DOTUS Department of TransportationPHMSAPipeline and Hazardous Materials Safety AdministrationOPSOffice of Pipeline Safety<br/>Eastern Region

Principal Investigator	Alex Dankanich
Region Director	Byron Coy
Date of Report	November 12, 2014
Subject	Failure Investigation Report – Buckeye Macungie Tank 228 Overfill

#### **Operator, Location, & Consequences**

Date of Failure	June 17, 2012
Commodity Released	Gasoline
City/County & State	Emmaus, Lehigh County, Pa.
OpID & Operator Name	1845 Buckeye Partners, LP
Unit # & Unit Name	321 Macungie,
SMART Activity #	140297
Milepost / Location	Macungie Tank Farm, 5131 Buckeye Road, Emmaus, PA 18049
Type of Failure	Overfill of Atmospheric Low Pressure Breakout Tank
Fatalities	None
Injuries	None
Description of area impacted	Tank Dike Containment Area
Total Costs	\$87,000

#### **Executive Summary**

At approximately 06:00 hours on Sunday June 17, 2012, Tank 228 in the Buckeye Macungie Station located in Emmaus, Lehigh County, Pennsylvania, was overfilled. Tank 228 is designated as a break-out tank and is thus regulated under CFR 49, Part 195.

The overflow was caused by inaccurate calibration of the level gauging and alarm system on Tank 228. As a result, the Tank Side Gauge was reading approximately 18 inches lower than the actual product level in the tank. During the process of filling the tank on June 17, the control room operator received a "Safe Fill" and "Independent Hi-Hi Alarm" indicating that the safe fill level in the tank had been exceeded. Product flow was diverted to another tank. Shut down and volume calculations were conducted, which indicated a safe fill level and therefore a field inspection of the tank was not

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immediately performed. The extent of the overflow situation was not identified until the morning of June 18, when personnel smelled an odor of gasoline and noticed product staining near the vents on Tank 228.

Approximately 100 barrels of gasoline was released into tank dike area on Operator-controlled property. Tank 228 is located in a designated high consequence area (HCA). There were no injuries or fatalities, evacuations, or supply disruptions as a result of the incident.

An inspector from PHMSA Eastern Region was dispatched to the location on August 21, 2012, conduct an investigation into the cause of the release.

#### System Details

The Buckeye Macungie Terminal facility, located in Macungie, PA, consists of 27 breakout tanks that are regulated under CFR 49, Part 195 of the code of Federal Regulations (Appendix A-page 1-2). The terminal facility receives and temporarily stores refined products for delivery to market by pipeline and trucks. Line 620 supplies refined product from the Linden, NJ, station into the Macungie Station. At the Macungie station, product can either be routed to breakout tanks, or bypass the station and continue to other downstream storage locations or sent directly to customers. The outbound line 714 takes product from the Macungie station to the Sinking Springs Station and is controlled by the Breinigsville Control Center personnel. The Breinigsville control center has SCADA control over the entire Buckeye pipeline system and receives alarms that are announced at the various Buckeye Terminal facilities.

Tank 228 is an atmospheric low pressure breakout tank measuring 110 feet in diameter by 48 feet high, and it has an internal floating roof and a steel cone roof (Appendix Apage 3-4). Tank 228 was constructed in 1974 and is equipped with a tank level alarm system comprised of a GSI system and Hi-Hi Level Switch. The GSI is a softwarebased system that receives data from the tank side gauge, encoder, and transmitter mounted on the tank. The Hi-Hi Level Switch is located on the roof of the tank.



# **Events leading up to the Failure**

Prior to the tank overflow that was discovered on June 17, 2012, Tank 228 was in normal service. Below is a summary of the events. A complete timeline can be found in Appendix D.

- a. June 16, 2012: The tank was receiving product from Line 620.
- b. June 17, 2012:
  - i. 05:50: The Macungie Night Shift Operator was preparing to swing the tank switch valve when he heard the Hi-Hi level alarm.
  - ii. 05:52: The alarm was received into SCADA and acknowledged by the Control Center Desk 13 Day Controller (CC13) in the Breinigsville SCADA control center. The Macungie night operator made a tank swing in the manifold from Tank 228 to Tank 222.
  - iii. 05:53: "Safe Fill Alarm" for Tank 228 was acknowledged by the Controller.
  - iv. 05:55: Tank 228 status changed to inactive.

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- v. 05:55-06:15: The CC13 Controller called the Macungie Night Shift Operator to check tank volume calculations. The Macungie Night Shift Operator acknowledged the "Safe Fill Alarm."
- c. June 17, 2012, 06:50 to 15:00:
  - i. 06:50: Shift change. The Macungie Night Shift Operator reviewed the "Safe Fill Alarm" with the incoming day operator, including the reading on the GSI computer, which showed 3000 barrels of space remaining in the tank before overfill.
  - ii. 11:30: The Control Center (CC) received an odor complaint on Tank Farm Road. The CC Shift Lead called the Macungie Day Operator to report the odor complaint. The CC Shift Lead reminded the Macungie Day Operator about the Hi-Hi Alarm on Tank 228.
  - iii. 12:00: The CC Shift Lead and Controller at CC13 shut down Line 620 as a result of the odor complaint. The Macungie Day Operator did a drive by investigation of Tank 228 and did NOT notice product coming out of the tank vents or smell an odor.
  - iv. 12:30: The Macungie Day Operator sent a "chit chat" message to the CC Shift Lead and Controller at CC13 that everything appeared to be good throughout the tank farm. The CC Shift Lead called the Macungie Day Operator to confirm the report.
  - v. 13:30: Macungie Station returned to normal operations and returned Line 620 to service.
  - vi. 15:00: The Macungie Afternoon Operator came on shift and was informed by the Macungie Day Operator that there was an odor complaint during the day. The Macungie Afternoon Operator checked the Tank Book and saw that Tank 228 was close to Safe Fill Height. The Macungie Afternoon Operator was on his way to Tank 222, which is near Tank 228. No odor or release was noticed at Tank 222. The Macungie Afternoon Operator did not visit Tank 228.
- d. June 18, 2012:
  - i. 09:00: A Macungie pipeliner went to Tank 228 to prepare an outbound product movement. The pipeliner noticed an odor of gasoline. He inspected the tank shell gate valve pit and discovered product in the pit. He called the Macungie Day Shift Operator to report a potential release. Responding personnel noticed staining by the tank shell vents.
  - ii. 14:14: The release was reported to the NRC and PA DEP (Appendix B NRC 1014928).

#### **Emergency Response**

On June 18, 2012, at approximately 09:00, a Macungie pipeliner smelled gasoline at the base of Tank 228 and discovered product in the Tank 228 valve pit. The pipeliner called Macungie station to report a potential release. When additional personnel arrived on site, product staining was noticed on the tank shell near the tank overflow vents. Buckeye's Emergency procedures and OPA plan were successfully implemented in response to the release. There were no fires or injuries as a result of the event, and the environmental impact was minimal due to product containment. An estimated 100 barrels of gasoline was released into the containment dike area surrounding Tank 228. It has been estimated that approximately 26.5 barrels were recovered during the cleanup operation. Notification to the NRC was made on June 18, 2012, at 14:18. The Pennsylvania DEP was also notified.

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#### Summary of Return-to-Service

Upon completion of the spill remediation activities, the tank gauge level and alarm levels for Tank 228 were recalculated and adjusted to the appropriate levels. Tank 228 was then placed back in service. All other tanks at the Macungie tank farm were also checked to ensure gauge and alarm level accuracy. Monitoring wells have been installed in the tank dike as part of the remediation effort. No other remediation activities are planned.

In addition to the corrective actions taken immediately following the incident, Buckeye has identified additional corrective actions to be implemented to prevent reoccurrence. These actions are outlined in below and can also be found in Appendix D.

#### Additional Corrective Actions Identified by Buckeye:

- 1. Tank Gauging Procedures
  - a. Reinstate Monthly Hand Gauging of all tanks at Macungie Station.
  - b. Reinstate hand gauging to verify accurate gauge level during maintenance events on the Tank Gauging system at Macungie Station.
- 2. Check and evaluate all individual tank gauging systems at Macungie Station to ensure proper tank levels are being read through to GSI and SCADA.
- 3. Include Independent Hi-Hi Alarm Setting Calculation Guidance in 195 O&M Manual F-37 as policy and procedure for checking and/or re-setting Hi-Hi Alarms.
- 4. Ensure that Macungie Station Operations Personnel are trained on OQ task 412, Tank Operations.

#### **Investigation Details**

PHMSA Eastern Region received NRC report #1014928 on June 18, 2012, regarding an unintentional overfill of breakout Tank 228 at the Buckeye Macungie PA tank farm. On August 21, 2012, a formal accident investigation was initiated by PHMSA to determine the cause of the incident. Approximately 100 barrels of gasoline overflowed from the tank vents at the top of the tank during filling of the tank that took place on June 17, 2012. The overfill was not discovered until Buckeye personnel noticed an odor on June 18, 2012, while they were preparing to tap water from Tank 228. The operator inspected the tank shell gate valve pit and discovered product in the pit.

The investigation revealed that the set points of alarms and the tanks gauging system had not been accurately set or checked for at least one year. The tank side gauge and the GSI tracking system were reading about 18 inches lower than actual levels in the tank. The independent Hi-Hi magnetrol alarm level was set 7 inches too high. As a result, the tank gauge was showing the tank level to be at "max safe fill" at the same time the Hi-Hi alarm was received and the tank was in an overfill condition.

During the course of the investigation, PHMSA reviewed all applicable records and procedures related to the accident. The operating history for Tank 228 is provided below.

Four employees directly involved with the incident were submitted for Drug and Alcohol testing immediately following the accident per DOT Drug and Alcohol Testing Regulations. The results of the testing were negative.

#### Tank 228 Operating History:

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1974 – Tank 228 was constructed and placed into service. Tank 228 was last strapped (actual volume calculated) at this time. Over-fill height was established at 49'7".

1997 – Independent Magnetrol Hi-Hi Alarm System installed on tank. Hi-Hi Alarm set at 49'2".

2003 – Secondary seal installed on tank. This addition lowers the tank overfill level by 5 inches to 49'2". The Hi-Hi alarm set point was recalculated to be 48'7", which was 7 inches lower than the 49'2" set point established in 1997. There were no records available to confirm that the Hi-Hi level switch was reset to 48'7".

2010 – April – A change order (651345) was initiated for line 620. Safety control devices were adjusted to account for the rate change and set for 9,500 BPH (Barrels Per Hour).

2010 – May – The Hi-Hi switch on Tank 228 was lowered 2" to a new Hi-Hi Alarm Level of 48'5"

2012 – January 13 – Maintenance work was performed on the Gauging System on Tank 228 due to icing issues related to the gauge tape/side gauge. There were no records to indicate that Hand Gauging of the tank was performed, as required per procedures, to ensure the accuracy of the Gauging System.

2012 – March 31 – A measurement discrepancy of 1,299 barrels was identified on Tank 228 following the tank refill with summer grade product on April 1, 2012. This volume discrepancy was not investigated as required per Buckeye's Measurement Manual A-01, 16.1 Transportation Stock Variations.

2012 – April 13 – Side Gauge Rocker Knob and Negator Motor was replaced. There were no records to indicate that Hand Gauging of the tank was performed, as required per procedures, to ensure the accuracy of the Gauging System.

2012 – June 8 – The encoder and transmitter were changed on the tank gauging system. There were no records to indicate that Hand Gauging of the tank was performed, as required per procedures, to ensure the accuracy of the Gauging System.

2012 – June – As part of the Tank Overfill Investigation conducted by Buckeye, the Hi-Hi Alarm setting was measured at 49'0". Buckeye has confirmed that this setting was 7 inches above the correct setting of 48'5".

#### **Findings and Contributing Factors**

As a result of the accident investigation conducted by PHMSA, it was determined that the cause of the accident was due to Incorrect Operation pertaining to the failure to accurately calibrate the level gauging and alarm system on Tank 228. The investigation revealed that monthly tank gauging was not being conducted as outlined in Section A-01 and subsection 11.1 of the Measurement Manual.

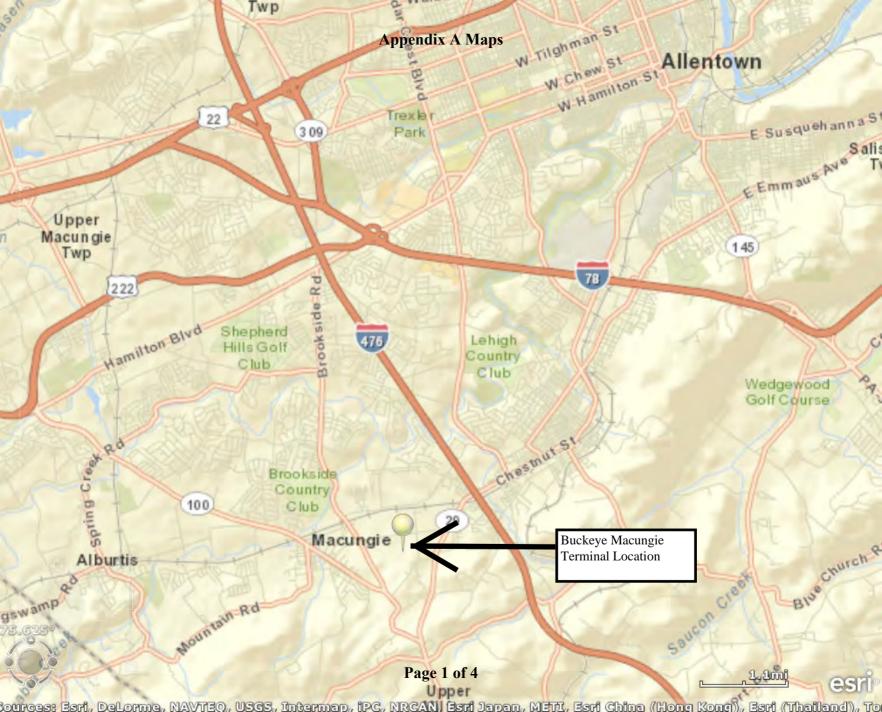
The investigation also revealed that the Macungie Terminal recently discontinued the practice of hand gauging tank volumes when side gauge maintenance activities occur. This recent practice is inconsistent with the requirements outlined in Buckeye's O & M Manual (Appendices E and F).

In addition, the measurement discrepancy of 1,299 barrels that was identified on March 31, 2012, during a refill operation on Tank 228, was not investigated. Buckeye's Measurement Manual A-01, Section 16.1 (Transportation Variations) requires that variations greater than +/-0.25% for pipeline and marine receipts shall be investigated and the results documented (Appendix G).

[Failure Date 6/17/2012]

Appendix	Description
A	140297 Appendix A Maps
В	140297 Appendix B NRC Report #1014928 6-18-12
С	140297 Appendix C 7000-1 Accident report 20120215-16856 - Final
D	140297 Appendix D Tank 228 Incident Investigation Report 08202012
E	140297 Appendix E_Buckeye Partners, LP H-09 – Tank Alarms and Gauging Equipment, Issued 910
F	140297 Appendix F_ Buckeye Partners, LP F-35 Tank Alarms and Gauging Equipment Issued 1211
G	140297 Appendix G_Measurement Manual, A-01 – Measurement Issued 1111

# Appendix D through G Removed File Available at PHMSA



Buckeye Macungie Tank Farm: Macungie, PA

Tank #228

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**Appendix A Maps** 

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Buckeye Macungie Terminal Breakout Tank 228







Appendix A Maps

Staining on side of tank 228 as a result of overflowing the tank.

\*\*\* For Public Use \*\*\* Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws Incident Report # 1014928 INCIDENT DESCRIPTION \*Report taken at 14:18 on 18-JUN-12 Incident Type: STORAGE TANK Incident Cause: UNKNOWN Affected Area: The incident was discovered on 18-JUN-12 at 11:00 local time. Affected Medium: OTHER SECONDARY CONTAINMENT SUSPECTED RESPONSIBLE PARTY Organization: BUCKEYE PARTNERS LP EMMAUS, PA 18049 Type of Organization: PRIVATE ENTERPRISE INCIDENT LOCATION 51231 BUCKEYE RD. County: LEHIGH City: EMMAUS State: PA Zip: 18049 Latitude: 40° 31' 04" N Longitude: 075° 32' 03" W RELEASED MATERIAL(S) CHRIS Code: GAS Official Material Name: GASOLINE: AUTOMOTIVE (UNLEADED) Also Known As: Qty Released: 300 BARREL(S) DESCRIPTION OF INCIDENT CALLER IS REPORTING A DISCHARGE OF GASOLINE ONTO THE SOIL. CALLER STATED THAT THERE WAS AN OVERFLOW FROM A TANK. INCIDENT DETAILS Description of Tank: Tank Above/Below Ground: ABOVE Transportable Container: NO Tank Regulated: YES Tank Regulated By: DOT Tank ID: 228 Capacity of Tank: Actual Amount: DAMAGES Fire Involved: NO Fire Extinguished: UNKNOWN INJURIES: NO Hospitalized: Empl/Crew: Passenger: FATALITIES: NO Empl/Crew: Passenger: Occupant: EVACUATIONS: NO Who Evacuated: Radius/Area: Damages: NO Length of Direction of Closure Type Description of Closure <u>Closure</u> <u>Closure</u> Air: N Road: Ν Waterway: Ν

Appendix B NRC Report #1014928 6-18-12

NATIONAL RESPONSE CENTER 1-800-424-8802

Major Artery: <sup>N</sup> Passengers Transferred: NO Environmental Impact: UNKNOWN Media Interest: NONE Community Impact due to Material:

REMEDIAL ACTIONS CLEAN UP CREW ON-SITE, CLEAN UP UNDERWAY, CONTRACTOR HAS BEEN HIRED, MATERIAL SPILLED INTO SECOND CONTAINMENT. Release Secured: YES Release Rate: Estimated Release Duration:

#### **WEATHER**

Weather: OVERCAST, °F

Ν

#### ADDITIONAL AGENCIES NOTIFIED

Federal: State/Local: State/Local On Scene: State Agency Number:

#### NOTIFICATIONS BY NRC

ATLANTIC STRIKE TEAM (MAIN OFFICE) 18-JUN-12 14:28 DHS PROTECTIVE SECURITY ADVISOR (PSA DESK) 18-JUN-12 14:28 DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE) 18-JUN-12 14:28 U.S. EPA III (MAIN OFFICE) 18-JUN-12 14:30 FLD INTEL SUPPORT TEAM PHILADELPHIA (MAIN OFFICE) 18-JUN-12 14:28 NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE) 18-JUN-12 14:28 NJ STATE POLICE (MARINE SERVICES BUREAU) 18-JUN-12 14:28 NOAA RPTS FOR PA (MAIN OFFICE) 18-JUN-12 14:28 PA STATE POLICE (BUREAU OF CRIMINAL INVESTIGATION) 18-JUN-12 14:28 PA EMERG MGMT AGCY (MAIN OFFICE) 18-JUN-12 14:28 ADDITIONAL INFORMATION

CALLER HAD LIMITED INFORMATION AT THIS TIME.

\*\*\* END INCIDENT REPORT # 1014928 \*\*\*

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a exceed \$100,000 for each violation for each day that such violation persists except th penalty shall not exceed \$1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 01/3	1/2014
<b>A</b>	Original Report Date:	07/16/201	2
U.S Department of Transportation	No.	20120215 - 1	
Pipeline and Hazardous Materials Safety Administration		(DOT Use Or	
ACCIDENT REPORT - HAZ PIPELINE SYS		)	
A federal agency may not conduct or sponsor, and a person is not required to respon with a collection of information subject to the requirements of the Paperwork Reducti OMB Control Number. The OMB Control Number for this information collection is 21 to be approximately 10 hours per response (5 hours for a small release), including th completing and reviewing the collection of information. All responses to this collectio burden estimate or any other aspect of this collection of information, including sugge Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, V	on Act unless that collec 37-0047. Public reportir e time for reviewing instr n of information are mar stions for reducing this b	tion of information displays a ong for this collection of informa ructions, gathering the data ne idatory. Send comments rega	current valid tion is estimated eded, and urding this
INSTRUCTIONS			
<b>Important:</b> Please read the separate instructions for completing this form before you examples. If you do not have a copy of the instructions, you can obtain one from the <u>http://www.phmsa.dot.gov/pipeline</u> .			ovide specific
PART A - KEY REPORT INFORMATION			
Report Type: (select all that apply)	Original:	Supplemental:	Final:
Last Revision Date:	08/24/2012	Yes	Yes
Operator's OPS-issued Operator Identification Number (OPID):	1845		
2. Name of Operator	BUCKEYE PARTN	ERS, LP	
3. Address of Operator:		- /	
3a. Street Address	FIVE TEK PARK		
3b. City	BREINIGSVILLE		
3c. State	Pennsylvania		
3d. Zip Code	18031		
4. Local time (24-hr clock) and date of the Accident:	06/17/2012 05:52		
5. Location of Accident:	40.544000		
Latitude:	40.514382 -75.532567		
Longitude: 6. National Response Center Report Number (if applicable):	1014928		
<ol> <li>National Response Center Report Number (in applicable).</li> <li>Local time (24-hr clock) and date of initial telephonic report to the National Response Center (if applicable):</li> </ol>	06/18/2012 14:18		
8. Commodity released: (select only one, based on predominant volume released)	Refined and/or Peter Liquid at Ambient C	oleum Product (non-HVL)	which is a
- Specify Commodity Subtype:	Gasoline (non-Etha		
- If "Other" Subtype, Describe:		- /	
<ul> <li>If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:</li> </ul>			
<ul> <li>If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend (e.g. B2, B20, B100):</li> </ul>			
9. Estimated volume of commodity released unintentionally (Barrels):	100.00		
<ol> <li>Estimated volume of intentional and/or controlled release/blowdown (Barrels):</li> </ol>	100.00		
11. Estimated volume of commodity recovered (Barrels):	26.50		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:	[		
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders 12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			

	1
13d. Workers working on the right-of-way, but NOT	
associated with this Operator 13e. General public	
13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	No
- If No, Explain:	Product stream was swung to another tank
- If Yes, complete Questions 14a and 14b: <i>(use local time, 24-hr clock)</i>	i reddet eireann nae en ang te aneilier tank
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	0
18. Time sequence (use local time, 24-hour clock):	
18a. Local time Operator identified Accident:	06/18/2012 09:00
18b. Local time Operator resources arrived on site:	06/18/2012 09:00
PART B - ADDITIONAL LOCATION INFORMATION	
1. Was the origin of Accident onshore?	Yes
If Yes, Complete Ques	tions (2-12)
If No, Complete Quest	ions (13-15)
- If Onshore:	
2. State:	Pennsylvania
3. Zip Code:	18049
4. City	Emmaus
5. County or Parish	Lehigh
6. Operator-designated location:	
Specify:	
7. Pipeline/Facility name:	Macungie Station
8. Segment name/ID:	
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Tank, including attached appurtenances
Specify:	
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	1
- Approx. water deptin (it) at the point of the Accident. - Select:	1
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- State: - Area:	
- State: - Area: - Block/Tract #:	
- State: - Area: - Block/Tract #: - Nearest County/Parish:	
- State: - Area: - Block/Tract #: - Nearest County/Parish: - On the Outer Continental Shelf (OCS) - Specify:	
- State: - Area: - Block/Tract #: - Nearest County/Parish: - On the Outer Continental Shelf (OCS) - Specify: - Area:	
- State: - Area: - Block/Tract #: - Nearest County/Parish: - On the Outer Continental Shelf (OCS) - Specify: - Area: - Block #:	
- State:     - Area:     - Block/Tract #:     - Nearest County/Parish:     - On the Outer Continental Shelf (OCS) - Specify:     - Area:     - Block #:  15. Area of Accident:	
- State:     - Area:     - Block/Tract #:     - Nearest County/Parish:     - On the Outer Continental Shelf (OCS) - Specify:         - Area:         - Block #:  15. Area of Accident:  PART C - ADDITIONAL FACILITY INFORMATION	
- State:     - Area:     - Block/Tract #:     - Nearest County/Parish:     - On the Outer Continental Shelf (OCS) - Specify:         - Area:         - Block #: 15. Area of Accident:  PART C - ADDITIONAL FACILITY INFORMATION 1. Is the pipeline or facility:	Interstate Onshore Breakout Tank or Storage Vessel, including
- State:     - Area:     - Block/Tract #:     - Nearest County/Parish:     - On the Outer Continental Shelf (OCS) - Specify:         - Area:         - Block #:  15. Area of Accident:  PART C - ADDITIONAL FACILITY INFORMATION	Interstate Onshore Breakout Tank or Storage Vessel, including Attached Appurtenances Atmospheric or Low Pressure

#### Appendix C 7000-1 Accident report 20120215-16856 - Final

3. Item involved in Accident:	Tank/Vessel
- If Pipe, specify:	
3a. Nominal diameter of pipe (in): 3b. Wall thickness (in):	
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3d. Pipe specification:	
3e. Pipe Seam , specify:	
- If Other, Describe:	
3f. Pipe manufacturer:	
3g. Year of manufacture:	
3h. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
<ul> <li>If Weld, including heat-affected zone, specify:</li> </ul>	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by: 3j. Year of manufacture:	
- If Tank/Vessel, specify:	Other
- If Other - Describe:	Vent
- If Other, describe:	
4. Year item involved in Accident was installed:	1974
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Overfill or Overflow
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
Approx. size: in. (widest opening) by in. (length circumferentially or axially)	
Approx. size: in. (widest opening) by	
Approx. size: in. (widest opening) by in. (length circumferentially or axially)	1
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: PART D - ADDITIONAL CONSEQUENCE INFORMATION	     No
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: PART D - ADDITIONAL CONSEQUENCE INFORMATION 1. Wildlife impact:	
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: PART D - ADDITIONAL CONSEQUENCE INFORMATION 1. Wildlife impact: 1a. If Yes, specify all that apply:	
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: PART D - ADDITIONAL CONSEQUENCE INFORMATION 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic	
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds	
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial	No
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination:	No Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned:	No Yes Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation:	No Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned:	No Yes Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply:	No Yes Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil	No Yes Yes
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Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil	No       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination:	No       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination: 5a. If Yes, specify all that apply:	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination:	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially)         - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact:         1a. If Yes, specify all that apply:         - Fish/aquatic         - Birds         - Terrestrial         2. Soil contamination:         3. Long term impact assessment performed or planned:         4. Anticipated remediation:         4a. If Yes, specify all that apply:         - Surface water         - Groundwater         - Soil         - Vegetation         - Wildlife         5. Water contamination:	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination: 5a. If Yes, specify all that apply: - Ocean/Seawater	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination: 5a. If Yes, specify all that apply: - Ocean/Seawater - Surface - Groundwater	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination: 5a. If Yes, specify all that apply: - Ocean/Seawater - Surface	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination: 5a. If Yes, specify all that apply: - Ocean/Seawater - Surface - Groundwater - Surface - Groundwater - Surface - Groundwater - Surface - Private Well - Private Well - Public Water Intake	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination: 5a. If Yes, specify all that apply: - Ocean/Seawater - Surface - Groundwater - Surface - Groundwater - Surface - Groundwater - Surface - Groundwater - Drinking water: (Select one or both) - Private Well	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination: 5a. If Yes, specify all that apply: - Ocean/Seawater - Surface - Groundwater - Surface - Groundwater - Surface - Groundwater - Surface - Private Well - Private Well - Public Water Intake	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Vidlife 5. Water contamination: 5a. If Yes, specify all that apply: - Ocean/Seawater - Surface - Groundwater - Surface - Private Well - Public Water Intake 5b. Estimated amount released in or reaching water (Barrels):	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination: 5a. If Yes, specify all that apply: - Ocean/Seawater - Surface - Groundwater - Surface - Private Well - Public Water Intake 5b. Estimated amount released in or reaching water (Barrels): 5c. Name of body of water, if commonly known:	No       Yes       Yes       Yes       Yes       Yes
Approx. size: in. (widest opening) by in. (length circumferentially or axially)         - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact:         1a. If Yes, specify all that apply:         - Fish/aquatic         - Birds         - Terrestrial         2. Soil contamination:         3. Long term impact assessment performed or planned:         4. Anticipated remediation:         4a. If Yes, specify all that apply:         - Surface water         - Groundwater         - Soil         - Vegetation         - Wildlife         5. Water contamination:         5a. If Yes, specify all that apply:         - Occan/Seawater         - Surface         - Groundwater         - Surface         - Drinking water: (Select one or both)         - Private Well         - Private Well         - Public Water Intake         5b. Estimated amount released in or reaching water (Barrels):         5c. 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?	No           Yes           Yes           Yes           Yes           Yes           No
Approx. size: in. (widest opening) by in. (length circumferentially or axially)         - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact:         1a. If Yes, specify all that apply:         - Fish/aquatic         - Birds         - Terrestrial         2. Soil contamination:         3. Long term impact assessment performed or planned:         4. Anticipated remediation:         4a. If Yes, specify all that apply:         - Surface water         - Groundwater         - Soil         - Vegetation         - Wildlife         5. Water contamination:         5a. If Yes, specify all that apply:         - Ocean/Seawater         - Surface         - Groundwater         - Surface         - Private Well         - Private Well         - Public Water Intake         5b. Estimated amount released in or reaching water (Barrels):         5c. 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?         7. Did the released commodity reach or occur in one or more High	No           Yes           Yes           Yes           Yes           Yes           No
Approx. size: in. (widest opening) by in. (length circumferentially or axially) - If Other – Describe: PART D - ADDITIONAL CONSEQUENCE INFORMATION 1. Wildlife impact: 1a. If Yes, specify all that apply: - Fish/aquatic - Birds - Terrestrial 2. Soil contamination: 3. Long term impact assessment performed or planned: 4. Anticipated remediation: 4a. If Yes, specify all that apply: - Surface water - Groundwater - Soil - Vegetation - Wildlife 5. Water contamination: 5a. If Yes, specify all that apply: - Ocean/Seawater - Surface - Groundwater - Surface - Groundwater - Drinking water: (Select one or both) - Private Well - Public Water Intake 5b. Estimated amount released in or reaching water (Barrels): 5c. 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? 7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No           Yes           Yes           Yes           Yes           Yes           No
Approx. size: in. (widest opening) by in. (length circumferentially or axially)         - If Other – Describe: <b>PART D - ADDITIONAL CONSEQUENCE INFORMATION</b> 1. Wildlife impact:         1a. If Yes, specify all that apply:         - Fish/aquatic         - Birds         - Terrestrial         2. Soil contamination:         3. Long term impact assessment performed or planned:         4. Anticipated remediation:         4a. If Yes, specify all that apply:         - Surface water         - Groundwater         - Soil         - Vegetation         - Wildlife         5. Water contamination:         5a. If Yes, specify all that apply:         - Ocean/Seawater         - Surface         - Groundwater         - Surface         - Private Well         - Private Well         - Public Water Intake         5b. Estimated amount released in or reaching water (Barrels):         5c. 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?         7. Did the released commodity reach or occur in one or more High	No           Yes           Yes           Yes           Yes           Yes           No

Was this HCA identified in the "could affect"	
determination for this Assident site in the Operator's	
determination for this Accident site in the Operator's Integrity Management Program?	
- High Population Area:	Yes
Was this HCA identified in the "could affect"	
determination for this Accident site in the Operator's	Yes
Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination	
for this Accident site in the Operator's Integrity	
Management Program?	
<ul> <li>Unusually Sensitive Area (USA) - Drinking Water</li> </ul>	
Was this HCA identified in the "could affect" determination	
for this Accident site in the Operator's Integrity	
Management Program?	
- 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?	
8. Estimated Property Damage:	
8a. Estimated cost of public and non-Operator private property	
damage	\$ 0
8b. Estimated cost of commodity lost	\$ 0
8c. Estimated cost of Operator's property damage & repairs	\$ 0
8d. Estimated cost of Operator's emergency response	\$ 0
8e. Estimated cost of Operator's environmental remediation	\$ 60,000
8f. Estimated other costs	\$ 27,000
Describe:	Tank cleaning and refurbishment
8g. Total estimated property damage (sum of above)	\$ 87,000
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Accident (psig):	.00
2. Maximum Operating Pressure (MOP) at the point and time of the	.00
Accident (psig):	.00
O Dependent the management of the event on the Physical Constant.	
3. Describe the pressure on the system or facility relating to the	Pressure did not exceed MOP
Accident (psig):	Pressure did not exceed MOP
Accident (psig): 4. Not including pressure reductions required by PHMSA regulations	Pressure did not exceed MOP
<ul><li>Accident (psig):</li><li>4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility</li></ul>	
Accident (psig): 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	Pressure did not exceed MOP No
Accident (psig): 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	
Accident (psig): 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?	
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Accident (psig): 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?  - If Yes, Complete 4.a and 4.b below: 4a. Did the pressure exceed this established pressure restriction? 4b. Was this pressure restriction mandated by PHMSA or the State? 5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question	
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Accident (psig): 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?  - If Yes, Complete 4.a and 4.b below: 4a. Did the pressure exceed this established pressure restriction? 4b. Was this pressure restriction mandated by PHMSA or the State? 5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2? - If Yes - ( <i>Complete 5a. – 5e. below</i> ) 5a. Type of upstream valve used to initially isolate release	No
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<ul> <li>Accident (psig):</li> <li>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? <ul> <li>If Yes, Complete 4.a and 4.b below:</li> <li>4a. Did the pressure exceed this established pressure restriction?</li> <li>4b. Was this pressure restriction mandated by PHMSA or the State?</li> </ul> </li> <li>5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2? <ul> <li>If Yes - (Complete 5a. – 5e. below)</li> <li>5a. Type of upstream valve used to initially isolate release source:</li> <li>5b. Type of downstream valve used to initially isolate release</li> </ul> </li> </ul>	No
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<ul> <li>Accident (psig):</li> <li>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?</li> <li>If Yes, Complete 4.a and 4.b below: <ul> <li>4a. Did the pressure exceed this established pressure restriction?</li> <li>4b. Was this pressure restriction mandated by PHMSA or the State?</li> </ul> </li> <li>5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?</li> <li>If Yes - (<i>Complete 5a. – 5e. below</i>)</li> <li>5a. Type of upstream valve used to initially isolate release source:</li> <li>5b. Type of downstream valve used to initially isolate release source:</li> <li>5c. Length of segment isolated between valves (ft): 5d. Is the pipeline configured to accommodate internal inspection tools?</li> </ul>	No
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system in place on the pipeline or facility involved in the Accident?         Yes           6 Yes -         6a. Was it operating at the time of the Accident?         Yes           6b. Was it fully functional at the time of the Accident?         Yes           6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?         No           6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?         No           7d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?         Yes           7. Was a CPM leak detection system in place on the pipeline or facility hvolved in the Accident?         Yes           7. Was it operating at the time of the Accident?         Yes           7. 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           7. 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?         No           8. How was the Accident initially identified for the Operator?         Local Operator error ontractors'', "Air Patrol", or "Guard Patrol by Operator or its contractors", "Air Patrol", or "Guard Patrol by Operator or its contractors", "Air Patrol", or "Guard Patrol by Operator or the controller(s) or contractor is selected in Question 8, specify the fol	
Low flow or absence of flow     Incompatible commodity     Other     Incompatible commodity     Other     Other     Incompatible commodity     Other     If Other, Describe:     Sf. Function of pipeline system:     St. Function of pipeline or facility involved in the Accident?     Yes     Yes     So. Was it operating at the time of the Accident?     Yes     Yes     So. Was it operating at the time of the Accident?     Yes     Yes     So. Was it operating at the time of the Accident?     Yes     Yes     So. Was it operating at the time of the Accident?     Yes     Yes     So. Was it Societtic at the time of the Accident?     Yes     So. Was it Coperating at the time of the Accident?     Yes     So. Vas it Coperating at the time of the Accident?     Yes     So. Vas it Coperating at the time of the Accident?     Yes     Societtic,     alert(s), event(s), and/or volume calculations) assist with     the detection of the Accident?     Yes     Yes     To. Was it operating at the time of the Accident?     Yes     Yes     To. Did CPM leak detection system information (such as     alarm(s), alert(s), event(s), and/or volume calculations) assist     with the Accident?     Yes     To. 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     To. 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     To. Did CPM leak detection system information (such as     alarm(s), alert(s), event(s), and/or volume calculations) assist     with the Accident initially identified for the Operator?     Local Operatore	
Incompatible commodity     Other     Othe	
Other         - Other         - If Other, Describe:         -	
- If Other, Describe:         Sf. Function of pipeline system:         S. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?       Yes         6. Was it operating at the time of the Accident?       Yes         6. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?       Yes         6. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?       No         7. Was a CPM leak detection system in place on the pipeline or facility nvolved in the Accident?       Yes         7. Was it operating at the time of the Accident?       Yes         7. Uwas it operating at the time of the Accident?       Yes         7. 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         7. 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?       If Ves         8. How was the Accident initially identified for the Operator?       Local Operator = -If Other, Specify:         8. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Guard Patrol by Operator or its contractors", "Air Patrol", or "Guard Patrol by Operator or its control for the Coperator?, and other factors associated with fatigue       Operator en con	
5f. Function of pipeline system:       Yes         6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?       Yes         6. Was it operating at the time of the Accident?       Yes         6. Data it fully functional at the time of the Accident?       Yes         6. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?       Yes         6. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?       Yes         7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?       Yes         7. Was it fully functional at the time of the Accident?       Yes         7. Did CPM leak detection system information (such as alarm(s), and/or volume calculations) assist with the detection of the Accident?       Yes         7. 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?       Local Operator?         8. How was the Accident initially identified for the Operator?       Local Operator?         8. How controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Guard Patrol by Operator or its contractors", "Air Patrol", or "Guard Patrol by Operator or its controller(s) actions or control room issues was necessary due to: (provide an explanation for why the operator did not investigation of the controller(s	
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?         Yes           If Yes -         6a. Was it operating at the time of the Accident?         Yes           6b. Was it fully functional at the time of the Accident?         Yes           6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?         No           76. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?         No           77. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?         Yes           76. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?         Yes           76. 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?         No           8. How was the Accident initially identified or the Operator?         Local Operator           8. How was the Accident initially identified or the Operator?         Local Operator           9. Was an investigation initiated into whether or not the controller(s) or contractor" is selected in Question 8, specify the following:         Operator en contractor is selected in Question 8, specify the following:	
system in place on the pipeline or facility involved in the Accident?         Tes           If Yes -         6a. Was it operating at the time of the Accident?         Yes           6b. Was it fully functional at the time of the Accident?         Yes           6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?         No           6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?         Yes           7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?         Yes           7. Was it fully functional at the time of the Accident?         Yes           7. Was it fully functional at the time of the Accident?         Yes           7. Uas it fully functional at the time of the Accident?         Yes           7. 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?         No           7. To 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?         Local Operator?           7. How as the Accident initially identified for the Operator?         Local Operator?           8. How was the Accident on the accident?         Yes, specify           8. How was the Accident not whether or not the controller(s) or contractors"	
If Yes -         6a. Was it operating at the time of the Accident?         Yes           6b. Was it fully functional at the time of the Accident?         Yes           6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?         No           6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?         No           7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?         Yes           7. Was it operating at the time of the Accident?         Yes           7. Was it operating at the time of the Accident?         Yes           7. 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           7. 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?         No           8. How was the Accident initially identified for the Operator?         Local Operator en contractors", "Air Patrol", or "Guard Patrol by Operator or its contractors", ali Patrol", or "Guard Patrol by Operator or its contractors", ali Patrol", or "Guard Patrol by Operator or its control room issues were the cause of or a contributing factor to the Accident?           9. Was an investigation initiated into whether or not the controller(s) or control row insues were the cause of or a contributing factor to the Accident en explanation for why the	
6a. Was it operating at the time of the Accident?         Yes           6b. Was it fully functional at the time of the Accident?         Yes           6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?         No           6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?         No           7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?         Yes           7. Was a toperating at the time of the Accident?         Yes           7. 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           7. 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?         Local Operator?           8. How was the Accident initially identified for the Operator?         Local Operator en contractor", "Air Patrol", or "Guard Patrol by Operator or its contractor" is selected in Question 8, specify the following:         Operator en contractor" is selected in Question 8, specify the following:           9. Was an investigation initiated into whether or not the controller(s) or contractors", "Air Patrol", or "Guard Patrol by Operator or its contractor" is selected in Question 8, specify the following:         Operator en contractor is selected in Question 8, specify the following:           9. Was an investigation in	
6b. Was it fully functional at the time of the Accident?         Yes           6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?         No           6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?         Yes           7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?         Yes           7. Was it operating at the time of the Accident?         Yes           7. D. Was it fully functional at the time of the Accident?         Yes           7. D. Was it operating, and/or volume calculations) assist with the detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?         No           8. How was the Accident initially identified for the Operator?         Local Operator?           8. How was the Accident initially identified for the controller(s) or contractors", 'Air Patrol", or 'Guard Patrol by Operator or its contractors' is selected in Question 8, specify the following:         Operator en contractor's selected in Question 8, specify the following:           9. Usa an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the operator did not investigate)         Yes, specify           1 If Yes, specify investigation result(s): (select all that apply)	
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?         No           6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?         No           7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?         Yes           7. Was it operating at the time of the Accident?         Yes           7. Was it fully functional at the time of the Accident?         Yes           7. 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           7. 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?         No           8. How was the Accident initially identified for the Operator?         Local Operator           8. How controller', "Local Operating Personnel", including contractors", "Air Patrol", or "Guard Patrol by Operator or its contractors", "Air Patrol", or "Guard Patrol by Operator or toto control room issues were the cause of or a contributing factor to the Accident?         Yes, specify           • If 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           • If No, the Operator did not find that an investigation         Yes	
the detection of the Accident?           6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?         No           7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?         Yes           7a. Was it operating at the time of the Accident?         Yes           7b. Was it fully functional at the time of the Accident?         Yes           7c. 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?         No           7d. 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?         No           8. How was the Accident initially identified for the Operator?         Local Operator - If Other, Specify:         Ro           8. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Guard Patrol by Operator or its contractors", 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?         Yes, specify           9. Was an investigation result(s): "Gueet all that a pipy)         - If Yes, specify investigation result(s) reset all that apply)         -           9. If Yo, 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)	
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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       Yes         - Investigation identified no controller issues       Yes         - Investigation identified no controller issues       Yes         - Investigation identified incorrect controller action or controller error       Yes         - 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 incorrect control room equipment         - Investigation identified maintenance activities that affected control room operations, procedures, and/or controller       Investigation identified maintenance	
Operator), and other factors associated with fatigue           Provide an explanation for why not:           - Investigation identified no control room issues         Yes           - Investigation identified no controller issues         Yes           - Investigation identified no controller issues         Yes           - Investigation identified incorrect controller action or controller error         Yes           - 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	
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	
Investigation identified no control room issues Yes     Investigation identified no controller issues Yes     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	
Investigation identified no controller issues Yes     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	
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	
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	
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	
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 incorrect procedures         - Investigation identified incorrect control room equipment operation         - Investigation identified maintenance activities that affected control room operations, procedures, and/or controller	
Investigation identified incorrect procedures     Investigation identified incorrect control room equipment     operation     Investigation identified maintenance activities that affected     control room operations, procedures, and/or controller	
Investigation identified incorrect control room equipment     operation     Investigation identified maintenance activities that affected     control room operations, procedures, and/or controller	
operation - Investigation identified maintenance activities that affected control room operations, procedures, and/or controller	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller	
control room operations, procedures, and/or controller	
- 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	Yes
Drug & Alcohol Testing regulations?	
- If Yes:	
1a. Specify how many were tested:	4
1b. Specify how many failed:	0
2. As a result of this Accident, were any Operator contractor employees	
tested under the post-accident drug and alcohol testing requirements of	No
DOT's Drug & Alcohol Testing regulations?	
- If Yes:	
2a. Specify how many were tested:	
2b. Specify how many failed:	
PART G – APPARENT CAUSE	
Select only one box from PART G in shaded column on left represent the questions on the right. Describe secondary, contributing or root of	
Apparent Cause:	G7 - Incorrect Operation
G1 - Corrosion Failure - only one sub-cause can be picked from shace	led left-hand column
External Corrosion:	
Internal Corrosion:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: (select all that apply)	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the followin	g: (select all that apply)
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
□4a. Was failed item considered to be under cathodic	
protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at	
the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been	
conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of	
the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion (select all that apply): -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the follow	ing (select all that apply): -
- Field examination	
- Determined by metallurgical analysis	

- Other:	
- If Other, Describe:	
9. Location of corrosion (select all that apply): -	
- Low point in pipe	
- Elbow	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	
11. Was the interior coated or lined with protective coating?	
12. Were cleaning/dewatering pigs (or other operations) routinely	
utilized?	
13. Were corrosion coupons routinely utilized?	
Complete the following if any Corrosion Failure sub-cause is selected AND Question 3) is Tank/Vessel.	the "Item Involved in Accident" (from PART C,
14. List the year of the most recent inspections:	
14a. API Std 653 Out-of-Service Inspection	
- No Out-of-Service Inspection completed	
14b. API Std 653 In-Service Inspection	
- No In-Service Inspection completed	
Complete the following if any Corrosion Failure sub-cause is selected AND Question 3) is Pipe or Weld.	the "Item Involved in Accident" (from PART C,
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and	indicate most recent vear run: -
- Magnetic Flux Leakage Tool	
Most recent year:	
- Ultrasonic	
Most recent year:	
- Geometry	
Most recent year:	
- Caliper	
Most recent year:	
- Crack	
Most recent year:	
- Hard Spot	
Most recent year:	
- Combination Tool	
Most recent year:	
- Transverse Field/Triaxial Most recent year:	
- Other	
Most recent year:	
Describe:	
16. Has one or more hydrotest or other pressure test been conducted since	
original construction at the point of the Accident?	
lf Yes -	
Most recent year tested:	
Test pressure:	
17. Has one or more Direct Assessment been conducted on this segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident::	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	1
Most recent year conducted:	
18. Has one or more non-destructive examination been conducted at the	
point of the Accident since January 1, 2002?	
18a. If Yes, for each examination conducted since January 1, 2002, select typ	e of non-destructive examination and indicate most
recent year the examination was conducted: - Radiography	
- Radiography Most recent year conducted:	
- Guided Wave Ultrasonic	
- Guided wave Ditrasonic Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
Dry Magnetic Particle Test	
Most recent year conducted:	1
- Other	
Other     Most recent year conducted:	
- Other Most recent year conducted: Describe:	

G2 - Natural Force Damage - only one sub-cause can be picked from shaded left-handed column		
Natural Force Damage – Sub-Cause:		
- If Earth Movement, NOT due to Heavy Rains/Floods:		
1. Specify:		
- If Other, Describe:		
- If Heavy Rains/Floods: 2. Specify:		
- If Other, Describe:		
- If Lightning:		
3. Specify:		
- If Temperature: 4. Specify:		
- If Other, Describe:		
- If High Winds:		
- If Other Natural Force Damage: 5. Describe:		
Complete the following if any Natural Force Damage sub-cause is sele	eted	
6. Were the natural forces causing the Accident generated in	cted.	
conjunction with an extreme weather event?		
6a. If Yes, specify: (select all that apply)		
- Hurricane		
- Tropical Storm - Tornado		
- Tomado - Other		
- If Other, Describe:		
G3 - Excavation Damage - only one sub-cause can be picked from s	haded left-hand column	
Excavation Damage – Sub-Cause:		
- If Excavation Damage by Operator (First Party):		
- II Excavation Damage by Operator (First Party).		
- If Excavation Damage by Operator's Contractor (Second Party):		
- If Excavation Damage by Third Party:		
- If Excavation Damage by Third Party:	PART C, Question 3) is Pipe or Weld.	
If Excavation Damage by Third Party:     If Previous Damage due to Excavation Activity:	PART C, Question 3) is Pipe or Weld.	
If Excavation Damage by Third Party:     If Previous Damage due to Excavation Activity:     Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?     1a. If Yes, for each tool used, select type of internal inspection tool a		
If Excavation Damage by Third Party:     If Previous Damage due to Excavation Activity:     Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?     1a. If Yes, for each tool used, select type of internal inspection tool a         - Magnetic Flux Leakage		
If Excavation Damage by Third Party:     If Previous Damage due to Excavation Activity:     Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?     1a. If Yes, for each tool used, select type of internal inspection tool a         - Magnetic Flux Leakage         Most recent year conducted:		
If Excavation Damage by Third Party:     If Previous Damage due to Excavation Activity:     Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?         1a. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage		
If Excavation Damage by Third Party:     If Previous Damage due to Excavation Activity:     Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?     1a. If Yes, for each tool used, select type of internal inspection tool a         - Magnetic Flux Leakage         Most recent year conducted:		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?      1a. If Yes, for each tool used, select type of internal inspection tool a         - Magnetic Flux Leakage          Most recent year conducted:         - Ultrasonic          Most recent year conducted:         - Geometry         Most recent year conducted:		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?         1a. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?          1a. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?          1a. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?          1a. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from      1. Has one or more internal inspection tool collected data at the point of     the Accident?      1a. If Yes, for each tool used, select type of internal inspection tool a         Most recent year conducted:         Outrasonic          Geometry          Most recent year conducted:         Caliper          Most recent year conducted:         Crack          Most recent year conducted:         Hard Spot		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?          1a. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from      1. Has one or more internal inspection tool collected data at the point of     the Accident?      1a. If Yes, for each tool used, select type of internal inspection tool a         Most recent year conducted:         Outrasonic          Ultrasonic          Geometry          Most recent year conducted:         Caliper          Most recent year conducted:         Crack          Most recent year conducted:         Hard Spot          Most recent year conducted:         Combination Tool          Most recent year conducted:         Combination Tool          Most recent year conducted:		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from      1. Has one or more internal inspection tool collected data at the point of     the Accident?      1a. If Yes, for each tool used, select type of internal inspection tool a         Most recent year conducted:         Outrasonic          Ultrasonic          Geometry          Most recent year conducted:         Caliper          Most recent year conducted:         Crack          Most recent year conducted:         Accident          Crack          Most recent year conducted:         Crack          Most recent year conducted:         Combination Tool          Most recent year conducted:         Transverse Field/Triaxial		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from      1. Has one or more internal inspection tool collected data at the point of     the Accident?      1a. If Yes, for each tool used, select type of internal inspection tool a         Most recent year conducted:         Outrasonic          Ultrasonic          Geometry          Most recent year conducted:         Caliper          Most recent year conducted:         Crack          Most recent year conducted:         Crack          Most recent year conducted:         Crack          Most recent year conducted:         Combination Tool          Most recent year conducted:         Transverse Field/Triaxial          Most recent year conducted:		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from      1. Has one or more internal inspection tool collected data at the point of     the Accident?      1a. If Yes, for each tool used, select type of internal inspection tool a         Most recent year conducted:         Outrasonic          Ultrasonic          Geometry          Most recent year conducted:         Caliper          Most recent year conducted:         Crack          Most recent year conducted:         Crack          Most recent year conducted:         Crack          Most recent year conducted:         Combination Tool          Most recent year conducted:         Transverse Field/Triaxial          Most recent year conducted:         Other          Active          Active		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from      1. Has one or more internal inspection tool collected data at the point of     the Accident?      1a. If Yes, for each tool used, select type of internal inspection tool a         Most recent year conducted:         Outrasonic          Ultrasonic          Geometry          Most recent year conducted:         Caliper          Most recent year conducted:         Crack          Most recent year conducted:         Crack          Most recent year conducted:         Crack          Most recent year conducted:         Combination Tool          Most recent year conducted:         Transverse Field/Triaxial          Most recent year conducted:		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from      1. Has one or more internal inspection tool collected data at the point of     the Accident?      1a. If Yes, for each tool used, select type of internal inspection tool a         Magnetic Flux Leakage          Most recent year conducted:         Ultrasonic          Most recent year conducted:         Geometry          Most recent year conducted:         Caliper          Most recent year conducted:         Crack          Most recent year conducted:         Active          Most recent year conducted:         Crack          Most recent year conducted:         Combination Tool          Most recent year conducted:         Transverse Field/Triaxial          Most recent year conducted:         Other          Most recent year conducted:         Other          Most recent year conducted:         Other          Most recent year conducted:         Describe:         Z. Do you have reason to believe that the internal inspection was		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from      1. Has one or more internal inspection tool collected data at the point of     the Accident?      1a. If Yes, for each tool used, select type of internal inspection tool a         Magnetic Flux Leakage          Most recent year conducted:         Ultrasonic          Geometry          Most recent year conducted:         Other          Most recent year conducted:         Crack          Most recent year conducted:         Other          Most re		
If Excavation Damage by Third Party:      If Previous Damage due to Excavation Activity:      Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from      1. Has one or more internal inspection tool collected data at the point of     the Accident?      1a. If Yes, for each tool used, select type of internal inspection tool a         Magnetic Flux Leakage          Most recent year conducted:         Ultrasonic          Most recent year conducted:         Geometry          Most recent year conducted:         Caliper          Most recent year conducted:         Crack          Most recent year conducted:         Active          Most recent year conducted:         Crack          Most recent year conducted:         Combination Tool          Most recent year conducted:         Transverse Field/Triaxial          Most recent year conducted:         Other          Most recent year conducted:         Other          Most recent year conducted:         Other          Most recent year conducted:         Describe:         Z. Do you have reason to believe that the internal inspection was		
If Excavation Damage by Third Party:     If Previous Damage due to Excavation Activity:     Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?     1a. If Yes, for each tool used, select type of internal inspection tool a         Magnetic Flux Leakage         Most recent year conducted:         Ultrasonic         Most recent year conducted:         Geometry         Most recent year conducted:         Caliper         Most recent year conducted:         Crack         Most recent year conducted:         Crack         Most recent year conducted:         Crack         Most recent year conducted:         Combination Tool         Most recent year conducted:         Other         Most recent year conducted:         Other		
If Excavation Damage by Third Party:     If Previous Damage due to Excavation Activity:     Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from     1. Has one or more internal inspection tool collected data at the point of     the Accident?     1a. If Yes, for each tool used, select type of internal inspection tool a         Magnetic Flux Leakage         Most recent year conducted:         Ultrasonic         Most recent year conducted:         Geometry         Most recent year conducted:         Caliper         Most recent year conducted:         Crack         Most recent year conducted:         Other         Most re		

4. Has one or more Direct Assessment been conducted on the pipeline	
segment? - If Yes, and an investigative dig was conducted at the point of the Acci	dent:
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. 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	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted: - Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted: Describe:	
Complete the following if Excavation Damage by Third Party is selected	ed as the sub-cause.
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: (select all that apply) -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
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)?	
8. Right-of-Way where event occurred: (select all that apply) Public	
- Public - If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other 9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. 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:	
<ul><li>14. Were facility locate marks visible in the area of excavation?</li><li>15. Were facilities marked correctly?</li></ul>	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause (select only the one predon	ninant first level CGA-DIRT Root Cause and then, where
available as a choice, the one predominant second level CGA-DIRT Root	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - only one sub-cause can be see	elected from the shaded left-hand column
Other Outside Force Damage – Sub-Cause:	

- If Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Incident:			
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NO	Engaged in Excavation:		
1. Vehicle/Equipment operated by: - If 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		
- Hurricane			
- Tropical Storm			
- Tornado - Heavy Rains/Flood			
- Other			
- If Other, Describe:			
- If Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation:			
- If Electrical Arcing from Other Equipment or Facility:			
- If Previous Mechanical Damage NOT Related to Excavation:			
Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from	m PART C, Question 3) is Pipe or Weld.		
3. Has one or more internal inspection tool collected data at the point of the Accident?			
3a. If Yes, for each tool used, select type of internal inspection tool and inc - Magnetic Flux Leakage	dicate most recent year run:		
Most recent year conducted:			
- Ultrasonic			
Most recent year conducted: - Geometry			
- Geometry Most recent year conducted:			
- Caliper			
Most recent year conducted:			
- Crack Most recent year conducted:			
- Hard Spot			
Most recent year conducted:			
- Combination Tool			
Most recent year conducted: - Transverse Field/Triaxial			
Most recent year conducted:			
- Other			
Most recent year conducted:			
4. Do you have reason to believe that the internal inspection was			
completed BEFORE the damage was sustained?			
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?			
- If Yes: Most recent year tested:			
Test pressure (psig):			
6. Has one or more Direct Assessment been conducted on the pipeline segment?			
- If Yes, and an investigative dig was conducted at the point of the Accident:			
Most recent year conducted: - If Yes, but the point of the Accident was not identified as a dig site:			
Most recent year conducted:			
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?			
7a. If Yes, for each examination conducted since January 1, 2002, se recent year the examination was conducted:	elect type of non-destructive examination and indicate most		
- Radiography Most recent year conducted:			
- Guided Wave Ultrasonic			
Most recent year conducted: - Handheld Ultrasonic Tool			
Most recent year conducted:			
- Wet Magnetic Particle Test			
Most recent year conducted:			
- Dry Magnetic Particle Test Most recent year conducted:			
- Other			
Most recent year conducted:			

#### Appendix C 7000-1 Accident report 20120215-16856 - Final

Describer	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	
G5 - Material Failure of Pipe or Weld - only one sub-cause can be	selected from the shaded left-hand column
Use this section to report material failures ONLY IF the "Item Involve "Weld."	d in Accident" (from PART C, Question 3) is "Pipe" or
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause selected below is based on the following: (select all that	at apply)
- Field Examination	
- Determined by Metallurgical Analysis	
- Other Analysis	
- If "Other Analysis", Describe:	
- Sub-cause is Tentative or Suspected; Still Under Investigation	
(Supplemental Report required)	
- If Construction, Installation, or Fabrication-related:	
2. List contributing factors: (select all that apply)	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Original Manufacturing-related (NOT girth weld or other welds for	med in the field):
2. List contributing factors: (select all that apply)	
- Fatigue or Vibration-related:	
Specify:	
- If Other, Describe:	
- Il Other, Describe.	
- Mechanical Stress	
- Other	
- Other - If Other, Describe:	
Other     - If Other, Describe:     - If Environmental Cracking-related:	
Other     Other     If Other, Describe:     If Environmental Cracking-related:     Specify:	
Other     - If Other, Describe:     - If Environmental Cracking-related:	
Other     Other     If Other, Describe:     If Environmental Cracking-related:     Specify:	se is selected.
Other         - Other         - If Other, Describe:         - If Environmental Cracking-related:         3. Specify:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau	se is selected.
Other         - Other         - If Other, Describe:         - If Environmental Cracking-related:         3. Specify:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):         - Dent	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):         - Dent         - Gouge	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion	se is selected.
Other         If Other, Describe:         If Other, Describe:         If Environmental Cracking-related:         Specify:             - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Misalignment             - Misalignment             - Misalignment             - Other             - Misalignment             - Misalignment             - Misalignment             - Support Support             - Support             - Support             - Crack             - Lack of Fusion             - Lack of Fusion             - Misalignment             -	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack         - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Burnt Steel	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Misalignment             - Misalignment             - Misalignment             - Other             - Misalignment             - Misalignment             - Misalignment             - Support Support             - Support             - Support             - Crack             - Lack of Fusion             - Lack of Fusion             - Misalignment             -	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other, Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Burnt Steel	se is selected.
Other         - Other         - If Other, Describe:         - If Other, Describe:         - If Other - Describe:         - Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Burnt Steel             - Other:             - If Other, Describe:             - If Other, Describe:             - If Other, Describe:             - If Other, Describe:	se is selected.
Other         Other         Other, Describe:         If Other, Describe:         Other - Describe:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Burnt Steel             - Other:             - Other:             - If Other, Describe:             - If Other, Describe:             - If Other, Describe:             - If Other, Describe:	
Other         If Other, Describe:         If Other, Describe:         If Environmental Cracking-related:         Specify:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         Additional factors: (select all that apply):             Dent             Gouge             Pipe Bend             Arc Burn             Crack             Lack of Fusion             Lamination             Buckle             Wrinkle             Misalignment             Burnt Steel             Other:             If Other, Describe:             S. Has one or more internal inspection tool collected data at the point of the Accident?             Sa. If Yes, for each tool used, select type of internal inspection tool a	
Other         If Other, Describe:         If Other, Describe:         If Environmental Cracking-related:         Specify:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Other:             - Other:             - Other:             - If Other, Describe:             - Other:             - If Other, Describe:             - Magnetic Flux Leakage	
Other         If Other, Describe:         If Other, Describe:         If Environmental Cracking-related:         Specify:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         Additional factors: (select all that apply):             Dent             Gouge             Pipe Bend             Arc Burn             Crack             Lack of Fusion             Lamination             Buckle             Wrinkle             Misalignment             Burnt Steel             Other:             If Other, Describe:             S. Has one or more internal inspection tool collected data at the point of             the Accident?             Sa. If Yes, for each tool used, select type of internal inspection tool a             Most recent year run:	
Other         If Other, Describe:         If Other, Describe:         If Environmental Cracking-related:         Specify:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Burnt Steel             - Other:             - Other:             - If Other, Describe:             S. Has one or more internal inspection tool collected data at the point of             the Accident?             Sa. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage             Most recent year run:             - Ultrasonic	
Other         Other         Other, Describe:         If Other, Describe:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Larination             - Buckle             - Wrinkle             - Misalignment             - Other:             - If Other, Describe:             - If Other, Describe:             - If Other, Describe:             - If Other, Describe:             - Uther - Describe:             - Crack             - Lack of Fusion             - Larination             - Buckle             - Wrinkle             - Misalignment             - Burnt Steel             - Other:             - If Other, Describe:             - If Other, Describe:             - If Other, Describe:             - Uther:             - Uthere:             - Uthere:             - Uthere:	
Other         If Other, Describe:         If Other, Describe:         If Environmental Cracking-related:         Specify:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Other:             - Other:             - If Other, Describe:             S. Has one or more internal inspection tool collected data at the point of             the Accident?             Sa. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage             Most recent year run:             - Ultrasonic             Most recent year run:             - Geometry	
Other         If Other, Describe:         If Other, Describe:         If Environmental Cracking-related:         Specify:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Burnt Steel             - Other:             - If Other, Describe:             S. Has one or more internal inspection tool collected data at the point of             the Accident?             Sa. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage             Most recent year run:             - Ultrasonic	
Other         If Other, Describe:         If Other, Describe:         If Environmental Cracking-related:         Specify:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Burnt Steel             - Other:             - If Other, Describe:             5. Has one or more internal inspection tool collected data at the point of             the Accident?             Sa. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage             Most recent year run:             - Ultrasonic             Most recent year run:             - Geometry	
Other         If Other, Describe:         If Other, Describe:         If Environmental Cracking-related:         Specify:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         A. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Buckle             - Wrinkle         - Misalignment             - Burnt Steel             - Other:             - If Other, Describe:             S. Has one or more internal inspection tool collected data at the point of             the Accident?             Sa. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage             Most recent year run:             - Ultrasonic             Most recent year run:             - Caliper	
Other         If Other, Describe:         If Other, Describe:         If Other, Describe:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Other:             - Other:             - If Other, Describe:             5. Has one or more internal inspection tool collected data at the point of             the Accident?             5a. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage             Most recent year run:             - Geometry             Most recent year run:             - Caliper             Most recent year run:             - Caliper	
Other         If Other, Describe:         If Other, Describe:         If Other, Describe:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Other:             - Other:             - If Other, Describe:             5. Has one or more internal inspection tool collected data at the point of             the Accident?             5a. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage             Most recent year run:             - Caliper             Most recent year run:             - Caliper             Most recent year run:             - Crack	
Other         If Other, Describe:         If Other, Describe:         If Other, Describe:         Other - Describe:         Complete the following if any Material Failure of Pipe or Weld sub-cau         4. Additional factors: (select all that apply):             - Dent             - Gouge             - Pipe Bend             - Arc Burn             - Crack             - Lack of Fusion             - Lamination             - Buckle             - Wrinkle             - Misalignment             - Other:             - Other:             - If Other, Describe:             5. Has one or more internal inspection tool collected data at the point of             the Accident?             5a. If Yes, for each tool used, select type of internal inspection tool a             - Magnetic Flux Leakage             Most recent year run:             - Geometry             Most recent year run:             - Caliper             Most recent year run:             - Caliper             Most recent year run:             - Caliper             -	

- Combination Tool	
Most recent year run:	
- Transverse Field/Triaxial	
Most recent year run:	
- Other	
Most recent year run:	
Describe:	
6. Has one or more hydrotest or other pressure test been conducted since	
original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline	
segment?	
- If Yes, and an investigative dig was conducted at the point of the Acc	ident -
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, s	elect type of non-destructive examination and indicate most
recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
<ul> <li>Dry Magnetic Particle Test</li> </ul>	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe: <b>G6 – Equipment Failure -</b> only one <b>sub-cause</b> can be selected from	he shaded left-hand column
Describe:         G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from Equipment Failure – Sub-Cause:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from Equipment Failure – Sub-Cause: - If Malfunction of Control/Relief Equipment:	he shaded left-hand column
<ul> <li>G6 – Equipment Failure - only one sub-cause can be selected from</li> <li>Equipment Failure – Sub-Cause:</li> <li>If Malfunction of Control/Relief Equipment:</li> <li>Specify: (select all that apply) -</li> </ul>	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Power Failure	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other         - If Other – Describe:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other         - If Other – Describe:         - If Pump or Pump-related Equipment:         2. Specify:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other         - If Other – Describe:         - If Pump or Pump-related Equipment:         2. Specify:         - If Other – Describe:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other         - If Pump or Pump-related Equipment:         2. Specify:         - If Other – Describe:         - If Threaded Connection/Coupling Failure:         3. Specify:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from f         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other         - If Other – Describe:         - If Pump or Pump-related Equipment:         2. Specify:         - If Other – Describe:         - If Other – Describe:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other         - If Other – Describe:         - If Pump or Pump-related Equipment:         2. Specify:         - If Other – Describe:         - If Threaded Connection/Coupling Failure:         3. Specify:         - If Other – Describe:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other         - Other         - If Pump or Pump-related Equipment:         2. Specify:         - If Other – Describe:         - If Threaded Connection/Coupling Failure:         3. Specify:         - If Non-threaded Connection Failure:         - If Non-threaded Connection Failure:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from f Equipment Failure – Sub-Cause: - If Malfunction of Control/Relief Equipment: 1. Specify: (select all that apply) - - Control Valve - Instrumentation - SCADA - Communications - Block Valve - Check Valve - Check Valve - Relief Valve - Relief Valve - Relief Valve - Stopple/Control Fitting - ESD System Failure - Other - If Other – Describe: - If Other – Describe:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other         - Other         - If Pump or Pump-related Equipment:         2. Specify:         - If Other – Describe:         - If Threaded Connection/Coupling Failure:         3. Specify:         - If Non-threaded Connection Failure:         - If Non-threaded Connection Failure:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a         Equipment Failure – Sub-Cause:         - If Malfunction of Control/Relief Equipment:         1. Specify: (select all that apply) -         - Control Valve         - Instrumentation         - SCADA         - Communications         - Block Valve         - Check Valve         - Relief Valve         - Relief Valve         - Stopple/Control Fitting         - ESD System Failure         - Other         - Other         - If Pump or Pump-related Equipment:         2. Specify:         - If Other – Describe:         - If Threaded Connection/Coupling Failure:         3. Specify:         - If Other – Describe:	he shaded left-hand column
G6 – Equipment Failure - only one sub-cause can be selected from a Equipment Failure – Sub-Cause:  If Malfunction of Control/Relief Equipment:  Specify: (select all that apply) - Control Valve Instrumentation SCADA Communications Block Valve Check Valve Check Valve Relief Valve Relief Valve Stopple/Control Fitting ESD System Failure Other If Other – Describe: If Pump or Pump-related Equipment: Specify: If Other – Describe: If Other – Describe: If Other – Describe: If Non-threaded Connection Failure: Specify: If Other – Describe:	
G6 – Equipment Failure - only one sub-cause can be selected from a Equipment Failure – Sub-Cause:  If Malfunction of Control/Relief Equipment:  Secify: (select all that apply) - Control Valve Instrumentation SCADA Communications Block Valve Check Valve Check Valve Check Valve Stopple/Control Fitting ESD System Failure Cother Cher Fit Pump or Pump-related Equipment: Specify: Fit Threaded Connection/Coupling Failure: Specify: Fit Non-threaded Connection Failure: Fit Non-threaded Connection Failure: Fit Other – Describe: Fit Non-threaded Connection Failure: Fit Other – Describe: Fit Other – Describe: Fit Other – Describe: Fit Non-threaded Connection Failure: Check Cause Fit Other – Describe: Fit Ot	
G6 – Equipment Failure - only one sub-cause can be selected from a Equipment Failure – Sub-Cause:  If Malfunction of Control/Relief Equipment:  Sector of Control/Relief Equipment:  Control Valve  Instrumentation  SCADA  Communications  Block Valve  Check Valve  Relief Valve  Relief Valve  Stopple/Control Fitting  ESD System Failure  Other  If Other – Describe:  If Pump or Pump-related Equipment:  Specify:  If Other – Describe:  If Other – Describe:  If Non-threaded Connection Failure:  If Other – Describe:  If Other – Describe: If Other – De	
G6 – Equipment Failure - only one sub-cause can be selected from a Equipment Failure – Sub-Cause:  If Malfunction of Control/Relief Equipment:  Secify: (select all that apply) - Control Valve Instrumentation SCADA Communications Block Valve Check Valve Check Valve Relief Valve Relief Valve Stopple/Control Fitting ESD System Failure Other If Other – Describe: If Pump or Pump-related Equipment: Specify: If Other – Describe: If Other – Describe: If Non-threaded Connection Failure: Specify: If Other – Describe:	

Complete the following if any Equipment Failure sub-cause is selected.		
6. Additional factors that contributed to the equipment failure: (select all the	hat 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		
- If Other, Describe:		
G7 - Incorrect Operation - only one sub-cause can be selected from the shaded left-hand column		
Incorrect Operation – Sub-Cause:		
Damage by Operator or Operator's Contractor NOT Related to		
Excavation and NOT due to Motorized Vehicle/Equipment Damage	No	
Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	Yes	
1. Specify:		
- If Other, Describe:		
Valve Left or Placed in Wrong Position, but NOT Resulting in a		
Tank, Vessel, or Sump/Separator Overflow or Facility Overpressure	No	
Pipeline or Equipment Overpressured	No	
Equipment Not Installed Properly	No	
Wrong Equipment Specified or Installed	No	
Other Incorrect Operation		
	No	
2. Describe:		
Complete the following if any Incorrect Operation sub-cause is selected	ed.	
3. Was this Accident related to (select all that apply): -		
- Inadequate procedure		
- No procedure established     - Failure to follow procedure	Yes	
- Pallure to follow procedure - Other:		
- If Other, Describe:		
4. What category type was the activity that caused the Accident?	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	
5a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	No, but they were performing the task(s) under the direction and observation of a qualified individual	
G8 - Other Accident Cause - only one sub-cause can be selected from the shaded left-hand column		
Other Accident Cause – Sub-Cause:		
lf Missellenseus		

- If Miscellaneous: 1. Describe: - If Unknown:

2. Specify:

#### **PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT**

A SAFE FILL AND INDEPENDENT TANK HI-HI ALARM WERE RECEIVED FOR TANK 228 AT 05:52 A.M. ON THE MORNING OF 6/17/2012 AT BUCKEYE¿S MACUNGIE, PA TANK FARM. PRODUCT FLOW TO THE TANK WAS IMMEDIATELY SHUT DOWN. VOLUME LEVELS AND CALCULATIONS INDICATED THE TANK TO BE AT SAFE-FILL HEIGHT SO THE TANK WAS NOT IMMEDIATELY INSPECTED. AT 11:00 A.M. ON 6/17/2012 AN ODOR COMPLAINT FROM A NEIGHBOR WAS RECIVED BY THE BREINIGSVILLE CONTROL CENTER. THE BREINIGSVILLE CONTROL CENTER SHUT DOWN THE INBOUND PIPELINE AND CONTACTED MACUNGIE OPERATIONS. MACUNGIE OPERATIONS PERFORMED A FACILITY CHECK AND REPORTED NO PRODUCT ODOR OR SOIL STAINING WAS FOUND. THE INBOUND PIPELINE WAS RESTARTED AND NORMAL OPERATIONS RESUMED.

AT 09:00 A.M. ON THE MORNING OF 6/18/2012 A MACUNGIE PIPELINER WAS PREPARING MACUNGIE TANK 228 FOR AN OUTBOUND PRODUCT MOVEMENT. HE SMELLED GASOLINE AT THE BASE OF THE TANK AND NOTICED FREE PRODUCT IN THE TANK SHELL VALVE PIT. THE MACUNGIE PIPELINER THEN CALLED MACUNGIE STATION TO REPORT A POTENTIAL RELEASE. WHEN ADDITIONAL PERSONNEL ARRIVED ON SITE, PRODUCT STAINING WAS NOTICED AT THE TANK VENTS. EMERGENCY RESPONSE WAS BEGUN AND INTERNAL NOTIFICATIONS WERE PERFORMED. THE NRC WAS NOTIFIED AT 14:18 P.M. AFTER IT WAS DETERMINED THAT THE COSTS MAY REACH THE REPORTING CRITERIA.

THE INCIDENT INVESTIGATION IS STILL IN PROGRESS. PRELIMINARY FINDINGS SUGGEST MECHANICAL FAILURE MAY HAVE CONTRIBUTED TO THE INCIDENT. A SUPPLEMENTAL REPORT WILL BE FILED UPON THE COMPLETION OF THE INVESTIGATION.

REMEDIATION AND REPAIRS ARE ONGOING.

UPDATE: 8/24/2012

THE INCIDENT INVESTIGATION FOUND THAT TANK 228'S GAUGE SYSTEM WAS READING APPROXIMATELY 18 INCHES LOWER THAN THE ACTUAL LEVEL IN THE TANK. ADDITIONALLY, THE INVESTIGATION FOUND THE INDEPENDENT HI-HI MAGNETROL ALARM LEVEL WAS 7 INCHES TOO HIGH. AS A RESULT, THE TANK GAUGE WAS SHOWING THE TANK LEVEL TO BE AT MAX SAFE FILL AT THE SAME TIME THE HI-HI ALARM WAS RECEIVED AND THE TANK WAS IN AN OVERFILL CONDITION.

THE TANK GAUGE LEVEL AND ALARM LEVELS FOR TANK 228 WERE RECALCULATED AND ADJUSTED TO THE APPROPRIATE LEVELS. ALL OTHER TANKS AT THE MACUNGIE TANK FARM WERE ALSO CHECKED TO ENSURE GAUGE AND ALARM LEVEL ACCURACY.

THE TANK HAS BEEN PUT BACK IN SERVICE. MONITORING WELLS HAVE BEEN INSTALLED IN THE TANK DIKE. NO OTHER REMEDIATION ACTIVITIES ARE PLANNED.

#### File Full Name

#### **PART I - PREPARER AND AUTHORIZED SIGNATURE**

Preparer's Name	BRAD YARZEBINSKI
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Preparer's Telephone Number	610-904-4958
Preparer's E-mail Address	BYARZEBINSKI@BUCKEYE.COM
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Authorized Signature's Name	JOHN REINBOLD
Authorized Signature Title	MANAGER COMPLIANCE
Authorized Signature Telephone Number	610-904-4185
Authorized Signature Email	JREINBOLD@BUCKEYE.COM
Date	08/24/2012