

<p>12. Were there fatalities? <input type="radio"/> Yes <input type="radio"/> No FATALITY_IND</p> <p>If Yes, specify the number in each category:</p> <p>12.a Operator employees NUM_EMP_FATALITIES <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u></p> <p>12.b Contractor employees NUM_CONTR_FATALITIES <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u> working for the Operator</p> <p>12.c Non-Operator NUM_ER_FATALITIES <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u> emergency responders</p> <p>12.d Workers working on the NUM_WORKER_FATALITIES <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u> right-of-way, but NOT associated with this Operator</p> <p>NUM_GP_FATALITIES <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u></p> <p>12.e General public</p> <p>12.f Total fatalities (sum of above) <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u> FATAL</p>	<p>13. Were there injuries requiring inpatient hospitalization? <input type="radio"/> Yes <input type="radio"/> No</p> <p>If Yes, specify the number in each category: INJURY_IND</p> <p>13.a Operator employees NUM_EMP_INJURIES <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u></p> <p>13.b Contractor employees NUM_CONTR_INJURIES <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u> working for the Operator</p> <p>13.c Non-Operator NUM_ER_INJURIES <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u> emergency responders</p> <p>13.d Workers working on the NUM_WORKER_INJURIES <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u> right-of-way, but NOT associated with this Operator</p> <p>NUM_GP_INJURIES <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u></p> <p>13.e General public</p> <p>13.f Total injuries (sum of above) <u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u>/<u> </u> INJURE</p>
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14. Was the pipeline/facility shut down due to the Accident? SHUTDOWN_DUE_ACCIDENT_IND

☐ Yes ☐ No ➡ Explain: SHUTDOWN_EXPLAIN _____

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

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

14.b Local time pipeline/facility restarted RESTART_DATETIME / / / /
Hour Month Day Year

15. Did the commodity ignite? ☐ Yes ☐ No IGNITE_IND

16. Did the commodity explode? ☐ Yes ☐ No EXPLODE_IND

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

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

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

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

STILL_SHUTDOWN_IND
☐ Still shut down*
*(*Supplemental Report required)*

PART B – ADDITIONAL LOCATION INFORMATION

- *1. Was the origin of the Accident onshore? **ON_OFF_SHORE**
☐ Yes (Complete Questions 2-12) ☐ No (Complete Questions 13-15)

If Onshore:

2. State: **ONSHORE_STATE_ABBREVIATION**
3. Zip Code: **ONSHORE_POSTAL_CODE**
4. **ONSHORE_CITY_NAME** 5. **ONSHORE_COUNTY_NAME**
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)
DESIGNATED_LOCATION
DESIGNATED_NAME
7. Pipeline/Facility name: **PIPE_FAC_NAME**
8. Segment name/ID: **SEGMENT_NAME**
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)? ☐ Yes ☐ No **FEDERAL**
10. Location of Accident: (select only one) **LOCATION_TYPE**
☐ Totally contained on Operator-controlled property
☐ Originated on Operator-controlled property, but then flowed or migrated off the property
☐ Pipeline right-of-way
INCIDENT_AREA_TYPE
11. Area of Accident (as found): (select only one) **INCIDENT_AREA_SUBTYPE**
☐ 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 **INCIDENT_AREA_DETAILS**
Depth-of-Cover (in): **DEPTH_OF_COVER**
☐ Aboveground ⇨ Specify:
☐ Typical aboveground facility piping or appurtenance
☐ Overhead crossing
☐ In or spanning an open ditch
☐ Inside a building ☐ Inside other enclosed space
☐ Other **INCIDENT_AREA_DETAILS**
☐ Transition Area ⇨ Specify: ☐ Soil/air interface ☐ Wall sleeve ☐ Pipe support or other close contact area
☐ Other **INCIDENT_AREA_DETAILS**
- CROSSING**
12. Did Accident occur in a crossing?: ☐ Yes ☐ No
- If Yes, specify type below:
- ☐ Bridge crossing ⇨ Specify: ☐ Cased ☐ Uncased ⇨ **BRIDGE_CROSSING_IND, BRIDGE_TYPE**
- ☐ Railroad crossing ⇨ (select all that apply) ⇨ **RAILROAD_CROSSING_IND, RAILROAD_TYPE**
☐ Cased ☐ Uncased ☐ Bored/drilled
- ☐ Road crossing ⇨ (select all that apply) ⇨ **ROAD_CROSSING_IND, ROAD_TYPE**
☐ Cased ☐ Uncased ☐ Bored/drilled
- ☐ Water crossing ⇨ Specify: ☐ Cased ☐ Uncased ⇨ **WATER_CROSSING_IND, WATER_TYPE**
Name of body of water, if commonly known: **WATER_NAME**
Approx. water depth (ft) at the point of the Accident: **WATER_DEPTH**
(select only one of the following) **WATER_SUB_TYPE**
☐ 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: **OFF_WATER_DEPTH**
14. Origin of Accident: **OFF_ACCIDENT_ORIGIN**
☐ In State waters **OFFSHORE_STATE_ABBREVIATION**
⇨ Specify: State:
Area: **OFF_INSTATE_AREA**
OFF_INSTATE_BLOCK
Block/Tract #:
Nearest County/Parish: **OFFSHORE_COUNTY_NAME**
- ☐ On the Outer Continental Shelf (OCS)
⇨ Specify: Area: **OFF_OCS_AREA**
OFF_OCS_BLOCK
Block #:
15. Area of Accident: (select only one) **OFF_AREA_ACCIDENT_TYPE**
☐ 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 INFORMATION1. Is the pipeline or facility: **PIPE_FACILITY_TYPE**

- ☐ Interstate
☐ Intrastate

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

- ☐ Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances ➡ **SYSTEM_SUBPART_INVOLVED**
☐ 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) **ITEM_INVOLVED****PIPE_TYPE**

- ☐ Pipe ➡ Specify: ☐ Pipe Body ☐ Pipe Seam

3.a Nominal diameter of pipe (in): **PIPE_DIAMETER**3.b Wall thickness (in): **PIPE_WALL_THICKNESS**3.c SMYS (Specified Minimum Yield Strength) of pipe (psi): **PIPE_SMYS**3.d Pipe specification: **PIPE_SPECIFICATION**3.e Pipe Seam ➡ Specify: ☐ Longitudinal ERW - High Frequency**PIPE_SEAM_TYPE**☐ Longitudinal ERW - Low Frequency☐ Longitudinal ERW – Unknown Frequency☐ Spiral Welded ERW☐ Lap Welded☐ Spiral Welded SAW☐ Seamless☐ Single SAW☐ DSAW☐ Spiral Welded DSAW☐ Other☐ Flash Welded☐ Continuous Welded☐ Furnace Butt Welded **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 Accident **PIPE_COATING_TYPE**

➡ Specify:

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

- ☐ 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 Accident.

VALVE_TYPE **VALVE_MAINLINE_TYPE**

- ☐ Valve ☐ Mainline ➡ Specify: ☐ Butterfly ☐ Check ☐ Gate ☐ Plug ☐ Ball ☐ Globe

☐ 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☐ Pump☐ Meter/Prover☐ Scraper/Pig Trap☐ Sump/Separator☐ Repair Sleeve or Clamp☐ Hot Tap Equipment☐ Stopple Fitting☐ Flange☐ Relief Line☐ Auxiliary Piping (e.g. drain lines)☐ Tubing☐ Instrumentation☐ Tank/Vessel ➡ Specify: ☐ Single Bottom System☐ Double Bottom System☐ Tank Shell☐ Chime**TANK_VESSEL_SUBTYPE**☐ Roof/Roof Seal☐ Roof Drain System☐ Mixer☐ Pressure Vessel Head or Wall☐ Appurtenance☐ Other **TANK_VESSEL_DETAILS**☐ Other **ITEM_INVOLVED_DETAILS**4. Year item involved in Accident was installed: **INSTALLATION_YEAR**

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

☐ Carbon Steel

☐ Material other than Carbon Steel ➡ Specify: **MATERIAL_DETAILS**

RELEASE_TYPE

6. Type of Accident involved: (select only one) **PUNCTURE_AXIAL** **PUNCTURE_CIRCUM**

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

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

☐ Rupture ➡ **RUPTURE_ORIENT** Select Orientation: ☐ Circumferential ☐ Longitudinal ☐ Other **RUPTURE_DETAILS**

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

☐ Overfill or Overflow

☐ Other ➡ Describe: **RELEASE_TYPE_DETAILS**

PART D – ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact: <input type="radio"/> Yes <input type="radio"/> No WILDLIFE_IMPACT_IND	
1.a If Yes, specify all that apply:	
<input type="checkbox"/> Fish/aquatic FISH_AQUATIC_IMPACT_IND	
<input type="checkbox"/> Birds BIRDS_IMPACT_IND	
<input type="checkbox"/> Terrestrial TERRESTRIAL_IMPACT_IND	
2. Soil contamination: <input type="radio"/> Yes <input type="radio"/> No SOIL_CONTAMINATION	
3. Long term impact assessment performed or planned: <input type="radio"/> Yes <input type="radio"/> No LONG_TERM_ASSESSMENT	
4. Anticipated remediation: <input type="radio"/> Yes <input type="radio"/> No (not needed) REMEDATION_IND	
4.a If Yes, specify all that apply:	
<input type="checkbox"/> Surface water SURFACE_WATER_REMED_IND	<input type="checkbox"/> Groundwater GROUNDWATER_REMED_IND
<input type="checkbox"/> Soil SOIL_REMED_IND	<input type="checkbox"/> Vegetation VEGETATION_REMED_IND
<input type="checkbox"/> Wildlife WILDLIFE_REMED_IND	
5. Water contamination: <input type="radio"/> Yes ➡ (Complete 5.a – 5.c below) <input type="radio"/> No	
5.a Specify all that apply:	
<input type="checkbox"/> Ocean/Seawater OCEAN_SEAWATER_IND	
<input type="checkbox"/> Surface SURFACE_CONTAM_IND	
<input type="checkbox"/> Groundwater GROUNDWATER_CONTAM_IND	
<input type="checkbox"/> Drinking water ➡ (Select one or both) <input type="radio"/> Private Well <input type="radio"/> Public Water Intake	
5.b Estimated amount released in or reaching water: / / / / / / / / / / Barrels AMOUNT_RELEASED	
5.c Name of body of water, if commonly known: REL_WATER_NAME	
COULD_BE_HCA	
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? <input type="radio"/> Yes <input type="radio"/> No	
COMMODITY_REACHED_HCA	
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)? <input type="radio"/> Yes <input type="radio"/> No	
7.a If Yes, specify HCA type(s): (select all that apply)	
<input type="checkbox"/> Commercially Navigable Waterway COMMERCIALLY_NAV_IND	
Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?	
<input type="radio"/> Yes <input type="radio"/> No COMMERCIALLY_NAV_YES_NO	
<input type="checkbox"/> High Population Area HIGH_POP_IND	
Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?	
<input type="radio"/> Yes <input type="radio"/> No HIGH_POP_YES_NO	
<input type="checkbox"/> Other Populated Area OTHER_POP_IND	
Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?	
<input type="radio"/> Yes <input type="radio"/> No OTHER_POP_YES_NO	
<input type="checkbox"/> Unusually Sensitive Area (USA) – Drinking Water USA_DRINKING_IND	
Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?	
<input type="radio"/> Yes <input type="radio"/> No USA_DRINKING_YES_NO	
<input type="checkbox"/> Unusually Sensitive Area (USA) – Ecological USA_ECOLOGICAL_IND	
Was this HCA identified in the “could affect” determination for this Accident site in the Operator’s Integrity Management Program?	
<input type="radio"/> Yes <input type="radio"/> No USA_ECOLOGICAL_YES_NO	

8. Estimated Property Damage:

8.a Estimated cost of public and non-Operator private property damage

EST_COST_OPER_PAID \$ / / / / / / / / / /

8.b Estimated cost of commodity lost

EST_COST_GAS_RELEASED \$ / / / / / / / / / /

8.c Estimated cost of Operator's property damage & repairs

EST_COST_PROP_DAMAGE \$ / / / / / / / / / /

8.d Estimated cost of Operator's emergency response

EST_COST_EMERGENCY \$ / / / / / / / / / /

8.e Estimated cost of Operator's environmental remediation

EST_COST_ENVIRONMENTAL \$ / / / / / / / / / /

8.f Estimated other costs

EST_COST_OTHER \$ / / / / / / / / / /

Describe **EST_COST_OTHER_DETAILS** _____

8.g Total estimated property damage (sum of above) **TOTAL_COST** \$ / / / / / / / / / /

PART E – ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):

/ / / / / / **ACCIDENT_PSIG**

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

/ / / / / / **MOP_PSIG**

3. Describe the pressure on the system or facility relating to the Accident: (select only one) **ACCIDENT_PRESSURE**

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

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

4.a Did the pressure exceed this established pressure restriction? **EXCEED_RESTRICTION_IND**

☐ Yes ☐ No

4.b Was this pressure restriction mandated by PHMSA or the State? **PHMSA_RESTRICTION_IND**

☐ PHMSA ☐ State ☐ Not mandated

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)

5.a Type of upstream valve used to initially isolate release source: **UPSTREAM_VALVE_TYPE_IND**

☐ Manual ☐ Automatic ☐ Remotely Controlled

5.b Type of downstream valve used to initially isolate release source: **DOWNSTREAM_VALVE_TYPE_IND**

☐ Manual ☐ Automatic ☐ Remotely Controlled
☐ Check Valve

5.c Length of segment initially 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)

- ☐ Changes in line pipe diameter **DIAMETER_CHANGE_IND**
☐ Presence of unsuitable mainline valves **UNSUITABLE_MAINLINE_IND**
☐ Tight or mitered pipe bends **TIGHT_MITERED_IND**
☐ Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.) **OTHER_RESTRICTIONS_IND**
☐ Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools) **EXTRA_THICK_WALL_IND**
☐ 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?

- ☐ No **OPERATION_COMPLICATIONS_IND**
☐ 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**

☐ > 20% SMYS Regulated Trunkline/Transmission

☐ > 20% SMYS Regulated Gathering

☐ ≤ 20% SMYS Regulated Trunkline/Transmission

☐ ≤ 20% SMYS Regulated Gathering

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

☐ No

SCADA_IN_PLACE_IND

☐ Yes ➔

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

☐ Yes

☐ No

SCADA_OPERATING_IND

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

☐ Yes

☐ No

SCADA_FUNCTIONAL_IND

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

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 Accident?

☐ Yes

☐ No

SCADA_CONF_IND

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

☐ No

CPM_IN_PLACE_IND

☐ Yes ➔

7.a Was it operating at the time of the Accident?

☐ Yes

☐ No

CPM_OPERATING_IND

7.b Was it fully functional at the time of the Accident?

☐ Yes

☐ No

CPM_FUNCTIONAL_IND

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

CPM_DETECTION_IND

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

CPM_CONF_IND

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

ACCIDENT_IDENTIFIER

☐ 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

ACCIDENT_DETAILS

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_TYPE

☐ 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)

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 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)

INVESTIGATION_STATUS_DETAILS

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

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

INVEST_SCHEDULE_IND

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

INVEST_NO_SCHEDULE_IND

INVEST_NO_SCHEDULE_IND_DETAILS

☐ Investigation identified no control room issues

INVEST_NO_CONTROL_ROOM_IND

☐ Investigation identified no controller issues

INVEST_NO_CONTROLLER_IND

☐ Investigation identified incorrect controller action or controller error

INVEST_INCORRECT_ACTION_IND

☐ Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response

INVEST_FATIGUE_IND

☐ Investigation identified incorrect procedures

INVEST_INCORRECT_PROCEDURE_IND

☐ Investigation identified incorrect control room equipment operation

INVEST_INCORRECT_CONTROL_IND

☐ Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response

INVEST_MAINT_IND

☐ Investigation identified areas other than those above ➔ Describe:

INVEST_OTHER_IND, INVEST_OTHER_IND_DETAILS

PART F – DRUG & ALCOHOL TESTING INFORMATION	
<p>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?</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Yes ➡ *1.a Specify how many were tested:</p> <p>*1.b Specify how many failed:</p>	<div style="color: red; font-weight: bold;">EMPLOYEE_DRUG_TEST_IND</div> <div style="color: red; font-weight: bold;">NUM_EMPLOYEES_TESTED</div> <div style="color: red; font-weight: bold;">NUM_EMPLOYEES_FAILED</div>
<p>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?</p> <p><input type="radio"/> No</p> <p><input type="radio"/> Yes ➡ *2.a Specify how many were tested:</p> <p>*2.b Specify how many failed:</p>	<div style="color: red; font-weight: bold;">CONTRACTOR_DRUG_TEST_IND</div> <div style="color: red; font-weight: bold;">NUM_CONTRACTORS_TESTED</div> <div style="color: red; font-weight: bold;">NUM_CONTRACTORS_FAILED</div>

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 Accident? **UNDER_CATHODIC_PROTECTION_IND**
 ☐ Yes ⇒ Year protection started: ____ / ____ / ____ / ____ / ____
 ☐ No **CATHODIC_PRO_START_YEAR**

 4.b Was shielding, tenting, or disbonding of coating evident at the point of the Accident? **SHIELDING_EVIDENT**
 ☐ Yes ☐ No

 4.c Has one or more Cathodic Protection Survey been conducted at the point of the Accident? **CATHODIC_SURVEY_TYPE**
 ⇒ ☐ 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 **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**

<input type="checkbox"/> Internal Corrosion <div style="border-left: 1px solid black; border-right: 1px solid black; padding: 5px; margin: 5px 0;"> <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> INT_CORROSIVE_COMMODITY_IND INT_WATER_ACID_IND INT_MICROBIOLOGICAL_IND INT_EROSION_IND INT_OTHER_CORROSION_IND </div> <div style="width: 35%; text-align: center;">⇒</div> </div> </div>	<div style="margin-bottom: 10px;"> 6. Results of visual examination: INT_VISUAL_EXAM_RESULTS <input type="radio"/> Localized Pitting <input type="radio"/> General Corrosion <input type="radio"/> Not cut open <input type="radio"/> Other INT_VISUAL_EXAM_DETAILS </div> <div style="margin-bottom: 10px;"> 7. Cause of corrosion: <i>(select all that apply)</i> <input type="radio"/> Corrosive Commodity <input type="radio"/> Water drop-out/Acid <input type="radio"/> Microbiological <input type="radio"/> Erosion <input type="radio"/> Other INT_CORROSION_TYPE_DETAILS </div> <div style="margin-bottom: 10px;"> 8. The cause(s) of corrosion selected in Question 7 is based on the following: <i>(select all that apply)</i> INT_FIELD_EXAM_BASIS_IND, INT_METALLURGICAL_BASIS_IND <input type="radio"/> Field examination <input type="radio"/> Determined by metallurgical analysis <input type="radio"/> Other INT_OTHER_BASIS_IND, INT_CORROSION_BASIS_DETAILS </div> <div style="margin-bottom: 10px;"> 9. Location of corrosion: <i>(select all that apply)</i> INT_LOW_POINT_PIPE_LOC_IND, INT_ELBOW_LOC_IND, INT_OTHER_LOC_IND <input type="radio"/> Low point in pipe <input type="radio"/> Elbow <input type="radio"/> Other CORROSION_LOCATION_DETAILS </div> <div style="margin-bottom: 10px;"> 10. Was the commodity treated with corrosion inhibitors or biocides? <input type="radio"/> Yes <input type="radio"/> No CORROSION_INHIBITORS </div> <div style="margin-bottom: 10px;"> 11. Was the interior coated or lined with protective coating? <input type="radio"/> Yes <input type="radio"/> No CORROSION_LINING </div> <div style="margin-bottom: 10px;"> 12. Were cleaning/dewatering pigs (or other operations) routinely utilized? <input type="radio"/> Not applicable - Not mainline pipe <input type="radio"/> Yes <input type="radio"/> No CLEANING_DEWATERING </div> <div style="margin-bottom: 10px;"> 13. Were corrosion coupons routinely utilized? <input type="radio"/> Not applicable - Not mainline pipe <input type="radio"/> Yes <input type="radio"/> No CORROSION_COUPONS </div>
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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: API_STD_OUT_OF_SERVICE_IND, API_STD_OUT_OF_SERVICE_YEAR

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

API_STD_IN_SERVICE_IND, API_STD_IN_SERVICE_YEAR

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? COR_INSP_TOOL_COLL_IND
☐ Yes ☐ No

15.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 Tool	<u> </u>	COR_MAGNETIC_FLUX_LEAKAGE_IND, _YEAR
<input type="radio"/> Ultrasonic	<u> </u>	COR_ULTRASONIC_IND, _YEAR
<input type="radio"/> Geometry	<u> </u>	COR_GEOMETRY_IND, _YEAR
<input type="radio"/> Caliper	<u> </u>	COR_CALIPER_IND, _YEAR
<input type="radio"/> Crack	<u> </u>	COR_CRACK_IND, _YEAR
<input type="radio"/> Hard Spot	<u> </u>	COR_HARDSPOT_IND, _YEAR
<input type="radio"/> Combination Tool	<u> </u>	COR_COMBINATION_TOOL_IND, _YEAR
<input type="radio"/> Transverse Field/Triaxial	<u> </u>	COR_TRANSVERSE_FIELD_IND, _YEAR
<input type="radio"/> Other _____	<u> </u>	COR_INSPECTION_OTHER_IND, _YEAR _DETAILS

COR_HYDROTEST_CONDUCTED_IND

16. 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 COR_HYDROTEST_CONDUCTED_YEAR COR_HYDROTEST_PRESSURE

17. Has one or more Direct Assessment been conducted on this segment? DIRECT_INSPECTION_TYPE DIRECT_YES_DIG_YEAR
☐ 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 DIRECT_YES_NO_DIG_YEAR

18. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?
☐ Yes ☐ No COR_NON_DESTRUCTIVE_IND

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:

<input type="radio"/> Radiography	<u> </u>	COR_RADIOGRAPHY_IND, _YEAR
<input type="radio"/> Guided Wave Ultrasonic	<u> </u>	COR_GUIDED_WAVE_IND, _YEAR
<input type="radio"/> Handheld Ultrasonic Tool	<u> </u>	COR_HANDHELD_ULTRA_IND, _YEAR
<input type="radio"/> Wet Magnetic Particle Test	<u> </u>	COR_WET_MAGNETIC_IND, _YEAR
<input type="radio"/> Dry Magnetic Particle Test	<u> </u>	COR_DRY_MAGNETIC_IND, _YEAR
<input type="radio"/> Other _____	<u> </u>	COR_NON_DEST_OTHER_IND, _YEAR, DETAILS _DETAILS

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

<input type="checkbox"/> NATURAL_FORCE_TYPE 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 NF_OTHER_DETAILS
<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 NF_OTHER_DETAILS
<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 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 Accident generated in conjunction with an extreme weather event? ☐ Yes ☐ No

6.a If Yes, specify: (select all that apply) **NF_HURRICANE_IND** ☐ Hurricane **NF_TROPICAL_STORM_IND** ☐ Tropical Storm **NF_TORNADO_IND** ☐ Tornado
☐ Other **NF_OTHER_IND** **NF_EXTREME_WEATHER_DETAILS**

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

<input type="checkbox"/> PARTY_TYPE 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 Accident" (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 Accident? <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><tr><td><input type="radio"/> Magnetic Flux Leakage</td><td>/ / / / /</td></tr><tr><td><input type="radio"/> Ultrasonic</td><td>/ / / / /</td></tr><tr><td><input type="radio"/> Geometry</td><td>/ / / / /</td></tr><tr><td><input type="radio"/> Caliper</td><td>/ / / / /</td></tr><tr><td><input type="radio"/> Crack</td><td>/ / / / /</td></tr><tr><td><input type="radio"/> Hard Spot</td><td>/ / / / /</td></tr><tr><td><input type="radio"/> Combination Tool</td><td>/ / / / /</td></tr><tr><td><input type="radio"/> Transverse Field/Triaxial</td><td>/ / / / /</td></tr><tr><td><input type="radio"/> Other</td><td>/ / / / /</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 Accident? 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 Accident ⇨ Most recent year conducted: / / / / / EX_DIRECT_YES_DIG_YEAR</p> <p><input type="radio"/> Yes, but the point of the Accident was not identified as a dig site ⇨ Most recent year conducted: / / / / / EX_DIRECT_YES_NO_DIG_YEAR</p> <p><input type="radio"/> No</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"/> 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	/ / / / /																		

EX_MAGNETIC_FLUX_LEAKAGE_IND, _YEAR ⇨
EX_ULTRASONIC_IND, _YEAR ⇨
EX_GEOMETRY_IND, _YEAR ⇨
EX_CALIPER_IND, _YEAR ⇨
EX_CRACK_IND, _YEAR ⇨
EX_HARDSHOT_IND, _YEAR ⇨
EX_COMBINATION_TOOL_IND, _YEAR ⇨
EX_TRANSVERSE_FIELD_IND, _YEAR ⇨
EX_INSPECTION_OTHER_IND, _YEAR, _DETAILS ⇨

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 Notification Practices Not Sufficient: (select only one) **ONE_CALL_SUBTYPE**

- ☐ 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) **LOCATING_SUBTYPE**

- ☐ 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_SUBTYPE**

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

☐ One-Call Notification Center Error

☐ Abandoned Facility

☐ Deteriorated Facility

☐ Previous Damage

☐ Data Not Collected

☐ Other / None of the Above (explain) **ROOT_CAUSE_OTHER**

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

<div style="background-color: #f2f2f2; padding: 5px; margin-bottom: 5px;"> OUTSIDE_FORCE_TYPE <input type="checkbox"/> Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Accident </div>	
<div style="background-color: #f2f2f2; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation </div>	VEHICLE_SUBTYPE 1. Vehicle/Equipment operated by: <i>(select only one)</i> <div style="display: flex; justify-content: space-around;"> <input type="radio"/> Operator <input type="radio"/> Operator's Contractor <input type="radio"/> Third Party </div>
<div style="background-color: #f2f2f2; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring </div>	<div style="display: flex; justify-content: space-between;"> OSF_HURRICANE_IND OSF_TROPICAL_STORM_IND OSF_TORNADO_IND </div> 2. Select one or more of the following IF an extreme weather event was a factor: <div style="display: flex; justify-content: space-around;"> <input type="radio"/> Hurricane <input type="radio"/> Tropical Storm <input type="radio"/> Tornado </div> <div style="display: flex; justify-content: space-around;"> <input type="radio"/> Heavy Rains/Flood <input type="radio"/> Other OSF_OTHER_WEATHER_IND </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> OSF_HEAVY_RAINS_IND OSF_OTHER_WEATHER_DETAILS </div>
<div style="background-color: #f2f2f2; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation </div>	
<div style="background-color: #f2f2f2; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> Electrical Arcing from Other Equipment or Facility </div>	
<div style="background-color: #f2f2f2; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> Previous Mechanical Damage NOT Related to Excavation </div> <div style="display: flex; flex-direction: row-reverse;"> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> </div> <div style="display: flex; flex-direction: row-reverse;"> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> <div style="width: 20px; text-align: center;">⇒</div> </div>	<div style="background-color: #f2f2f2; padding: 5px; margin-bottom: 5px;"> Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld. </div> 3. Has one or more internal inspection tool collected data at the point of the Accident? <input type="radio"/> Yes <input type="radio"/> No OSF_INSPECTION_TOOL_COLLECTED_IND 3.a If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <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 _____ </div> <div style="width: 55%;"> <div style="text-align: center;">/ / / / /</div> <div style="text-align: center;">/ / / / /</div> <div style="text-align: center;">/ / / / /</div> <div style="text-align: center;">/ / / / /</div> <div style="text-align: center;">/ / / / /</div> <div style="text-align: center;">/ / / / /</div> <div style="text-align: center;">/ / / / /</div> <div style="text-align: center;">/ / / / /</div> <div style="text-align: center;">/ / / / /</div> </div> </div> <div style="margin-top: 10px;"> 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 OSF_BEFORE_DAMAGE </div> <div style="margin-top: 10px;"> 5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident? HYDROTEST_CONDUCTED_IND <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 40%;"> <input type="radio"/> Yes ⇒ Most recent year tested: _____ Test pressure (psig): _____ </div> <div style="width: 55%;"> <div style="text-align: center;">/ / / / /</div> <div style="text-align: center;">/ / / / /</div> </div> </div> <div style="margin-top: 5px;"> <input type="radio"/> No OSF_DIRECT_INSPECTION_TYPE </div> <div style="margin-top: 10px;"> 6. Has one or more Direct Assessment been conducted on the pipeline segment? <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 40%;"> <input type="radio"/> Yes, and an investigative dig was conducted at the point of the Accident ⇒ Most recent year conducted: _____ </div> <div style="width: 55%;"> <div style="text-align: center;">/ / / / /</div> </div> </div> <div style="margin-top: 5px;"> <input type="radio"/> Yes, but the point of the Accident was not identified as a dig site ⇒ Most recent year conducted: _____ </div> <div style="margin-top: 5px;"> <input type="radio"/> No OSF_DIRECT_YES_NO_DIG_YEAR </div> <div style="margin-top: 10px;"> 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 OSF_NON_DESTRUCTIVE_IND </div> <div style="margin-top: 20px; font-style: italic;"> (This section continued on next page with Question 7.a) </div> </div></div>

OSF_RADIOGRAPHY_IND , _YEAR OSF_GUIDED_WAVE_IND , _YEAR OSF_HANDHELD_ULTRA_IND , _YEAR OSF_WET_MAGNETIC_IND , _YEAR OSF_DRY_MAGNETIC_IND , _YEAR OSF_NON_DEST_OTHER_IND , _YEAR	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: <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 OSF_NON_DEST_DETAILS
<input type="checkbox"/> Intentional Damage	8. Specify: INTENTIONAL_SUBTYPE <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 INTENTIONAL_DETAILS
<input type="checkbox"/> Other Outside Force Damage	9. Describe: OSF_OTHER_DETAILS

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) <input type="checkbox"/> Field Examination <input type="checkbox"/> Determined by Metallurgical Analysis <input type="checkbox"/> Other Analysis OTHER_ANALYSIS_IND, OTHER_ANALYSIS_DETAILS <input type="checkbox"/> Sub-cause is Tentative or Suspected; Still Under Investigation (Supplemental Report required)		
<input type="checkbox"/> FAILURE_TYPE Construction-, Installation-, or Fabrication-related	2. List contributing factors: (select all that apply) <input type="checkbox"/> Fatigue- or Vibration-related: FATIGUE_VIBR_RELATED_1, _2 FAILURE_SUBTYPE_1, _2 <input type="radio"/> Mechanically-induced prior to installation (such as during transport of pipe) <input type="radio"/> Mechanical Vibration <input type="radio"/> Pressure-related <input type="radio"/> Thermal <input type="radio"/> Other FATIGUE_VIBR_RELATED_OTHER_1, _2 <input type="checkbox"/> Mechanical Stress MECHANICAL_STRESS_1, _2 <input type="checkbox"/> Other OTHER_FACTOR_1, _2 OTHER_FACTOR_DETAILS_1, _2	
<input type="checkbox"/> Original Manufacturing-related (NOT girth weld or other welds formed in the field)		
<input type="checkbox"/> Environmental Cracking-related	3. Specify: <input type="radio"/> Stress Corrosion Cracking <input type="radio"/> Sulfide Stress Cracking STRESS_SUBTYPE <input type="radio"/> Hydrogen Stress Cracking <input type="radio"/> Other STRESS_DETAILS	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected. ADDITIONAL_DENT_IND, ADDITIONAL_GOUGE_IND, ADDITIONAL_PIPE_BEND_IND, ADDITIONAL_ARC_BURN_IND, ADDITIONAL_CRACK_IND, ADDITIONAL_LACK_FUSION_IND 4. Additional factors: (select all that apply) <input type="radio"/> Dent <input type="radio"/> Gouge <input type="radio"/> Pipe Bend <input type="radio"/> Arc Burn <input type="radio"/> Crack <input type="radio"/> Lack of Fusion <input type="radio"/> Lamination <input type="radio"/> Buckle <input type="radio"/> Wrinkle <input type="radio"/> Misalignment <input type="radio"/> Burnt Steel ADDITIONAL_LACK_FUSION_IND <input type="radio"/> Other ADDITIONAL_LAMINATION_IND, ADDITIONAL_BUCKLE_IND, ADDITIONAL_WRINKLE_IND, PWF_ADDITIONAL_MISALIGNMENT_IND, ADDITIONAL_BURNT_STEEL_IND, PWF_ADDITIONAL_OTHER_IND, PWF_ADDITIONAL_OTHER_DETAILS		
PWF_INSP_TOOL_COLLECTED_IND 5. Has one or more internal inspection tool collected data at the point of the Accident? <input type="radio"/> Yes <input type="radio"/> No 5.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 Tool <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 PWF_MAGNETIC_FLUX_LEAKAGE_IND , _YEAR PWF_ULTRASONIC_IND , _YEAR PWF_GEOMETRY_IND , _YEAR PWF_CALIPER_IND , _YEAR PWF_CRACK_IND , _YEAR PWF_HARDSPOT_IND , _YEAR PWF_COMBINATION_TOOL_IND , _YEAR PWF_TRANSVERSE_FIELD_IND , _YEAR PWF_INSPECTION_OTHER_IND , _YEAR, _DETAILS		
PWF_HYDROTEST_CONDUCTED_IND 6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident? <input type="radio"/> Yes <input type="radio"/> No Most recent year tested: Test pressure (psig): PWF_HYDROTEST_CONDUCTED_YEAR PWF_HYDROTEST_PRESSURE		
PWF_DIRECT_INSPECTION_TYPE 7. Has one or more Direct Assessment been conducted on the pipeline segment? <input type="radio"/> Yes, and an investigative dig was conducted at the point of the Accident <input type="radio"/> Most recent year conducted: <input type="radio"/> Yes, but the point of the Accident was not identified as a dig site <input type="radio"/> Most recent year conducted: <input type="radio"/> No PWF_DIRECT_YES_NO_DIG_YEAR		
PWF_NON_DEST_IND 8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002? <input type="radio"/> Yes <input type="radio"/> 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: <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 PWF_RADIOGRAPHY_IND , _YEAR PWF_GUIDED_WAVE_IND , _YEAR PWF_HANDHELD_ULTRA_IND , _YEAR PWF_WET_MAGNETIC_IND , _YEAR PWF_DRY_MAGNETIC_IND , _YEAR PWF_NON_DEST_OTHER_IND , _YEAR , _DETAILS		

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>CONTROL_VALVE_IND, INSTRUMENTATION_IND, SCADA_IND, COMMUNICATIONS_IND, BLOCK_VALVE_IND</p> <p>1. Specify: <i>(select all that apply)</i> CHECK_VALVE_IND, RELIEF_VALVE_IND, POWER_FAILURE_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"/> Stopple/Control Fitting <input type="radio"/> ESD System Failure ESD_SYSTEM_FAILURE_IND <input type="radio"/> Other OTHER_CONTROL_RELIEF_IND, OTHER_CONTROL_RELIEF_DETAILS </p>
<p><input type="checkbox"/> Pump or Pump-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</p> <p> <input type="radio"/> Appurtenance 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</p> <p> <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 pump seal) or Packing</p> <p> <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 Pump), Tank Plate, or other Material</p>	
<p><input type="checkbox"/> Other Equipment Failure</p>	<p>5. Describe: 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 commodity **ADDITIONAL_BREAKDOWN_IND**
 - ☐ Valve vault or valve can contributed to the release **ADDITIONAL_VALVE_IND**
 - ☐ Alarm/status failure **ADDITIONAL_ALARM_IND**
 - ☐ Misalignment **IEF_ADDL_MISALIGNMENT_IND**
 - ☐ Thermal stress **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"/> Tank, Vessel, or Sump/Separator Allowed or Caused to Overflow or Overflow	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 OVERFLOW_OTHER_DETAILS
<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: OPERATION_DETAILS

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

3. Was this Accident 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 Accident: **CATEGORY_TYPE**
- ☐ 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 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)? **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 Accident Cause - *only one sub-cause can be picked from shaded left-hand column

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

PART H – NARRATIVE DESCRIPTION OF THE ACCIDENT	<i>(Attach additional sheets as necessary)</i>
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(Attach additional sheets as necessary)

NARRATIVE

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

PART I – PREPARER AND AUTHORIZED SIGNATURE

PREPARER NAME

Preparer's Name (type or print) _____

PREPARER_TITLE

Preparer's Title (type or print)

PREPARER_EMAIL

Preparer's E-mail Address

AUTHORIZER_NAME

Authorized Signer's Name _____

AUTHORIZER TITLE

Authorized Signer's Title

PREPARER TELEPHONE

Preparer's Telephone Number

PREPARER FAX

Preparer's Facsimile Number

PREPARED_

Date _____

AUTHORIZER TELEPHONE

Authorized Signer Telephone Number

AUTHORIZER_EMAIL

Authorized Signer's E-mail Address

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, non-HVL loss >= 50bbls, HVL loss >= 5bbls, then SIGNIFICANT='YES', else SIGNIFICANT='NO'.</i>
IYEAR	<i>Year accident occurred, derived from accident date</i>
NET_LOSS_BBLs	<i>UNINTENTIONAL_RELEASE_BBLs – RECOVERED_BBLs</i>
EST_COST_OPER_PAID_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_ENVIRONMENTAL_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
EST_COST_OTHER_CURRENT	<i>Converted Property Damage to Current Year dollars</i>
TOTAL_COST_IN84	<i>Converted Property Damage to 1984 dollars</i>
TOTAL_COST_CURRENT	<i>Converted Property Damage to Current Year dollars</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>
SPILL_TYPE_CATEGORY	<i>Spill type category by PHMSA for accident trending; If there was fatality, injury, fire, explosion, water contamination, total property damage > \$50K, or unintentional loss >= 5bbls, then SPILL_TYPE_CATEGORY='LARGE', else SPILL_TYPE_CATEGORY='SMALL'.</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>