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: 3/31/2024
	Original Report Date:	04/08/2022
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	No.	20220077 -36598
		(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:	04/22/2022		
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. Earliest local time (24-hr clock) and date an accident reporting criteria was met:	03/11/2022 09:50		
4a. Time Zone for local time	Central		
4b. Daylight Saving in effect?	No		
5. Location of Accident:			
Latitude / Longitude			
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):	3,500.00	
8. Estimated volume of intentional and/or controlled release/blowdown (Barrels):		
Estimated volume of commodity recovered (Barrels):	2,974.00	
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)	SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations)	
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)		
13. Local time Operator identified failure	03/11/2022 08:15	
14. formerly C2 Part of system involved in Accident: (select only one)	Onshore Pipeline, Including Valve Sites	
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:	Normal Operation, includes pauses between batches and during maintenance	
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	03/11/2022 08:23
17b. Local time pipeline/facility restarted	03/15/2022 07:31
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?	Yes
If No, skip 18b. and 18c	
18b. Which party initiated communication about the accident?	Operator
18c. Local time of initial Operator and Local/State/Federal Emergency Responder communication	03/11/2022 09:50
19. Local time Operator responders arrived on site	03/11/2022 09:50
20. Local time of confirmed discovery	03/11/2022 09:50
21a. Local time (24-hr clock) and date of initial operator report to the National Response Center:	03/11/2022 10:15
21b. Initial Operator National Response Center Report Number OR	1330806
21c. Additional NRC Report numbers submitted by the operator:	1330949
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?	
23. If 14. is "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, In	ncluding Riser and Riser Bend", answer A23a through f:
23a. Initial action taken to control flow upstream of failure location	Valve Closure
- If Operational Control	
If Valve Closure, answer A23b and c:	
23b. Local time of valve closure	03/11/2022 09:51
23c. Type of upstream valve used to initially isolate release source:	Manual
23d. Initial action taken to control flow downstream of failure location	Valve Closure
- If Operational Control	
If Valve Closure, answer A23.e and f:	
23e. Local time of valve closure	03/11/2022 10:07
23f. Type of downstream valve used to initially isolate release source	Manual

24. If A6 = Crude Oil, Refined and/or Petroleum Product (non-HVL) which is a (including ethanol blends) AND A15. is Onshore, answer questions A24a and c	a Liquid at Ambient Conditions, or Biofuel / Alternative Fuel
24a. Did the operator notify a "qualified individual" in the Onshore Oil Spill Response Plan?	Yes
If Yes, answer A24b.	
24b. Local time the "qualified individual" was notified.	03/11/2022 09:40
24c. Did the operator activate an Oil Spill Removal Organization (OSRO)?	Yes
If Yes, answer A24d and e:	
24d. Local time operator activated OSRO	03/11/2022 10:00
24e. Local time OSRO arrived on site	03/11/2022 10:30
25. Number of general public evacuated:	0
PART B - ADDITIONAL LOCATION INFORMATION	
Pipeline/Facility name:	Woodpat 22" Crude
2. Segment name/ID:	Roxana - Patoka Woodpat 22"
If Yes, Complete Quest	ions (2-12)
If No, Complete Question	ons (13-15)
- If Onshore:	
3. State:	Illinois
4. Zip Code:	62025
5. City	Edwardsville
6. County or Parish	Madison
7. Operator-designated location:	Milepost
8. Specify:	6.1
9. Was this onshore Accident on Federal land?	No
10. Location of Accident:	Pipeline Right-of-way
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
11a. Depth-of-Cover (in):	48
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:	Weld, including heat-affected zone
- If Pipe, specify:	
If Pipe Body: Was this a puddle/spot weld?	
3a. Nominal Pipe Size:	22
3b. Wall thickness (in):	.344
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	46,000
3d. Pipe specification:	API-5L-X46
3e. Pipe Seam, specify:	ERW - Low Frequency
- If Other, Describe:	
3f. Pipe manufacturer:	Youngstown Sheet and Tube
3g. Pipeline coating type at point of Accident, specify:	Coal Tar
- If Other, Describe:	
3h. Coating field applied?	Unknown
- If Weld, including heat-affected zone, specify	Pipe Girth Weld
- If Other, Describe:	

Pipe Girth Weld is selected, complete items C3a through h above. Are any the C3b though h values different on either side of the girth weld?	No
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	
- 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:	1949
4a. Year item involved in Accident was manufactured:	1948
5. Material involved in Accident:	Carbon Steel
- If Material other than Carbon Steel, specify:	
6. Type of Accident Involved:	Rupture
- If Mechanical Puncture – Specify Approx. size:	
in. (axial) by	
in. (circumferential)	
- If Leak - Select Type:	
- If Other, Describe:	
- If Rupture - Select Orientation:	Circumferential
- If Other, Describe:	
Approx. size: in. (widest opening) by	22
in. (length circumferentially or axially)	2
- If Other – Describe:	
PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Wildlife impact:	Yes
1a. If Yes, specify all that apply:	
- Fish/aquatic	Yes
- Birds	Yes
- Terrestrial	Yes
2. Soil contamination:	Yes
3. Long term impact assessment performed or planned:	Yes
4. Anticipated remediation:	Yes
4a. If Yes, specify all that apply:	
- Surface water	Yes
- Groundwater	
- Soil	Yes
- Vegetation	Yes
- Wildlife	
5. Water contamination:	Yes
5a. If Yes, specify all that apply:	
- Ocean/Seawater	
- Surface	Yes
- Groundwater	
- Drinking water: (Select one or both)	
- Private Well	
- Public Water Intake	
5b. Estimated amount released in or reaching water (Barrels):	558.00

5c. Name of body of water, if commonly known:	Cahokia Creek
Sc. Name of body of water, it commonly known:	Canokia Creek
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	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 Prop	erty 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	56,440
8c. Estimated cost of Operator's property damage & repairs	1,862,000
8d. Estimated cost of emergency response	7,659,519
8e. Estimated cost of environmental remediation	12,229,100
8f. Estimated other costs	0
Describe:	
8g. Total estimated property damage (sum of above)	21,807,059
Injured Persons not included in A11 The number of persons injured, admitted overnight are reported in A11. If a person is included in A11, do not include the	ed to a hospital, and remaining in the hospital for at least one new in D9.
9. Estimated number of persons with injuries requiring treatment in a medical facility but not requiring overnight in-patient hospitalization:	0

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:	0	
Buildings Affected		
11. Number of residential buildings affected (evacuated or required repair):	0	
12. Number of business buildings affected (evacuated or required repair):	0	
PART E - ADDITIONAL OPERATING INFORMATION		
1. Estimated pressure at the point and time of the Accident (psig):	467.00	
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):	877.00	
2a. Limiting factor establishing MOP (select only one):	SubPart E Pressure Test §195.406(a)(3)	
describe:		
2b. Date MOP established	03/30/2018	
2c. Was the MOP established in conjunction with a reversal of flow direction?	No	
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):	121	
6. Is the pipeline configured to accommodate internal inspection tools?	Yes	
- If No, Which physical features limit tool accommodation? (select all that apply)		
- Changes in line pipe diameter		
- Presence of unsuitable mainline valves		
- Tight or mitered pipe bends		
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)		

- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
7. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No
- 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?	Yes
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, but the investigation of the control room and/or controller actions has not yet been completed by the operator (Supplemental Report Required)

- 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		
- 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		
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	
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:	G8 - Other Incident Cause	

- Failure to follow procedure	
- Other:	
- If Other, Describe:	
4. What category type was the activity that caused the Accident?	
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 shade	ed left-hand column
Other Accident Cause – Sub-Cause:	Unknown
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	Still under investigation, cause of Accident to be determined* (*Supplemental Report required)
Mandatory comment field:	
PART J - COMPLETED INTEGRITY INSPECTIONS	
Complete the following if the "Item Involved in Accident" (from PART C, Q	ruestion 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	t 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):	

Non-threaded Connection Failure	
Defective or Loose Tubing or Fitting	
Failure of Equipment Body (except Compressor), Vessel Plate, or other Material	
Incorrect Operation	
Damage by Operator or Operator's Contractor NOT Excavation and NOT Vehicle/Equipment Damage	
Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	
Valve Left or Placed in Wrong Position, but NOT Resulting in Overpressure	
Pipeline or Equipment 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 March 11, 2022, The Woodpat 22" Crude system was running steady state from Wood River tankage delivering to Patoka tankage. At 8:15 AM CST the Roxana Unit 3 shutdown on low suction. Field operations confirmed a mainline release at 9:50 AM CST. A call to the National Response Center (NRC) was made at 10:15AM CST. The leak point was located 6 miles downstream of Roxana station where the pipeline runs adjacent to Cahokia Creek.

On March 13, 2022 at 8:46 AM CDT, a call was made to the NRC to provide the required 48-hour update. The operator at the National Response Center stated due to the number of agencies alerted because of the volume released, no new NRC Reports would be taken. All updates need to be provided directly to Federal On-scene Coordinator. Per direction from the onsite PHMSA personnel, a second attempt at the 48-hour notification was completed at 5:03 PM CDT.

NRC 48-hour update: #1330949

Updated Part A, Part D, Part E and Part G for this supplemental report.

Updated 4/22/22: The current estimation of product released is 3,500 barrels. To date, recovered product is estimated at 2,974 barrels; however, recovery is ongoing and will be further updated as more information becomes available.

The National Transportation Safety Board (NTSB) is leading the investigation into the cause of the failure and it is ongoing. Future investigative activity will focus on geohazard management, metallurgy, comparing the forces exerted on the pipeline to its ability to withstand strain, and the ongoing environmental response.

PART I - PREPARER AND AUTHORIZED SIGNATURE		
Preparer's Name	Darryl Somerville	
Preparer's Title	Regulatory Compliance Professional	
Preparer's Telephone Number		
Preparer's E-mail Address		
Preparer's Facsimile Number		
Local Contact Name	Darryl Somerville	
Local Contact Email		
Local Contact Phone		
Authorized Signer Name	Aaron Martinez	
Authorized Signer Title	Regulatory Compliance Manager	

Authorized Signer Telephone Number	
Authorized Signer Email	
Date	04/22/2022