

[illegible]

<p>13. Were there fatalities? <input type="radio"/> Yes <input type="radio"/> No <b>FATALITY_IND</b></p> <p>If Yes, specify the number in each category:</p> <p>13.a Operator employees <b>NUM_EMP_FATALITIES</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p> <p>13.b Contractor employees <b>NUM_CONTR_FATALITIES</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p> <p>13.c Non-Operator emergency responders <b>NUM_ER_FATALITIES</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p> <p>13.d Workers working on the right-of-way, but NOT associated with this Operator <b>NUM_WORKER_FATALITIES</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p> <p>13.e General public <b>NUM_GP_FATALITIES</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p> <p>13.f Total fatalities (sum of above) <b>FATAL</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p>	<p>14. Were there injuries requiring inpatient hospitalization? <input type="radio"/> Yes <input type="radio"/> No <b>INJURY_IND</b></p> <p>If Yes, specify the number in each category:</p> <p>14.a Operator employees <b>NUM_EMP_INJURIES</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p> <p>14.b Contractor employees working for the Operator <b>NUM_CONTR_INJURIES</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p> <p>14.c Non-Operator emergency responders <b>NUM_ER_INJURIES</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p> <p>14.d Workers working on the right-of-way, but NOT associated with this Operator <b>NUM_WORKER_INJURIES</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p> <p>14.e General public <b>NUM_GP_INJURIES</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p> <p>14.f Total injuries (sum of above) <b>INJURE</b>  <div style="border-bottom: 1px solid black; width: 100px; margin-top: 2px;"></div></p>
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15. Was the pipeline/facility shut down due to the incident? **SHUTDOWN\_DUE\_ACCIDENT\_IND**

☐ Yes ☐ No ➡ Explain: **SHUTDOWN\_EXPLAIN** \_\_\_\_\_

If Yes, complete Questions 15.a and 15.b: *(use local time, 24-hr clock)*

15.a Local time and date of shutdown **SHUTDOWN\_DATETIME**  

Hour

Month

Day

Year

15.b Local time pipeline/facility restarted **RESTART\_DATETIME**  

Hour

Month

Day

Year

**STILL\_SHUTDOWN\_IND**  
☐ Still shut down\*  
*(\*Supplemental Report required)*

16. Did the gas ignite? ☐ Yes ☐ No **IGNITE\_IND**

17. Did the gas explode? ☐ Yes ☐ No **EXPLODE\_IND**

18. Number of general public evacuated: **NUM\_PUB\_EVACUATED**

19. Time sequence: *(use local time, 24-hour clock)*

19.a Local time operator identified failure **INCIDENT\_IDENTIFIED\_DATETIME**  

Hour

Month

Day

Year

19.b Local time operator resources arrived on site **ON\_SITE\_DATETIME**  

Hour

Month

Day

Year



<b>PART C – INCIDENT FACILITY INFORMATION</b>	
1.	Is the pipeline or facility: <b>PIPE_FACILITY_TYPE</b> <input type="checkbox"/> Interstate <input type="checkbox"/> Intrastate
2.	Part of system involved in Incident: ( <i>select only one</i> ) <b>SYSTEM_PART_INVOLVED</b> <input type="checkbox"/> Belowground Storage, Including Associated Equipment and Piping <input type="checkbox"/> Aboveground Storage, Including Associated Equipment and Piping <input type="checkbox"/> Onshore Compressor Station Equipment and Piping <input type="checkbox"/> Onshore Regulator/Metering Station Equipment and Piping <input type="checkbox"/> Onshore Pipeline, Including Valve Sites <input type="checkbox"/> Offshore Platform, Including Platform-mounted Equipment and Piping <input type="checkbox"/> Offshore Pipeline, Including Riser and Riser Bend
3.	Item involved in Incident: ( <i>select only one</i> ) <b>ITEM_INVOLVED</b>  <input type="checkbox"/> Pipe ⇨ Specify: <input type="radio"/> Pipe Body <input type="radio"/> Pipe Seam <b>PIPE_TYPE</b> 3.a Nominal diameter of pipe (in):     ___ / ___ / ___ / ___ / ___ <b>PIPE_DIAMETER</b> 3.b Wall thickness (in):     ___ / ___ / ___ / ___ / ___ <b>PIPE_WALL_THICKNESS</b> <b>PIPE_SMYS</b> 3.c SMYS (Specified Minimum Yield Strength) of pipe (psi):     ___ / ___ / ___ / ___ / ___ 3.d Pipe specification:     ___ <b>PIPE_SPECIFICATION</b>  3.e Pipe Seam ⇨ Specify: <input type="radio"/> Longitudinal ERW - High Frequency <input type="radio"/> Single SAW <input type="radio"/> Flash Welded <b>PIPE_SEAM_TYPE</b> <input type="radio"/> Longitudinal ERW - Low Frequency <input type="radio"/> DSAW <input type="radio"/> Continuous Welded <input type="radio"/> Longitudinal ERW – Unknown Frequency <input type="radio"/> Furnace Butt Welded <input type="radio"/> Spiral Welded ERW <input type="radio"/> Spiral Welded SAW <input type="radio"/> Spiral Welded DSAW <input type="radio"/> Lap Welded <input type="radio"/> Seamless <input type="radio"/> Other     ___ <b>PIPE_SEAM_DETAILS</b>  3.f Pipe manufacturer:     ___ <b>PIPE_MANUFACTURER</b> 3.g Year of manufacture:     ___ / ___ / ___ / ___ / ___ <b>PIPE_MANUFACTURE_YEAR</b> 3.h Pipeline coating type at point of Incident <b>PIPE_COATING_TYPE</b> ⇨ Specify: <input type="radio"/> Fusion Bonded Epoxy <input type="radio"/> Coal Tar <input type="radio"/> Asphalt <input type="radio"/> Polyolefin <input type="radio"/> Extruded Polyethylene <input type="radio"/> Field Applied Epoxy <input type="radio"/> Cold Applied Tape <input type="radio"/> Paint <input type="radio"/> Composite <input type="radio"/> None <input type="radio"/> Other     ___ <b>PIPE_COATING_DETAILS</b> <input type="checkbox"/> Weld, including heat-affected zone ⇨ Specify: <input type="radio"/> Pipe Girth Weld <input type="radio"/> Other Butt Weld <input type="radio"/> Fillet Weld <input type="radio"/> Other <b>WELD_DETAILS</b> If Pipe Girth Weld is selected, complete items 3.a. through h. above. If the values differ on either side of the girth weld, enter one value in 3.a. through h. and list the different value(s) in Part H - Narrative Description of the Incident. <input type="checkbox"/> Valve <input type="radio"/> Mainline ⇨ Specify: <input type="radio"/> Butterfly <input type="radio"/> Check <input type="radio"/> Gate <input type="radio"/> Plug <input type="radio"/> Ball <input type="radio"/> Globe <b>VALVE_TYPE</b> <b>VALVE_MAINLINE_TYPE</b> <input type="radio"/> Other     ___ <b>VALVE_MAINLINE_DETAILS</b> 3.i Mainline valve manufacturer:     ___ <b>VALVE_MANUFACTURER</b> 3.j Year of manufacture:     ___ / ___ / ___ / ___ / ___ <b>VALVE_MANUFACTURE_YEAR</b> <input type="radio"/> Relief Valve <input type="radio"/> Auxiliary or Other Valve  <input type="checkbox"/> Compressor <input type="checkbox"/> Meter <input type="checkbox"/> Scraper/Pig Trap <input type="checkbox"/> Separator/Separator Filter <input type="checkbox"/> Strainer/Filter <input type="checkbox"/> Dehydrator/Drier/Treater <input type="checkbox"/> Regulator/Control Valve <input type="checkbox"/> Drip/Drip Collection Device <input type="checkbox"/> Pulsation Bottle <input type="checkbox"/> Cooler <input type="checkbox"/> Repair Sleeve or Clamp <input type="checkbox"/> Hot Tap Equipment <input type="checkbox"/> Stopple Fitting <input type="checkbox"/> Flange <input type="checkbox"/> Relief Line <input type="checkbox"/> Auxiliary Piping (e.g. drain lines) <input type="checkbox"/> Tubing <input type="checkbox"/> Instrumentation <input type="checkbox"/> Underground Gas Storage or Cavern <input type="checkbox"/> Pressure Vessel <input type="checkbox"/> Other     ___ <b>ITEM_INVOLVED_DETAILS</b>
4.	Year item involved in Incident was installed:     ___ / ___ / ___ / ___ / ___ <b>INSTALLATION_YEAR</b>

5. Material involved in Incident: (select only one) **MATERIAL\_INVOLVED**

☐ Carbon Steel

☐ Plastic

☐ Material other than Carbon Steel or Plastic ➡ \*Specify: **MATERIAL\_DETAILS**

**RELEASE\_TYPE**

6. Type of Incident involved: (select only one)

**PUNCTURE\_AXIAL**

**PUNCTURE\_CIRCUM**

☐ Mechanical Puncture ➡ Approx. size: / / / / / in. (axial) by / / / / / in. (circumferential)

**LEAK\_TYPE**

**LEAK\_TYPE\_OTHER**

☐ Leak ➡ Select Type: ☐ Pinhole ☐ Crack ☐ Connection Failure ☐ Seal or Packing ☐ Other

**RUPTURE\_ORIENT**

**RUPTURE\_DETAILS**

☐ Rupture ➡ Select Orientation: ☐ Circumferential ☐ Longitudinal ☐ Other

Approx. size: / / / / / in. (widest opening) by / / / / / in. (length circumferentially or axially)

☐ Other ➡ \*Describe: **RELEASE\_TYPE\_DETAILS**

**PART D – ADDITIONAL CONSEQUENCE INFORMATION**

1. Class Location of Incident: (select only one) **CLASS\_LOCATION\_TYPE**

☐ Class 1 Location

☐ Class 2 Location

☐ Class 3 Location

☐ Class 4 Location

2. Did this Incident occur in a High Consequence Area (HCA)? **COULD\_BE\_HCA**

☐ No

**DETERMINATION\_METHOD**

☐ Yes ➡ 2.a Specify the Method used to identify the HCA: ☐ Method 1 ☐ Method 2

**PIR\_RADIUS**

3. What is the PIR (Potential Impact Radius) for the location of this Incident? / / / / / feet

4. Were any structures outside the PIR impacted or otherwise damaged by heat/fire resulting from the Incident?

☐ Yes ☐ No **HEAT\_DAMAGE\_IND**

5. Were any structures outside the PIR impacted or otherwise damaged NOT by heat/fire resulting from the Incident?

☐ Yes ☐ No **NON\_HEAT\_DAMAGE\_IND**

6. Were any of the fatalities or injuries reported for persons located outside the PIR?

☐ Yes ☐ No **HCA\_FATALITIES\_IND**

7. Estimated Property Damage:

7.a Estimated cost of public and non-Operator private property damage \$ / / / / / **EST\_COST\_OPER\_PAID**

7.b Estimated cost of Operator's property damage & repairs \$ / / / / / **EST\_COST\_PROP\_DAMAGE**

7.c Estimated cost of Operator's emergency response \$ / / / / / **EST\_COST\_EMERGENCY**

7.d Estimated other costs **EST\_COST\_OTHER\_DETAILS** \$ / / / / / **EST\_COST\_OTHER**  
Describe \_\_\_\_\_

7.e Total estimated property damage (sum of above) \$ / / / / /

Cost of Gas Released

7.f Estimated cost of gas released unintentionally \$ / / / / / **EST\_COST\_GAS\_RELEASED**

7.g Estimated cost of gas released during intentional and controlled blowdown \$ / / / / / **EST\_COST\_INTENTIONAL\_RELEASE**

7.h Total estimated cost of gas released (sum of 7.f & 7.g above) \$ / / / / /

**PRPTY – Estimated Total Cost, sum of 7.a-d and 7.f-g**

**PART E – ADDITIONAL OPERATING INFORMATION**

1. Estimated pressure at the point and time of the Incident (psig): **ACCIDENT\_PSIG**    /   /   /, /   /   /   /
2. Maximum Allowable Operating Pressure (MAOP) at the point and time of the Incident (psig) :    /   /   /, /   /   /   /    **MOP\_PSIG**
- 2a. 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)  
    ♦ Other    Specify Other: **MOP\_CFR\_SECTION\_DETAILS**
3. Describe the pressure on the system or facility relating to the Incident: (select only one) **ACCIDENT\_PRESSURE**  
☐ Pressure did not exceed MAOP  
☐ Pressure exceeded MAOP, but did not exceed 110% of MAOP  
☐ Pressure exceeded 110% of 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 **PRESSURE\_RESTRICTION\_IND**  
☐ Yes ➡ (Complete 4.a and 4.b below) **EXCEED\_RESTRICTION\_IND**  
    4.a Did the pressure exceed this established pressure restriction?    ☐ Yes    ☐ No  
    4.b Was this pressure restriction mandated by PHMSA or the State?    ☐ PHMSA    ☐ State    ☐ Not mandated **PHMSA\_RESTRICTION\_IND**
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?  
☐ No **PART\_C\_QUESTION\_2\_IND**  
☐ Yes ➡ (Complete 5.a – 5.e below) **UPSTREAM\_VALVE\_TYPE\_IND**  
    5.a Type of upstream valve used to initially isolate release source:    ☐ Manual    ☐ Automatic    ☐ Remotely Controlled  
    5.b Type of downstream valve used to initially isolate release source:    ☐ Manual    ☐ Automatic    ☐ Remotely Controlled  
    ☐ Check Valve  
    5.c Length of segment isolated between valves (ft): **LENGTH\_SEGMENT\_ISOLATED**    /   /   /, /   /   /   /  
    5.d Is the pipeline configured to accommodate internal inspection tools? **INTERNAL\_INSPECTION\_IND**  
        ☐ 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)  
            ☐ Other ➡ Describe: **OTHER\_INSPECTION\_IND**    **INTERNAL\_INSPECTION\_DETAILS**  
    5.e For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run? **OPERATION\_COMPLICATIONS\_IND**  
        ☐ No  
        ☐ Yes ➡ Which operational factors complicate execution? (select all that apply)  
            ☐ Excessive debris or scale, wax, or other wall build-up **EXCESSIVE\_DEBRIS\_IND**  
            ☐ Low operating pressure(s) **LOW\_OP\_PRESSURE\_IND**  
            ☐ Low flow or absence of flow **LOW\_FLOW\_IND**  
            ☐ Incompatible commodity **INCOMPAT\_COMMOD\_IND**  
            ☐ Other ➡ Describe: **OTHER\_COMPLICATIONS\_IND**    **INSPECT\_COMP\_DETAILS**  
    5.f Function of pipeline system: (select only one) **PIPELINE\_FUNCTION**  
        ☐ Transmission System    ☐ Transmission Line of Distribution System  
        ☐ Type A Gathering    ☐ Type B Gathering  
        ☐ Storage Gathering    ☐ Offshore Gathering

6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Incident?

☐ No

**SCADA\_IN\_PLACE\_IND**

☐ Yes ➔

6.a Was it operating at the time of the Incident?

☐ Yes

☐ No

**SCADA\_OPERATING\_IND**

6.b Was it fully functional at the time of the Incident?

☐ Yes

☐ No

**SCADA\_FUNCTIONAL\_IND**

6.c 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

☐ No

**SCADA\_DETECTION\_IND**

6.d Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Incident?

☐ Yes

☐ No

**SCADA\_CONF\_IND**

**ACCIDENT\_IDENTIFIER**

7. How was the Incident initially identified for the Operator? (select only one)

☐ SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations)

☐ Static Shut-in Test or Other Pressure or Leak Test

☐ Controller

☐ Air Patrol

☐ Notification from Public

☐ Notification from Third Party that caused the Incident

☐ Local Operating Personnel, including contractors

☐ Ground Patrol by Operator or its contractor

☐ Notification from Emergency Responder

☐ Other

**ACCIDENT\_DETAILS**

7.a If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 7, specify the following: (select only one) **OPERATOR\_TYPE**

☐ Operator employee

☐ Contractor working for the Operator

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? (select only one) **INVESTIGATION\_STATUS**

☐ Yes, but the investigation of the control room and/or controller actions has not yet been completed by the operator (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 due to: (provide an explanation for why the operator did not investigate)

**INVESTIGATION\_STATUS\_DETAILS**

☐ Yes, specify investigation result(s): (select all that apply)

☐ Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue **INVEST\_SCHEDULE\_IND**

☐ 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) **INVEST\_NO\_SCHEDULE\_IND**

**INVEST\_NO\_SCHEDULE\_IND\_DETAILS**

☐ Investigation identified no control room issues

**INVEST\_NO\_CONTROL\_ROOM\_IND**

☐ Investigation identified no controller issues

**INVEST\_NO\_CONTROLLER\_IND**

☐ Investigation identified incorrect controller action or controller error

**INVEST\_INCORRECT\_ACTION\_IND**

☐ Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response **INVEST\_FATIGUE\_IND**

☐ Investigation identified incorrect procedures

**INVEST\_INCORRECT\_PROCEDURE\_IND**

☐ Investigation identified incorrect control room equipment operation

**INVEST\_INCORRECT\_CONTROL\_IND**

☐ Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response **INVEST\_MAINT\_IND**

☐ Investigation identified areas other than those above ➔ Describe: **INVEST\_OTHER\_IND, INVEST\_OTHER\_IND\_DETAILS**

**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? **EMPLOYEE\_DRUG\_TEST\_IND**
- ☐ No
- ☐ Yes ➡ \*1.a Specify how many were tested:    /    /    / **NUM\_EMPLOYEES\_TESTED**
- \*1.b Specify how many failed:    /    /    / **NUM\_EMPLOYEES\_FAILED**
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? **CONTRACTOR\_DRUG\_TEST\_IND**
- ☐ No
- ☐ Yes ➡ \*2.a Specify how many were tested:    /    /    / **NUM\_CONTRACTORS\_TESTED**
- \*2.b Specify how many failed:    /    /    / **NUM\_CONTRACTORS\_FAILED**



## G1 - Corrosion Failure – \*only one sub-cause can be picked from shaded left-hand column

INTERNAL\_EXTERNAL

### ☐ External Corrosion

1. Results of visual examination: **VISUAL\_EXAM\_RESULTS**  
☐ Localized Pitting ☐ General Corrosion  
☐ Other **VISUAL\_EXAM\_DETAILS**
2. Type of corrosion: (select all that apply)  
**GALVANIC\_CORROSION\_IND, ATMOSPHERE\_CORROSION\_IND, STRAY\_CURRENT\_CORROSION\_IND, MICROBIOLOGICAL\_CORROSION\_IND, SELECTIVE\_SEAM\_CORROSION\_IND**  
☐ Galvanic ☐ Atmospheric ☐ Stray Current ☐ Microbiological ☐ Selective Seam  
☐ Other **OTHER\_CORROSION\_IND, CORROSION\_TYPE\_DETAILS**
3. 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**  
☐ Field examination ☐ Determined by metallurgical analysis  
☐ Other **OTHER\_BASIS\_IND CORROSION\_BASIS\_DETAILS**
4. Was the failed item buried under the ground? **UNDERGROUND\_LOCATION**  
☐ Yes ⇒ 4.a Was failed item considered to be under cathodic protection at the time of the incident? **UNDER\_CATHODIC\_PROTECTION\_IND**  
☐ Yes ⇒ Year protection started: **CATHODIC\_PRO\_START\_YEAR**  
☐ No **SHIELDING\_EVIDENT**  
4.b Was shielding, tenting, or disbonding of coating evident at the point of the incident?  
☐ Yes ☐ No **CATHODIC\_SURVEY\_TYPE**  
4.c Has one or more Cathodic Protection Survey been conducted at the point of the incident?  
**CP\_ANNUAL\_SURVEY\_IND CP\_ANNUAL\_SURVEY\_YEAR**  
☐ Yes, CP Annual Survey ⇒ Most recent year conducted: **CLOSE\_INTERVAL\_SURVEY\_IND CLOSE\_INTERVAL\_SURVEY\_YEAR**  
☐ Yes, Close Interval Survey ⇒ Most recent year conducted: **OTHER\_CP\_SURVEY\_IND OTHER\_CP\_SURVEY\_YEAR**  
☐ Yes, Other CP Survey ⇒ Most recent year conducted: **EXTERNALLY\_COATED**  
☐ No ⇒ 4.d Was the failed item externally coated or painted? ☐ Yes ☐ No
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?  
☐ Yes ☐ No **PRIOR\_DAMAGE**

### ☐ Internal Corrosion

6. Results of visual examination: **INT\_VISUAL\_EXAM\_RESULTS**  
☐ Localized Pitting ☐ General Corrosion ☐ Not cut open  
☐ Other **INT\_VISUAL\_EXAM\_DETAILS**
7. Cause of corrosion: (select all that apply) **INT\_CORROSIVE\_COMMODITY\_IND INT\_WATER\_ACID\_IND, INT\_MICROBIOLOGICAL\_IND, INT\_EROSION\_IND**  
☐ Corrosive Commodity ☐ Water drop-out/Acid ☐ Microbiological ☐ Erosion  
☐ Other **INT\_OTHER\_CORROSION\_IND, INT\_CORROSION\_TYPE\_DETAILS**
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\_METALLURGICAL\_BASIS\_IND**  
☐ Field examination ☐ Determined by metallurgical analysis  
☐ Other **INT\_OTHER\_BASIS\_IND, INT\_CORROSION\_BASIS\_DETAILS**
9. Location of corrosion: (select all that apply)  
**INT\_LOW\_POINT\_PIPE\_LOC\_IND, INT\_ELBOW\_LOC\_IND, INT\_DROP\_OUT\_LOC\_IND**  
☐ Low point in pipe ☐ Elbow ☐ Drop-out  
☐ Other **INT\_OTHER\_LOC\_IND, CORROSION\_LOCATION\_DETAILS**
10. Was the gas/fluid treated with corrosion inhibitors or biocides? ☐ Yes ☐ No **CORROSION\_INHIBITORS**
11. Was the interior coated or lined with protective coating? ☐ Yes ☐ No **CORROSION\_LINING**
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?  
☐ Not applicable - Not mainline pipe ☐ Yes ☐ No **CLEANING\_DEWATERING**
13. Were corrosion coupons routinely utilized?  
☐ Not applicable - Not mainline pipe ☐ Yes ☐ No **CORROSION\_COUPONS**

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

**COR\_INSPECT\_TOOL\_COLLECTED\_IND**

14. Has one or more internal inspection tool collected data at the point of the Incident?

☐ Yes ☐ No

14.a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:

☐ Magnetic Flux Leakage Tool **COR\_MAGNETIC\_FLUX\_LEAKAGE\_IND**

/ / / / /

**COR\_MAGNETIC\_FLUX\_LEAKAGE\_YEAR**

☐ Ultrasonic **COR\_ULTRASONIC\_IND**

/ / / / /

**COR\_ULTRASONIC\_YEAR**

☐ Geometry **COR\_GEOMETRY\_IND**

/ / / / /

**COR\_GEOMETRY\_YEAR**

☐ Caliper **COR\_CALIPER\_IND**

/ / / / /

**COR\_CALIPER\_YEAR**

☐ Crack **COR\_CRACK\_IND**

/ / / / /

**COR\_CRACK\_YEAR**

☐ Hard Spot **COR\_HARDSPOT\_IND**

/ / / / /

**COR\_HARDSPOT\_YEAR**

☐ Combination Tool **COR\_COMBINATION\_TOOL\_IND**

/ / / / /

**COR\_COMBINATION\_TOOL\_YEAR**

☐ Transverse Field/Triaxial **COR\_TRANSVERSE\_FIELD\_IND**

/ / / / /

**COR\_TRANSVERSE\_FIELD\_YEAR**

☐ Other **COR\_INSPECTION\_OTHER\_IND**

/ / / / /

**COR\_INSPECTION\_OTHER\_YEAR**

**COR\_INSPECTION\_OTHER\_DETAILS**

**COR\_HYDROTEST\_CONDUCTED\_IND**

15. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?

☐ Yes ☒ Most recent year tested: / / / / / Test pressure (psig): / / / / /

☐ No

**COR\_HYDROTEST\_CONDUCTED\_YEAR**

**COR\_HYDROTEST\_PRESSURE**

**COR\_DIRECT\_INSPECTION\_TYPE**

16. Has one or more Direct Assessment been conducted on this segment?

**COR\_DIRECT\_YES\_DIG\_YEAR**

☐ Yes, and an investigative dig was conducted at the point of the Incident ☒ Most recent year conducted: / / / / /

☐ Yes, but the point of the Incident was not identified as a dig site ☒ Most recent year conducted: / / / / /

☐ No

**COR\_DIRECT\_YES\_NO\_DIG\_YEAR**

**COR\_NON\_DESTRUCTIVE\_IND**

17. Has one or more non-destructive examination been conducted at the point of the Incident since January 21, 2002?

☐ Yes ☐ No

17.a. 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

/ / / / /

**COR\_RADIOGRAPHY\_IND, COR\_RADIOGRAPHY\_YEAR**

☐ Guided Wave Ultrasonic

/ / / / /

**COR\_GUIDED\_WAVE\_IND, COR\_GUIDED\_WAVE\_YEAR**

☐ Handheld Ultrasonic Tool

/ / / / /

**COR\_HANDHELD\_ULTRA\_IND, COR\_HANDHELD\_ULTRA\_YEAR**

☐ Wet Magnetic Particle Test

/ / / / /

**COR\_WET\_MAGNETIC\_IND, COR\_WET\_MAGNETIC\_YEAR**

☐ Dry Magnetic Particle Test

/ / / / /

**COR\_DRY\_MAGNETIC\_IND, COR\_DRY\_MAGNETIC\_YEAR**

☐ Other **COR\_NON\_DEST\_DETAILS**

/ / / / /

**COR\_NON\_DEST\_OTHER\_IND, COR\_NON\_DEST\_OTHER\_YEAR**

## G2 - Natural Force Damage - \*only one sub-cause can be picked from shaded left-hand column

**NATURAL\_FORCE\_TYPE**

☐ Earth Movement, NOT due to Heavy Rains/Floods

**EARTH\_SUBTYPE**

1. Specify: ☐ Earthquake ☐ Subsidence ☐ Landslide

☐ Other **NF\_OTHER\_DETAILS**

☐ Heavy Rains/Floods

**HEAVY\_RAINS\_SUBTYPE**

2. Specify: ☐ Washout/Scouring ☐ Flotation ☐ Mudslide ☐ Other **NF\_OTHER\_DETAILS**

☐ Lightning

**LIGHTNING\_SUBTYPE**

3. Specify: ☐ Direct hit ☐ Secondary impact such as resulting nearby fires

☐ Temperature

**TEMPERATURE\_SUBTYPE**

4. Specify: ☐ Thermal Stress ☐ Frost Heave

☐ Frozen Components ☐ Other **NF\_OTHER\_DETAILS**

☐ High Winds

☐ Other Natural Force Damage

5. 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? ☐ Yes ☐ No

**NF\_HURRICANE\_IND**

**NF\_TROPICAL\_STORM\_IND**

**NF\_TORNADO\_IND**

6.a. If Yes, specify: (select all that apply)

☐ Hurricane

☐ Tropical Storm

☐ Tornado

☐ Other **NF\_OTHER\_IND, NF\_EXTREME\_WEATHER\_DETAILS**

### G3 – Excavation Damage - \*only one sub-cause can be picked from shaded left-hand column

EX\_PARTY\_TYPE

☐ Excavation Damage by Operator  
(First Party)

☐ Excavation Damage by Operator's  
Contractor (Second Party)

☐ Excavation Damage by Third Party

☐ 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?  
☐ Yes ☐ No EX\_INSPECT\_TOOL\_COLLECTED\_IND

1.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:

EX_MAGNETIC_FLUX_LEAKAGE_IND	⇒	<input type="radio"/> Magnetic Flux Leakage	EX_MAGNETIC_FLUX_LEAKAGE_YEAR	/ / / / /
EX_ULTRASONIC_IND	⇒	<input type="radio"/> Ultrasonic	EX_ULTRASONIC_YEAR	/ / / / /
EX_GEOMETRY_IND	⇒	<input type="radio"/> Geometry	EX_GEOMETRY_YEAR	/ / / / /
EX_CALIPER_IND	⇒	<input type="radio"/> Caliper	EX_CALIPER_YEAR	/ / / / /
EX_CRACK_IND	⇒	<input type="radio"/> Crack	EX_CRACK_YEAR	/ / / / /
EX_HARDSPOT_IND	⇒	<input type="radio"/> Hard Spot	EX_HARDSPOT_YEAR	/ / / / /
EX_COMBINATION_TOOL_IND	⇒	<input type="radio"/> Combination Tool	EX_COMBINATION_TOOL_YEAR	/ / / / /
EX_TRANSVERSE_FIELD_IND	⇒	<input type="radio"/> Transverse Field/Triaxial	EX_TRANSVERSE_FIELD_YEAR	/ / / / /
EX_INSPECTION_OTHER_IND	⇒	<input type="radio"/> Other EX_INSPECTION_OTHER_DETAILS	EX_INSPECTION_OTHER_YEAR	/ / / / /

2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? ☐ Yes ☐ No EX\_BEFORE\_DAMAGE

3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident? EX\_HYDROTEST\_CONDUCTED\_IND

☐ Yes ⇒ Most recent year tested: EX\_HYDROTEST\_CONDUCTED\_YEAR  
Test pressure (psig): EX\_HYDROTEST\_PRESSURE

☐ No EX\_DIRECT\_INSPECTION\_TYPE

4. Has one or more Direct Assessment been conducted on the pipeline segment?

☐ Yes, and an investigative dig was conducted at the point of the Incident  
⇒ Most recent year conducted: EX\_DIRECT\_YES\_DIG\_YEAR

☐ Yes, but the point of the Incident was not identified as a dig site  
⇒ Most recent year conducted: EX\_DIRECT\_YES\_NO\_DIG\_YEAR

☐ No

5. Has one or more non-destructive examination been conducted at the point of the Incident since January 1, 2002? EX\_NON\_DESTRUCTIVE\_IND

☐ Yes ☐ No

5.a 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:

EX_RADIOGRAPHY_IND	⇒	<input type="radio"/> Radiograph	EX_RADIOGRAPHY_YEAR	/ / / / /
EX_GUIDED_WAVE_IND	⇒	<input type="radio"/> Guided Wave Ultrasonic	EX_GUIDED_WAVE_YEAR	/ / / / /
EX_HANDHELD_ULTRA_IND	⇒	<input type="radio"/> Handheld Ultrasonic Tool	EX_HANDHELD_ULTRA_YEAR	/ / / / /
EX_WET_MAGNETIC_IND	⇒	<input type="radio"/> Wet Magnetic Particle Test	EX_WET_MAGNETIC_YEAR	/ / / / /
EX_DRY_MAGNETIC_IND	⇒	<input type="radio"/> Dry Magnetic Particle Test	EX_DRY_MAGNETIC_YEAR	/ / / / /
EX_NON_DEST_OTHER_IND	⇒	<input type="radio"/> Other EX_NON_DEST_OTHER_DETAILS	EX_NON_DEST_OTHER_YEAR	/ / / / /

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? ☐ Yes ☐ No PRIOR\_NOTIFICATION\_IND

6.a If Yes, Notification received from: (select all that apply) ☐ One-Call System ☐ Excavator ☐ Contractor ☐ Landowner  
ONE\_CALL\_SYSTEM\_IND EXCAVATOR\_IND CONTRACTOR\_IND LANDOWNER\_IND

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)? ☐ Yes ☐ No **NOTIFY\_CGA\_DIRT**

8. Right-of-Way where event occurred: (select all that apply)

- PUBLIC\_ROW\_IND** **PUBLIC\_SUBTYPE**
- ☐ Public ➡ Specify: ☐ City Street ☐ State Highway ☐ County Road ☐ Interstate Highway ☐ Other
- ☐ Private ➡ Specify: ☐ Private Landowner ☐ Private Business ☐ Private Easement **PRIVATE\_ROW\_IND, PRIVATE\_SUBTYPE**
- ☐ Pipeline Property/Easement **PIPELINE\_EASEMENT\_ROW\_IND**
- ☐ Power/Transmission Line **POWER\_TRANSMISSION\_ROW\_IND**
- ☐ Railroad **RAILROAD\_ROW\_IND**
- ☐ Dedicated Public Utility Easement **PUBLIC\_UTIL\_EASEMENT\_ROW\_IND**
- ☐ Federal Land **FEDERAL\_LAND\_ROW\_IND**
- ☐ Data not collected **DATA\_NOT\_COLLECTED\_ROW\_IND**
- ☐ Unknown/Other **UNKNOWN\_ROW\_IND**

9. Type of excavator: (select only one) **EXCAVATOR\_TYPE**

- ☐ Contractor ☐ County ☐ Developer ☐ Farmer ☐ Municipality ☐ Occupant
- ☐ Railroad ☐ State ☐ Utility ☐ Data not collected ☐ Unknown/Other

**EXCAVATOR\_EQUIPMENT**

10. Type of excavation equipment: (select only one)

- ☐ Auger ☐ Backhoe/Trackhoe ☐ Boring ☐ Drilling ☐ Directional Drilling
- ☐ Explosives ☐ Farm Equipment ☐ Grader/Scraper ☐ Hand Tools ☐ Milling Equipment
- ☐ Probing Device ☐ Trencher ☐ Vacuum Equipment ☐ Data not collected ☐ Unknown/Other

11. Type of work performed: (select only one) **WORK\_PERFORMED**

- ☐ Agriculture ☐ Cable TV ☐ Curb/Sidewalk ☐ Building Construction ☐ Building Demolition
- ☐ Drainage ☐ Driveway ☐ Electric ☐ Engineering/Surveying ☐ Fencing
- ☐ Grading ☐ Irrigation ☐ Landscaping ☐ Liquid Pipeline ☐ Milling
- ☐ Natural Gas ☐ Pole ☐ Public Transit Authority ☐ Railroad Maintenance ☐ Road Work
- ☐ Sewer (Sanitary/Storm) ☐ Site Development ☐ Steam ☐ Storm Drain/Culvert ☐ Street Light
- ☐ Telecommunications ☐ Traffic Signal ☐ Traffic Sign ☐ Water ☐ Waterway Improvement
- ☐ Data not collected ☐ Unknown/Other

**ONE\_CALL\_NOTIFIED\_IND**

12. Was the One-Call Center notified? ☐ Yes ☐ No

**ONE\_CALL\_TICKET\_NUM**

\*12.a If Yes, specify ticket number: / / / / / / / / / / / / / / / /

\*12.b 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**

13. Type of Locator: ☐ Utility Owner ☐ Contract Locator ☐ Data not collected ☐ Unknown/Other

**VISIBLE\_MARKS**

14. Were facility locate marks visible in the area of excavation? ☐ No ☐ Yes ☐ Data not collected ☐ Unknown/Other

**FACILITIES\_MARKED**

15. Were facilities marked correctly? ☐ No ☐ Yes ☐ Data not collected ☐ Unknown/Other

**SERVICE\_INTERRUPTION**

16. Did the damage cause an interruption in service? ☐ No ☐ Yes ☐ Data not collected ☐ Unknown/Other

16.a If Yes, specify duration of the interruption: / / / / / hours **SERVICE\_INTERRUPTION\_HOURS**

(This CGA-DIRT section continued on next page with Question 17.)

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, the one predominant second level CGA-DIRT Root Cause as well): **ROOT\_CAUSE**

**ONE\_CALL\_SUBTYPE**

- ☐ One-Call Notification Practices Not Sufficient: (select only one)
- ☐ No notification made to the One-Call Center
  - ☐ Notification to One-Call Center made, but not sufficient
  - ☐ Wrong information provided

**LOCATING\_SUBTYPE**

- ☐ Locating Practices Not Sufficient: (select only one)
- ☐ Facility could not be found/located
  - ☐ Facility marking or location not sufficient
  - ☐ Facility was not located or marked
  - ☐ Incorrect facility records/maps

**EXCAVATION\_SUBTYPE**

- ☐ Excavation Practices Not Sufficient: (select only one)
- ☐ Excavation practices not sufficient (other)
  - ☐ Failure to maintain clearance
  - ☐ Failure to maintain the marks
  - ☐ Failure to support exposed facilities
  - ☐ Failure to use hand tools where required
  - ☐ Failure to verify location by test-hole (pot-holing)
  - ☐ Improper backfilling

☐ One-Call Notification Center Error

☐ Abandoned Facility

☐ Deteriorated Facility

☐ Previous Damage

☐ Data Not Collected

☐ 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

<div style="color: red; font-weight: bold; margin-bottom: 5px;">OUTSIDE_FORCE_TYPE</div> <input type="checkbox"/> Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Incident	
<input type="checkbox"/> Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation	<div style="color: red; font-weight: bold; margin-bottom: 5px;">VEHICLE_SUBTYPE</div> 1. Vehicle/Equipment operated by: (select only one) <input type="radio"/> Operator <input type="radio"/> Operator's Contractor <input type="radio"/> Third Party
<input type="checkbox"/> Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring	<div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_HURRICANE_IND, OSF_TROPICAL_STORM_IND, OSF_TORNADO_IND</div> 2. Select one or more of the following IF an extreme weather event was a factor: <input type="radio"/> Hurricane <input type="radio"/> Tropical Storm <input type="radio"/> Tornado <input type="radio"/> Heavy Rains/Flood <input type="radio"/> Other <div style="color: red; font-weight: bold;">OSF_OTHER_WEATHER_IND</div> <div style="color: red; font-weight: bold; margin-left: 150px;">OSF_HEAVY_RAINS_IND</div> <div style="color: red; font-weight: bold; margin-left: 150px;">OSF_OTHER_WEATHER_DETAILS</div>
<input type="checkbox"/> Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation	
<input type="checkbox"/> Electrical Arcing from Other Equipment or Facility	
<input type="checkbox"/> Previous Mechanical Damage NOT Related to Excavation	<div style="color: red; font-weight: bold; margin-bottom: 5px;">Complete Questions 3-7 ONLY IF the "Item Involved in Incident" (from PART C, Question 3) is Pipe or Weld.</div> 3. Has one or more internal inspection tool collected data at the point of the Incident? <input type="radio"/> Yes <input type="radio"/> No <div style="color: red; font-weight: bold;">OSF_INSPECT_TOOL_COLLECTED_IND</div> 3.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_MAGNETIC_FLUX_LEAKAGE_IND</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_ULTRASONIC_IND</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_GEOMETRY_IND</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_CALIPER_IND</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_CRACK_IND</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_HARDSPOT_IND</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_COMBINATION_TOOL_IND</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_TRANSVERSE_FIELD_IND</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_INSPECTION_OTHER_IND</div> </div> <div style="width: 65%;"> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="font-size: 1.2em; margin-right: 10px;">⇒</span> <input type="radio"/> Magnetic Flux Leakag      <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="font-size: 1.2em; margin-right: 10px;">⇒</span> <input type="radio"/> Ultrasonic      <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="font-size: 1.2em; margin-right: 10px;">⇒</span> <input type="radio"/> Geometry      <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="font-size: 1.2em; margin-right: 10px;">⇒</span> <input type="radio"/> Caliper      <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="font-size: 1.2em; margin-right: 10px;">⇒</span> <input type="radio"/> Crack      <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="font-size: 1.2em; margin-right: 10px;">⇒</span> <input type="radio"/> Hard Spot      <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="font-size: 1.2em; margin-right: 10px;">⇒</span> <input type="radio"/> Combination Tool      <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="font-size: 1.2em; margin-right: 10px;">⇒</span> <input type="radio"/> Transverse Field/Triaxial      <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <span style="font-size: 1.2em; margin-right: 10px;">⇒</span> <input type="radio"/> Other      <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> / <u>      </u> </div> </div> <div style="width: 30%; text-align: right;"> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_MAGNETIC_FLUX_LEAKAGE_YEAR</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_ULTRASONIC_YEAR</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_GEOMETRY_YEAR</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_CALIPER_YEAR</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_CRACK_YEAR</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_HARDSPOT_YEAR</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_COMBINATION_TOOL_YEAR</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_TRANSVERSE_FIELD_YEAR</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_INSPECTION_OTHER_YEAR</div> <div style="color: red; font-weight: bold; margin-bottom: 5px;">OSF_INSPECTION_OTHER_DETAILS</div> </div> </div>

 4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?   ☐ Yes   ☐ No   

OSF\_BEFORE\_DAMAGE

  

OSF\_HYDROTEST\_CONDUCTED\_IND

 5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Incident?  

☐ Yes   ⇒   Most recent year tested:             /        /        /        /

Test pressure (psig):

       /        /        /        /        /        /        /        /        /

☐ No      

OSF\_HYDROTEST\_PRESSURE

  

OSF\_DIRECT\_INSPECTION\_TYPE

 6. Has one or more Direct Assessment been conducted on the pipeline segment?  
☐ Yes, and an investigative dig was conducted at the point of the Incident  

⇒ Most recent year conducted:

       /        /        /        /

OSF\_DIRECT\_YES\_DIG\_YEAR

☐ Yes, but the point of the Incident was not identified as a dig site  

⇒ Most recent year conducted:

       /        /        /        /

OSF\_DIRECT\_YES\_NO\_DIG\_YEAR

☐ No
 

(This section continued on next page with Question 7.)

<p><b>OSF_RADIOGRAPHY_IND</b></p> <p><b>OSF_GUIDED_WAVE_IND</b></p> <p><b>OSF_HANDHELD_ULTRA_IND</b></p> <p><b>OSF_WET_MAGNETIC_IND</b></p> <p><b>OSF_DRY_MAGNETIC_IND</b></p> <p><b>OSF_NON_DEST_OTHER_IND</b></p>	<p>7. Has one or more non-destructive examination been conducted at the point of the Incident since January 1, 2002? <b>OSF_NON_DESTRUCTIVE_IND</b></p> <p><input type="radio"/> Yes <input type="radio"/> No</p> <p>7.a 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:</p> <p><input type="radio"/> Radiography <u>      </u> <b>OSF_RADIOGRAPHY_YEAR</b></p> <p><input type="radio"/> Guided Wave Ultrasonic <u>      </u> <b>OSF_GUIDED_WAVE_YEAR</b></p> <p><input type="radio"/> Handheld Ultrasonic Tool <u>      </u> <b>OSF_HANDHELD_ULTRA_YEAR</b></p> <p><input type="radio"/> Wet Magnetic Particle Test <u>      </u> <b>OSF_WET_MAGNETIC_YEAR</b></p> <p><input type="radio"/> Dry Magnetic Particle Test <u>      </u> <b>OSF_DRY_MAGNETIC_YEAR</b></p> <p><input type="radio"/> Other <b>OSF_NON_DEST_OTHER_DETAILS</b> <u>      </u> <b>OSF_NON_DEST_OTHER_YEAR</b></p>
<p><input type="checkbox"/> <b>Intentional Damage</b></p>	<p>8. Specify: <b>INTENTIONAL_SUBTYPE</b></p> <p><input type="radio"/> Vandalism <input type="radio"/> Terrorism</p> <p><input type="radio"/> Theft of transported commodity <input type="radio"/> Theft of equipment</p> <p><input type="radio"/> Other <b>INTENTIONAL_DETAILS</b></p>
<p><input type="checkbox"/> <b>Other Outside Force Damage</b></p>	<p>9. Describe: <b>OSF_OTHER_DETAILS</b></p>

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## G6 - Equipment Failure - \*only one sub-cause can be picked from shaded left-hand column

<p><b>EQ_FAILURE_TYPE</b></p> <p><input type="checkbox"/> <b>Malfunction of Control/Relief Equipment</b></p> <p><b>RELIEF_VALVE_IND</b></p> <p><b>PRESSURE_REGULATOR_IND</b></p> <p><b>OTHER_CONTROL_RELIEF_IND</b></p>	<p><b>CONTROL_VALVE_IND, INSTRUMENTATION_IND, SCADA_IND, COMMUNICATIONS_IND</b></p> <p>1. Specify: (select all that apply) <b>BLOCK_VALVE_IND, CHECK_VALVE_IND</b></p> <p><input type="radio"/> Control Valve <input type="radio"/> Instrumentation <input type="radio"/> SCADA</p> <p><input type="radio"/> Communications <input type="radio"/> Block Valve <input type="radio"/> Check Valve</p> <p><input type="radio"/> Relief Valve <input type="radio"/> Power Failure <b>POWER_FAILURE_IND</b> <input type="radio"/> Stopple/Control Fitting <b>STOPPLE_CONTROL_FITTING_IND</b></p> <p><input type="radio"/> Pressure Regulator <input type="radio"/> ESD System Failure</p> <p><input type="radio"/> Other <b>OTHER_CONTROL_RELIEF_DETAILS, ESD_SYSTEM_FAILURE_IND</b></p>
<p><input type="checkbox"/> <b>Compressor or Compressor-related Equipment</b></p>	<p><b>OTHER_PUMP_IND</b></p> <p>2. Specify: <input type="radio"/> Seal/Packing Failure <input type="radio"/> Body Failure <input type="radio"/> Crack in Body</p> <p><input type="radio"/> Appurtenance Failure <input type="radio"/> Pressure Vessel Failure</p> <p><input type="radio"/> Other <b>OTHER_PUMP_DETAILS</b></p>
<p><input type="checkbox"/> <b>Threaded Connection/Coupling Failure</b></p>	<p><b>OTHER_STRIPPED_IND</b></p> <p>3. Specify: <input type="radio"/> Pipe Nipple <input type="radio"/> Valve Threads <input type="radio"/> Mechanical Coupling</p> <p><input type="radio"/> Threaded Pipe Collar <input type="radio"/> Threaded Fitting</p> <p><input type="radio"/> Other <b>OTHER_STRIPPED_DETAILS</b></p>
<p><input type="checkbox"/> <b>Non-threaded Connection Failure</b></p>	<p><b>OTHER_NON_THREADED_IND</b></p> <p>4. Specify: <input type="radio"/> O-Ring <input type="radio"/> Gasket <input type="radio"/> Seal (NOT compressor seal) or Packing</p> <p><input type="radio"/> Other <b>OTHER_NON_THREADED_DETAILS</b></p>
<p><input type="checkbox"/> <b>Defective or Loose Tubing or Fitting</b></p>	
<p><input type="checkbox"/> <b>Failure of Equipment Body (except Compressor), Vessel Plate, or other Material</b></p>	
<p><input type="checkbox"/> <b>Other Equipment Failure</b></p>	<p>5. Describe: <b>EQ_FAILURE_DETAILS</b></p> <p>_____</p> <p>_____</p>

Complete the following if any Equipment Failure sub-cause is selected.

6. Additional factors that contributed to the equipment failure: (select all that apply)

- |  |   |
|--|---|
| <input type="radio"/> Excessive vibration  | <b>ADDITIONAL_VIBRATION_IND</b>                             |
| <input type="radio"/> Overpressurization   | <b>ADDITIONAL_OVERPRESSURE_IND</b>                          |
| <input type="radio"/> No support or loss of support  | <b>ADDITIONAL_SUPPORT_IND</b>                               |
| <input type="radio"/> Manufacturing defect   | <b>ADDITIONAL_DEFECT_IND</b>                                |
| <input type="radio"/> Loss of electricity  | <b>ADDITIONAL_ELECTRICITY_IND</b>                           |
| <input type="radio"/> Improper installation  | <b>ADDITIONAL_INSTALLATION_IND</b>                          |
| <input type="radio"/> Mismatched items (different manufacturer for tubing and tubing fittings)       | <b>ADDITIONAL_MISMATCH_IND</b>                              |
| <input type="radio"/> Dissimilar metals  | <b>ADDITIONAL_DISSIMILAR_IND</b>                            |
| <input type="radio"/> Breakdown of soft goods due to compatibility issues with transported gas/fluid | <b>ADDITIONAL_BREAKDOWN_IND</b>                             |
| <input type="radio"/> Valve vault or valve can contributed to the release                            | <b>ADDITIONAL_VALVE_IND</b>                                 |
| <input type="radio"/> Alarm/status failure   | <b>ADDITIONAL_ALARM_IND</b>                                 |
| <input type="radio"/> Misalignment   | <b>EQ_ADDITIONAL_MISALIGN_IND</b>                           |
| <input type="radio"/> Thermal stress   | <b>EQ_ADDITIONAL_THERMAL_IND</b>                            |
| <input type="radio"/> Other _____  | <b>EQ_ADDITIONAL_OTHER_IND, EQ_ADDITIONAL_OTHER_DETAILS</b> |

## G7 - Incorrect Operation - \*only one sub-cause can be picked from shaded left-hand column

<input type="checkbox"/> <b>OPERATION_TYPE</b> Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage	
<input type="checkbox"/> Underground Gas Storage, Pressure Vessel, or Cavern Allowed or Caused to Overpressure	1. Specify: <b>OVERFLOW_OTHER_IND</b> <input type="radio"/> Valve Misalignment <input type="radio"/> Incorrect Reference Data/Calculation <input type="radio"/> Miscommunication <input type="radio"/> Inadequate Monitoring <input type="radio"/> Other <b>OVERFLOW_OTHER_DETAILS</b> _____
<input type="checkbox"/> Valve Left or Placed in Wrong Position, but NOT Resulting in an Overpressure	
<input type="checkbox"/> Pipeline or Equipment Overpressured	
<input type="checkbox"/> Equipment Not Installed Properly	
<input type="checkbox"/> Wrong Equipment Specified or Installed	
<input type="checkbox"/> Other Incorrect Operation	2. Describe: <b>OPERATION_DETAILS</b> _____

Complete the following if any Incorrect Operation sub-cause is selected.

3. Was this Incident related to: (select all that apply)
- ☐ Inadequate procedure **RELATED\_INADEQUATE\_PROC\_IND**
  - ☐ No procedure established **RELATED\_NO\_PROC\_IND**
  - ☐ Failure to follow procedure **RELATED\_FAILURE\_FOLLOW\_IND**
  - ☐ Other: **RELATED\_OTHER\_IND, OPERATION\_RELATED\_DETAILS** \_\_\_\_\_
4. What category type was the activity that caused the Incident: **CATEGORY\_TYPE**
- ☐ Construction
  - ☐ Commissioning
  - ☐ Decommissioning
  - ☐ Right-of-Way activities
  - ☐ Routine maintenance
  - ☐ Other maintenance
  - ☐ Normal operating conditions
  - ☐ Non-routine operating conditions (abnormal operations or emergencies)
5. Was the task(s) that led to the Incident identified as a covered task in your Operator Qualification Program? **OPERATOR\_QUALIFICATION\_IND** ☐ Yes ☐ No
- 5.a If Yes, were the individuals performing the task(s) qualified for the task(s)? **QUALIFIED\_INDIVIDUALS**
- ☐ Yes, they were qualified for the task(s)
  - ☐ No, but they were performing the task(s) under the direction and observation of a qualified individual
  - ☐ 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 sub-cause can be picked from shaded left-hand column

<b>OTHER_TYPE</b> <input type="checkbox"/> Miscellaneous	1. Describe: <b>MISC_DETAILS</b> _____
<input type="checkbox"/> Unknown	2. Specify: <input type="radio"/> Investigation complete, cause of Incident unknown <input type="radio"/> Still under investigation, cause of Incident to be determined* <b>UNKNOWN_SUBTYPE</b> (*Supplemental Report required)

(Attach additional sheets as necessary)

## This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

<b>PREPARER_NAME</b> Preparer's Name (type or print)		<b>PREPARER_TELEPHONE</b> Preparer's Telephone Number
<b>PREPARER_TITLE</b> Preparer's Title (type or print)		
<b>PREPARER_EMAIL</b> Preparer's E-mail Address		<b>PREPARER_FAX</b> Preparer's Facsimile Number
<b>AUTHORIZER_NAME</b> Authorized Signer Name	<b>PREPARED_DATE</b> Date	<b>AUTHORIZER_TELEPHONE</b> Authorized Signer Telephone Number
<b>AUTHORIZER_TITLE</b> Authorized Signer Title		<b>AUTHORIZER_EMAIL</b> Authorized Signer E-mail Address

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

Field Name	Field Name Description
<b>IYEAR</b>	<i>Year accident occurred, derived from accident date</i>
<b>STHH</b>	<i>Elapsed Time Until Area Was Made Safe / Hours</i>