

DOT US Department of Transportation
PHMSA Pipelines and Hazardous Materials Safety Administration
OPS Office of Pipeline Safety
Eastern Region

Principal Investigator Al Schoen
Region Director Byron Coy
Date of Report 7/5/2012
Subject Failure Investigation Report – Harbor Pipeline Fire Incident, Mansfield Township, NJ

Operator, Location, & Consequences

Date of Failure 10/11/2010
Commodity Released ULSD Diesel Fuel
City/County & State Mansfield Township/Burlington County, NJ
OpID & Operator Name 7063 Harbor Pipeline Co
Unit # & Unit Name 20001 Harbor System - NJ
SMART Activity # 135547
Milepost / Location MP 1661 + 20 / Latitude: 40.0893, Longitude: -74.7366
Type of Failure Fire – Incorrect Operation
Fatalities 0
Injuries 0
Description of area impacted HCA area
Property Damage 0

Failure Investigation Report – Harbor Pipeline Co – Pipeline Fire Incident

[Failure Date 10/11/2010]

Executive Summary

On October 11, 2010, Sunoco Pipeline reported a fire in a section of pipe that had been severed from an active pipeline as part of a relocation project. The 16 inch line was part of the Harbor Pipeline Co system in Mansfield Township, NJ. Sunoco Pipeline is part owner and operates the Harbor Pipeline Co jurisdictional assets. The fire occurred in a right-of-way along the New Jersey Turnpike near Mill Lane. The fire started when contractor personnel on the “NJ Turnpike Relocation Project” were using a torch to cut a 50 feet length of out-of-service pipe in the ditch approximately 300 feet away from newly installed in-service relocated pipe and approximately 130 feet from the NJ Turnpike edge of pavement. Residual product in the out of service pipe ignited inside the pipe. A small amount of product dripped out of the pipe and burned in the trench. The fire was extinguished and contaminated soil was removed.

System Details

The 80 mile pipeline transports liquid petroleum products from Woodbury, NJ to Linden, NJ. The Pipe is a 16 inch diameter pre-1970 ERW pipe. The fire occurred on a portion of the pipeline running along the New Jersey Turnpike in Burlington County that was in the process of being relocated to accommodate the widening of the turnpike lanes. There was no supply impact since the piping had been severed from the active line in preparation for removal.

Events Leading up to the Failure

The piping where the fire occurred had been severed from the active line and removed from service in September 2010. This segment was being cut into sections for transport to a recycler.

1. On Saturday, October 9, 2010, the contractor removed a mainline valve adjacent to Mill Lane.
2. The project inspector performed gas testing and determined that it was safe to proceed with hot work. The pipe flanges were then removed by cutting with an oxy-acetylene torch.
3. On Monday, October 11, 2010 the welder then made an initial cut on pipe to be removed.
4. Liquid came out and the welder thought it was water.
5. The welder continued to cut the pipe.
6. The fire watch noticed smoke coming from the cut.
7. The plastic cap at the end of the pipe blew off.
8. The liquid that dripped from the pipe formed a puddle that burned in the bottom of the trench with an 18” high flame.
9. The fire watch stopped the job
10. On October 11, 2010 at 19:35, the incident was reported to the NRC by Sunoco

Emergency Response

The welder and fire watch attempted unsuccessfully to extinguish the fire with two dry powder fire extinguishers. An inspector working for the construction management contractor supervising the construction contractor instructed an equipment operator to cover the burning pipe with soil which

Failure Investigation Report – Harbor Pipeline Co – Pipeline Fire Incident

[Failure Date 10/11/2010]

extinguished the fire. The soil that was contaminated by the small amount of product that had leaked from the pipeline was removed.

The NJ Turnpike Authority was notified. There was no impact on the public.

Summary of Return to Service

The pipeline was being permanently removed. No return to service plan was warranted.

Investigation Details

The operator was contacted by PHMSA to follow up on the NRC. Based on the initial information received, PHMSA did not visit the accident location. Additional information was requested and received from the operator. Based on an analysis of this information, it was determined that the failure occurred in a wooded area adjacent to the NJ Turnpike in Burlington County, NJ. There was no HCA impact. The firefighting equipment on site was inadequate to extinguish the fire.

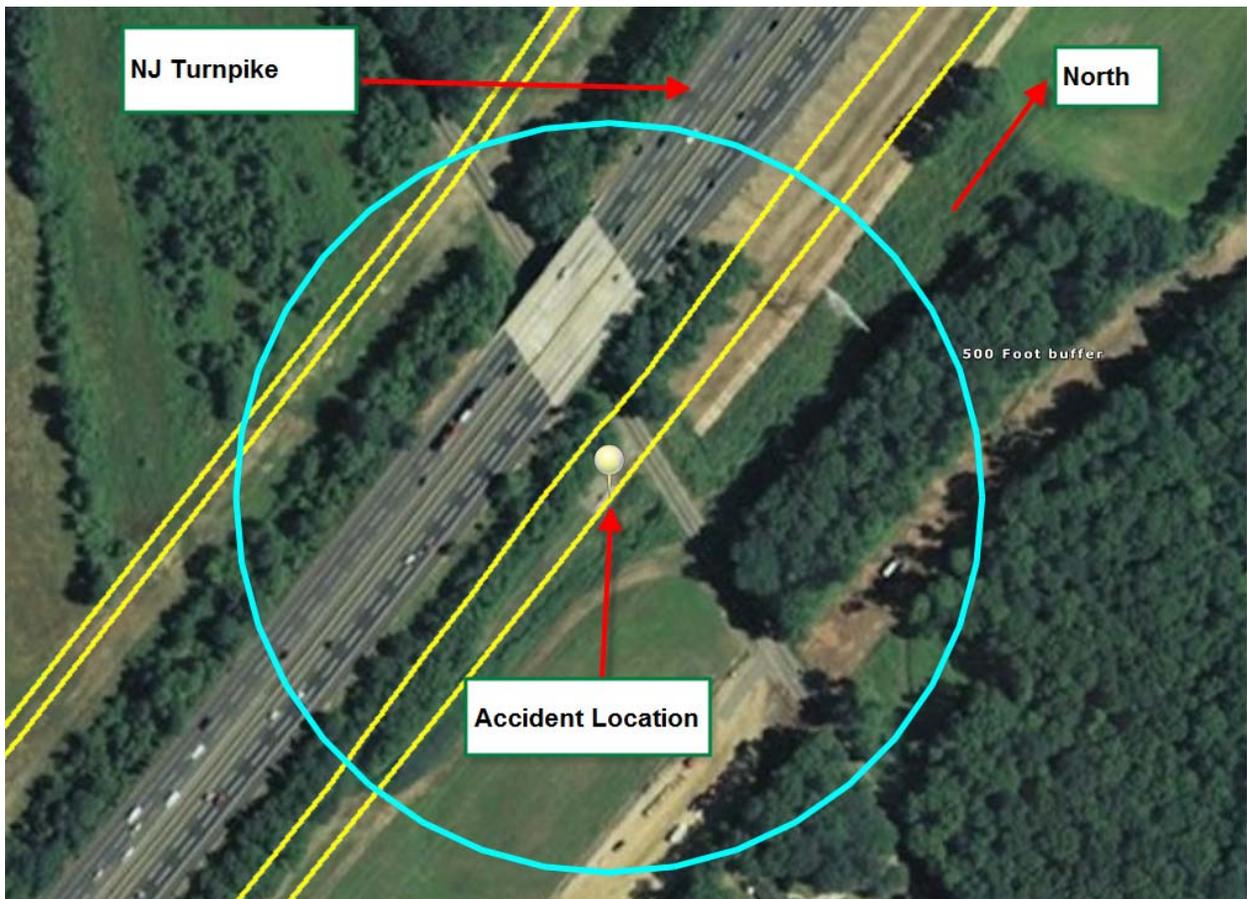
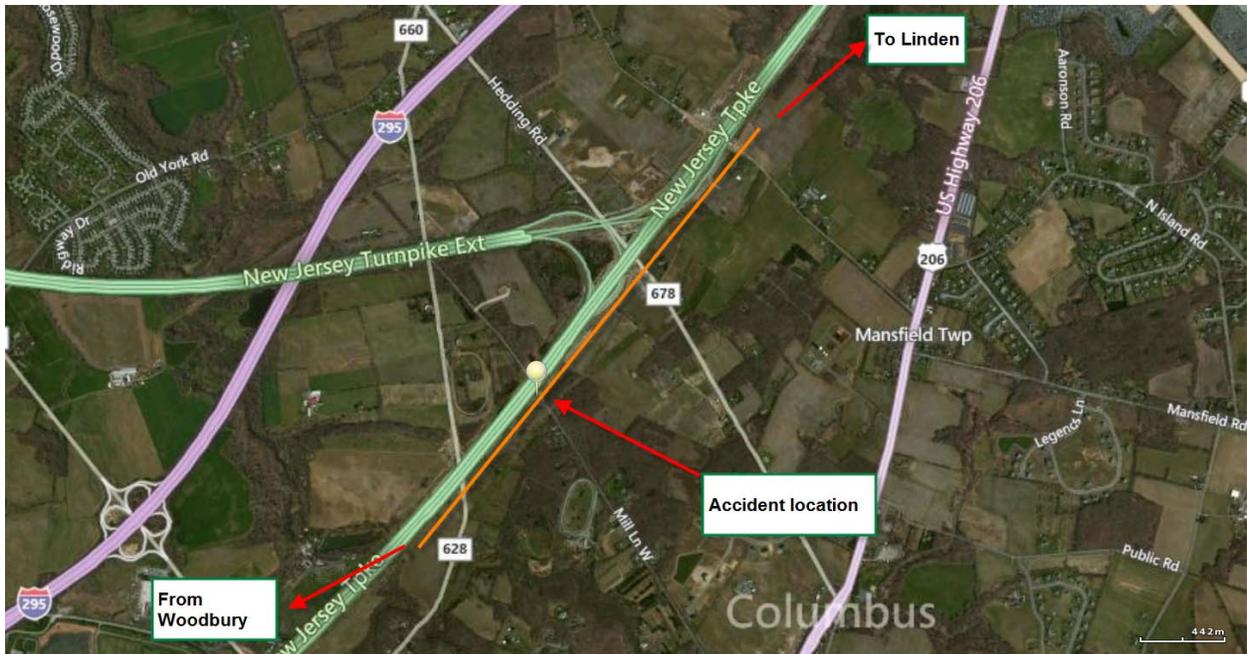
Findings & Contributing Factors

The fire was caused because there was product present in the pipe where hot work was being performed. Based on work at other locations on the pipeline, the operator did not anticipate product. The procedures called for mechanical cutting of the pipe. The pipe was being cut out with an oxy-acetylene torch. The personnel performing the work did not follow the hazard assessment or work permit process. There was no work permit issued for the pipe cutting and removal. The work permit referenced was written for a different job site with different tasks. No gas testing was performed prior to performing the hot work. Sunoco concluded that an immediate cause of the incident was less than adequate supervisory oversight regarding hazard assessment, work permit, excavation, hot work and gas monitoring practice and equipment availability. Personnel knew, but didn't follow details of safety procedures or OQ procedures that require hazard assessment, work permit and gas monitoring.

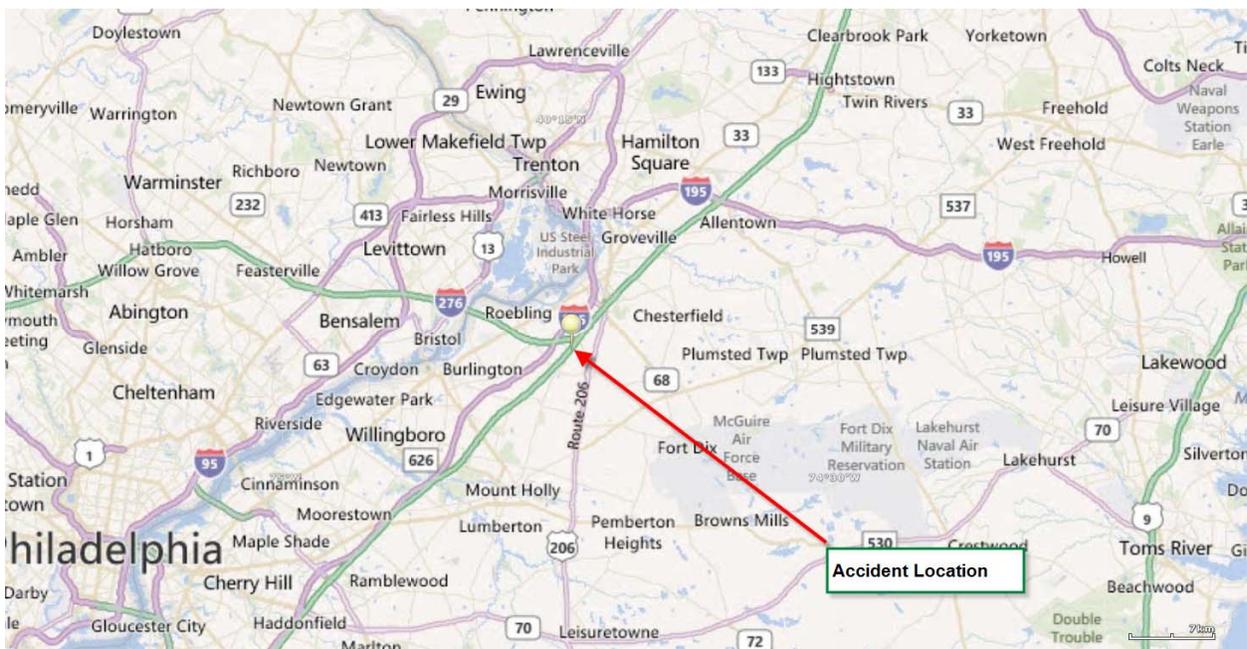
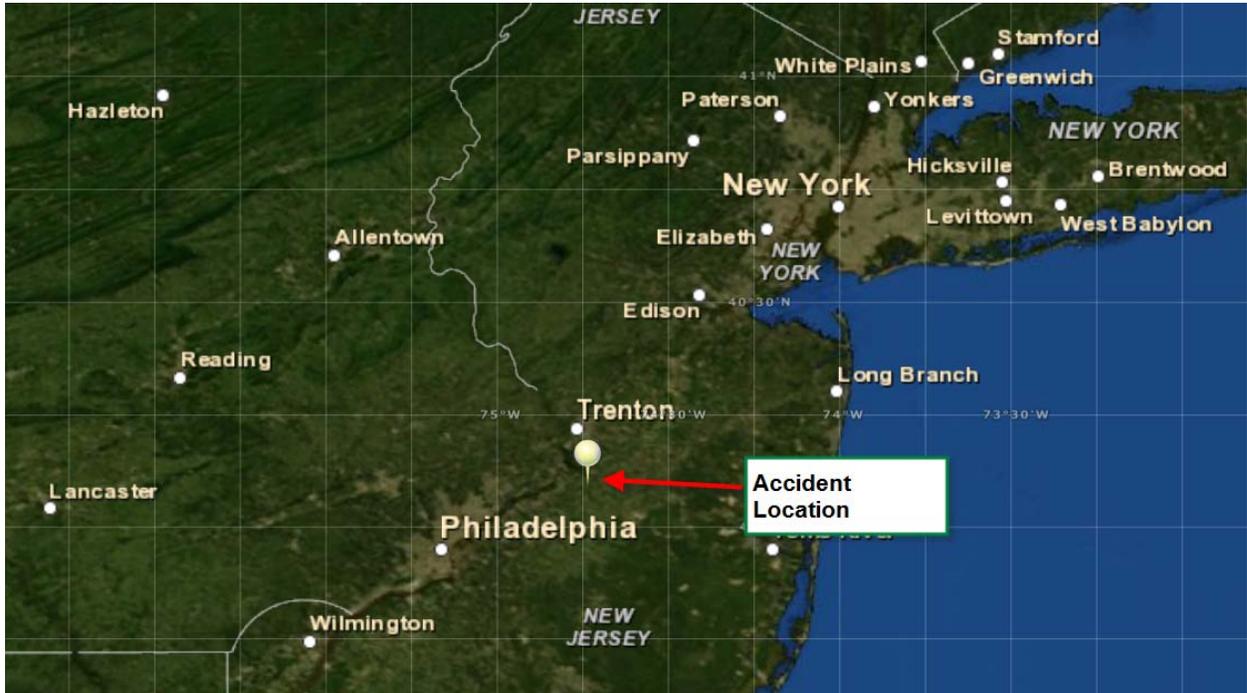
Appendices

Appendix	Description
A	135547 Appendix A Map
B	135547 Appendix B - Photographs
C	135547 Appendix C NRC Report 956654
D	135547 Appendix D Operator Accident Report HL # 20100241 - 16556
E	135547 Appendix E INC Analysis Final Report 11Oct2010 Harbor Line Relocation Fire

135547 Appendix A Map



135547 Appendix A Map



135547 Appendix B - Photographs



135547 Appendix C NRC Report 956654

NATIONAL RESPONSE CENTER 1-800-424-8802

*** 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 # 956654

INCIDENT DESCRIPTION

*Report taken at 19:35 on 11-OCT-10

Incident Type: PIPELINE

Incident Cause: OTHER

Affected Area:

The incident occurred on 11-OCT-10 at 16:10 local time.

Affected Medium: OTHER GROUND/AIR

SUSPECTED RESPONSIBLE PARTYOrganization: HARBOR PIPELINE
HONEYBROOK, PA

Type of Organization: PRIVATE ENTERPRISE

INCIDENT LOCATION

NEW JERSEY TURNPIKE & MILL LANE County: BURLINGTON

City: MANSFIELD TOWNSHIP State: NJ

RELEASED MATERIAL(S)

CHRIS Code: OTW Official Material Name: OIL, FUEL: NO. 2

Also Known As:

Qty Released: 1 GALLON(S)

DESCRIPTION OF INCIDENT

CALLER IS REPORTING A PIPELINE WAS BEING DECOMMISSIONED WHEN RESIDUAL MATERIAL INSIDE THE PIPELINE CAUGHT FIRE. CALLER STATED THERE WAS A 1 GALLON DISCHARGE OF MATERIAL TO THE GROUND AND VAPORS THAT RELEASED FROM MATERIAL BURN-OFF.

INCIDENT DETAILS

Pipeline Type: TRANSMISSION

DOT Regulated: YES

Pipeline Above/Below Ground: BELOW

Exposed or Under Water: NO

Pipeline Covered: UNKNOWN

DAMAGES

Fire Involved: YES Fire Extinguished: YES

INJURIES: NO Hospitalized: Empl/Crew: Passenger:

FATALITIES: NO Empl/Crew: Passenger: Occupant:

EVACUATIONS: NO Who Evacuated: Radius/Area:

Damages: NO

<u>Closure Type</u>	<u>Description of Closure</u>	<u>Length of Closure</u>	<u>Direction of Closure</u>
Air:	N		
Road:	N		Major Artery: N
Waterway:	N		
Track:	N		

Passengers Transferred: NO

Environmental Impact: NO

Media Interest: NONE Community Impact due to Material:

135547 Appendix C NRC Report 956654

REMEDIAL ACTIONS

CLEAN UP WILL BE CONDUCTED ON 12OCT2010.

Release Secured: YES

Release Rate:

Estimated Release Duration:

WEATHERWeather: UNKNOWN, °F

ADDITIONAL AGENCIES NOTIFIEDFederal: NONE
State/Local: NJ DEP
State/Local On Scene: NONE
State Agency Number: NONE

NOTIFICATIONS BY NRCATLANTIC STRIKE TEAM (MAIN OFFICE)
11-OCT-10 19:42
USCG ICC (ICC ONI)
11-OCT-10 19:42
CT DEPT OF EMERGENCY MGMT (COMMISSIONER)
11-OCT-10 19:42
DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)
11-OCT-10 19:42
U.S. EPA II (MAIN OFFICE)
11-OCT-10 19:47
FLD INTEL SUPPORT TEAM PHILADELPHIA (MAIN OFFICE)
11-OCT-10 19:42
USCG NATIONAL COMMAND CENTER (MAIN OFFICE)
11-OCT-10 19:44
NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)
11-OCT-10 19:42
NJ DEPT OF HEALTH & SENIOR SVC (COMMAND CENTER)
11-OCT-10 19:42
NJ OFC HMLND SECURITY & PREPAREDNES (COMMAND CENTER)
11-OCT-10 19:42
NJ STATE POLICE (MARINE SERVICES BUREAU)
11-OCT-10 19:42
NOAA RPTS FOR NJ (MAIN OFFICE)
11-OCT-10 19:42
NATIONAL RESPONSE CENTER HQ (MAIN OFFICE)
11-OCT-10 19:44
PA STATE POLICE (BUREAU OF CRIMINAL INVESTIGATION)
11-OCT-10 19:42
PIPELINE & HAZMAT SAFETY ADMIN (OFFICE OF PIPELINE SAFETY (AUTO))
11-OCT-10 19:42
NJ DEP POC: DUTY OFFICER (MAIN OFFICE)
11-OCT-10 19:42
PA EMERG MGMT AGCY (MAIN OFFICE)
11-OCT-10 19:42
USCG DISTRICT 1 (COMMAND CENTER)
11-OCT-10 19:42

ADDITIONAL INFORMATIONCALLER HAD NO ADDITIONAL INFORMATION.

*** END INCIDENT REPORT # 956654 ***

The National Response Center is strictly an initial report taking agency and does not participate in the investigation or incident response. The NRC receives initial reporting information only and notifies Federal and State On-Scene Coordinators for response. The NRC does not verify nor does it take follow-on incident information. Verification of data and incident response is the sole responsibility of Federal/State On-Scene Coordinators. Data contained within the FOIA Web Database is initial information only. All reports provided via this server are for informational purposes only. Data to be used in legal proceedings must be obtained via written correspondence from the NRC.

Appendix D

Incident Analysis for NJ Turnpike Fire in Pipe

This document is on file at PHMSA

135547 Appendix E Operator Accident Report HL 20100241-16556

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed \$100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed \$1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 01/31/2013	
 U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	Report Date:	11/11/2010	
	No.	20100241 - 16556 ----- (DOT Use Only)	
ACCIDENT REPORT - HAZARDOUS LIQUID PIPELINE SYSTEMS			
A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0047. Public reporting for this collection of information is estimated to be approximately 10 hours per response (5 hours for a small release), including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.			
INSTRUCTIONS			
Important: Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline .			
PART A - KEY REPORT INFORMATION			
Report Type: <i>(select all that apply)</i>	Original:	Supplemental:	Final:
		Yes	Yes
Last Revision Date:	04/18/2012		
1. Operator's OPS-issued Operator Identification Number (OPID):	7063		
2. Name of Operator	HARBOR PIPELINE CO		
3. Address of Operator:			
3a. Street Address	525 FRITZTOWN ROAD		
3b. City	SINKING SPRING		
3c. State	Pennsylvania		
3d. Zip Code	19608		
4. Local time (24-hr clock) and date of the Accident:	10/11/2010 16:10		
5. Location of Accident:			
Latitude:	40.091758		
Longitude:	-74.738542		
6. National Response Center Report Number (if applicable):	956654		
7. Local time (24-hr clock) and date of initial telephonic report to the National Response Center (if applicable):	10/11/2010 19:35		
8. Commodity released: <i>(select only one, based on predominant volume released)</i>	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Diesel, Fuel Oil, Kerosene, Jet Fuel		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend (e.g. B2, B20, B100):	B		
9. Estimated volume of commodity released unintentionally (Barrels):			
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):			
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			
13d. Workers working on the right-of-way, but NOT			

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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:	This pipeline had been disconnected from both ends from the main line on 9/21/10
- If Yes, complete Questions 14a and 14b: (use local time, 24-hr clock)	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	Yes
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:	10/11/2010 16:10
18b. Local time Operator resources arrived on site:	10/11/2010 16:10

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of Accident onshore?	Yes
<i>If Yes, Complete Questions (2-12)</i>	
<i>If No, Complete Questions (13-15)</i>	
- If Onshore:	
2. State:	New Jersey
3. Zip Code:	08022
4. City	MANSFIELD TOWNSHIP
5. County or Parish	BURLINGTON
6. Operator-designated location:	
Specify:	
7. Pipeline/Facility name:	Harbor Pipeline
8. Segment name/ID:	
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Pipeline Right-of-way
11. Area of Accident (as found):	Underground
Specify:	Other
- If Other, Describe:	Inactive ROW: exposed for decommission
Depth-of-Cover (in):	48
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:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

1. Is the pipeline or facility:	Intrastate
2. Part of system involved in Accident:	Onshore Pipeline, Including Valve Sites
- If Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances, specify:	
3. Item involved in Accident:	Pipe

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- If Pipe, specify:	Pipe Body
3a. Nominal diameter of pipe (in):	16
3b. Wall thickness (in):	.281
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	52,000
3d. Pipe specification:	X-52
3e. Pipe Seam , specify:	Longitudinal ERW - Unknown Frequency
- If Other, Describe:	
3f. Pipe manufacturer:	Youngstown Sheet and Tube Company
3g. Year of manufacture:	1955
3h. Pipeline coating type at point of Accident, specify:	Fusion Bonded Epoxy
- If Other, Describe:	
- If Weld, including heat-affected zone, specify:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1955
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Other
- 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	
in. (length circumferentially or axially)	
- If Other – Describe:	Segment had been disconnected at both ends and purged weeks prior to this fire. Segment was being cut to be sold as scrap metal.
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	No
4. Anticipated remediation:	No
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	
- Vegetation	
- Wildlife	
5. Water contamination:	No
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- 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?	No
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): (Select all that apply)	

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- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's 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?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- 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	\$ 0
8f. Estimated other costs	\$ 0
Describe:	
8g. Total estimated property damage (sum of above)	\$
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 Accident (psig):	.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- 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?	Yes
- If Yes - (Complete 5a. - 5f. below)	
5a. Type of upstream valve used to initially isolate release source:	
5b. Type of downstream valve used to initially isolate release source:	
5c. Length of segment isolated between valves (ft):	
5d. Is the pipeline configured to accommodate internal inspection tools?	Yes
- If No, Which physical features limit tool accommodation? (select all that apply)	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No

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- If Yes, Which operational factors complicate execution? (select all that apply)	
- Excessive debris or scale, wax, or other wall buildup	
- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	No
If Yes -	
6a. Was it operating at the time of the Accident?	
6b. Was it fully functional at the time of the Accident?	
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with 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?	
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	No
- If Yes:	
7a. Was it operating at the time of the Accident?	
7b. Was it fully functional at the time of the Accident?	
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?	
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?	
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Guard Patrol by Operator or its contractor" is selected in Question 8, specify the following:	Contractor working for the Operator
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	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)
- 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)	Segment had been disconnected from active pipeline.
- If Yes, specify investigation result(s): (select all that apply)	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	
- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above:	
Describe:	
PART F - DRUG & ALCOHOL TESTING INFORMATION	

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1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. Specify how many were tested:	
1b. Specify how many failed:	
2. As a result of this Accident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
2a. Specify how many were tested:	1
2b. Specify how many failed:	0
PART G – APPARENT CAUSE	
<i>Select only one box from PART G in shaded column on left representing the APPARENT Cause of the Accident, and answer the questions on the right. Describe secondary, contributing or root causes of the Accident in the narrative (PART H).</i>	
Apparent Cause:	G7 - Incorrect Operation
G1 - Corrosion Failure - only one sub-cause can be picked from shaded left-hand column	
External Corrosion:	
Internal Corrosion:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: <i>(select all that apply)</i>	
- 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 following: <i>(select all that apply)</i>	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
<input type="checkbox"/> 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 <i>(select all that apply):</i> -	
- 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 following <i>(select all that apply):</i> -	
- Field examination	

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- 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 the "Item Involved in Accident" (from PART C, Question 3) is Tank/Vessel.	
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 the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
15. Has one or more internal inspection tool collected data at the point of the Accident?	
15a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year 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?	
If 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:	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 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:

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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 selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: <i>(select all that apply)</i>	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one sub-cause can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Excavation Damage by Operator (First Party):	
- If Excavation Damage by Operator's Contractor (Second Party):	
- 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 PART C, Question 3) is Pipe or Weld.	
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 and indicate most recent year run: -	
- 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:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	

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Most recent year tested:	
Test pressure (psig):	
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 Accident:	
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 as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: <i>(select all that apply)</i> -	
- 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: <i>(select all that apply)</i> -	
- 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:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
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 <i>(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):</i>	
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 selected from the shaded left-hand column	

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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 NOT 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 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 indicate most recent year run:	
- 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:
- Hard Spot	Most recent year conducted:
- Combination Tool	Most recent year conducted:
- Transverse Field/Triaxial	Most recent year conducted:
- Other	Most recent year conducted:
Describe:	
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, 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:

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- Other	
Most recent year conducted:	
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 Involved in Accident" (from PART C, Question 3) is "Pipe" or "Weld."	
Material Failure of Pipe or Weld – Sub-Cause:	
1. The sub-cause selected below is based on the following: <i>(select all that apply)</i>	
- 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: <i>(select all that apply)</i>	
- Fatigue or Vibration-related	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Original Manufacturing-related (NOT girth weld or other welds formed in the field):	
2. List contributing factors: <i>(select all that apply)</i>	
- Fatigue or Vibration-related:	
Specify:	
- If Other, Describe:	
- Mechanical Stress:	
- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: <i>(select all that apply)</i> :	
- 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?	
5a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	Most recent year run:
- Ultrasonic	Most recent year run:
- Geometry	Most recent year run:
- Caliper	Most recent year run:
- Crack	Most recent year run:

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- Hard Spot	
Most recent year run:	
- 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 Accident -	
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, 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:	
G6 – Equipment Failure - only one sub-cause can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: <i>(select all that apply)</i> -	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- 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:	
- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Defective or Loose Tubing or Fitting:	
- If Failure of Equipment Body (except Pump), Tank Plate, or other Material:	
- If Other Equipment Failure:	

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5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: <i>(select all that apply)</i>	
- 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	No
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	Yes
2. Describe:	Yes
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to <i>(select all that apply)</i> : -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	Yes
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	Decommissioning
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)?	Yes, they were qualified for the task(s)
G8 - Other Accident Cause - only one sub-cause can be selected from the shaded left-hand column	
Other Accident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	

- If Unknown:			
2. Specify:			
PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT			
<p>Out of service piping that had been permanently removed from the pipeline system was being cut to be sold as scrap metal. Residual product of less than one gallon ignited during the hot work process of cutting the piping which resulted in a small fire that was immediately extinguished. Causal analysis revealed that the established hot work procedures were not followed by the on-site personnel.</p>			
<table border="1"> <tr> <td>File Full Name</td> </tr> <tr> <td> </td> </tr> </table>		File Full Name	
File Full Name			

PART I - PREPARER AND AUTHORIZED SIGNATURE	
Preparer's Name	Claudia Pankowski
Preparer's Title	Area DOT Compliance Supervisor
Preparer's Telephone Number	610-942-1924
Preparer's E-mail Address	cmpankowski@sunocologistics.com
Preparer's Facsimile Number	610-942-1910
Authorized Signature's Name	Claudia Pankowski
Authorized Signature Title	Area DOT Compliance Supervisor
Authorized Signature Telephone Number	610-942-1924
Authorized Signature Email	cmpankowski@sunocologistics.com
Date	04/18/2012