NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 4/30/2026
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	04/19/2012
	No.	20120114 -17969 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID AND CARBON DIOXIDE 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 12 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the 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/library/forms .`

PART A - KEY REPORT INFORMATION

	Original:	**Supplemental:**	**Final:**
Report Type: *(select all that apply)*		Yes	

Last Revision Date:	04/29/2013
1. Operator's OPS-issued Operator Identification Number (OPID):	32147
2. Name of Operator	MARATHON PIPE LINE LLC
3. Address of Operator:	
3a. Street Address	539 SOUTH MAIN STREET
3b. City	FINDLAY
3c. State	Ohio
3d. Zip Code	45840
4. Local time *(24-hr clock)* and date of accident:	03/26/2012 09:00
4a. Time Zone for local time	
4b. Daylight Saving in effect?	
5. Location of Accident:	
Latitude / Longitude	[redacted]
6. Commodity released: *(select only one, based on predominant volume released)*	Crude Oil
- Specify Commodity Subtype:	
- 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	
7. Estimated volume of commodity released unintentionally (Barrels):	1.60
8. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	0
9. Estimated volume of commodity recovered (Barrels):	1.60
10. Were there fatalities?	No
- If Yes, specify the number in each category:	
10a. Operator employees	
10b. Contractor employees working for the Operator	
10c. Non-Operator emergency responders	
10d. Workers working on the right-of-way, but NOT associated with this Operator	
10e. General public	
10f. Total fatalities (sum of above)	0
11. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
11a. Operator employees	
11b. Contractor employees working for the Operator	
11c. Non-Operator emergency responders	
11d. Workers working on the right-of-way, but NOT associated with this Operator	
11e. General public	
11f. Total injuries (sum of above)	0
12. What was the Operator's initial indication of the Failure? *(select only one)*	Local Operating Personnel, including contractors
Other	
12a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 12, specify the following: (select only one)	
	Operator employee
13. Local time Operator identified failure	03/26/2012 09:00
14. formerly C2 Part of system involved in Accident: *(select only one)*	Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances
15. formerly B1 *Auto-populated based on A14* Was the origin of the Accident onshore?	Yes
Yes (Complete Questions B3-B12)	
No *(Complete Questions B13-B15)*	
16. Operational Status at time Operator identified failure:	
17. If Operational Status = Routine Start-Up or Normal Operation, was the pipeline/facility shut down due to the Accident?	No
Explain:	Already shut down for a project.

If Yes, complete Questions 17.a and 17.b: *(use local time, 24-hr clock)*	
17a. Local time and date of shutdown	
17b. Local time pipeline/facility restarted	
Still shut down*	
18. *If A12 = Notification from Emergency Responder, skip A18.a through A18.c.*	
18a. Did the operator communicate with Local, State, or Federal Emergency Responders about the accident?	
If No, skip 18b. and 18c	
18b. Which party initiated communication about the accident?	
18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication	
19. Local time Operator responders arrived on site	03/26/2012 09:00
20. Local time of confirmed discovery	
21a. Local time (24-hr clock) and date of initial operator report to the National Response Center :	
21b. Initial Operator National Response Center Report Number OR	
21c. Additional NRC Report numbers submitted by the operator:	
22. Did the commodity ignite?	No
If Yes, answer 22.a through d:	
22a. Local time of ignition	
22b. How was the fire extinguished?	
specify:	
22c. Estimated volume of commodity consumed by fire (barrels): (must be less than or equal to A7)	
22d. formerly A16. Did the commodity explode?	No
23. If 14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, answer A23a through f:	
23a. Initial action taken to control flow upstream of failure location	
- If Operational Control	
If Valve Closure, answer A23b and c:	
23b. Local time of valve closure	
23c. Type of upstream valve used to initially isolate release source:	
23d. Initial action taken to control flow downstream of failure location	
- If Operational Control	
If Valve Closure, answer A23.e and f:	
23e. Local time of valve closure	
23f. Type of downstream valve used to initially isolate release source	

24. If A6 = Crude Oil , Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions, or Biofuel / Alternative Fuel (including ethanol blends) AND A15. is Onshore, answer questions A24a and c	
24a. Did the operator notify a "qualified individual" in the Onshore Oil Spill Response Plan?	
If Yes, answer A24b.	
24b. Local time the "qualified individual" was notified.	
24c. Did the operator activate an Oil Spill Removal Organization (OSRO)?	
If Yes, answer A24d and e:	
24d. Local time operator activated OSRO	
24e. Local time OSRO arrived on site	
25. Number of general public evacuated:	0
PART B - ADDITIONAL LOCATION INFORMATION	
1. Pipeline/Facility name:	Patoka Tank Farm
2. Segment name/ID:	
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
3. State:	Illinois
4. Zip Code:	62892
5. City	Patoka
6. County or Parish	Marion
7. Operator-designated location	Milepost/Valve Station
8. Specify:	Patoka TF
9. Was this onshore Accident on Federal land?	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:	
11a. Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased	
Uncased	
Bored/drilled	
- If Road crossing –	

Cased/ / Bored/drilled	
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:	
Is this water crossing 100 feet or more in length from high water mark to high water mark?	
- 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) :	
- Area:	
- Block/Tract #:	
15. Area of Accident:	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Is the pipeline or facility:	Interstate
2. reserved	
3. Item involved in Accident: *When A14 is "Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances" C3 will default to "Tank/Vessel"*	Valve
- If Pipe, specify:	
If Pipe Body: Was this a puddle/spot weld?	
3a. Nominal Pipe Size:	
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. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
3h. Coating field applied?	
- If Weld, including heat-affected zone, specify	
- If Other, Describe:	

If Pipe Girth Weld is selected, complete items C3a through h above. Are any of the C3b though h values different on either side of the girth weld?	
If Yes, enter the different value(s) below:	
3i. Wall thickness (in):	
3j. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3k. Pipe specification:	
Unknown	
3l. Pipe Seam	
- If Other, Describe:	
3m. Pipe manufacturer:	
Unknown	
3n. Pipeline coating type at point of Accident	
- If Other, Describe:	
3o. Coating field applied?	
- If Valve, specify:	
- Valve type	Auxiliary or Other Valve
- If Mainline, Valve Mainline type	
- If Other, Describe:	
3p. Mainline valve manufacturer:	
3q. Type of pump	
- If Other, Describe:	
3r. Type of Service	
- If Other, Describe:	
3s. Tubing material	
3t. Type of tubing	
3u. Specify failure path	
- If Other, Describe:	
3v. Tank Type	Atmospheric
If 3v. = Pressurized:	
3v1. Tank Maximum Operating Pressure	
3v2. What is the set point of the primary pressure relief device on the tank	
3v3. Did the thermal or pressure relief valve activate?	
3v4. Was the MOP of the tank exceeded?	
If 3v = Atmospheric or Low Pressure:	
3v5. Safe-Fill-Level (in feet) at the time of the accident?	
3v6. Was the Safe Fill-Level exceeded?	
3v7. Year of most recent API Std 653 Out-of-Service Inspection	

3v8. API Std 653 In-Service Inspection	
4. Year item involved in Accident was installed:	1975
4a. Year item involved in Accident was manufactured:	
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	Packing O-Ring
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Seal or Packing
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
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:	Yes
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	Yes
- 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?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- 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	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- 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 cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	0
8b. Estimated cost of commodity lost	0
8c. Estimated cost of Operator's property damage & repairs	120,000
8d. Estimated cost of emergency response	100
8e. Estimated cost of environmental remediation	300
8f. Estimated other costs	0
Describe:	
8g. Total estimated property damage (sum of above)	120,400
Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. ***If a person is included in A11, do not include them in D9.***	
9. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:	

If a person is included in D9, do not include them in D10.	
10. Estimated number of persons with injuries requiring treatment by EMTs at the site of accident:	
Buildings Affected	
11. Number of residential buildings affected (evacuated or required repair):	
12. Number of business buildings affected (evacuated or required repair):	
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Accident (psig):	40.00
If C3. Is Tank/Vessel and C3v. is Atmospheric, do not answer E2. and E3	
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	275.00
2a. Limiting factor establishing MOP (select only one):	
describe:	
2b. Date MOP established	
2c. Was the MOP established in conjunction with a reversal of flow direction?	
If E2c = Yes, E2d. What is the date of the most recent surge analysis performed at the point of the Accident?	
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. 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?	
If A14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, complete E5 through E7	
5. Answer E5 only when both A23a and A23d are Valve Closure	
Length of segment initially isolated between valves (ft):	
6. Is the pipeline configured to accommodate internal inspection tools?	
- 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:	
7. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- 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:	
8. Function of pipeline system:	> 20% SMYS Regulated Transmission
9. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
9a. Was it operating at the time of the Accident?	Yes
9b. Was it fully functional at the time of the Accident?	Yes
9c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
9d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
10. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	Yes
- If Yes:	
10a. Was it operating at the time of the Accident?	Yes
10b. Was it fully functional at the time of the Accident?	Yes
10c. 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
10d. 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
11. 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?	Yes, specify investigation result(s): (select all that apply)

- 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)*	
- 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	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 response	
- Investigation identified areas other than those above:	
Describe:	
PART F - DRUG & ALCOHOL TESTING INFORMATION	
1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- 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?	No
- 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 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).	
Apparent Cause:	G6 - Equipment Failure

- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- 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	
- 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:	Seal (NOT pump seal) or packing
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Improper maintenance	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Erosion/Abnormal Wear	
- Other	Yes
- If Other, Describe:	Related to valve age.
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Descr be:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	

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

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

Valve packing o-ring issue related to old age of valve.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Renee Schroeder
Preparer's Title	HES Professional
Preparer's Telephone Number	[redacted]
Preparer's E-mail Address	[redacted]
Preparer's Facsimile Number	
Local Contact Name	
Local Contact Email	
Local Contact Phone	
Authorized Signer Name	Randall Bishop
Authorized Signer Title	Regulatory Compliance Supervisor
Authorized Signer Telephone Number	[redacted]
Authorized Signer Email	[redacted]
Date	04/29/2013

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 4/30/2026
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	09/21/2012
	No.	20120273 -17268 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID AND CARBON DIOXIDE PIPELINE SYSTEMS

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INSTRUCTIONS

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PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	Yes

Last Revision Date:	02/27/2013
1. Operator's OPS-issued Operator Identification Number (OPID):	32147
2. Name of Operator	MARATHON PIPE LINE LLC
3. Address of Operator:	
3a. Street Address	539 SOUTH MAIN STREET
3b. City	FINDLAY
3c. State	Ohio
3d. Zip Code	45840
4. Local time *(24-hr clock)* and date of accident:	08/22/2012 10:00
4a. Time Zone for local time	
4b. Daylight Saving in effect?	
5. Location of Accident:	
Latitude / Longitude	[redacted]
6. Commodity released: *(select only one, based on predominant volume released)*	Crude Oil
- Specify Commodity Subtype:	
- 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	
7. Estimated volume of commodity released unintentionally (Barrels):	25.00
8. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	0
9. Estimated volume of commodity recovered (Barrels):	25.00
10. Were there fatalities?	No
- If Yes, specify the number in each category:	
10a. Operator employees	
10b. Contractor employees working for the Operator	
10c. Non-Operator emergency responders	
10d. Workers working on the right-of-way, but NOT associated with this Operator	
10e. General public	
10f. Total fatalities (sum of above)	0
11. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
11a. Operator employees	
11b. Contractor employees working for the Operator	
11c. Non-Operator emergency responders	
11d. Workers working on the right-of-way, but NOT associated with this Operator	
11e. General public	
11f. Total injuries (sum of above)	0
12. What was the Operator's initial indication of the Failure? *(select only one)*	Local Operating Personnel, including contractors
Other	
12a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 12, specify the following: (select only one)	
	Operator employee
13. Local time Operator identified failure	08/22/2012 10:00
14. formerly C2 Part of system involved in Accident: *(select only one)*	Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances
15. formerly B1 *Auto-populated based on A14* Was the origin of the Accident onshore?	Yes
Yes (Complete Questions B3-B12)	
No *(Complete Questions B13-B15)*	
16. Operational Status at time Operator identified failure:	
17. If Operational Status = Routine Start-Up or Normal Operation, was the pipeline/facility shut down due to the Accident?	No
Explain:	Release from a breakout tank, not an individual pipeline.

If Yes, complete Questions 17.a and 17.b: *(use local time, 24-hr clock)*	
17a. Local time and date of shutdown	
17b. Local time pipeline/facility restarted	
Still shut down*	
18. *If A12 = Notification from Emergency Responder, skip A18.a through A18.c.*	
18a. Did the operator communicate with Local, State, or Federal Emergency Responders about the accident?	
If No, skip 18b. and 18c	
18b. Which party initiated communication about the accident?	
18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication	
19. Local time Operator responders arrived on site	08/22/2012 10:00
20. Local time of confirmed discovery	
21a. Local time (24-hr clock) and date of initial operator report to the National Response Center :	08/22/2012 12:54
21b. Initial Operator National Response Center Report Number OR	1021898
21c. Additional NRC Report numbers submitted by the operator:	
22. Did the commodity ignite?	No
If Yes, answer 22.a through d:	
22a. Local time of ignition	
22b. How was the fire extinguished?	
specify:	
22c. Estimated volume of commodity consumed by fire (barrels): (must be less than or equal to A7)	
22d. formerly A16. Did the commodity explode?	No
23. If 14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, answer A23a through f:	
23a. Initial action taken to control flow upstream of failure location	
- If Operational Control	
If Valve Closure, answer A23b and c:	
23b. Local time of valve closure	
23c. Type of upstream valve used to initially isolate release source:	
23d. Initial action taken to control flow downstream of failure location	
- If Operational Control	
If Valve Closure, answer A23.e and f:	
23e. Local time of valve closure	
23f. Type of downstream valve used to initially isolate release source	

24. If A6 = Crude Oil , Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions, or Biofuel / Alternative Fuel (including ethanol blends) AND A15. is Onshore, answer questions A24a and c	
24a. Did the operator notify a "qualified individual" in the Onshore Oil Spill Response Plan?	
If Yes, answer A24b.	
24b. Local time the "qualified individual" was notified.	
24c. Did the operator activate an Oil Spill Removal Organization (OSRO)?	
If Yes, answer A24d and e:	
24d. Local time operator activated OSRO	
24e. Local time OSRO arrived on site	
25. Number of general public evacuated:	0
PART B - ADDITIONAL LOCATION INFORMATION	
1. Pipeline/Facility name:	Wood River Station
2. Segment name/ID:	Tank 1262
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
3. State:	Illinois
4. Zip Code:	62095
5. City	Wood River
6. County or Parish	Madison
7. Operator-designated location	
8. Specify:	
9. Was this onshore Accident on Federal land?	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:	
11a. Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased	
Uncased	
Bored/drilled	
- If Road crossing –	

Cased/ / Bored/drilled	
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:	
Is this water crossing 100 feet or more in length from high water mark to high water mark?	
- 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) :	
- Area:	
- Block/Tract #:	
15. Area of Accident:	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Is the pipeline or facility:	Interstate
2. reserved	
3. Item involved in Accident: *When A14 is "Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances" C3 will default to "Tank/Vessel"*	Weld, including heat-affected zone
- If Pipe, specify:	
If Pipe Body: Was this a puddle/spot weld?	
3a. Nominal Pipe Size:	
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. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
3h. Coating field applied?	
- If Weld, including heat-affected zone, specify	Fillet Weld
- If Other, Describe:	

If Pipe Girth Weld is selected, complete items C3a through h above. Are any of the C3b though h values different on either side of the girth weld?	
If Yes, enter the different value(s) below:	
3i. Wall thickness (in):	
3j. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3k. Pipe specification:	
Unknown	
3l. Pipe Seam	
- If Other, Describe:	
3m. Pipe manufacturer:	
Unknown	
3n. Pipeline coating type at point of Accident	
- If Other, Describe:	
3o. Coating field applied?	
- If Valve, specify:	
- Valve type	
- If Mainline, Valve Mainline type	
- If Other, Describe:	
3p. Mainline valve manufacturer:	
3q. Type of pump	
- If Other, Describe:	
3r. Type of Service	
- If Other, Describe:	
3s. Tubing material	
3t. Type of tubing	
3u. Specify failure path	
- If Other, Describe:	
3v. Tank Type	Atmospheric
If 3v. = Pressurized:	
3v1. Tank Maximum Operating Pressure	
3v2. What is the set point of the primary pressure relief device on the tank	
3v3. Did the thermal or pressure relief valve activate?	
3v4. Was the MOP of the tank exceeded?	
If 3v = Atmospheric or Low Pressure:	
3v5. Safe-Fill-Level (in feet) at the time of the accident?	
3v6. Was the Safe Fill-Level exceeded?	
3v7. Year of most recent API Std 653 Out-of-Service Inspection	

3v8. API Std 653 In-Service Inspection	
4. Year item involved in Accident was installed:	1992
4a. Year item involved in Accident was manufactured:	
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Other
- If Other, Describe:	Hole in Weld
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
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:	Yes
4a. If Yes, specify all that apply:	
- Surface water	
- Groundwater	
- Soil	Yes
- 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?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- High Population Area:	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- 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 cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	0
8b. Estimated cost of commodity lost	1,980
8c. Estimated cost of Operator's property damage & repairs	476,000
8d. Estimated cost of emergency response	0
8e. Estimated cost of environmental remediation	189,000
8f. Estimated other costs	0
Describe:	
8g. Total estimated property damage (sum of above)	666,980
Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. ***If a person is included in A11, do not include them in D9.***	
9. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:	

If a person is included in D9, do not include them in D10.	
10. Estimated number of persons with injuries requiring treatment by EMTs at the site of accident:	
Buildings Affected	
11. Number of residential buildings affected (evacuated or required repair):	
12. Number of business buildings affected (evacuated or required repair):	
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Accident (psig):	13.80
If C3. Is Tank/Vessel and C3v. is Atmospheric, do not answer E2. and E3	
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	18.00
2a. Limiting factor establishing MOP (select only one):	
describe:	
2b. Date MOP established	
2c. Was the MOP established in conjunction with a reversal of flow direction?	
If E2c = Yes, E2d. What is the date of the most recent surge analysis performed at the point of the Accident?	
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. 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?	
If A14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, complete E5 through E7	
5. Answer E5 only when both A23a and A23d are Valve Closure	
Length of segment initially isolated between valves (ft):	
6. Is the pipeline configured to accommodate internal inspection tools?	
- 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:	
7. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- 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:	
8. Function of pipeline system:	> 20% SMYS Regulated Transmission
9. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
9a. Was it operating at the time of the Accident?	Yes
9b. Was it fully functional at the time of the Accident?	Yes
9c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
9d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
10. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	Yes
- If Yes:	
10a. Was it operating at the time of the Accident?	Yes
10b. Was it fully functional at the time of the Accident?	Yes
10c. 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
10d. 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
11. 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)*	Issue is related to tank integrity. Leak rate below control room detection capabilities.
- 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	
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?	No
- 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 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).	
Apparent Cause:	G7 - Incorrect Operation

- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Improper maintenance	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Erosion/Abnormal Wear	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	Equipment Not Installed Properly
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Descr be:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	Yes
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	Other maintenance

5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	No
5a. If Yes, were the individuals performing the task(s) 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:	
Mandatory comment field:	
PART J – COMPLETED INTEGRITY INSPECTIONS	
Complete the following if the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld and the "Cause" (from Part G) is:	
Corrosion (any subCause in Part G1); or	
Previous Damage due to Excavation Activity (subCause in Part G3); or	
Previous Mechanical Damage NOT Related to Excavation (subCause in Part G4); or	
Material Failure of Pipe or Weld (any subCause in Part G5)	
J1. Have internal inspection tools collected data at the point of the Accident?	
J1a. If Yes, for each tool and technology used provide the information below for the most recent and previous tool runs:	
Axial Magnetic Flux Leakage	
Most recent run Year:	
Most recent run Propulsion Method (select only one):	
Most recent run Attuned to Detect (select only one):	
Other Describe	
If Metal Loss, specify (select only one):	
Other Describe	
Previous run Year:	
Previous run Propulsion Method (select only one):	
Previous run Attuned to Detect (select only one):	
Other Describe	
If Metal Loss, specify (select only one):	
Other Describe	
Circumferential/Transverse Wave Magnetic Flux Leakage	
Most recent run Year:	
Most recent run Propulsion Method (select only one):	
Most recent run Resolution (select only one):	
Other Describe	
Previous run Year:	
Previous run Propulsion Method (select only one):	
Previous run Resolution (select only one):	

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

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

On August 1, 2012, local operating personnel noticed a small amount of crude oil (0.013 gallons) on the chime of Tank 1262 during a routine facility check. On August 22, further investigation revealed crude oil in one of three soil samples taken within the tank dike, lab analysis determined the crude to be fresh. Subsequent soil samples have not shown indications of fresh crude. The original estimated release volume was calculated using dimensions of impacted soil found via soil borings. Analysis of impacted soils led to a revised estimated release volume. All impacted soil was removed and disposed.

In attempts to discover a release source, the tank was emptied, taken out of service, and cleaned. The tank then underwent an API 653 inspection, an MFL floor scan, and the critical zone and floor welds were blasted and non-destructively tested. During the vacuum box testing on September 18, a small hole was found in the weld of a patch plate on the tank floor. The cause of the hole was determined to be a lack of fusion of the weld due to ineffective inspection procedures in 1992.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Jennifer Rader
Preparer's Title	HES Professional
Preparer's Telephone Number	[redacted]
Preparer's E-mail Address	[redacted]
Preparer's Facsimile Number	[redacted]
Local Contact Name	
Local Contact Email	
Local Contact Phone	
Authorized Signer Name	Randy Bishop
Authorized Signer Title	Regulatory Compliance Supervisor
Authorized Signer Telephone Number	[redacted]
Authorized Signer Email	[redacted]
Date	02/27/2013

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 4/30/2026
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	07/28/2014
	No.	20140272 -20168 --- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID AND CARBON DIOXIDE 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 12 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the 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/library/forms .`

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	Yes

Last Revision Date:	02/24/2015
1. Operator's OPS-issued Operator Identification Number (OPID):	32147
2. Name of Operator	MARATHON PIPE LINE LLC
3. Address of Operator:	
3a. Street Address	539 SOUTH MAIN STREET
3b. City	FINDLAY
3c. State	Ohio
3d. Zip Code	45840
4. Local time *(24-hr clock)* and date of accident:	06/29/2014 05:00
4a. Time Zone for local time	
4b. Daylight Saving in effect?	
5. Location of Accident:	
Latitude / Longitude	[redacted]
6. Commodity released: *(select only one, based on predominant volume released)*	Crude Oil
- Specify Commodity Subtype:	
- 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	
7. Estimated volume of commodity released unintentionally (Barrels):	646.00
8. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
9. Estimated volume of commodity recovered (Barrels):	348.00
10. Were there fatalities?	No
- If Yes, specify the number in each category:	
10a. Operator employees	
10b. Contractor employees working for the Operator	
10c. Non-Operator emergency responders	
10d. Workers working on the right-of-way, but NOT associated with this Operator	
10e. General public	
10f. Total fatalities (sum of above)	0
11. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
11a. Operator employees	
11b. Contractor employees working for the Operator	
11c. Non-Operator emergency responders	
11d. Workers working on the right-of-way, but NOT associated with this Operator	
11e. General public	
11f. Total injuries (sum of above)	0
12. What was the Operator's initial indication of the Failure? *(select only one)*	Local Operating Personnel, including contractors
Other	
12a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 12, specify the following: (select only one)	
	Operator employee
13. Local time Operator identified failure	06/29/2014 05:00
14. formerly C2 Part of system involved in Accident: *(select only one)*	Onshore Terminal/Tank Farm Equipment and Piping
15. formerly B1 *Auto-populated based on A14* Was the origin of the Accident onshore?	Yes
Yes (Complete Questions B3-B12)	
No *(Complete Questions B13-B15)*	
16. Operational Status at time Operator identified failure:	
17. If Operational Status = Routine Start-Up or Normal Operation, was the pipeline/facility shut down due to the Accident?	Yes
Explain:	

If Yes, complete Questions 17.a and 17.b: *(use local time, 24-hr clock)*	
17a. Local time and date of shutdown	06/29/2014 05:00
17b. Local time pipeline/facility restarted	06/29/2014 10:44
Still shut down*	
18. *If A12 = Notification from Emergency Responder, skip A18.a through A18.c.*	
18a. Did the operator communicate with Local, State, or Federal Emergency Responders about the accident?	
If No, skip 18b. and 18c	
18b. Which party initiated communication about the accident?	
18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication	
19. Local time Operator responders arrived on site	06/29/2014 05:00
20. Local time of confirmed discovery	
21a. Local time (24-hr clock) and date of initial operator report to the National Response Center :	06/29/2014 06:15
21b. Initial Operator National Response Center Report Number OR	1087454
21c. Additional NRC Report numbers submitted by the operator:	
22. Did the commodity ignite?	No
If Yes, answer 22.a through d:	
22a. Local time of ignition	
22b. How was the fire extinguished?	
specify:	
22c. Estimated volume of commodity consumed by fire (barrels): (must be less than or equal to A7)	
22d. formerly A16. Did the commodity explode?	No
23. If 14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, answer A23a through f:	
23a. Initial action taken to control flow upstream of failure location	
- If Operational Control	
If Valve Closure, answer A23b and c:	
23b. Local time of valve closure	
23c. Type of upstream valve used to initially isolate release source:	
23d. Initial action taken to control flow downstream of failure location	
- If Operational Control	
If Valve Closure, answer A23.e and f:	
23e. Local time of valve closure	
23f. Type of downstream valve used to initially isolate release source	

24. If A6 = Crude Oil , Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions, or Biofuel / Alternative Fuel (including ethanol blends) AND A15. is Onshore, answer questions A24a and c	
24a. Did the operator notify a "qualified individual" in the Onshore Oil Spill Response Plan?	
If Yes, answer A24b.	
24b. Local time the "qualified individual" was notified.	
24c. Did the operator activate an Oil Spill Removal Organization (OSRO)?	
If Yes, answer A24d and e:	
24d. Local time operator activated OSRO	
24e. Local time OSRO arrived on site	
25. Number of general public evacuated:	0
PART B - ADDITIONAL LOCATION INFORMATION	
1. Pipeline/Facility name:	Patoka Station
2. Segment name/ID:	Facility Piping
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
3. State:	Illinois
4. Zip Code:	62892
5. City	Vernon
6. County or Parish	Marion
7. Operator-designated location	Survey Station No.
8. Specify:	
9. Was this onshore Accident on Federal land?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Aboveground
Specify:	Typical aboveground facility piping or appurtenance
- If Other, Describe:	
11a. Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased	
Uncased	
Bored/drilled	
- If Road crossing –	

Cased/ / Bored/drilled	
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:	
Is this water crossing 100 feet or more in length from high water mark to high water mark?	
- 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) :	
- Area:	
- Block/Tract #:	
15. Area of Accident:	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Is the pipeline or facility:	Interstate
2. reserved	
3. Item involved in Accident: *When A14 is "Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances" C3 will default to "Tank/Vessel"*	Pipe
- If Pipe, specify:	Pipe Body
If Pipe Body: Was this a puddle/spot weld?	
3a. Nominal Pipe Size:	20
3b. Wall thickness (in):	.380
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	52,000
3d. Pipe specification:	API 5L
3e. Pipe Seam , specify:	Seamless
- If Other, Describe:	
3f. Pipe manufacturer:	USX - Mill in McKeesport PA
3g. Pipeline coating type at point of Accident, specify:	Fusion Bonded Epoxy(FBE)
- If Other, Describe:	
3h. Coating field applied?	
- If Weld, including heat-affected zone, specify	
- If Other, Describe:	

3v8. API Std 653 In-Service Inspection	
4. Year item involved in Accident was installed:	2012
4a. Year item involved in Accident was manufactured:	2010
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Other
- If Other, Describe:	Holes 1.5" & 3/4" in diameter
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
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?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- 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	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- 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 cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	0
8b. Estimated cost of commodity lost	65,000
8c. Estimated cost of Operator's property damage & repairs	300,000
8d. Estimated cost of emergency response	1,200,000
8e. Estimated cost of environmental remediation	0
8f. Estimated other costs	0
Describe:	
8g. Total estimated property damage (sum of above)	1,565,000
Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. ***If a person is included in A11, do not include them in D9.***	
9. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:	

If a person is included in D9, do not include them in D10.	
10. Estimated number of persons with injuries requiring treatment by EMTs at the site of accident:	
Buildings Affected	
11. Number of residential buildings affected (evacuated or required repair):	
12. Number of business buildings affected (evacuated or required repair):	
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Accident (psig):	25.00
If C3. Is Tank/Vessel and C3v. is Atmospheric, do not answer E2. and E3	
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	275.00
2a. Limiting factor establishing MOP (select only one):	
describe:	
2b. Date MOP established	
2c. Was the MOP established in conjunction with a reversal of flow direction?	
If E2c = Yes, E2d. What is the date of the most recent surge analysis performed at the point of the Accident?	
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. 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?	
If A14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, complete E5 through E7	
5. Answer E5 only when both A23a and A23d are Valve Closure	
Length of segment initially isolated between valves (ft):	
6. Is the pipeline configured to accommodate internal inspection tools?	
- 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:	
7. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- 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:	
8. Function of pipeline system:	> 20% SMYS Regulated Transmission
9. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
9a. Was it operating at the time of the Accident?	Yes
9b. Was it fully functional at the time of the Accident?	Yes
9c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
9d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	Yes
10. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	Yes
- If Yes:	
10a. Was it operating at the time of the Accident?	Yes
10b. Was it fully functional at the time of the Accident?	Yes
10c. 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
10d. 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
11. 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?	Yes, specify investigation result(s): (select all that apply)

- 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)*	
- 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	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 response	
- Investigation identified areas other than those above:	
Describe:	
PART F - DRUG & ALCOHOL TESTING INFORMATION	
1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	Yes
- If Yes:	
1a. Specify how many were tested:	1
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 DOT's Drug & Alcohol Testing regulations?	No
- 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 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).	
Apparent Cause:	G1 - Corrosion Failure

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column	
Corrosion Failure – Sub-Cause:	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:	
2a. If 2 is Stray Current, specify	
2b. Describe the stray current source:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried or submerged?	
- 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:	
Describe other CP survey	
- 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:	Localized Pitting
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	

- Water drop-out/Acid	Yes
- Microbiological	
- Erosion	
- Other:	Yes
- If Other, Describe:	Stray Current
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	Yes
- Determined by metallurgical analysis	Yes
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	Yes
- Elbow	
- Dead-Leg	
- Other:	
- If Other, Describe:	
10. Was the commodity treated with corrosion inhibitors or biocides?	No
11. Was the interior coated or lined with protective coating?	No
12. Were cleaning/dewatering pigs (or other operations) routinely utilized?	Not applicable - Not mainline pipe
13. Were corrosion coupons routinely utilized?	Not applicable - Not mainline pipe
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 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: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	

5. Was the task(s) that led to the Accident identified as a covered task in your Operator Qualification Program?	
5a. If Yes, were the individuals performing the task(s) 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:	
Mandatory comment field:	
PART J – COMPLETED INTEGRITY INSPECTIONS	
Complete the following if the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld and the "Cause" (from Part G) is:	
Corrosion (any subCause in Part G1); or	
Previous Damage due to Excavation Activity (subCause in Part G3); or	
Previous Mechanical Damage NOT Related to Excavation (subCause in Part G4); or	
Material Failure of Pipe or Weld (any subCause in Part G5)	
J1. Have internal inspection tools collected data at the point of the Accident?	No
J1a. If Yes, for each tool and technology used provide the information below for the most recent and previous tool runs:	
Axial Magnetic Flux Leakage	
Most recent run Year:	
Most recent run Propulsion Method (select only one):	
Most recent run Attuned to Detect (select only one):	
Other Describe	
If Metal Loss, specify (select only one):	
Other Describe	
Previous run Year:	
Previous run Propulsion Method (select only one):	
Previous run Attuned to Detect (select only one):	
Other Describe	
If Metal Loss, specify (select only one):	
Other Describe	
Circumferential/Transverse Wave Magnetic Flux Leakage	
Most recent run Year:	
Most recent run Propulsion Method (select only one):	
Most recent run Resolution (select only one):	
Other Describe	
Previous run Year:	
Previous run Propulsion Method (select only one):	
Previous run Resolution (select only one):	

Answer J1.b only when the cause i:	
Previous Damage due to Excavation Activity (subCause in Part G3); or	
Previous Mechanical Damage NOT Related to Excavation (subCause in Part G4)	
J1b. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained	
J2. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident? (initial post construction pressure test is NOT reported here)	No
Most recent year tested:	
Test pressure (psig):	
J3. Has Direct Assessment been conducted on the pipeline segment?	No
Most recent year conducted:	
Most recent year conducted:	
If J3 is Yes, J3a. For each type, indicate the year of the most recent assessment	
External Corrosion Direct Assessment (ECDA)	
Other, specify type	
J4. Has one or more non-destructive examination been conducted prior to the Accident at the point of the Accident since January 1, 2002?	No
4a. If Yes, for each examination conducted, select type of non-destructive examination and indicate most recent year the examination was conducted:	
Radiography	
Guided Wave Ultrasonic	
Handheld Ultrasonic Tool	
Wet Magnetic Particle Test	
Dry Magnetic Particle Test	
Other	
- If Other, specify type	
PART K – CONTRIBUTING FACTORS	
The Apparent Cause of the accident is contained in Part G. Do not report the Apparent Cause again in this Part K. If Contributing Factors were identified during a root cause analysis, select all that apply below and explain each in the Narrative:	
External Corrosion	
External Corrosion, Galvanic	
External Corrosion, Atmospheric	
External Corrosion, Stray Current Induced	
External Corrosion, Microbiologically Induced	
External Corrosion, Selective Seam	
Internal Corrosion	
Internal Corrosion, Corrosive Commodity	
Internal Corrosion, Water drop-out/Acid	
Internal Corrosion, Microbiological	
Internal Corrosion, Erosion	
Natural Forces	
Earth Movement, NOT due to Heavy Rains/Floods	

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

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

The release occurred from two holes (#1 - 0.75" long by 0.625"; #2 - 1.7" long by 1.9" wide) in Tank 1284 manifold line for the Patoka to Robinson system due to stray current. The tank line was removed for examination and a root cause analysis was conducted.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Renee Hermiller
Preparer's Title	HES Professional
Preparer's Telephone Number	[redacted]
Preparer's E-mail Address	[redacted]
Preparer's Facsimile Number	
Local Contact Name	
Local Contact Email	
Local Contact Phone	
Authorized Signer Name	Randall W. Bishop
Authorized Signer Title	Regulatory Compliance Manager
Authorized Signer Telephone Number	[redacted]
Authorized Signer Email	[redacted]
Date	02/24/2015

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 4/30/2026
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	05/14/2015
	No.	20150176 -21050 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID AND CARBON DIOXIDE 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 12 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the 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/library/forms .`

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	Yes
Last Revision Date:	01/15/2016		
1. Operator's OPS-issued Operator Identification Number (OPID):	32147		
2. Name of Operator	MARATHON PIPE LINE LLC		
3. Address of Operator:			
3a. Street Address	539 SOUTH MAIN STREET		
3b. City	FINDLAY		
3c. State	Ohio		
3d. Zip Code	45840		
4. Local time *(24-hr clock)* and date of accident:	04/27/2015 13:55		
4a. Time Zone for local time			
4b. Daylight Saving in effect?			
5. Location of Accident:			
Latitude / Longitude	[redacted]		
6. Commodity released: *(select only one, based on predominant volume released)*	Crude Oil		
- Specify Commodity Subtype:			
- 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	
7. Estimated volume of commodity released unintentionally (Barrels):	4.00
8. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
9. Estimated volume of commodity recovered (Barrels):	4.00
10. Were there fatalities?	No
- If Yes, specify the number in each category:	
10a. Operator employees	
10b. Contractor employees working for the Operator	
10c. Non-Operator emergency responders	
10d. Workers working on the right-of-way, but NOT associated with this Operator	
10e. General public	
10f. Total fatalities (sum of above)	0
11. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
11a. Operator employees	
11b. Contractor employees working for the Operator	
11c. Non-Operator emergency responders	
11d. Workers working on the right-of-way, but NOT associated with this Operator	
11e. General public	
11f. Total injuries (sum of above)	0
12. What was the Operator's initial indication of the Failure? *(select only one)*	Local Operating Personnel, including contractors
Other	
12a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 12, specify the following: (select only one)	
	Contractor working for the Operator
13. Local time Operator identified failure	04/27/2015 13:55
14. formerly C2 Part of system involved in Accident: *(select only one)*	Onshore Terminal/Tank Farm Equipment and Piping
15. formerly B1 *Auto-populated based on A14* Was the origin of the Accident onshore?	Yes
Yes (Complete Questions B3-B12)	
No *(Complete Questions B13-B15)*	
16. Operational Status at time Operator identified failure:	
17. If Operational Status = Routine Start-Up or Normal Operation, was the pipeline/facility shut down due to the Accident?	Yes
Explain:	

If Yes, complete Questions 17.a and 17.b: *(use local time, 24-hr clock)*	
17a. Local time and date of shutdown	04/27/2015 14:10
17b. Local time pipeline/facility restarted	04/28/2015 16:03
Still shut down*	
18. *If A12 = Notification from Emergency Responder, skip A18.a through A18.c.*	
18a. Did the operator communicate with Local, State, or Federal Emergency Responders about the accident?	
If No, skip 18b. and 18c	
18b. Which party initiated communication about the accident?	
18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication	
19. Local time Operator responders arrived on site	04/27/2015 13:55
20. Local time of confirmed discovery	
21a. Local time (24-hr clock) and date of initial operator report to the National Response Center :	04/28/2015 02:00
21b. Initial Operator National Response Center Report Number OR	1114871
21c. Additional NRC Report numbers submitted by the operator:	
22. Did the commodity ignite?	No
If Yes, answer 22.a through d:	
22a. Local time of ignition	
22b. How was the fire extinguished?	
specify:	
22c. Estimated volume of commodity consumed by fire (barrels): (must be less than or equal to A7)	
22d. formerly A16. Did the commodity explode?	No
23. If 14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, answer A23a through f:	
23a. Initial action taken to control flow upstream of failure location	
- If Operational Control	
If Valve Closure, answer A23b and c:	
23b. Local time of valve closure	
23c. Type of upstream valve used to initially isolate release source:	
23d. Initial action taken to control flow downstream of failure location	
- If Operational Control	
If Valve Closure, answer A23.e and f:	
23e. Local time of valve closure	
23f. Type of downstream valve used to initially isolate release source	

24. If A6 = Crude Oil , Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions, or Biofuel / Alternative Fuel (including ethanol blends) AND A15. is Onshore, answer questions A24a and c	
24a. Did the operator notify a "qualified individual" in the Onshore Oil Spill Response Plan?	
If Yes, answer A24b.	
24b. Local time the "qualified individual" was notified.	
24c. Did the operator activate an Oil Spill Removal Organization (OSRO)?	
If Yes, answer A24d and e:	
24d. Local time operator activated OSRO	
24e. Local time OSRO arrived on site	
25. Number of general public evacuated:	0
PART B - ADDITIONAL LOCATION INFORMATION	
1. Pipeline/Facility name:	Patoka Station
2. Segment name/ID:	Patoka-Martinsville 20"
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
3. State:	Illinois
4. Zip Code:	62892
5. City	Vernon
6. County or Parish	Marion
7. Operator-designated location	Milepost/Valve Station
8. Specify:	0.17
9. Was this onshore Accident on Federal land?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
11a. Depth-of-Cover (in):	60
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased	
Uncased	
Bored/drilled	
- If Road crossing –	

Cased/ / Bored/drilled	
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:	
Is this water crossing 100 feet or more in length from high water mark to high water mark?	
- 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) :	
- Area:	
- Block/Tract #:	
15. Area of Accident:	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Is the pipeline or facility:	Interstate
2. reserved	
3. Item involved in Accident: *When A14 is "Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances" C3 will default to "Tank/Vessel"*	Flange Assembly
- If Pipe, specify:	
If Pipe Body: Was this a puddle/spot weld?	
3a. Nominal Pipe Size:	
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. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
3h. Coating field applied?	
- If Weld, including heat-affected zone, specify	
- If Other, Describe:	

3v8. API Std 653 In-Service Inspection	
4. Year item involved in Accident was installed:	Unknown
4a. Year item involved in Accident was manufactured:	
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	Corregated Gasket
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
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?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- 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	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- 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 cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	0
8b. Estimated cost of commodity lost	230
8c. Estimated cost of Operator's property damage & repairs	45,000
8d. Estimated cost of emergency response	60,000
8e. Estimated cost of environmental remediation	0
8f. Estimated other costs	0
Describe:	
8g. Total estimated property damage (sum of above)	105,230
Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. ***If a person is included in A11, do not include them in D9.***	
9. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:	

If a person is included in D9, do not include them in D10.	
10. Estimated number of persons with injuries requiring treatment by EMTs at the site of accident:	
Buildings Affected	
11. Number of residential buildings affected (evacuated or required repair):	
12. Number of business buildings affected (evacuated or required repair):	
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Accident (psig):	1,139.00
If C3. Is Tank/Vessel and C3v. is Atmospheric, do not answer E2. and E3	
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	1,142.00
2a. Limiting factor establishing MOP (select only one):	
describe:	
2b. Date MOP established	
2c. Was the MOP established in conjunction with a reversal of flow direction?	
If E2c = Yes, E2d. What is the date of the most recent surge analysis performed at the point of the Accident?	
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. 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?	
If A14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, complete E5 through E7	
5. Answer E5 only when both A23a and A23d are Valve Closure	
Length of segment initially isolated between valves (ft):	
6. Is the pipeline configured to accommodate internal inspection tools?	
- 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:	
7. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- 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:	
8. Function of pipeline system:	> 20% SMYS Regulated Transmission
9. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
9a. Was it operating at the time of the Accident?	Yes
9b. Was it fully functional at the time of the Accident?	Yes
9c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
9d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
10. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	Yes
- If Yes:	
10a. Was it operating at the time of the Accident?	Yes
10b. Was it fully functional at the time of the Accident?	Yes
10c. 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
10d. 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
11. 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)*	SCADA and CPM would not have detected the leak due to the small volume released.
- 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	
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?	No
- 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 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).	
Apparent Cause:	G6 - Equipment Failure

- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- 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	
- 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:	Gasket
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Improper maintenance	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	Yes
- Thermal stress	
- Erosion/Abnormal Wear	
- Other	Yes
- If Other, Describe:	Misalignment due to recent excavation backfilling activity
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Descr be:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	

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

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

An MPL Contractor was working on the new manifold when he smelled hydrocarbons and informed MPL personnel at 13:55 on 4/27/15. The line was immediately shutdown. The area was extensively evaluated including writing an excavation plan, making One-Calls, and mobilizing contractors. Upon excavation of the area there was no active leak detected and a pressure test was performed. A small leak was discovered on the flange connection at 01:30 on 4/28/15.The gasket was replaced. Approximately 60 yards of contaminated soil was excavated from the area surrounding the flange.

The initial 7000-1 reported the local date and time of the accident as 4/28/2015 at 01:30, since this is the time MPL verified this was an active release. Based on the fact that an active release was discovered following excavation and a pressure test, MPL has changed the local date and time of the accident to 4/27/15 at 13:55 (Part A, Question 4), the time when hydrocarbon odor was reported.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Danielle Shay
Preparer's Title	HES Professional
Preparer's Telephone Number	[redacted]
Preparer's E-mail Address	[redacted]
Preparer's Facsimile Number	
Local Contact Name	
Local Contact Email	
Local Contact Phone	
Authorized Signer Name	Randall W. Bishop
Authorized Signer Title	Regulatory Compliance Supervisor
Authorized Signer Telephone Number	[redacted]
Authorized Signer Email	[redacted]
Date	01/15/2016

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 4/30/2026
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	06/05/2015
	No.	20150211 -20775 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID AND CARBON DIOXIDE 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 12 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the 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/library/forms .`

PART A - KEY REPORT INFORMATION

	Original:	**Supplemental:**	**Final:**
Report Type: *(select all that apply)*		Yes	Yes

Last Revision Date:	09/28/2015
1. Operator's OPS-issued Operator Identification Number (OPID):	32147
2. Name of Operator	MARATHON PIPE LINE LLC
3. Address of Operator:	
3a. Street Address	539 SOUTH MAIN STREET
3b. City	FINDLAY
3c. State	Ohio
3d. Zip Code	45840
4. Local time *(24-hr clock)* and date of accident:	05/15/2015 17:00
4a. Time Zone for local time	
4b. Daylight Saving in effect?	
5. Location of Accident:	
Latitude / Longitude	[redacted]
6. Commodity released: *(select only one, based on predominant volume released)*	Crude Oil
- Specify Commodity Subtype:	
- 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	
7. Estimated volume of commodity released unintentionally (Barrels):	.80
8. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
9. Estimated volume of commodity recovered (Barrels):	.80
10. Were there fatalities?	No
- If Yes, specify the number in each category:	
10a. Operator employees	
10b. Contractor employees working for the Operator	
10c. Non-Operator emergency responders	
10d. Workers working on the right-of-way, but NOT associated with this Operator	
10e. General public	
10f. Total fatalities (sum of above)	0
11. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
11a. Operator employees	
11b. Contractor employees working for the Operator	
11c. Non-Operator emergency responders	
11d. Workers working on the right-of-way, but NOT associated with this Operator	
11e. General public	
11f. Total injuries (sum of above)	0
12. What was the Operator's initial indication of the Failure? *(select only one)*	Local Operating Personnel, including contractors
Other	
12a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 12, specify the following: (select only one)	
	Operator employee
13. Local time Operator identified failure	05/15/2015 17:00
14. formerly C2 Part of system involved in Accident: *(select only one)*	Onshore Terminal/Tank Farm Equipment and Piping
15. formerly B1 *Auto-populated based on A14* Was the origin of the Accident onshore?	Yes
Yes (Complete Questions B3-B12)	
No *(Complete Questions B13-B15)*	
16. Operational Status at time Operator identified failure:	
17. If Operational Status = Routine Start-Up or Normal Operation, was the pipeline/facility shut down due to the Accident?	Yes
Explain:	

If Yes, complete Questions 17.a and 17.b: *(use local time, 24-hr clock)*	
17a. Local time and date of shutdown	05/15/2015 16:19
17b. Local time pipeline/facility restarted	05/16/2015 06:29
Still shut down*	
18. *If A12 = Notification from Emergency Responder, skip A18.a through A18.c.*	
18a. Did the operator communicate with Local, State, or Federal Emergency Responders about the accident?	
If No, skip 18b. and 18c	
18b. Which party initiated communication about the accident?	
18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication	
19. Local time Operator responders arrived on site	05/15/2015 17:00
20. Local time of confirmed discovery	
21a. Local time (24-hr clock) and date of initial operator report to the National Response Center :	
21b. Initial Operator National Response Center Report Number OR	NRC Notification Not Required
21c. Additional NRC Report numbers submitted by the operator:	
22. Did the commodity ignite?	No
If Yes, answer 22.a through d:	
22a. Local time of ignition	
22b. How was the fire extinguished?	
specify:	
22c. Estimated volume of commodity consumed by fire (barrels): (must be less than or equal to A7)	
22d. formerly A16. Did the commodity explode?	No
23. If 14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, answer A23a through f:	
23a. Initial action taken to control flow upstream of failure location	
- If Operational Control	
If Valve Closure, answer A23b and c:	
23b. Local time of valve closure	
23c. Type of upstream valve used to initially isolate release source:	
23d. Initial action taken to control flow downstream of failure location	
- If Operational Control	
If Valve Closure, answer A23.e and f:	
23e. Local time of valve closure	
23f. Type of downstream valve used to initially isolate release source	

24. If A6 = Crude Oil , Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions, or Biofuel / Alternative Fuel (including ethanol blends) AND A15. is Onshore, answer questions A24a and c	
24a. Did the operator notify a "qualified individual" in the Onshore Oil Spill Response Plan?	
If Yes, answer A24b.	
24b. Local time the "qualified individual" was notified.	
24c. Did the operator activate an Oil Spill Removal Organization (OSRO)?	
If Yes, answer A24d and e:	
24d. Local time operator activated OSRO	
24e. Local time OSRO arrived on site	
25. Number of general public evacuated:	0
PART B - ADDITIONAL LOCATION INFORMATION	
1. Pipeline/Facility name:	Patoka Station
2. Segment name/ID:	Patoka-Robinson 20"
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
3. State:	Illinois
4. Zip Code:	62892
5. City	Vernon
6. County or Parish	Marion
7. Operator-designated location	Milepost/Valve Station
8. Specify:	0.17
9. Was this onshore Accident on Federal land?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
11a. Depth-of-Cover (in):	96
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased	
Uncased	
Bored/drilled	
- If Road crossing –	

Cased/ / Bored/drilled	
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:	
Is this water crossing 100 feet or more in length from high water mark to high water mark?	
- 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) :	
- Area:	
- Block/Tract #:	
15. Area of Accident:	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Is the pipeline or facility:	Interstate
2. reserved	
3. Item involved in Accident: *When A14 is "Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances" C3 will default to "Tank/Vessel"*	Flange Assembly
- If Pipe, specify:	
If Pipe Body: Was this a puddle/spot weld?	
3a. Nominal Pipe Size:	
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. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
3h. Coating field applied?	
- If Weld, including heat-affected zone, specify	
- If Other, Describe:	

3v8. API Std 653 In-Service Inspection	
4. Year item involved in Accident was installed:	1973
4a. Year item involved in Accident was manufactured:	
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	Garlock Paper Gasket
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
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?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- 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	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- 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 cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	0
8b. Estimated cost of commodity lost	100
8c. Estimated cost of Operator's property damage & repairs	30,000
8d. Estimated cost of emergency response	5,000
8e. Estimated cost of environmental remediation	0
8f. Estimated other costs	0
Describe:	
8g. Total estimated property damage (sum of above)	35,100
Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. ***If a person is included in A11, do not include them in D9.***	
9. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:	

If a person is included in D9, do not include them in D10.	
10. Estimated number of persons with injuries requiring treatment by EMTs at the site of accident:	
Buildings Affected	
11. Number of residential buildings affected (evacuated or required repair):	
12. Number of business buildings affected (evacuated or required repair):	
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Accident (psig):	845.00
If C3. Is Tank/Vessel and C3v. is Atmospheric, do not answer E2. and E3	
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	936.00
2a. Limiting factor establishing MOP (select only one):	
describe:	
2b. Date MOP established	
2c. Was the MOP established in conjunction with a reversal of flow direction?	
If E2c = Yes, E2d. What is the date of the most recent surge analysis performed at the point of the Accident?	
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. 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?	
If A14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, complete E5 through E7	
5. Answer E5 only when both A23a and A23d are Valve Closure	
Length of segment initially isolated between valves (ft):	
6. Is the pipeline configured to accommodate internal inspection tools?	
- 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:	
7. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- 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:	
8. Function of pipeline system:	> 20% SMYS Regulated Transmission
9. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
9a. Was it operating at the time of the Accident?	Yes
9b. Was it fully functional at the time of the Accident?	Yes
9c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
9d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
10. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	Yes
- If Yes:	
10a. Was it operating at the time of the Accident?	Yes
10b. Was it fully functional at the time of the Accident?	Yes
10c. 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
10d. 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
11. 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)*	SCADA and CPM would not have detected the leak due to the small volume released.
- 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	
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?	No
- 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 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).	
Apparent Cause:	G6 - Equipment Failure

- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- 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	
- 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:	Gasket
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Improper maintenance	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	Yes
- Thermal stress	
- Erosion/Abnormal Wear	
- Other	
- If Other, Describe:	
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Descr be:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	

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

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

MPL personnel noticed a sheen in an excavation adjacent to a new manifold that was under construction. A buried valve flange was found to be leaking upon excavation due to a gasket failure.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Danielle Shay
Preparer's Title	HES Professional
Preparer's Telephone Number	[redacted]
Preparer's E-mail Address	[redacted]
Preparer's Facsimile Number	
Local Contact Name	
Local Contact Email	
Local Contact Phone	
Authorized Signer Name	Randall W. Bishop
Authorized Signer Title	Regulatory Compliance Supervisor
Authorized Signer Telephone Number	[redacted]
Authorized Signer Email	[redacted]
Date	09/28/2015

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 4/30/2026
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	07/28/2016
	No.	20160265 -21911 ---------- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID AND CARBON DIOXIDE PIPELINE SYSTEMS

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/library/forms .`

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	Yes

Last Revision Date:	12/02/2016
1. Operator's OPS-issued Operator Identification Number (OPID):	32147
2. Name of Operator	MARATHON PIPE LINE LLC
3. Address of Operator:	
3a. Street Address	539 SOUTH MAIN STREET
3b. City	FINDLAY
3c. State	Ohio
3d. Zip Code	45840
4. Local time *(24-hr clock)* and date of accident:	07/28/2016 13:40
4a. Time Zone for local time	
4b. Daylight Saving in effect?	
5. Location of Accident:	
Latitude / Longitude	[redacted]
6. Commodity released: *(select only one, based on predominant volume released)*	Crude Oil
- Specify Commodity Subtype:	
- 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	
7. Estimated volume of commodity released unintentionally (Barrels):	.20
8. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
9. Estimated volume of commodity recovered (Barrels):	.20
10. Were there fatalities?	No
- If Yes, specify the number in each category:	
10a. Operator employees	
10b. Contractor employees working for the Operator	
10c. Non-Operator emergency responders	
10d. Workers working on the right-of-way, but NOT associated with this Operator	
10e. General public	
10f. Total fatalities (sum of above)	0
11. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
11a. Operator employees	
11b. Contractor employees working for the Operator	
11c. Non-Operator emergency responders	
11d. Workers working on the right-of-way, but NOT associated with this Operator	
11e. General public	
11f. Total injuries (sum of above)	0
12. What was the Operator's initial indication of the Failure? *(select only one)*	Local Operating Personnel, including contractors
Other	
12a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 12, specify the following: (select only one)	
	Operator employee
13. Local time Operator identified failure	07/28/2016 13:40
14. formerly C2 Part of system involved in Accident: *(select only one)*	Onshore Terminal/Tank Farm Equipment and Piping
15. formerly B1 *Auto-populated based on A14* Was the origin of the Accident onshore?	Yes
Yes (Complete Questions B3-B12)	
No *(Complete Questions B13-B15)*	
16. Operational Status at time Operator identified failure:	
17. If Operational Status = Routine Start-Up or Normal Operation, was the pipeline/facility shut down due to the Accident?	No
Explain:	Pipeline already shutdown by schedule.

If Yes, complete Questions 17.a and 17.b: *(use local time, 24-hr clock)*	
17a. Local time and date of shutdown	
17b. Local time pipeline/facility restarted	
Still shut down*	
18. *If A12 = Notification from Emergency Responder, skip A18.a through A18.c.*	
18a. Did the operator communicate with Local, State, or Federal Emergency Responders about the accident?	
If No, skip 18b. and 18c	
18b. Which party initiated communication about the accident?	
18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication	
19. Local time Operator responders arrived on site	07/28/2016 13:40
20. Local time of confirmed discovery	
21a. Local time (24-hr clock) and date of initial operator report to the National Response Center :	
21b. Initial Operator National Response Center Report Number OR	NRC Notification Not Required
21c. Additional NRC Report numbers submitted by the operator:	
22. Did the commodity ignite?	No
If Yes, answer 22.a through d:	
22a. Local time of ignition	
22b. How was the fire extinguished?	
specify:	
22c. Estimated volume of commodity consumed by fire (barrels): (must be less than or equal to A7)	
22d. formerly A16. Did the commodity explode?	No
23. If 14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, answer A23a through f:	
23a. Initial action taken to control flow upstream of failure location	
- If Operational Control	
If Valve Closure, answer A23b and c:	
23b. Local time of valve closure	
23c. Type of upstream valve used to initially isolate release source:	
23d. Initial action taken to control flow downstream of failure location	
- If Operational Control	
If Valve Closure, answer A23.e and f:	
23e. Local time of valve closure	
23f. Type of downstream valve used to initially isolate release source	

24. If A6 = Crude Oil , Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions, or Biofuel / Alternative Fuel (including ethanol blends) AND A15. is Onshore, answer questions A24a and c	
24a. Did the operator notify a "qualified individual" in the Onshore Oil Spill Response Plan?	
If Yes, answer A24b.	
24b. Local time the "qualified individual" was notified.	
24c. Did the operator activate an Oil Spill Removal Organization (OSRO)?	
If Yes, answer A24d and e:	
24d. Local time operator activated OSRO	
24e. Local time OSRO arrived on site	
25. Number of general public evacuated:	0
PART B - ADDITIONAL LOCATION INFORMATION	
1. Pipeline/Facility name:	Patoka Station
2. Segment name/ID:	Facility Piping
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
3. State:	Illinois
4. Zip Code:	62892
5. City	Vernon
6. County or Parish	Marion
7. Operator-designated location	Survey Station No.
8. Specify:	Facility
9. Was this onshore Accident on Federal land?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Aboveground
Specify:	Typical aboveground facility piping or appurtenance
- If Other, Describe:	
11a. Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased	
Uncased	
Bored/drilled	
- If Road crossing –	

Cased/ / Bored/drilled	
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:	
Is this water crossing 100 feet or more in length from high water mark to high water mark?	
- 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) :	
- Area:	
- Block/Tract #:	
15. Area of Accident:	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Is the pipeline or facility:	Interstate
2. reserved	
3. Item involved in Accident: *When A14 is "Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances" C3 will default to "Tank/Vessel"*	Valve
- If Pipe, specify:	
If Pipe Body: Was this a puddle/spot weld?	
3a. Nominal Pipe Size:	
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. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
3h. Coating field applied?	
- If Weld, including heat-affected zone, specify	
- If Other, Describe:	

If Pipe Girth Weld is selected, complete items C3a through h above. Are any of the C3b though h values different on either side of the girth weld?	
If Yes, enter the different value(s) below:	
3i. Wall thickness (in):	
3j. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3k. Pipe specification:	
Unknown	
3l. Pipe Seam	
- If Other, Describe:	
3m. Pipe manufacturer:	
Unknown	
3n. Pipeline coating type at point of Accident	
- If Other, Describe:	
3o. Coating field applied?	
- If Valve, specify:	
- Valve type	Auxiliary or Other Valve
- If Mainline, Valve Mainline type	
- If Other, Describe:	
3p. Mainline valve manufacturer:	
3q. Type of pump	
- If Other, Describe:	
3r. Type of Service	
- If Other, Describe:	
3s. Tubing material	
3t. Type of tubing	
3u. Specify failure path	
- If Other, Describe:	
3v. Tank Type	
If 3v. = Pressurized:	
3v1. Tank Maximum Operating Pressure	
3v2. What is the set point of the primary pressure relief device on the tank	
3v3. Did the thermal or pressure relief valve activate?	
3v4. Was the MOP of the tank exceeded?	
If 3v = Atmospheric or Low Pressure:	
3v5. Safe-Fill-Level (in feet) at the time of the accident?	
3v6. Was the Safe Fill-Level exceeded?	
3v7. Year of most recent API Std 653 Out-of-Service Inspection	

3v8. API Std 653 In-Service Inspection	
4. Year item involved in Accident was installed:	2015
4a. Year item involved in Accident was manufactured:	
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Connection Failure
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
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?	Yes
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)*	
- 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 cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	0
8b. Estimated cost of commodity lost	10
8c. Estimated cost of Operator's property damage & repairs	1,000
8d. Estimated cost of emergency response	6,000
8e. Estimated cost of environmental remediation	0
8f. Estimated other costs	0
Describe:	
8g. Total estimated property damage (sum of above)	7,010
Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. ***If a person is included in A11, do not include them in D9.***	
9. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:	

If a person is included in D9, do not include them in D10.	
10. Estimated number of persons with injuries requiring treatment by EMTs at the site of accident:	
Buildings Affected	
11. Number of residential buildings affected (evacuated or required repair):	
12. Number of business buildings affected (evacuated or required repair):	
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Accident (psig):	20.00
If C3. Is Tank/Vessel and C3v. is Atmospheric, do not answer E2. and E3	
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	275.00
2a. Limiting factor establishing MOP (select only one):	
describe:	
2b. Date MOP established	
2c. Was the MOP established in conjunction with a reversal of flow direction?	
If E2c = Yes, E2d. What is the date of the most recent surge analysis performed at the point of the Accident?	
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. 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?	
If A14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, complete E5 through E7	
5. Answer E5 only when both A23a and A23d are Valve Closure	
Length of segment initially isolated between valves (ft):	
6. Is the pipeline configured to accommodate internal inspection tools?	
- 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:	
7. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- 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:	
8. Function of pipeline system:	> 20% SMYS Regulated Transmission
9. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
9a. Was it operating at the time of the Accident?	Yes
9b. Was it fully functional at the time of the Accident?	Yes
9c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
9d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
10. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	Yes
- If Yes:	
10a. Was it operating at the time of the Accident?	Yes
10b. Was it fully functional at the time of the Accident?	Yes
10c. 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
10d. 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
11. 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?	Yes, specify investigation result(s): (select all that apply)

- 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)*	
- 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	Yes
- 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	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 response	
- Investigation identified areas other than those above:	
Describe:	
PART F - DRUG & ALCOHOL TESTING INFORMATION	
1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- 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?	No
- 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 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).	
Apparent Cause:	G6 - Equipment Failure

- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Threaded Connection/Coupling Failure
- 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	
- 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:	Pipe Nipple
- If Other – Describe:	

- If Non-threaded Connection Failure:	
4. Specify:	
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Improper maintenance	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Erosion/Abnormal Wear	
- Other	Yes
- If Other, Describe:	Cyclicial fatigue, most likely due to vibration.
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Descr be:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	

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

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

A field technician was installing locks on several manifold valves when a leak was discovered on valve PX13. Upon further investigation, the cause of failure was determined to be a broken pipe nipple (1/2 inch schedule 160) threaded into the valve flange, which is the discharge line of the PX13 DTR (differential thermal relief) system. Repairs were made prior to restarting the line. A total of 0.54 cubic yards of contaminated soil was removed from the site during clean-up.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Danielle Shay
Preparer's Title	HES Professional
Preparer's Telephone Number	[redacted]
Preparer's E-mail Address	[redacted]
Preparer's Facsimile Number	
Local Contact Name	
Local Contact Email	
Local Contact Phone	
Authorized Signer Name	Randall W. Bishop
Authorized Signer Title	Regulatory and Compliance Supervisor
Authorized Signer Telephone Number	[redacted]
Authorized Signer Email	[redacted]
Date	12/02/2016

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 4/30/2026
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	12/28/2016
	No.	20160430 -22085 --- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID AND CARBON DIOXIDE 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 12 hours per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to the collection of information are mandatory. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing the 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/library/forms .`

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	Yes

Last Revision Date:	02/13/2017
1. Operator's OPS-issued Operator Identification Number (OPID):	32147
2. Name of Operator	MARATHON PIPE LINE LLC
3. Address of Operator:	
3a. Street Address	539 SOUTH MAIN STREET
3b. City	FINDLAY
3c. State	Ohio
3d. Zip Code	45840
4. Local time *(24-hr clock)* and date of accident:	12/02/2016 15:18
4a. Time Zone for local time	
4b. Daylight Saving in effect?	
5. Location of Accident:	
Latitude / Longitude	[redacted]
6. Commodity released: *(select only one, based on predominant volume released)*	Crude Oil
- Specify Commodity Subtype:	
- 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	
7. Estimated volume of commodity released unintentionally (Barrels):	.10
8. Estimated volume of intentional and/or controlled release/blowdown (Barrels):	
9. Estimated volume of commodity recovered (Barrels):	.10
10. Were there fatalities?	No
- If Yes, specify the number in each category:	
10a. Operator employees	
10b. Contractor employees working for the Operator	
10c. Non-Operator emergency responders	
10d. Workers working on the right-of-way, but NOT associated with this Operator	
10e. General public	
10f. Total fatalities (sum of above)	0
11. Were there injuries requiring inpatient hospitalization?	No
- If Yes, specify the number in each category:	
11a. Operator employees	
11b. Contractor employees working for the Operator	
11c. Non-Operator emergency responders	
11d. Workers working on the right-of-way, but NOT associated with this Operator	
11e. General public	
11f. Total injuries (sum of above)	0
12. What was the Operator's initial indication of the Failure? *(select only one)*	Local Operating Personnel, including contractors
Other	
12a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 12, specify the following: (select only one)	
	Operator employee
13. Local time Operator identified failure	12/02/2016 15:18
14. formerly C2 Part of system involved in Accident: *(select only one)*	Onshore Pump/Meter Station Equipment and Piping
15. formerly B1 *Auto-populated based on A14* Was the origin of the Accident onshore?	Yes
Yes (Complete Questions B3-B12)	
No *(Complete Questions B13-B15)*	
16. Operational Status at time Operator identified failure:	
17. If Operational Status = Routine Start-Up or Normal Operation, was the pipeline/facility shut down due to the Accident?	No
Explain:	Pipeline already shutdown by schedule.

If Yes, complete Questions 17.a and 17.b: *(use local time, 24-hr clock)*	
17a. Local time and date of shutdown	
17b. Local time pipeline/facility restarted	
Still shut down*	
18. *If A12 = Notification from Emergency Responder, skip A18.a through A18.c.*	
18a. Did the operator communicate with Local, State, or Federal Emergency Responders about the accident?	
If No, skip 18b. and 18c	
18b. Which party initiated communication about the accident?	
18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication	
19. Local time Operator responders arrived on site	12/02/2016 15:18
20. Local time of confirmed discovery	
21a. Local time (24-hr clock) and date of initial operator report to the National Response Center :	12/02/2016 17:37
21b. Initial Operator National Response Center Report Number OR	1165443
21c. Additional NRC Report numbers submitted by the operator:	
22. Did the commodity ignite?	No
If Yes, answer 22.a through d:	
22a. Local time of ignition	
22b. How was the fire extinguished?	
specify:	
22c. Estimated volume of commodity consumed by fire (barrels): (must be less than or equal to A7)	
22d. formerly A16. Did the commodity explode?	No
23. If 14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, answer A23a through f:	
23a. Initial action taken to control flow upstream of failure location	
- If Operational Control	
If Valve Closure, answer A23b and c:	
23b. Local time of valve closure	
23c. Type of upstream valve used to initially isolate release source:	
23d. Initial action taken to control flow downstream of failure location	
- If Operational Control	
If Valve Closure, answer A23.e and f:	
23e. Local time of valve closure	
23f. Type of downstream valve used to initially isolate release source	

24. If A6 = Crude Oil , Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions, or Biofuel / Alternative Fuel (including ethanol blends) AND A15. is Onshore, answer questions A24a and c	
24a. Did the operator notify a "qualified individual" in the Onshore Oil Spill Response Plan?	
If Yes, answer A24b.	
24b. Local time the "qualified individual" was notified.	
24c. Did the operator activate an Oil Spill Removal Organization (OSRO)?	
If Yes, answer A24d and e:	
24d. Local time operator activated OSRO	
24e. Local time OSRO arrived on site	
25. Number of general public evacuated:	0
PART B - ADDITIONAL LOCATION INFORMATION	
1. Pipeline/Facility name:	Roxana Station
2. Segment name/ID:	Facility Piping
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
3. State:	Illinois
4. Zip Code:	62048
5. City	Hartford
6. County or Parish	Madison
7. Operator-designated location	Survey Station No.
8. Specify:	Facility
9. Was this onshore Accident on Federal land?	No
10. Location of Accident:	Totally contained on Operator-controlled property
11. Area of Accident (as found):	Aboveground
Specify:	Typical aboveground facility piping or appurtenance
- If Other, Describe:	
11a. Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased	
Uncased	
Bored/drilled	
- If Road crossing –	

Cased/ / Bored/drilled	
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:	
Is this water crossing 100 feet or more in length from high water mark to high water mark?	
- 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) :	
- Area:	
- Block/Tract #:	
15. Area of Accident:	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Is the pipeline or facility:	Interstate
2. reserved	
3. Item involved in Accident: *When A14 is "Onshore Breakout Tank or Storage Vessel, Including Attached Appurtenances" C3 will default to "Tank/Vessel"*	Valve
- If Pipe, specify:	
If Pipe Body: Was this a puddle/spot weld?	
3a. Nominal Pipe Size:	
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. Pipeline coating type at point of Accident, specify:	
- If Other, Describe:	
3h. Coating field applied?	
- If Weld, including heat-affected zone, specify	
- If Other, Describe:	

If Pipe Girth Weld is selected, complete items C3a through h above. Are any of the C3b though h values different on either side of the girth weld?	
If Yes, enter the different value(s) below:	
3i. Wall thickness (in):	
3j. SMYS (Specified Minimum Yield Strength) of pipe (psi):	
3k. Pipe specification:	
Unknown	
3l. Pipe Seam	
- If Other, Describe:	
3m. Pipe manufacturer:	
Unknown	
3n. Pipeline coating type at point of Accident	
- If Other, Describe:	
3o. Coating field applied?	
- If Valve, specify:	
- Valve type	Mainline
- If Mainline, Valve Mainline type	Gate
- If Other, Describe:	
3p. Mainline valve manufacturer:	EPI
3q. Type of pump	
- If Other, Describe:	
3r. Type of Service	
- If Other, Describe:	
3s. Tubing material	
3t. Type of tubing	
3u. Specify failure path	
- If Other, Describe:	
3v. Tank Type	
If 3v. = Pressurized:	
3v1. Tank Maximum Operating Pressure	
3v2. What is the set point of the primary pressure relief device on the tank	
3v3. Did the thermal or pressure relief valve activate?	
3v4. Was the MOP of the tank exceeded?	
If 3v = Atmospheric or Low Pressure:	
3v5. Safe-Fill-Level (in feet) at the time of the accident?	
3v6. Was the Safe Fill-Level exceeded?	
3v7. Year of most recent API Std 653 Out-of-Service Inspection	

3v8. API Std 653 In-Service Inspection	
4. Year item involved in Accident was installed:	2011
4a. Year item involved in Accident was manufactured:	2011
5. Material involved in Accident:	Material other than Carbon Steel
- If Material other than Carbon Steel, specify:	Cast Steel
6. Type of Accident Involved:	Leak
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	Seal or Packing
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: in. (widest opening) by	
in. (length circumferentially or axially)	
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	No
1a. If Yes, specify all that apply:	
- Fish/aquatic	
- Birds	
- Terrestrial	
2. Soil contamination:	No
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?	Yes
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	Yes
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- 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	Yes
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	Yes
- 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 cost to Operator – effective 12-2012, changed to "Estimated Property Damage":	
8a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 12-2012, "paid/reimbursed by the Operator" removed	0
8b. Estimated cost of commodity lost	0
8c. Estimated cost of Operator's property damage & repairs	151,175
8d. Estimated cost of emergency response	1,640
8e. Estimated cost of environmental remediation	0
8f. Estimated other costs	0
Describe:	
8g. Total estimated property damage (sum of above)	152,815
Injured Persons not included in A11 The number of persons injured, admitted to a hospital, and remaining in the hospital for at least one overnight are reported in A11. ***If a person is included in A11, do not include them in D9.***	
9. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:	

If a person is included in D9, do not include them in D10.	
10. Estimated number of persons with injuries requiring treatment by EMTs at the site of accident:	
Buildings Affected	
11. Number of residential buildings affected (evacuated or required repair):	
12. Number of business buildings affected (evacuated or required repair):	
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Accident (psig):	60.00
If C3. Is Tank/Vessel and C3v. is Atmospheric, do not answer E2. and E3	
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	720.00
2a. Limiting factor establishing MOP (select only one):	
describe:	
2b. Date MOP established	
2c. Was the MOP established in conjunction with a reversal of flow direction?	
If E2c = Yes, E2d. What is the date of the most recent surge analysis performed at the point of the Accident?	
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. 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?	
If A14. is “Onshore Pipeline, Including Valve Sites” OR “Offshore Pipeline, Including Riser and Riser Bend”, complete E5 through E7	
5. Answer E5 only when both A23a and A23d are Valve Closure	
Length of segment initially isolated between valves (ft):	
6. Is the pipeline configured to accommodate internal inspection tools?	
- 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:	
7. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	
- 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:	
8. Function of pipeline system:	> 20% SMYS Regulated Transmission
9. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
9a. Was it operating at the time of the Accident?	Yes
9b. Was it fully functional at the time of the Accident?	Yes
9c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
9d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
10. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	Yes
- If Yes:	
10a. Was it operating at the time of the Accident?	Yes
10b. Was it fully functional at the time of the Accident?	Yes
10c. 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
10d. 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
11. 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?	Yes, specify investigation result(s): (select all that apply)

- 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)*	
- 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	Yes
- 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	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 response	
- Investigation identified areas other than those above:	
Describe:	
PART F - DRUG & ALCOHOL TESTING INFORMATION	
1. As a result of this Accident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- 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?	No
- 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 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).	
Apparent Cause:	G6 - Equipment Failure

- Other	
- If Other, Describe:	
- If Environmental Cracking-related:	
3. Specify:	
- If Other - Describe:	
Complete the following if any Material Failure of Pipe or Weld sub-cause is selected.	
4. Additional factors: (*select all that apply*):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other:	
- If Other, Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	Non-threaded Connection Failure
- 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	
- 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:	Seal (NOT pump seal) or packing
- If Other – Describe:	
- If Other Equipment Failure:	
5. Describe:	
Complete the following if any Equipment Failure sub-cause is selected.	
6. Additional factors that contributed to the equipment failure: *(select all that apply)*	
- Excessive vibration	
- Overpressurization	
- No support or loss of support	
- Manufacturing defect	
- Loss of electricity	
- Improper installation	
- Improper maintenance	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Erosion/Abnormal Wear	
- Other	Yes
- If Other, Describe:	small packing vent diameter inhibited packing flow
G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column	
Incorrect Operation – Sub-Cause:	
- If Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
1. Specify:	
- If Other, Descr be:	
- If Other Incorrect Operation	
2. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
3. Was this Accident related to *(select all that apply)*: -	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	

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

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

A release was discovered by MPL personnel who were on-site for other non-related project work. Approximately 4 ounces of crude oil leaked from between the yoke tube and valve bonnet of Roxana Station Valve SS1 due to a valve packing failure. MPL personnel attempted to repack the valve but were unsuccessful and therefore, the valve was replaced. The line was later returned to normal operations.

MPL completed its investigation into this release on January 26, 2017. As a result of the investigation, it was determined that a rough finish specification on the valve stem contributed to a quicker than expected deterioration of the valve seals. It was also determined that valve repacking was hindered by a small diameter packing vent which inhibited packing flow. The inhibited flow resulted in a buildup of pressure in the packing box while being repacked which caused the valve stem seals to fail.

Part D.8. was updated to include final costs. Part G.6. was updated to include investigation results.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Timothy Higgins
Preparer's Title	HES Professional
Preparer's Telephone Number	[redacted]
Preparer's E-mail Address	[redacted]
Preparer's Facsimile Number	
Local Contact Name	
Local Contact Email	
Local Contact Phone	
Authorized Signer Name	Randall W. Bishop
Authorized Signer Title	Regulatory and Compliance Supervisor
Authorized Signer Telephone Number	[redacted]
Authorized Signer Email	[redacted]
Date	02/13/2017