

A10. Were there fatalities? ☐ Yes ☐ No

If Yes, specify the number in each category:

A10a. Operator employees / / / / / /
A10b. Contractor employees / / / / / /
working for the Operator
A10c. Non-Operator / / / / / /
emergency responders
A10d. Workers working on the / / / / / /
right-of-way, but NOT
associated with this Operator
A10e. General public / / / / / /
A10f. Total fatalities (sum of above) calculated

A11. Were there injuries requiring inpatient hospitalization? ☐ Yes ☐ No

If Yes, specify the number in each category:

A11a. Operator employees / / / / / /
A11b. Contractor employees / / / / / /
working for the Operator
A11c. Non-Operator / / / / / /
emergency responders
A11d. Workers working on the / / / / / /
right-of-way, but NOT
associated with this Operator
A11e. General public / / / / / /
A11f. Total injuries (sum of above) calculated

A12. What was the Operator's initial indication of the Failure? (select only one)

- ☐ CPM leak detection system
☐ SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations)
☐ Static Shut-in Test or Other Pressure or Leak Test
☐ Controller
☐ Air Patrol
☐ Notification from Public
☐ Notification from Third Party that caused the Accident
☐ Local Operating Personnel, including contractors
☐ Ground Patrol by Operator or its contractor
☐ Notification from Emergency Responder
☐ Other _____

A12a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in A12, specify the following: (select only one)

☐ Operator employee ☐ Contractor working for the Operator

A13. Local time Operator identified failure / / / / / /
Hour Month Day Year

A14. Part of system involved in Accident: (select only one)

- ☐ Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances – *part C3 defaults to "Tank/Vessel"*
☐ Onshore Terminal/Tank Farm Equipment and Piping
☐ Onshore Equipment and Piping Associated with Belowground Storage
☐ Onshore Pump/Meter Station Equipment and Piping
☐ Onshore Pipeline, Including Valve Sites
☐ Offshore Platform/Deepwater Port, Including Platform-mounted Equipment and Piping
☐ Offshore Pipeline, Including Riser and Riser Bend

A15. Auto-populated based on A14 Was the origin of the Accident onshore?

☐ Yes (Complete Questions B3-B12) ☐ No (Complete Questions B13-B15)

A16. Operational Status at time Operator identified failure (select only one)

- ☐ Post-Construction Commissioning
☐ Post-Maintenance/Repair
☐ Routine Start-Up
☐ Routine Shutdown
☐ Normal Operation, include pauses between batches and during maintenance
☐ Idle

A17. If Operational Status = Routine Start-Up or Normal Operation, was the pipeline/facility shut down due to the Accident?

☐ Yes ☐ No ➡ Explain: _____

If Yes, complete Questions A17.a and A17.b: (use local time, 24-hr clock)

A17a. Local time and date of shutdown / / / / / /
Hour Month Day Year

A17b. Local time pipeline/facility restarted / / / / / / ☐ Still shut down*
Hour Month Day Year

**Supplemental Report required*

If A12 = Notification from Emergency Responder, skip A18a. through A18c.

A18a. Did the operator communicate with Local, State, or Federal Emergency Responders about the accident? ☐ Yes ☐ No

If No, skip A18b. and A18c.

A18b. Which party initiated communication about the accident? ☐ Operator ☐ Local/State/Federal Emergency Responder

A18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication

 / / / / / /
Hour Month Day Year

A19. Local time Operator responders arrived on site / / / / / /
Hour Month Day Year

B1. Pipeline/Facility name: _____

B2. Segment name/ID: _____

B3. State: / / /

B4. Zip Code: / / / / / - / / / / /

B5. _____
City

B6. _____
County or Parish

B7. Operator-designated location: *(select only one)*

☐ Milepost *(specify in shaded area below)*

☐ Survey Station No. *(specify in shaded area below)*

B8 / / / / / / / / / / / / / / / /

B9. Was this onshore Accident on Federal land? ☐ Yes ☐ No

B10. Location of Accident: *(select only one)*

- ☐ Totally contained on Operator-controlled property ☐ Pipeline right-of-way
☐ Originated on Operator-controlled property, but then flowed or migrated off the property

B11. Area of Accident (as found): *(select only one)*

- ☐ Tank, including attached appurtenances
- ☐ Underground ➡ Specify: ☐ Under soil ☐ Under a building ☐ Under pavement ☐ Exposed due to excavation
 ☐ Exposed due to loss of cover ☐ In underground enclosed space (e.g., vault) ☐ Other _____

B11a. Depth-of-Cover (in): / / / / / OR ○ Unknown

- ☐ Aboveground ➡ Specify: ☐ Typical aboveground facility piping or appurtenance ☐ Overhead crossing ☐ Inside a building
☐ In or spanning an open ditch ☐ Inside other enclosed space ☐ Other _____
- ☐ Transition Area ➡ Specify: ☐ Soil/air interface ☐ Wall sleeve ☐ Pipe support or other close contact area ☐ Other _____

B12. Did the Accident occur in a crossing? ☐ Yes ☐ No If B12 is Yes, specify type:

- ☐ Bridge crossing Specify: ☐ Cased ☐ Uncased
☐ Railroad crossing (select all that apply) ☐ Cased ☐ Uncased ☐ Bored/drilled
☐ Road crossing (select all that apply) ☐ Cased ☐ Uncased ☐ Bored/drilled
☐ Water crossing

Specify: ☐ Cased ☐ Uncased

Name of body of water, if commonly known:

Approx. water depth (ft) at the point of the Accident: _____ OR ☐ Unknown
(select only one of the following) ☐ Shoreline/Bank/Marsh crossing

- ☐ Shoreline/Bank/Marsh crossing
- ☐ Below water, pipe buried below bottom (NOT in bored/drilled crossing)
- ☐ Below water, pipe in bored/drilled crossing
- ☐ Below water, pipe on or above bottom

Is this water crossing 100 feet or more in length from high water mark to high water mark? ☐ Yes ☐ No

B13. Approximate water depth (ft.) at the point of the Accident: / / / / /

B14. Origin of Accident: ☐ In State waters
Specify: State: _____ Area: _____ Block/Tract #: ____/____/____/____/____ Nearest County/Parish: _____

- ☐ On the Outer Continental Shelf (OCS) (select only one) ☐ OCS – Alaska ☐ OCS- Atlantic
☐ OCS-Gulf of America~~Mexico~~ ☐ OCS – Pacific
- Specify: Area: _____ Block/Tract #: / / / / /

B15. Area of Accident: (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:

- ☐ Interstate
☐ Intrastate

C2. reserved

C3. Item involved in Accident: *(select only one)*

When A14 is "Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances" C3 will default to "Tank/Vessel",

☐ Pipe ➡ Specify: ☐ Pipe Body ☐ Pipe Seam

If Pipe Body: Was this a puddle/spot weld? ☐ Yes ☐ No

C3a. Nominal Pipe Size: / / / / / C3.b Wall thickness (in): / / / / /

C3c. SMYS (Specified Minimum Yield Strength) of pipe (psi): / / / / /

C3d. Pipe specification: _____ OR ☐ Unknown

C3e. Pipe Seam

➡ Specify: ☐ ERW - High Frequency ☐ Single SAW ☐ Flash Welded ☐ ERW - Low Frequency ☐ DSAW ☐ Continuous Welded

☐ ERW – Unknown Frequency ☐ Furnace Butt Welded ☐ Spiral Welded ☐ Lap Welded ☐ Seamless

☐ Other, describe: _____

C3f. Pipe manufacturer: _____ OR ☐ Unknown

C3g Pipeline coating type at point of Accident

➡ Specify: ☐ Fusion Bonded Epoxy (FBE) ☐ Coal Tar ☐ Asphalt ☐ Polyolefin ☐ Extruded Polyethylene

☐ Epoxy other than FBE ☐ Cold Applied Tape ☐ Paint ☐ Composite ☐ None ☐ Other, describe: _____

C3h. Coating field applied? ☐ Yes ☐ No ☐ Unknown

☐ Weld, including heat-affected zone ➡ Specify: ☐ Pipe Girth Weld ☐ Other Butt Weld ☐ Fillet Weld

If Pipe Girth Weld is selected, complete items C3a through h above. Are any of the C3b through h values different on either side of the girth weld?

☐ Yes ☐ No

If Yes, enter the different value(s) below:

C3i. Wall thickness (in): / / / / /

C3j. SMYS (Specified Minimum Yield Strength) of pipe (psi): / / / / /

C3k. Pipe specification: _____ OR ☐ Unknown

C3l. Pipe Seam

➡ Specify: ☐ ERW - High Frequency ☐ Single SAW ☐ Flash Welded ☐ ERW - Low Frequency ☐ DSAW ☐ Continuous Welded

☐ ERW – Unknown Frequency ☐ Furnace Butt Welded ☐ Spiral Welded ☐ Lap Welded ☐ Seamless

☐ Other, describe: _____

C3m. Pipe manufacturer: _____ OR ☐ Unknown

C3n. Pipeline coating type at point of Accident

➡ Specify: ☐ Fusion Bonded Epoxy (FBE) ☐ Coal Tar ☐ Asphalt ☐ Polyolefin ☐ Extruded Polyethylene

☐ Epoxy other than FBE ☐ Cold Applied Tape ☐ Paint ☐ Composite ☐ None ☐ Other, describe: _____

C3o. Coating field applied? ☐ Yes ☐ No ☐ Unknown

☐ Valve ☐ Mainline ➡ Specify: ☐ Butterfly ☐ Check ☐ Gate ☐ Plug ☐ Ball ☐ Globe ☐ Other, describe: _____

C3p. Mainline valve manufacturer: _____ OR ☐ Unknown

☐ Relief Valve – including thermal and pressure. Report tank relief valves under the Tank/Vessel, Relief Valve

☐ Auxiliary or Other Valve – report auxiliary valves on tanks under Tank/Vessel, Appurtenance

☐ Pump, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.

C3q. Type of pump

- ☐ Positive displacement
☐ Centrifugal
☐ Gear
☐ Other (specify): _____

C3r. Type of service

- ☐ Mainline
☐ Injection
☐ Truck rack (if on terminal side of truck rack canopy)
☐ Other (specify): _____

☐ Meter/Prover, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.

☐ Scraper/Pig Trap, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.

- ☐ Sump, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.
- ☐ Filter, Strainer, Separator, including auxiliary piping, connections, and equipment, but excluding product drain lines and tubing.
- ☐ Repair Sleeve or Clamp
- ☐ Tapping Equipment
- ☐ Tap Fitting (stopple, thread-o-ring, weld-o-let, etc.)
- ☐ Flange Assembly, including Gaskets
- ☐ Relief Lines and Relief Equipment
- ☐ Drain Lines
- ☐ Tubing, including Fittings
- C3s. Tubing material
- ☐ Stainless steel
- ☐ Carbon steel
- ☐ Copper
- ☐ Other
- C3t. Type of tubing
- ☐ Rigid
- ☐ Flexible
- ☐ Instrumentation, including Programmable Logic Controllers and Controls
- ☐ Tank/Vessel
- ⇒ C3u. Specify failure path: ☐ Single Bottom System ☐ Double Bottom System ☐ Tank Shell ☐ Chime ☐ Roof/Roof Seal
- ☐ Roof Drain System ☐ Mixer ☐ Pressure Vessel Head or Wall ☐ Appurtenance
- ☐ Relief Valve ☐ Manway ☐ Vent ☐ Other, describe: _____
- C3v. Tank Type ☐ Atmospheric ☐ Pressurized
- If C3v. = Pressurized:
- C3v1. Tank Maximum Operating Pressure _____
- C3v2. What is the set point of the primary pressure relief device on the tank? _____
- C3v3. Did the thermal or pressure relief valve activate? ☐ Yes ☐ No
- C3v4. Was the MOP of the tank exceeded? ☐ Yes ☐ No
- If C3v = Atmospheric:
- C3v5. Safe-Fill-Level (in feet) at the time of the accident? _____
- C3v6. Was the Safe-Fill-Level exceeded? ☐ Yes ☐ No
- C3v7. Year of most recent API Std 653 Out-of-Service Inspection / / OR ☐ None
- C3v8. API Std 653 In-Service Inspection / / OR ☐ No In-Service Inspection completed

☐ Other mandatory text field

C4. Year item involved in Accident was installed: / / OR ☐ Unknown

C4a. Year item involved in Accident was manufactured: / / OR ☐ Unknown

C5. Material involved in Accident: (select only one)

☐ Carbon Steel

☐ Material other than Carbon Steel ⇒ Specify: _____

C6. Type of Accident involved: (select only one)

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

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

☐ Rupture ⇒ Select Orientation: ☐ Circumferential ☐ Longitudinal ☐ Other _____

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

☐ Overfill or Overflow

☐ Other ⇒ Describe: _____

PART D – ADDITIONAL CONSEQUENCE INFORMATION

D1. Wildlife impact: ☐ Yes ☐ No

D1a If Yes, specify all that apply:

☐ Fish/aquatic

☐ Birds

☐ Terrestrial

D2. Soil contamination: ☐ Yes ☐ No

D3. Long term impact assessment performed or planned: ☐ Yes ☐ No

D4. Anticipated remediation: ☐ Yes ☐ No (not needed)

D4a. If Yes, specify all that apply:

☐ Surface water ☐ Groundwater ☐ Soil ☐ Vegetation ☐ Wildlife

D5. Water contamination: ☐ Yes ⇒ (Complete 5a – 5c below) ☐ No

☐ Ocean/Seawater
☐ Surface
☐ Groundwater
☐ Drinking water ➡ (Select one or both) ☐ Private Well ☐ Public Water Intake

D5c. Name of body of water, if commonly known: _____

D7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)? ☐ Yes ☐ No

- ☐ Commercially Navigable Waterway
Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?
☐ Yes ☐ No
- ☐ High Population Area
Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?
☐ Yes ☐ No
- ☐ Other Populated Area
Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?
☐ Yes ☐ No
- ☐ Unusually Sensitive Area (USA) – Drinking Water
Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?
☐ Yes ☐ No
- ☐ Unusually Sensitive Area (USA) – Ecological
Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?
☐ Yes ☐ No

D8a. Estimated cost of public and non-Operator private property damage	\$ / / / / / / / / / /
D8b. Estimated cost of commodity lost	\$ / / / / / / / / / /
D8c. Estimated cost of Operator's property damage & repairs	\$ / / / / / / / / / /
D8d. Estimated cost of emergency response	\$ / / / / / / / / / /
D8e. Estimated cost of environmental remediation	\$ / / / / / / / / / /
D8f. Estimated other costs	\$ / / / / / / / / / /

D8g. Total estimated property damage (sum of above) \$ calculated

D9. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:

D10. Estimated number of persons with injuries requiring treatment by EMTs at the site of accident:

D12. Number of business buildings affected (evacuated or required repair):

E1. Estimated pressure at the point and time of the Accident (psig): / / /, / / /

E2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig): / / /, / / / /

☐ Internal Design Pressure \$195.406(a)(1)
☐ Component Design Pressure \$195.406(a)(2)
☐ SubPart E Pressure Test \$195.406(a)(3)
☐ Excepted Component Pressure Test \$195.406(a)(4)
☐ Four Hour Test or Operation \$195.406(a)(5)
☐ Other; describe: _____

If E2c = Yes, E2d. What is the date of the most recent surge analysis performed at the point of the Accident? _____

E3. Describe the pressure on the system or facility relating to the Accident: *(calculated)*

- ☐ Pressure did not exceed MOP
☐ Pressure exceeded MOP, but did not exceed 110% of MOP
☐ Pressure exceeded 110% of MOP

E4. Was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?

- ☐ No
☐ Yes ➡ *(Complete 4.a and 4.b below)*

E4a. Did the pressure exceed this established pressure restriction? ☐ Yes ☐ No

E4b. Was this pressure restriction mandated by PHMSA or the State? ☐ PHMSA ☐ State ☐ Not mandated

If A14. is "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend", complete E5 through E7

E5. Answer E5 only when both A23a and A23d are Valve Closure

Length of segment initially isolated between valves (ft): / / /

E6. Is the pipeline configured to accommodate internal inspection tools?

- ☐ Yes
☐ No ➡ Which physical features limit tool accommodation? *(select all that apply)*
- ☐ Changes in line pipe diameter
 - ☐ Presence of unsuitable mainline valves
 - ☐ Tight or mitered pipe bends
 - ☐ Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)
 - ☐ Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)
 - ☐ Other ➡ Describe: _____

E7. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?

- ☐ No
☐ Yes ➡ Which operational factors complicate execution? *(select all that apply)*
- ☐ Excessive debris or scale, wax, or other wall build-up
 - ☐ Low operating pressure(s)
 - ☐ Low flow or absence of flow
 - ☐ Incompatible commodity
 - ☐ Other ➡ Describe: _____

E8. Function of pipeline system: *(select only one)*

- ☐ > 20% SMYS Regulated Transmission ☐ > 20% SMYS Regulated Gathering
☐ ≤ 20% SMYS Regulated Transmission ☐ ≤ 20% SMYS Regulated Gathering

E9. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?

- ☐ No
☐ Yes ➡
- E9a. Was it operating at the time of the Accident? ☐ Yes ☐ No
- E9b. Was it fully functional at the time of the Accident? ☐ Yes ☐ No
- E9c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the initial indication of the Accident? ☐ Yes ☐ No
- E9d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmed discovery of the Accident? ☐ Yes ☐ No

E10. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?

- ☐ No
☐ Yes ➡
- E10a. Was it operating at the time of the Accident? ☐ Yes ☐ No
- E10b. Was it fully functional at the time of the Accident? ☐ Yes ☐ No
- E10c. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the initial indication of the Accident? ☐ Yes ☐ No
- E10d. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmed discovery of the Accident? ☐ Yes ☐ No

E11. 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 Accident?
(select only one)

- ☐ 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 Accident
- ☐ 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)
-

☐ 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
- ☐ Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue (provide an explanation for why not)
-

- ☐ Investigation identified no control room issues
- ☐ Investigation identified no controller issues
- ☐ Investigation identified incorrect controller action or controller error
- ☐ Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response
- ☐ Investigation identified incorrect procedures
- ☐ Investigation identified incorrect control room equipment operation
- ☐ Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response
- ☐ Investigation identified areas other than those above ⇨ Describe: _____
-

PART F – DRUG & ALCOHOL TESTING INFORMATION

F1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?

- ☐ No
- ☐ Yes ⇨ F1a. Specify how many were tested: / / /
- F1b. Specify how many failed: / / /

F2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?

- ☐ No
- ☐ Yes ⇨ F2a. Specify how many were tested: / / /
- F2b. Specify how many failed: / / /

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

☐ External Corrosion

1. Results of visual examination:
 - ☐ Localized Pitting ☐ General Corrosion
 - ☐ Other _____
2. Type of corrosion: (select all that apply)
 - ☐ Galvanic ☐ Atmospheric ☐ Stray Current ☐ Microbiological ☐ Selective Seam
 - ☐ Other _____
- 2a. If 2 is Stray Current, specify ☐ Alternating Current ☐ Direct Current AND
- 2b. Describe the stray current source: _____
3. The type(s) of corrosion selected in Question 2 is based on the following: (select all that apply)
 - ☐ Field examination ☐ Determined by metallurgical analysis
 - ☐ Other _____
4. Was the failed item buried or submerged?
 - ☐ Yes ⇨ 4a. Was failed item considered to be under cathodic protection at the time of the Accident?
 - ☐ Yes ⇨ Year protection started: ____/____/____/____/____
 - ☐ No
 - 4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?
 - ☐ Yes ☐ No
 - 4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident? (select all that apply)
 - ☐ Yes, CP Annual Survey ⇨ Most recent year conducted: ____/____/____/____/____
 - ☐ Yes, Close Interval Survey ⇨ Most recent year conducted: ____/____/____/____/____
 - ☐ Yes, Other CP Survey ⇨ Most recent year conducted: ____/____/____/____/____
 - Describe other CP survey: _____
 - ☐ No
 - ☐ No ⇨ 4d. 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 ☐ N/A Bare/Ineffectively Coated Pipe

☐ Internal Corrosion

6. Results of visual examination:
 - ☐ Localized Pitting ☐ General Corrosion ☐ Not cut open
 - ☐ Other _____
7. Cause of corrosion: (select all that apply)
 - ☐ Corrosive Commodity ☐ Water drop-out/Acid ☐ Microbiological ☐ Erosion
 - ☐ Other _____
8. The cause(s) of corrosion selected in Question 7 is based on the following: (select all that apply)
 - ☐ Field examination ☐ Determined by metallurgical analysis
 - ☐ Other _____
9. Location of corrosion: (select all that apply)
 - ☐ Low point in pipe ☐ Elbow ☐ Dead-Leg ☐ Other _____
10. Was the commodity treated with corrosion inhibitors or biocides? ☐ Yes ☐ No
11. Was the interior coated or lined with protective coating? ☐ Yes ☐ No
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?
 - ☐ Not applicable - Not mainline pipe ☐ Yes ☐ No
13. Were corrosion coupons routinely utilized?
 - ☐ Not applicable - Not mainline pipe ☐ Yes ☐ No

G2 - Natural Force Damage - *only one sub-cause can be picked from shaded left-hand column	
<input type="checkbox"/> Earth Movement, NOT due to Heavy Rains/Floods	1. Specify: <input type="radio"/> Earthquake <input type="radio"/> Subsidence <input type="radio"/> Landslide <input type="radio"/> Other _____
<input type="checkbox"/> Heavy Rains/Floods	2. Specify: <input type="radio"/> Washout/Scouring <input type="radio"/> Flotation <input type="radio"/> Mudslide <input type="radio"/> Other _____
<input type="checkbox"/> Lightning	3. Specify: <input type="radio"/> Direct hit <input type="radio"/> Secondary impact such as resulting nearby fires
<input type="checkbox"/> Temperature	4. Specify: <input type="radio"/> Thermal Stress <input type="radio"/> Frost Heave <input type="radio"/> Frozen Components <input type="radio"/> Other _____
<input type="checkbox"/> High Winds	
<input type="checkbox"/> Tree/Vegetation Root	
<input type="checkbox"/> Snow/Ice impact or Accumulation	
<input type="checkbox"/> Other Natural Force Damage	5. Describe: _____

Complete the following if any Natural Force Damage sub-cause is selected.

6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event? ☐ Yes ☐ No
- 6a. If Yes, specify: (select all that apply) ☐ Hurricane ☐ Tropical Storm ☐ Tornado ☐ Other: _____

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

Complete the following if any Excavation Damage sub-cause is selected.

1. Did the Operator get prior notification of the excavation activity? ☐ Yes ☐ No
- 1a. If Yes, Notification received from: (select all that apply) ☐ One-Call System ☐ Excavator ☐ Contractor ☐ Landowner
- 1b. Per the primary Accident Investigator results, did State law exempt the excavator from notifying the one-call center?
☐ Yes ☐ No ☐ Unknown
- If yes, answer 1c through 1e.
- 1c. select one of the following:
☐ Excavator is exempt
☐ Activity is exempt and did not exceed the limits of the exemption
☐ Activity is exempt and exceeded the limits of the exemption
☐ Other mandatory text field: _____
- 1d. Exempting authority: _____
- 1e. Exempting criteria: _____
2. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)? ☐ Yes ☐ No
3. Right-of-Way where event occurred: (select all that apply)
- ☐ Public ➡ Specify: ☐ City Street ☐ State Highway ☐ County Road ☐ Interstate Highway ☐ Other
- ☐ Private ➡ Specify: ☐ Private Landowner ☐ Private Business ☐ Private Easement
- ☐ Pipeline Property/Easement ☐ Power/Transmission Line ☐ Railroad
- ☐ Dedicated Public Utility Easement ☐ Federal Land ☐ Unknown/Other
- 4 Was the facility part of a Joint Trench? ☐ Yes ☐ No
5. Did this event involve a Cross Bore? ☐ Yes ☐ No

6. Measured Depth from Grade (*select only one*)

- ☐ Embedded in Concrete/Asphalt Pavement ☐ <18 inches ☐ 18 – 36 inches ☐ > 36 inches
☐ Measured depth from grade _____ inches

7. Type of excavator: (*select only one*)

- ☐ Contractor ☐ County ☐ Developer ☐ Farmer ☐ Municipality ☐ Occupant
☐ Railroad ☐ State ☐ Utility ☐ Unknown/Other

8. 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 ☐ Bulldozer ☐ Unknown/Other

9. Type of work performed: (*select only one*)

- ☐ 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
☐ Unknown/Other

10. Was the One-Call Center notified? ☐ Yes ☐ No If No, skip to question 11

10a. If Yes, specify ticket number: / / / / / / / / / / / / / / / / / /

10b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified: _____

10c. Was work area white lined? ☐ No ☐ Yes ☐ Unknown

11. Type of Locator: ☐ Facility Owner ☐ Contract Locator ☐ Unknown/Other

12. Were facility locate marks visible in the area of excavation? ☐ No ☐ Yes ☐ Unknown

13. Did the damage cause an interruption in service? ☐ No ☐ Yes ☐ Unknown/Other

13a. If Yes, specify duration of the interruption: /___/___/___/ hours

14. Description of the CGA-DIRT Root Cause (*select the predominant CGA-DIRT Root Cause from the list below*):

Notification Issue

- ☐ No notification made to the One-Call Center/811
☐ Excavator dug outside area described on ticket
☐ Excavator dug prior to valid start date/time
☐ Excavator dug after valid ticket expired
☐ Excavator provided incorrect notification information

Excavation Issue

- ☐ Excavator dug prior to verifying marks by test-hole (pothole)
☐ Excavator failed to maintain clearance after verifying marks
☐ Excavator failed to protect/shore/support facilities
☐ Improper backfilling practices
☐ Marks faded or not maintained
☐ Improper excavation practice not listed above

Locating Issue

- ☐ Facility not marked due to Abandoned facility
☐ Facility not marked due to Incorrect facility records/maps
☐ Facility not marked due to Locator error
☐ Facility not marked due to No response from operator/contract locator
☐ Facility not marked due to Incomplete marks at damage location
☐ Facility not marked due to Tracer wire issue
☐ Facility not marked due to Unlocatable Facility
☐ Facility marked inaccurately due to Abandoned facility
☐ Facility marked inaccurately due to Incorrect facility records/maps
☐ Facility marked inaccurately due to Locator error
☐ Facility marked inaccurately due to Tracer wire issue

Miscellaneous Root Causes

- ☐ Deteriorated facility
☐ One Call Center Error
☐ Previous damage
☐ Root Cause not listed (comment required): _____

G4 - Other Outside Force Damage - *only one sub-cause can be picked from shaded left-hand column

<input type="checkbox"/> Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Accident	
<input type="checkbox"/> Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation	1. Vehicle/Equipment operated by: (<i>select only one</i>) <input type="radio"/> Operator <input type="radio"/> Operator's Contractor <input type="radio"/> Third Party If this sub-section is picked, please complete questions 5-11 below
<input type="checkbox"/> Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring	2. Select one or more of the following IF an extreme weather event was a factor: <input type="radio"/> Hurricane <input type="radio"/> Tropical Storm <input type="radio"/> Tornado <input type="radio"/> Heavy Rains/Flood <input type="radio"/> Other _____
<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	
<input type="checkbox"/> Intentional Damage	3. Specify: <input type="radio"/> Vandalism <input type="radio"/> Terrorism <input type="radio"/> Theft of transported commodity <input type="radio"/> Theft of equipment <input type="radio"/> Other _____
<input type="checkbox"/> Other Outside Force Damage	4. Describe: _____

Complete the following if Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation sub-cause is selected.

5. Was the driver of the vehicle or equipment issued one or more citations related to the accident? ☐ Yes ☐ No ☐ Unknown

If 5 is Yes, what was the nature of the citations (select all that apply)

5a. Excessive Speed

5b. Reckless Driving

5c. Driving Under the Influence

5e. Other, describe: _____

6. Was the driver under control of the vehicle at the time of the collision? ☐ Yes ☐ No ☐ Unknown

7. Estimated speed of the vehicle at the time of impact (miles per hour)? _____ or ☐ Unknown

8. Type of vehicle? (select only one) ☐ Motorcycle/ATV ☐ Passenger Car ☐ Small Truck ☐ Bus ☐ Large Truck

9. Where did the vehicle travel from to hit the pipeline facility? (select only one)

☐ Roadway ☐ Driveway ☐ Parking Lot ☐ Loading Dock ☐ Off-Road

10. Shortest distance from answer in 9. to the damaged pipeline facility (in feet): _____

11. At the time of the accident, were protections installed to protect the damaged pipeline facility from vehicular damage? ☐ Yes ☐ No

If 11 is Yes, specify type of protection (select all that apply):

11a. Bollards/Guard Posts

11b. Barricades – include Jersey barriers and fences in instructions

11c. Guard Rails

11d. Other, describe: _____

Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.

4. Additional factors: *(select all that apply)* ☐ Dent ☐ Gouge ☐ Pipe Bend ☐ Arc Burn ☐ Crack ☐ Lack of Fusion ☐ Lamination ☐ Buckle
☐ Wrinkle ☐ Misalignment ☐ Burnt Steel ☐ Other: _____

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
- ☐ Overpressurization
- ☐ No support or loss of support
- ☐ Manufacturing defect
- ☐ Loss of electricity

- ☐ Improper installation
- ☐ Improper maintenance
- ☐ Mismatched items (different manufacturer for tubing and tubing fittings)
- ☐ Dissimilar metals
- ☐ Breakdown of soft goods due to compatibility issues with transported commodity
- ☐ Valve vault or valve can contributed to the release
- ☐ Alarm/status failure
- ☐ Misalignment
- ☐ Thermal stress
- ☐ Erosion/Abnormal Wear
- ☐ Other _____

G7 - Incorrect Operation - *only one sub-cause can be picked from shaded left-hand column	
<input type="checkbox"/> Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage	
<input type="checkbox"/> Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	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 _____
<input type="checkbox"/> Valve Left or Placed in Wrong Position, but NOT Resulting in a Tank, Vessel, or Sump/Separator Overflow or Facility 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: _____

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

3. Was this Accident related to: *(select all that apply)*

- ☐ Inadequate procedure
- ☐ No procedure established
- ☐ Failure to follow procedure
- ☐ Other: _____

4. What category type was the activity that caused the Accident:

- ☐ 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 Accident identified as a covered task in your Operator Qualification Program? ☐ Yes ☐ No

5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?

- ☐ 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 Accident Cause - *only one sub-cause can be picked from shaded left-hand column	
<input type="checkbox"/> Miscellaneous	1. Describe: _____
<input type="checkbox"/> Unknown	2. Specify: <input type="radio"/> Investigation complete, cause of Accident unknown. Mandatory comment field: _____ <input type="radio"/> Still under investigation, cause of Accident to be determined* (*Supplemental Report required)

PART J – COMPLETED INTEGRITY INSPECTIONS

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)

J1. Have internal inspection tools collected data at the point of the Accident?

☐ Yes ☐ No

J1a. If Yes, for each tool and technology used provide the information below for the most recent and previous tool runs:

☐ Axial Magnetic Flux Leakage

Most recent run Year: _____

Most recent run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

Most recent run Attuned to Detect (select only one): ☐ Metal Loss ☐ Hard Spots ☐ Girth Weld Anomalies

☐ Other Describe: _____

If Metal Loss, specify (select only one): ☐ High Resolution ☐ Standard Resolution

☐ Other Describe: _____

Previous run Year: _____

Previous run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

Previous run Attuned to Detect (select only one): ☐ Metal Loss ☐ Hard Spots ☐ Girth Weld Anomalies

☐ Other Describe: _____

If Metal Loss, specify (select only one): ☐ High Resolution ☐ Standard Resolution

☐ Other Describe: _____

☐ Circumferential/Transverse Wave Magnetic Flux Leakage

Most recent run Year: _____

Most recent run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

Most recent run Resolution (select only one): ☐ High Resolution ☐ Standard Resolution

☐ Other Describe: _____

Previous run Year: _____

Previous run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

Previous run Resolution (select only one): ☐ High Resolution ☐ Standard Resolution

☐ Other Describe: _____

☐ Ultrasonic

Most recent run Year: _____

Most recent run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

Most recent run Attuned to (select only one) ☐ Wall Measurement ☐ Crack

☐ Other Describe: _____

If Attuned to Wall Measurement, most recent run Metal Loss Resolution (select only one):

☐ Standard Resolution ☐ Other Describe: _____

Previous run Year: _____

Previous run Propulsion Method (select only one): ☐ Free Swimming ☐ Tethered

Most recent run Attuned to (select only one) ☐ Wall Measurement ☐ Crack

☐ Other Describe: _____

If Attuned to Wall Measurement, most recent run Metal Loss Resolution (select only one):

☐ Standard Resolution ☐ Other Describe: _____

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 during a root cause analysis, select all that apply below and explain each in the Narrative:

External Corrosion

- ☐ External Corrosion, Galvanic
- ☐ External Corrosion, Atmospheric
- ☐ External Corrosion, Stray Current Induced
- ☐ External Corrosion, Microbiologically Induced
- ☐ External Corrosion, Selective Seam

Internal Corrosion

- ☐ Internal Corrosion, Corrosive Commodity
- ☐ Internal Corrosion, Water drop-out/Acid
- ☐ Internal Corrosion, Microbiological
- ☐ Internal Corrosion, Erosion

Natural Forces

- ☐ Earth Movement, NOT due to Heavy Rains/Floods
- ☐ Heavy Rains/Floods
- ☐ Lightning
- ☐ Temperature
- ☐ High Winds
- ☐ Tree/Vegetation Root

Excavation Damage

- ☐ 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

Other Outside Force

- ☐ Nearby Industrial, Man-made, or Other Fire/Explosion
- ☐ Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation
- ☐ Damage by Boats, Barges, Drilling Rigs, or Other Adrift Maritime Equipment
- ☐ Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation
- ☐ Electrical Arcing from Other Equipment or Facility
- ☐ Previous Mechanical Damage NOT Related to Excavation
 - ☐ Intentional Damage

Pipe/Weld Failure

- ☐ Design-related
- ☐ Construction-related
- ☐ Installation-related
- ☐ Fabrication-related
- ☐ Original Manufacturing-related
- ☐ Environmental Cracking-related, Stress Corrosion Cracking
- ☐ Environmental Cracking-related, Sulfide Stress Cracking
- ☐ Environmental Cracking-related, Hydrogen Stress Cracking
- ☐ Environmental Cracking-related, Hard Spot

Equipment Failure

- ☐ Malfunction of Control/Relief Equipment
- ☐ Pump or Pump-related Equipment
- ☐ Threaded Connection/Coupling Failure
- ☐ Non-threaded Connection Failure
- ☐ Defective or Loose Tubing or Fitting
- ☐ Failure of Equipment Body (except Compressor), Vessel Plate, or other Material

Incorrect Operation

- ☐ Damage by Operator or Operator's Contractor NOT Excavation and NOT Vehicle/Equipment Damage
- ☐ Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow
- ☐ Valve Left or Placed in Wrong Position, but NOT Resulting in Overpressure
- ☐ Pipeline or Equipment Overpressured
- ☐ Equipment Not Installed Properly
- ☐ Wrong Equipment Specified or Installed
- ☐ Inadequate Procedure
- ☐ No procedure established
- ☐ Failure to follow procedures

[illegible]

Preparer's Name (type or print)
Preparer's Title (type or print)
Preparer's E-mail Address
Local Contact Name: optional
Local Contact Email: optional
Local Contact Phone: optional

Preparer's Facsimile Number

Date	Authorized Signer Telephone Number
------	------------------------------------

Authorized Signer's E-mail Address