

A10. Were there fatalities? Yes No

A11. Were there injuries requiring inpatient hospitalization? Yes No

If Yes, specify the number in each category:

If Yes, specify the number in each category:

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

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

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

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

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

- Operator employee
- Contractor working for the Operator

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

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

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

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

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

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

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

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

- Yes
- No
- Explain: _____

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

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

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

*Supplemental Report required

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

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

If No, skip A18b. and A18c.

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

A18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication / / / Hour Month Day Year

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

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

Other mandatory text field

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

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

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

- Carbon Steel
- Material other than Carbon Steel ⇒ Specify: _____

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

- Mechanical Puncture ⇒ Approx. size: / / / / / in. (axial) by / / / / / in. (circumferential)
- Leak ⇒ Select Type: Pinhole Crack Connection Failure Seal or Packing Other
- Rupture ⇒ Select Orientation: Circumferential Longitudinal Other _____
Approx. size: / / / / / in. (widest opening) by / / / / / in. (length circumferentially or axially)
- Overfill or Overflow
- Other ⇒ Describe: _____

PART D – ADDITIONAL CONSEQUENCE INFORMATION

D1. Wildlife impact: Yes No

D1a If Yes, specify all that apply:

- Fish/aquatic
- Birds
- Terrestrial

D2. Soil contamination: Yes No

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

D4. Anticipated remediation: Yes No (not needed)

D4a. If Yes, specify all that apply:

- Surface water Groundwater Soil Vegetation Wildlife

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

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

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

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

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

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

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

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

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

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

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

- Yes
- No ⇨ Which physical features limit tool accommodation? *(select all that apply)*

- Changes in line pipe diameter
- Presence of unsuitable mainline valves
- Tight or mitered pipe bends
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)
- Other ⇨ Describe: _____

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

- No
- Yes ⇨ Which operational factors complicate execution? *(select all that apply)*

- Excessive debris or scale, wax, or other wall build-up
- Low operating pressure(s)
- Low flow or absence of flow
- Incompatible commodity
- Other ⇨ Describe: _____

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

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

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

- No
- Yes ⇨ E9a. Was it operating at the time of the Accident? Yes No

E9b. Was it fully functional at the time of the Accident? Yes No

E9c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the initial indication of the Accident? Yes No

E9d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmed discovery of the Accident? Yes No

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

- No
- Yes ⇨ E10a. Was it operating at the time of the Accident? Yes No

E10b. Was it fully functional at the time of the Accident? Yes No

E10c. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the initial indication of the Accident? Yes No

E10d. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmed discovery of the Accident? Yes No

E11. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident? (select only one)

- Yes, but the investigation of the control room and/or controller actions has not yet been completed by the Operator (Supplemental Report required)
- No, the facility was not monitored by a controller(s) at the time of the Accident
- No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)

-
- Yes, specify investigation result(s): (select all that apply)
 - Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue
 - Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator) and other factors associated with fatigue (provide an explanation for why not)

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

PART F – DRUG & ALCOHOL TESTING INFORMATION

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

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

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

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

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 _____
- 2a. If 2 is Stray Current, specify Alternating Current Direct Current AND
- 2b. Describe the stray current source: _____
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*
 - Field examination Determined by metallurgical analysis
 - Other _____
4. Was the failed item buried or submerged?
 - Yes ⇒ 4a. Was failed item considered to be under cathodic protection at the time of the Accident?
 - Yes ⇒ Year protection started: / / / / / /
 - No
 - 4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?
 - Yes No
 - 4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident? *(select all that apply)*
 - Yes, CP Annual Survey ⇒ Most recent year conducted: / / / / /
 - Yes, Close Interval Survey ⇒ Most recent year conducted: / / / / /
 - Yes, Other CP Survey ⇒ Most recent year conducted: / / / / /
 - Describe other CP survey: _____
 - No
 - No ⇒ 4d. Was the failed item externally coated or painted? Yes No
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?
 - Yes No N/A Bare/Ineffectively Coated Pipe

Internal Corrosion

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

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

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

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

G3 – Excavation Damage - *only one sub-cause can be picked from shaded left-hand column	
<input type="checkbox"/> Excavation Damage by Operator (First Party)	
<input type="checkbox"/> Excavation Damage by Operator's Contractor (Second Party)	
<input type="checkbox"/> Excavation Damage by Third Party	
<input type="checkbox"/> Previous Damage due to Excavation Activity	

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

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

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

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

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

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

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

- 5a. Excessive Speed
- 5b. Reckless Driving
- 5c. Driving Under the Influence
- 5e. Other, describe: _____

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

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

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

9. Where did the vehicle travel from to hit the pipeline facility? (select only one)
 Roadway Driveway Parking Lot Loading Dock Off-Road

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

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

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

- 11a. Bollards/Guard Posts
- 11b. Barricades – include Jersey barriers and fences in instructions
- 11c. Guard Rails
- 11d. Other, describe: _____

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", "Weld", or "Tank/Vessel".
		*Only one sub-cause can be picked from shaded left-hand column
1. The sub-cause selected below is based on the following: <i>(select all that apply)</i>		
<input type="checkbox"/> Field Examination <input type="checkbox"/> Determined by Metallurgical Analysis <input type="checkbox"/> Other Analysis _____ <input type="checkbox"/> Sub-cause is Tentative or Suspected; Still Under Investigation (<i>Supplemental Report required</i>)		
<input type="checkbox"/> Design-, Construction-, Installation-, or Fabrication-related	2. List contributing factors: <i>(select all that apply)</i>	
<input type="checkbox"/> Original Manufacturing-related (NOT girth weld or other welds formed in the field)	<input type="checkbox"/> Fatigue- or Vibration-related: <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 _____ <input type="checkbox"/> Mechanical Stress <input type="checkbox"/> Other _____	
<input type="checkbox"/> Environmental Cracking-related	3. Specify: <input type="radio"/> Stress Corrosion Cracking <input type="radio"/> Sulfide Stress Cracking <input type="radio"/> Hydrogen Stress Cracking <input type="radio"/> Hard Spot <input type="radio"/> 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: _____

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

G7 - Incorrect Operation - *only one sub-cause can be picked from shaded left-hand column	
<input type="checkbox"/> Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage	
<input type="checkbox"/> Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	1. Specify: <input type="radio"/> Valve misalignment <input type="radio"/> Incorrect reference data/calculation <input type="radio"/> Miscommunication <input type="radio"/> Inadequate monitoring <input type="radio"/> Other _____
<input type="checkbox"/> Valve Left or Placed in Wrong Position, but NOT Resulting in a Tank, Vessel, or Sump/Separator Overflow or Facility Overpressure	
<input type="checkbox"/> Pipeline or Equipment Overpressured	
<input type="checkbox"/> Equipment Not Installed Properly	
<input type="checkbox"/> Wrong Equipment Specified or Installed	
<input type="checkbox"/> Other Incorrect Operation	2. Describe: _____

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

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

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

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

- Construction
- Commissioning
- Decommissioning
- Right-of-Way activities
- Routine maintenance
- Other maintenance
- Normal operating conditions
- Non-routine operating conditions (abnormal operations or emergencies)

5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program? Yes No

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

- Yes, they were qualified for the task(s)
- No, but they were performing the task(s) under the direction and observation of a qualified individual
- No, they were not qualified for the task(s) nor were they performing the task(s) under the direction and observation of a qualified individual

G8 – Other Accident Cause - *only one sub-cause can be picked from shaded left-hand column	
<input type="checkbox"/> Miscellaneous	1. Describe: _____
<input type="checkbox"/> Unknown	2. Specify: <input type="radio"/> Investigation complete, cause of Accident unknown. Mandatory comment field: _____ <input type="radio"/> Still under investigation, cause of Accident to be determined* (*Supplemental Report required)

PART J – COMPLETED INTEGRITY INSPECTIONS

Complete the following if the “Item Involved in Accident” (from PART C, Question 3) is Pipe or Weld and the “Cause” (from Part G) is: **Corrosion (any subCause in Part G1); or Previous Damage due to Excavation Activity (subCause in Part G3); or Previous Mechanical Damage NOT Related to Excavation (subCause in Part G4); or Material Failure of Pipe or Weld (any subCause in Part G5)**

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

- Yes No

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

Axial Magnetic Flux Leakage

Most recent run Year: _____

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

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

Other Describe: _____

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

Other Describe: _____

Previous run Year: _____

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

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

Other Describe: _____

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

Other Describe: _____

Circumferential/Transverse Wave Magnetic Flux Leakage

Most recent run Year: _____

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

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

Other Describe: _____

Previous run Year: _____

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

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

Other Describe: _____

Ultrasonic

Most recent run Year: _____

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

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

Other Describe: _____

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

Standard Resolution Other Describe: _____

Previous run Year: _____

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

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

Other Describe: _____

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

Standard Resolution Other Describe: _____

- Geometry/Deformation
 - Most recent run Year: _____
 - Most recent run Propulsion Method (select only one): Free Swimming Tethered
 - Most recent run Resolution (select only one): High Resolution Standard Resolution
 Other Describe: _____
 - Most recent run Measurement Cups (select only one): Inside ILI Cups No Cups
 - Previous run Year: _____
 - Previous run Propulsion Method (select only one): Free Swimming Tethered
 - Previous run Resolution (select only one): High Resolution Standard Resolution
 Other Describe: _____
 - Previous run Measurement Cups (select only one): Inside ILI Cups No Cups
- Electromagnetic Acoustic Transducer (EMAT)
 - Most recent run Year: _____
 - Most recent run Propulsion Method (select only one): Free Swimming Tethered
 - Previous run Year: _____
 - Previous run Propulsion Method (select only one): Free Swimming Tethered
- Cathodic Protection Current Measurement (CPCM)
 - Most recent run Year: _____
 - Most recent run Propulsion Method (select only one): Free Swimming Tethered
 - Previous run Year: _____
 - Previous run Propulsion Method (select only one): Free Swimming Tethered
- Other, specify tool: _____
 - Most recent run Year: _____
 - Most recent run Propulsion Method (select only one): Free Swimming Tethered
 - Previous run Year: _____
 - Previous run Propulsion Method (select only one): Free Swimming Tethered

Answer J1.b only when the cause is:

**Previous Damage due to Excavation Activity (subCause in Part G3); or
Previous Mechanical Damage NOT Related to Excavation (subCause in Part G4)**

J1b. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained? Yes No

J2. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?
(initial post construction pressure test is NOT reported here)

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

J3. Has 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

If J3 is Yes, J3a. For each type, indicate the year of the most recent assessment:

External Corrosion Direct Assessment (ECDA) / / / / /
Other, specify type: _____ / / / / /

J4. Has one or more non-destructive examination been conducted prior to the Accident at the point of the Accident since January 1, 2002?

Yes No

J4a. If Yes, for each examination conducted, 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, specify type _____ / / / / /

PART K – CONTRIBUTING FACTORS

The Apparent Cause of the accident is contained in Part G. Do not report the Apparent Cause again in this Part K. If Contributing Factors were identified during a root cause analysis, select all that apply below and explain each in the Narrative:

External Corrosion

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

Internal Corrosion

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

Natural Forces

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

Excavation Damage

- Excavation Damage by Operator (First Party)
- Excavation Damage by Operator's Contractor (Second Party)
- Excavation Damage by Third Party
- Previous Damage due to Excavation Activity

Other Outside Force

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

Pipe/Weld Failure

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

Equipment Failure

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

Incorrect Operation

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

