

12. Were there fatalities? Yes No

If Yes, specify the number in each category:

12.a Operator employees / / / / /

12.b Contractor employees working for the Operator / / / / /

12.c Non-Operator emergency responders / / / / /

12.d Workers working on the right-of-way, but NOT associated with this Operator / / / / /

12.e General public / / / / /

12.f Total fatalities (sum of above) / / / / /

13. Were there injuries requiring inpatient hospitalization? Yes No

If Yes, specify the number in each category:

13.a Operator employees / / / / /

13.b Contractor employees working for the Operator / / / / /

13.c Non-Operator emergency responders / / / / /

13.d Workers working on the right-of-way, but NOT associated with this Operator / / / / /

13.e General public / / / / /

13.f Total injuries (sum of above) / / / / /

14. Was the pipeline/facility shut down due to the Accident?

Yes No ⇨ Explain: _____

If Yes, complete Questions 14.a and 14.b: (use local time, 24-hr clock)

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

14.b Local time pipeline/facility restarted / / / / / / / / / / Still shut down*
Hour Month Day Year (*Supplemental Report required)

15. Did the commodity ignite? Yes No

16. Did the commodity explode? Yes No

17. Number of general public evacuated: / / / / / / / / / /

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

18.a Local time Operator identified Accident / / / / / / / / / /
Hour Month Day Year

18.b Local time Operator resources arrived on site / / / / / / / / / /
Hour Month Day Year

PART B – ADDITIONAL LOCATION INFORMATION

1. Was the origin of the Accident onshore?

- Yes (Complete Questions 2-12)
- No (Complete Questions 13-15)

If Onshore:

2. State: / / /

3. Zip Code: / / / - / / / / /

4. _____ 5. _____
 City County or Parish

6. Operator-designated location: (select only one)

Milepost/Valve Station (specify in shaded area below)

Survey Station No. (specify in shaded area below)

/ / / / / / / / / / / / / / / / / /

7. Pipeline/Facility name: _____

8. Segment name/ID: _____

9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)? Yes No

10. Location of Accident: (select only one)

Totally contained on Operator-controlled property

Originated on Operator-controlled property, but then flowed or migrated off the property

Pipeline right-of-way

11. 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

In underground enclosed space (e.g., vault)

Other _____

Depth-of-Cover (in): / / / / / / /

Aboveground Specify:

Typical aboveground facility piping or appurtenance

Overhead crossing

In or spanning an open ditch

Inside a building Inside other enclosed space

Other _____

Transition Area Specify: Soil/air interface Wall

sleeve Pipe support or other close contact area

Other _____

12. Did Accident occur in a crossing?: Yes No

If Yes, specify type below:

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:

/ / / / /

(select only one of the following)

Shoreline/Bank crossing

Below water, pipe in bored/drilled crossing

Below water, pipe buried below bottom (NOT in bored/drilled crossing)

Below water, pipe on or above bottom

If Offshore:

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

/ / / / / / /

14. Origin of Accident:

In State waters

Specify: State: / / /

Area: _____

Block/Tract #: / / / / / / / /

Nearest County/Parish: _____

On the Outer Continental Shelf (OCS)

Specify: Area: _____

Block #: / / / / / / /

15. Area of Accident: (select only one)

Shoreline/Bank 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

1. Is the pipeline or facility:

- Interstate
- Intrastate

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

- Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances Atmospheric or Low Pressure Pressurized
- 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

3. Item involved in Accident: (select only one)

- Pipe Specify: Pipe Body Pipe Seam
 - 3.a Nominal diameter of pipe (in): / / / / / /
 - 3.b Wall thickness (in): / / / / / /
 - 3.c SMYS (Specified Minimum Yield Strength) of pipe (psi): / / / / / / / /
 - 3.d Pipe specification: _____
 - 3.e Pipe Seam Specify: Longitudinal ERW - High Frequency Single SAW Flash Welded
 - 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 _____
- 3.f Pipe manufacturer: _____
- 3.g Year of manufacture: / / / / / /
- 3.h Pipeline coating type at point of Accident Specify: Fusion Bonded Epoxy Coal Tar Asphalt Polyolefin
- Extruded Polyethylene Field Applied Epoxy Cold Applied Tape Paint
- Composite None Other _____
- Weld, including heat-affected zone Specify: Pipe Girth Weld Other Butt Weld Fillet Weld Other _____
- Valve Mainline Specify: Butterfly Check Gate Plug Ball Globe
- Other _____
- 3.i Mainline valve manufacturer: _____
- 3.j Year of manufacture: / / / / / /
- Relief Valve
- Auxiliary or Other Valve
- Pump
- Meter/Prover
- Scraper/Pig Trap
- Sump/Separator
- Repair Sleeve or Clamp
- Hot Tap Equipment
- Stoppie Fitting
- Flange
- Relief Line
- Auxiliary Piping (e.g. drain lines)
- Tubing
- Instrumentation
- Tank/Vessel Specify: Single Bottom System Double Bottom System Tank Shell Chime
- Roof/Roof Seal Roof Drain System Mixer Pressure Vessel Head or Wall
- Appurtenance Other _____
- Other _____

4. Year item involved in Accident was installed: / / / / / /

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

Carbon Steel

Material other than Carbon Steel → Specify: _____

6. 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

1. Wildlife impact: Yes No

1.a If Yes, specify all that apply:

- Fish/aquatic
- Birds
- Terrestrial

Deleted - If yes, estimated number of cubic yards.

2. Soil contamination: Yes No

3. Long term impact assessment performed or planned: Yes No

4. Anticipated remediation: Yes No (not needed)

4.a If Yes, specify all that apply:

- Surface water
- Groundwater
- Soil
- Vegetation
- Wildlife

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

5.a Specify all that apply:

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

5.b Estimated amount released in or reaching water: 1 1 1 1 1 1 1 1 1 1 / Barrels

5.c Name of body of water, if commonly known: _____

6. At the location of this Accident, had the pipeline segment or facility been identified as one that "could affect" a High Consequence Area (HCA) as determined in the Operator's Integrity Management Program? Yes No

7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?

Yes No

7.a If Yes, specify HCA type(s): (select all that apply)

- 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

8. Estimated cost to Operator:

8.a Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator	\$ <u>1 1 1 1 1 1 1 1 1 1</u>
8.b Estimated cost of commodity lost	\$ <u>1 1 1 1 1 1 1 1 1 1</u>
8.c Estimated cost of Operator's property damage & repairs	\$ <u>1 1 1 1 1 1 1 1 1 1</u>
8.d Estimated cost of Operator's emergency response	\$ <u>1 1 1 1 1 1 1 1 1 1</u>
8.e Estimated cost of Operator's environmental remediation	\$ <u>1 1 1 1 1 1 1 1 1 1</u>
8.f Estimated other costs	\$ <u>1 1 1 1 1 1 1 1 1 1</u>
Describe _____	
8.g Estimated total costs (sum of above)	\$ <u> / / / 1 / / / / / /</u>

PART E – ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Accident (psig):	/ / / / / / / /
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig) :	/ / / / / / / /
3. Describe the pressure on the system or facility relating to the Accident: (select only one)	
<input type="checkbox"/> Pressure did not exceed MOP <input type="checkbox"/> Pressure exceeded MOP, but did not exceed 110% of MOP <input type="checkbox"/> Pressure exceeded 110% of MOP	
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), 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?	
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes ⇨ (Complete 4.a and 4.b below)	
4.a Did the pressure exceed this established pressure restriction?	<input type="radio"/> Yes <input type="radio"/> No
4.b Was this pressure restriction mandated by PHMSA or the State?	<input type="radio"/> PHMSA <input type="radio"/> State <input type="radio"/> Not mandated
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes ⇨ (Complete 5.a – 5.f below)	
5.a Type of upstream valve used to initially isolate release source:	<input type="radio"/> Manual <input type="radio"/> Automatic <input type="radio"/> Remotely Controlled
5.b Type of downstream valve used to initially isolate release source:	<input type="radio"/> Manual <input type="radio"/> Automatic <input type="radio"/> Remotely Controlled <input type="radio"/> Check Valve
5.c Length of segment initially isolated between valves (ft):	/ / / / / / / /
5.d Is the pipeline configured to accommodate internal inspection tools?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ⇨ Which physical features limit tool accommodation? (select all that apply)	
<input type="radio"/> Changes in line pipe diameter <input type="radio"/> Presence of unsuitable mainline valves <input type="radio"/> Tight or mitered pipe bends <input type="radio"/> Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.) <input type="radio"/> Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools) <input type="radio"/> Other ⇨ Describe: _____	
5.e For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes ⇨ Which operational factors complicate execution? (select all that apply)	
<input type="radio"/> Excessive debris or scale, wax, or other wall build-up <input type="radio"/> Low operating pressure(s) <input type="radio"/> Low flow or absence of flow <input type="radio"/> Incompatible commodity <input type="radio"/> Other ⇨ Describe: _____	
5.f Function of pipeline system: (select only one)	
<input type="checkbox"/> > 20% SMYS Regulated Trunkline/Transmission	<input type="checkbox"/> > 20% SMYS Regulated Gathering
<input type="checkbox"/> ≤ 20% SMYS Regulated Trunkline/Transmission	<input type="checkbox"/> ≤ 20% SMYS Regulated Gathering
<input type="checkbox"/> ≤ 20% SMYS "Unregulated" Trunkline/Transmission	<input type="checkbox"/> ≤ 20% SMYS "Unregulated" Gathering

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

No

Yes =>

6.a Was it operating at the time of the Accident? Yes No

6.b Was it fully functional at the time of the Accident? Yes No

6.c Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident? Yes No

6.d Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident? Yes No

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

No

Yes =>

7.a Was it operating at the time of the Accident? Yes No

7.b Was it fully functional at the time of the Accident? Yes No

7.c Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident? Yes No

7.d Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident? Yes No

8. How was the Accident initially identified for the Operator? (select only one)

CPM leak detection system or 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

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 Accident

Other _____

8.a If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 8, specify the following: (select only one)

Operator employee Contractor working for the Operator

9. 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

1. 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 ⇨ 1.a Specify how many were tested: / / /

1.b Specify how many failed: / / /

2. 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 ⇨ 2.a Specify how many were tested: / / /

2.b Specify how many failed: / / /

PART G – APPARENT CAUSE

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

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 _____
- 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 under the ground?
 - Yes ⇒ 4.a Was failed item considered to be under cathodic protection at the time of the Accident?
 - Yes ⇒ Year protection started: / / / / /
 - No
 - 4.b Was shielding, tenting, or disbonding of coating evident at the point of the Accident?
 - Yes No
 - 4.c Has one or more Cathodic Protection Survey been conducted at the point of the Accident?
 - Yes, CP Annual Survey ⇒ Most recent year conducted: / / / / /
 - Yes, Close Interval Survey ⇒ Most recent year conducted: / / / / /
 - Yes, Other CP Survey ⇒ Most recent year conducted: / / / / /
 - No
 - 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

Listed as "cause of corrosion" on current form. Deleted - Cathodic protection disrupted & stress corrosion cracking

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 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

Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.

- 14. List the year of the most recent inspections:
 - 14.a API Std 653 Out-of-Service Inspection / / / / / No Out-of-Service Inspection completed
 - 14.b API Std 653 In-Service Inspection / / / / / No In-Service Inspection completed

Complete the following if any Corrosion Failure sub-cause is selected AND the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.

15. Has one or more internal inspection tool collected data at the point of the Accident?

Yes No

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

- Magnetic Flux Leakage Tool / / / / /
- Ultrasonic / / / / /
- Geometry / / / / /
- Caliper / / / / /
- Crack / / / / /
- Hard Spot / / / / /
- Combination Tool / / / / /
- Transverse Field/Triaxial / / / / /
- Other _____ / / / / /

15 & 15a are similar to Part C 3f & g on the current form.

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

Yes No Most recent year tested: / / / / / Test pressure (psig): / / / / /

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

Yes, and an investigative dig was conducted at the point of the Accident No Most recent year conducted: / / / / /

Yes, but the point of the Accident was not identified as a dig site No Most recent year conducted: / / / / /

No

18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?

Yes No

18.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 / / / / /
- Guided Wave Ultrasonic / / / / /
- Handheld Ultrasonic Tool / / / / /
- Wet Magnetic Particle Test / / / / /
- Dry Magnetic Particle Test / / / / /
- Other _____ / / / / /

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 checked="" 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"/> Other Natural Force Damage	5. Describe: _____

Separate item on current form.

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

6.a. 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

- Excavation Damage by Operator (First Party)
- Excavation Damage by Operator's Contractor (Second Party)
- Excavation Damage by Third Party

New to "Excavation Damage" cause category but similar questions appear on current liquid accident form.

Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.

1. Has one or more internal inspection tool collected data at the point of the Accident?
 Yes No

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

<input type="radio"/> Magnetic Flux Leakage	/	/	/	/	/
<input type="radio"/> Ultrasonic	/	/	/	/	/
<input type="radio"/> Geometry	/	/	/	/	/
<input type="radio"/> Caliper	/	/	/	/	/
<input type="radio"/> Crack	/	/	/	/	/
<input type="radio"/> Hard Spot	/	/	/	/	/
<input type="radio"/> Combination Tool	/	/	/	/	/
<input type="radio"/> Transverse Field/Triaxial	/	/	/	/	/
<input type="radio"/> Other _____	/	/	/	/	/

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

3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?
 Yes ⇒ Most recent year tested: / / / / /
 Test pressure (psig): / / / / /
 No

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 Accident
 ⇒ Most recent year conducted: / / / / /
 Yes, but the point of the Accident was not identified as a dig site
 ⇒ Most recent year conducted: / / / / /
 No

5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?
 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:

<input type="radio"/> Radiography	/	/	/	/	/
<input type="radio"/> Guided Wave Ultrasonic	/	/	/	/	/
<input type="radio"/> Handheld Ultrasonic Tool	/	/	/	/	/
<input type="radio"/> Wet Magnetic Particle Test	/	/	/	/	/
<input type="radio"/> Dry Magnetic Particle Test	/	/	/	/	/
<input type="radio"/> Other _____	/	/	/	/	/

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

6.a If Yes, Notification received from: (select all that apply) One-Call System Excavator Contractor Landowner

Date of notification was removed.

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

8. 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
- Data not collected
- Unknown/Other

The CGA-DIRT section (#s7-17) is new to the form although some items similar to the CGA-DIRT questions appear on the current form.

9. Type of excavator: (select only one)

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

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)

- 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

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

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:

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

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

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

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

(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):

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 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 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)

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: (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	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	<p>Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.</p> <p>3. Has one or more internal inspection tool collected data at the point of the Accident? <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.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><input type="radio"/> Magnetic Flux Leakage</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/> Ultrasonic</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/> Geometry</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/> Caliper</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/> Crack</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/> Hard Spot</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/> Combination Tool</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/> Transverse Field/Triaxial</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/> Other _____</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> </table> <p>4. 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</p> <p>5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?</p> <p><input type="radio"/> Yes ⇒ Most recent year tested: <input type="radio"/> <input type="radio"/></p> <p>Test pressure (psig): <input type="radio"/> <input type="radio"/></p> <p><input type="radio"/> No</p> <p>6. 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 Accident ⇒ Most recent year conducted: <input type="radio"/> <input type="radio"/></p> <p><input type="radio"/> Yes, but the point of the Accident was not identified as a dig site ⇒ Most recent year conducted: <input type="radio"/> <input type="radio"/></p> <p><input type="radio"/> No</p> <p><i>(This section continued on next page with Question 7.)</i></p>	<input type="radio"/> Magnetic Flux Leakage	<input type="radio"/> Ultrasonic	<input type="radio"/> Geometry	<input type="radio"/> Caliper	<input type="radio"/> Crack	<input type="radio"/> Hard Spot	<input type="radio"/> Combination Tool	<input type="radio"/> Transverse Field/Triaxial	<input type="radio"/> Other _____	<input type="radio"/>																																																																																
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New to "Other Outside Force Damage" cause category but similar questions appear on current form.

	<p>7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002? <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 <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> /</p> <p><input type="radio"/> Guided Wave Ultrasonic <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> /</p> <p><input type="radio"/> Handheld Ultrasonic Tool <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> /</p> <p><input type="radio"/> Wet Magnetic Particle Test <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> /</p> <p><input type="radio"/> Dry Magnetic Particle Test <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> /</p> <p><input type="radio"/> Other _____ / / / / /</p>
<input type="checkbox"/> Intentional Damage	<p>8. Specify:</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 _____</p>
<input type="checkbox"/> Other Outside Force Damage	<p>9. Describe: _____</p>

Listed as "Material and Welds" on current form.

G5 - Material Failure of Pipe or Weld

Use this section to report material failures ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."

Only one sub-cause can be picked from shaded left-hand column

1. The sub-cause selected below is based on the following: (select all that apply)

- Field Examination
- Determined by Metallurgical Analysis
- Other Analysis
- Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)

Construction-, Installation-, or Fabrication-related

Original Manufacturing-related (NOT girth weld or other welds formed in the field)

Environmental Cracking-related

2. List contributing factors: (select all that apply)

- Fatigue- or Vibration-related
 - Mechanically-induced prior to installation (such as during transport of pipe)
 - Mechanical Vibration
 - Pressure-related
 - Thermal
 - Other
- Mechanical Stress
- Other

3. Specify: Stress Corrosion Cracking Sulfide Stress Cracking
 Hydrogen Stress Cracking Other

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

5. Has one or more internal inspection tool collected data at the point of the Accident? Yes No

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

- Magnetic Flux Leakage Tool
- Ultrasonic
- Geometry
- Caliper
- Crack
- Hard Spot
- Combination Tool
- Transverse Field/Triaxial
- Other

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

Yes No Most recent year tested: Test pressure (psig):

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

Yes, and an investigative dig was conducted at the point of the Accident Most recent year conducted:

Yes, but the point of the Accident was not identified as a dig site Most recent year conducted:

No

8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?

Yes No

8.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
- Guided Wave Ultrasonic
- Handheld Ultrasonic Tool
- Wet Magnetic Particle Test
- Dry Magnetic Particle Test
- Other

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

<input type="checkbox"/> Malfunction of Control/Relief Equipment	1. Specify: <i>(select all that apply)</i> <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"/> Stopple/Control Fitting <input type="radio"/> ESD System Failure <input type="radio"/> Other _____
<input type="checkbox"/> Pump or Pump-related Equipment	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"/> Other _____
<input type="checkbox"/> Threaded Connection/Coupling Failure	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 _____
<input type="checkbox"/> Non-threaded Connection Failure	4. Specify: <input type="radio"/> O-Ring <input type="radio"/> Gasket <input type="radio"/> Seal (NOT pump seal) or Packing <input type="radio"/> Other _____
<input type="checkbox"/> Defective or Loose Tubing or Fitting	<div style="border: 1px solid red; padding: 5px; display: inline-block;">Replaced "Seal Failure" on current liquid form.</div>
<input type="checkbox"/> Failure of Equipment Body (except Pump), Tank Plate, or other Material	
<input type="checkbox"/> Other Equipment Failure	5. Describe: _____ _____

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

6. Additional factors that contributed to the equipment failure: *(select all that apply)*
- Excessive vibration
 - Overpressurization
 - No support or loss of support
 - Manufacturing defect
 - Loss of electricity
 - Improper installation
 - 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
 - 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: _____

Items 3-5.a are new; however, on the current form, "inadequate procedure" & "failure to follow procedure" appear as a type of incorrect operation.

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

- 5.a 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 <input type="radio"/> Still under investigation, cause of Accident to be determined* <i>(*Supplemental Report required)</i>

