

PART C – ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility: **PIPE_FACILITY_TYPE**

- Interstate
- Intrastate

2. Part of system involved in Incident: (select only one) **SYSTEM_PART_INVOLVED**

- 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 Platform-mounted Equipment and Piping
- Offshore Pipeline, Including Riser and Riser Bend

3. Item involved in Incident: (select only one) **ITEM_INVOLVED**

Pipe ⇨ Specify: Pipe Body Pipe Seam **PIPE_TYPE**

3.a Nominal diameter of pipe (in): / / / / / / / **PIPE_DIAMETER**

3.b Wall thickness (in): / / / / / / / **PIPE_WALL_THICKNESS** **PIPE_SMYS**

3.c SMYS (Specified Minimum Yield Strength) of pipe (psi): / / / / / / /

3.d Pipe specification: **PIPE_SPECIFICATION**

3.e Pipe Seam ⇨ Specify: Longitudinal ERW - High Frequency Single SAW Flash Welded
PIPE_SEAM_TYPE Longitudinal ERW - Low Frequency DSAW Continuous Welded
 Longitudinal ERW – Unknown Frequency Furnace Butt Welded
 Spiral Welded ERW Spiral Welded SAW Spiral Welded DSAW
 Lap Welded Seamless Other **PIPE_SEAM_DETAILS**

3.f Pipe manufacturer: **PIPE_MANUFACTURER**

3.g Year of manufacture: / / / / / / **PIPE_MANUFACTURE_YEAR**

3.h Pipeline coating type at point of Incident **PIPE_COATING_TYPE**

⇨ Specify: Fusion Bonded Epoxy Coal Tar Asphalt Polyolefin
 Extruded Polyethylene Field Applied Epoxy Cold Applied Tape Paint
WELD_SUBTYPE Composite None Other **PIPE_COATING_DETAILS**

Weld, including heat-affected zone ⇨ Specify: Pipe Girth Weld Other Butt Weld Fillet Weld Other **WELD_DETAILS**

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.

Valve Mainline ⇨ Specify: Butterfly Check Gate Plug Ball Globe

VALVE_TYPE **VALVE_MAINLINE_TYPE** Other **VALVE_MAINLINE_DETAILS**

3.i Mainline valve manufacturer: **VALVE_MANUFACTURER**

3.j Year of manufacture: / / / / / / **VALVE_MANUFACTURE_YEAR**

- Relief Valve
- Auxiliary or Other Valve

- Compressor
- Meter
- Scraper/Pig Trap
- Separator/Separator Filter
- Strainer/Filter
- Dehydrator/Drier/Treater
- Regulator/Control Valve
- Drip/Drip Collection Device
- Pulsation Bottle
- Cooler
- Repair Sleeve or Clamp
- Hot Tap Equipment
- Stopple Fitting
- Flange
- Relief Line
- Auxiliary Piping (e.g. drain lines)
- Tubing
- Instrumentation
- Underground Gas Storage or Cavern
- Pressure Vessel
- Other **ITEM_INVOLVED_DETAILS**

4. Year item involved in Incident was installed: / / / / / / **INSTALLATION_YEAR**

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_OTHER**

Leak ⇨ **LEAK_TYPE** Select Type: Pinhole Crack Connection Failure Seal or Packing Other

Rupture ⇨ **RUPTURE_ORIENT** Select Orientation: Circumferential Longitudinal Other _____ **RUPTURE_DETAILS**

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

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** \$ / / / / / / / / / /

Describe _____ **EST_COST_OTHER_DETAILS**

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_INTENT_REL**

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
DOWNSTREAM_VALVE_TYPE_IND
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 Local Operating Personnel, including contractors
- Air Patrol Ground Patrol by Operator or its contractor
- Notification from Public Notification from Emergency Responder
- Notification from Third Party that caused the Incident 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**

- 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**

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: ____/____/____/____
 No **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): / / / / /
COR_HYDROTEST_CONDUCTED_YEAR **COR_HYDROTEST_PRESSURE**

No

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: / / / / /

COR_DIRECT_YES_NO_DIG_YEAR

No

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

<input type="checkbox"/> Earth Movement, NOT due to Heavy Rains/Floods	EARTH_SUBTYPE 1. Specify: <input type="radio"/> Earthquake <input type="radio"/> Subsidence <input type="radio"/> Landslide <input type="radio"/> Other NF_OTHER_DETAILS
<input type="checkbox"/> Heavy Rains/Floods	HEAVY_RAINS_SUBTYPE 2. Specify: <input type="radio"/> Washout/Scouring <input type="radio"/> Flotation <input type="radio"/> Mudslide <input type="radio"/> Other NF_OTHER_DETAILS
<input type="checkbox"/> Lightning	LIGHTNING_SUBTYPE 3. Specify: <input type="radio"/> Direct hit <input type="radio"/> Secondary impact such as resulting nearby fires
<input type="checkbox"/> Temperature	TEMPERATURE_SUBTYPE 4. Specify: <input type="radio"/> Thermal Stress <input type="radio"/> Frost Heave <input type="radio"/> Frozen Components <input type="radio"/> Other NF_OTHER_DETAILS
<input type="checkbox"/> High Winds	
<input type="checkbox"/> 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

PARTY_TYPE

<input type="checkbox"/> Excavation Damage by Operator (First Party)																																																													
<input type="checkbox"/> Excavation Damage by Operator's Contractor (Second Party)																																																													
<input type="checkbox"/> Excavation Damage by Third Party																																																													
<input type="checkbox"/> Previous Damage due to Excavation Activity	<p>Complete Questions 1-5 ONLY IF the "Item Involved in Incident" (from PART C, Question 3) is Pipe or Weld.</p> <p>1. Has one or more internal inspection tool collected data at the point of the Incident? <input type="radio"/> Yes <input type="radio"/> No EX_INSPECT_TOOL_COLLECTED_IND</p> <p>1.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:</p> <table border="0"> <tr> <td style="text-align: right;">EX_MAGNETIC_FLUX_LEAKAGE_IND</td> <td>⇒ <input type="radio"/> Magnetic Flux Leakage</td> <td>EX_MAGNETIC_FLUX_LEAKAGE_YEAR</td> <td>_____ / _____ / _____ / _____ / _____</td> </tr> <tr> <td style="text-align: right;">EX_ULTRASONIC_IND</td> <td>⇒ <input type="radio"/> Ultrasonic</td> <td></td> <td>_____ / _____ / _____ / _____ / _____ EX_ULTRASONIC_YEAR</td> </tr> <tr> <td style="text-align: right;">EX_GEOMETRY_IND</td> <td>⇒ <input type="radio"/> Geometry</td> <td></td> <td>_____ / _____ / _____ / _____ / _____ EX_GEOMETRY_YEAR</td> </tr> <tr> <td style="text-align: right;">EX_CALIPER_IND</td> <td>⇒ <input type="radio"/> Caliper</td> <td></td> <td>_____ / _____ / _____ / _____ / _____ EX_CALIPER_YEAR</td> </tr> <tr> <td style="text-align: right;">EX_CRACK_IND</td> <td>⇒ <input type="radio"/> Crack</td> <td></td> <td>_____ / _____ / _____ / _____ / _____ EX_CRACK_YEAR</td> </tr> <tr> <td style="text-align: right;">EX_HARDSPOT_IND</td> <td>⇒ <input type="radio"/> Hard Spot</td> <td></td> <td>_____ / _____ / _____ / _____ / _____ EX_HARDSPOT_YEAR</td> </tr> <tr> <td style="text-align: right;">EX_COMBINATION_TOOL_IND</td> <td>⇒ <input type="radio"/> Combination Tool</td> <td></td> <td>_____ / _____ / _____ / _____ / _____ EX_COMBINATION_TOOL_YEAR</td> </tr> <tr> <td style="text-align: right;">EX_TRANSVERSE_FIELD_IND</td> <td>⇒ <input type="radio"/> Transverse Field/Triaxial</td> <td></td> <td>_____ / _____ / _____ / _____ / _____ EX_TRANSVERSE_FIELD_YEAR</td> </tr> <tr> <td style="text-align: right;">EX_INSPECTION_OTHER_IND</td> <td>⇒ <input type="radio"/> Other EX_INSPECTION_OTHER_DETAILS</td> <td></td> <td>_____ / _____ / _____ / _____ / _____ EX_INSPECTION_OTHER_YEAR</td> </tr> </table> <p>2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? <input type="radio"/> Yes <input type="radio"/> No EX_BEFORE_DAMAGE</p> <p>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</p> <p><input type="radio"/> Yes ⇒ Most recent year tested: EX_HYDROTEST_CONDUCTED_YEAR _____ / _____ / _____ / _____ / _____ Test pressure (psig): EX_HYDROTEST_PRESSURE _____ / _____ / _____ / _____ / _____</p> <p><input type="radio"/> No EX_DIRECT_INSPECTION_TYPE</p> <p>4. Has one or more Direct Assessment been conducted on the pipeline segment?</p> <p><input type="radio"/> Yes, and an investigative dig was conducted at the point of the Incident ⇒ Most recent year conducted: EX_DIRECT_YES_DIG_YEAR _____ / _____ / _____ / _____ / _____</p> <p><input type="radio"/> Yes, but the point of the Incident was not identified as a dig site ⇒ Most recent year conducted: _____ / _____ / _____ / _____ / _____</p> <p><input type="radio"/> No EX_DIRECT_YES_NO_DIG_YEAR</p> <p>5. Has one or more non-destructive examination been conducted at the point of the Incident since January 1, 2002? EX_NON_DESTRUCTIVE_IND</p> <p><input type="radio"/> Yes <input type="radio"/> No</p> <p>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:</p> <table border="0"> <tr> <td style="text-align: right;">EX_RADIOGRAPHY_IND</td> <td>⇒ <input type="radio"/> Radiograph</td> <td>EX_RADIOGRAPHY_YEAR</td> <td>_____ / _____ / _____ / _____ / _____</td> </tr> <tr> <td style="text-align: right;">EX_GUIDED_WAVE_IND</td> <td>⇒ <input type="radio"/> Guided Wave Ultrasonic</td> <td>EX_GUIDED_WAVE_YEAR</td> <td>_____ / _____ / _____ / _____ / _____</td> </tr> <tr> <td style="text-align: right;">EX_HANDHELD_ULTRA_IND</td> <td>⇒ <input type="radio"/> Handheld Ultrasonic Tool</td> <td>EX_HANDHELD_ULTRA_YEAR</td> <td>_____ / _____ / _____ / _____ / _____</td> </tr> <tr> <td style="text-align: right;">EX_WET_MAGNETIC_IND</td> <td>⇒ <input type="radio"/> Wet Magnetic Particle Test</td> <td>EX_WET_MAGNETIC_YEAR</td> <td>_____ / _____ / _____ / _____ / _____</td> </tr> <tr> <td style="text-align: right;">EX_DRY_MAGNETIC_IND</td> <td>⇒ <input type="radio"/> Dry Magnetic Particle Test</td> <td>EX_DRY_MAGNETIC_YEAR</td> <td>_____ / _____ / _____ / _____ / _____</td> </tr> <tr> <td style="text-align: right;">EX_NON_DEST_OTHER_IND</td> <td>⇒ <input type="radio"/> Other EX_NON_DEST_OTHER_DETAILS</td> <td>EX_NON_DEST_OTHER_YEAR</td> <td>_____ / _____ / _____ / _____ / _____</td> </tr> </table>	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	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	_____ / _____ / _____ / _____ / _____
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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

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** _____

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

<p>EQ_FAILURE_TYPE</p> <p><input type="checkbox"/> Malfunction of Control/Relief Equipment</p> <p style="text-align: right;"> RELIEF_VALVE_IND PRESSURE_REGULATOR_IND OTHER_CONTROL_RELIEF_IND </p>	<p>CONTROL_VALVE_IND, INSTRUMENTATION_IND, SCADA_IND, COMMUNICATIONS_IND</p> <p>1. Specify: <i>(select all that apply)</i> BLOCK_VALVE_IND, CHECK_VALVE_IND</p> <p> <input type="radio"/> Control Valve <input type="radio"/> Instrumentation <input type="radio"/> SCADA <input type="radio"/> Communications <input type="radio"/> Block Valve <input type="radio"/> Check Valve <input type="radio"/> Relief Valve <input type="radio"/> Power Failure <input type="radio"/> Stopples/Control Fitting <input type="radio"/> Pressure Regulator <input type="radio"/> ESD System Failure <input type="radio"/> Other OTHER_CONTROL_RELIEF_DETAILS, ESD_SYSTEM_FAILURE_IND </p>
<p><input type="checkbox"/> Compressor or Compressor-related Equipment</p>	<p>OTHER_PUMP_IND</p> <p>2. Specify: <input type="radio"/> Seal/Packing Failure <input type="radio"/> Body Failure <input type="radio"/> Crack in Body <input type="radio"/> Appurtenance Failure <input type="radio"/> Pressure Vessel Failure <input type="radio"/> Other OTHER_PUMP_DETAILS</p>
<p><input type="checkbox"/> Threaded Connection/Coupling Failure</p>	<p>OTHER_STRIPPED_IND</p> <p>3. Specify: <input type="radio"/> Pipe Nipple <input type="radio"/> Valve Threads <input type="radio"/> Mechanical Coupling <input type="radio"/> Threaded Pipe Collar <input type="radio"/> Threaded Fitting <input type="radio"/> Other OTHER_STRIPPED_DETAILS</p>
<p><input type="checkbox"/> Non-threaded Connection Failure</p>	<p>OTHER_NON_THREADED_IND</p> <p>4. Specify: <input type="radio"/> O-Ring <input type="radio"/> Gasket <input type="radio"/> Seal (NOT compressor seal) or Packing <input type="radio"/> Other OTHER_NON_THREADED_DETAILS</p>
<p><input type="checkbox"/> Defective or Loose Tubing or Fitting</p>	
<p><input type="checkbox"/> Failure of Equipment Body (except Compressor), Vessel Plate, or other Material</p>	
<p><input type="checkbox"/> Other Equipment Failure</p>	<p>5. Describe: EQ_FAILURE_DETAILS</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)*
- Excessive vibration **ADDITIONAL_VIBRATION_IND**
 - Overpressurization **ADDITIONAL_OVERPRESSURE_IND**
 - No support or loss of support **ADDITIONAL_SUPPORT_IND**
 - Manufacturing defect **ADDITIONAL_DEFECT_IND**
 - Loss of electricity **ADDITIONAL_ELECTRICITY_IND**
 - Improper installation **ADDITIONAL_INSTALLATION_IND**
 - Mismatched items (different manufacturer for tubing and tubing fittings) **ADDITIONAL_MISMATCH_IND**
 - Dissimilar metals **ADDITIONAL_DISSIMILAR_IND**
 - Breakdown of soft goods due to compatibility issues with transported gas/fluid **ADDITIONAL_BREAKDOWN_IND**
 - Valve vault or valve can contributed to the release **ADDITIONAL_VALVE_IND**
 - Alarm/status failure **ADDITIONAL_ALARM_IND**
 - Misalignment **EQ_ADDITIONAL_MISALIGN_IND**
 - Thermal stress **EQ_ADDITIONAL_THERMAL_IND**
 - Other **EQ_ADDITIONAL_OTHER_IND, EQ_ADDITIONAL_OTHER_DETAILS**

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

<input type="checkbox"/> OPERATION_TYPE 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	OVERFLOW_OTHER_IND 1. Specify: <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 <u> OVERFLOW_OTHER_DETAILS </u>
<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: <u> OPERATION_DETAILS </u>

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:

Construction

Commissioning

Decommissioning

Right-of-Way activities

Routine maintenance

Other maintenance

Normal operating conditions

Non-routine operating conditions (abnormal operations or emergencies)

OPERATOR_QUALIFICATION_IND

5. Was the task(s) that led to the Incident identified as a covered task in your Operator Qualification Program? 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

OTHER_TYPE <input type="checkbox"/> Miscellaneous	1. Describe: <u> MISC_DETAILS </u>
<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* UNKNOWN_SUBTYPE (*Supplemental Report required)

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

Field Name	Field Name Description
DATAFILE_AS_OF	<i>Data as of date</i>
SIGNIFICANT	<i>Identify if record meets the significant criteria or not: If there was fatality, injury, fire, explosion, total property damage \$50K or more in 1984 dollars then SIGNIFICANT='YES', else SIGNIFICANT='NO'.</i>
IYEAR	<i>Year accident occurred, derived from accident date</i>
EST_COST_OPER_PAID_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_INTENT_REL_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_GAS_RELEASED_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_PROP_DAMAGE_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_EMERGENCY_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_OTHER_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
PRPTY_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
STHH	<i>Elapsed Time Until Area Was Made Safe / Hours</i>
MAP_CAUSE	<i>Cause by PHMSA for 20 year accident trending</i>
MAP_SUBCAUSE	<i>SubCause by PHMSA for 20 year accident trending</i>
SERIOUS	<i>Identify if record meets the SERIOUS criteria or not: If there was fatality or injury then SERIOUS = 'YES' else SERIOUS = 'NO'.</i>