Temperature NF\_HIGH\_WINDS\_IND □ Defective or Loose Tubing or Fitting ☐ High Winds ☐ Failure of Equipment Body (except Compressor), Vessel Plate, ☐ Tree/Vegetation Root NF\_VEGITATION\_ROOT\_IND or other Material EQF\_EQUIPMENT\_BODY\_IND **Excavation Damage** EXCVTN DMG OPERATOR IND Excavation Damage by Operator (First Party) EXCVIN DMG OP CONTRACTOR IND Excavation Damage by Operator's Contractor (Second Party) EXCVIN DMG THIRD PARTY IND Third Party Incorrect Operation IO DAMAGE\_BY\_OPERATOR\_IND □ Damage by Operator or Operator's Contractor NOT Excavation and NOT Vehicle/Equipment Damage IO\_VALVE\_POSITION\_IND □ Excavation Damage by Third Party □ EXCYTN DMG PREVIOUS DAMAGE IND □ Previous Damage due to Excavation Activity ☐ Valve Left or Placed in Wrong Position, but NOT Resulting in Overpressure IO EQUIPMENT\_OVERPRESSURE\_IND □ Pipeline or Equipment Overpressured □ Pipeline or Equipment Overpressured □ NOT INSTALLED PROPERLY IND Other Outside Force OSF\_NEARBY\_INDUSTRIAL\_IND ☐ Equipment Not Installed Properly IO\_WRONG\_EQUIPMENT\_IND ☐ Nearby Industrial, Man-made, or Other Fire/Explosion ☐ Damage by Car, Truck, or Other Motorized Vehicle/Equipment ☐ Wrong Equipment Specified or Installed NOT Engaged in Excavation OSF\_VEHICLE\_IND IO\_INADEQUATE\_PROCEDURE\_IND □ Inadequate Procedure $\hfill \square$ Damage by Boats, Barges, Drilling Rigs, or Other Adrift IO NO PROCEDURE IND ☐ No procedure established Maritime Equipment OSF\_BOAT\_IND OSF\_OTHER MARITIME\_IND □ Routine or Normal Fishing or Other Maritime Activity NOT ☐ Failure to follow procedures IO\_FOLLOW\_PROCEDURE\_IND Engaged in Excavation OSF\_ELECTRICAL\_ARCING\_IND ☐ Electrical Arcing from Other Equipment or Facility OSF PREVIOUS MECHANICAL IND ☐ Previous Mechanical Damage NOT Related to Excavation ☐ Intentional Damage OSF\_INTENTIONAL\_IND ☐ Other underground facilities buried within 12 inches of the failure location OSF\_OTHER\_UNDERGROUND\_IND

PART H – NARRATIVE DESCRIPTION OF THE INCIDENT	(Attach additional sheets as necessary)
NARRATIVE	
·	
	<del></del>
PART I – PREPARER AND AUTHORIZED PERSON	
	•
PREPARER_NAME	PREPARER_TELEPHONE
Preparer's Name (type or print)	Preparer's Telephone Number
PREPARER_TITLE	
Preparer's Title (type or print)	
PREPARER_EMAIL	PREPARER_FAX
Preparer's E-mail Address	Preparer's Facsimile Number
LOCAL_CONTACT_NAME	
Local Contact Name: optional	
LOCAL_CONTACT_EMAIL	
Local Contact Email: optional	
LOCAL_CONTACT_TELEPHONE	
Local Contact Phone: optional	<del></del>
AUTHORIZER_NAME	AUTHORIZER_TELEPHONE
Authorized Signer Name	Authorized Signer Telephone Number
AUTHORIZER_TITLE	AUTHORIZER_EMAIL
Authorized Signer Title	Authorized Signer E-mail Address

**Note**: Field names not on the form are as following:

Field Name	Field Name Description
IYEAR	Year accident occurred, derived from accident date