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

Principal Investigator	Patrick Raichel – NYSDPS (Buffalo)
	Kristi Fogle – NYSDPS (Buffalo)
Senior Accident Investigator	Michael Yazemboski
Region Director	Byron E. Coy
Date of Report	7/27/2015
Subject	Failure Investigation Report – Buckeye Partners CD803RC Pipeline Leak

Operator, Location, & Consequences

Date of Failure	10/16/2013
Commodity Released	Gasoline
City/County & State	Town of Chili/Monroe County, New York
OpID & Operator Name	1845 Buckeye Partners, LP
Unit # & Unit Name	3201 Auburn Area – NY
SMART Activity #	144745
Milepost / Location	43.0456 Lat; -77.74824 Long. Survey Station No. 459+27 / Reed Road at Interstate 90 (I-90).
Type of Failure	Pinhole Leak due to electrical discharge event
Fatalities	0
Injuries	0
Description of area impacted	Non-HCA rural area adjacent to railroad and NYS Thruway rights-of-way (ROW), and NYS regulated freshwater wetland check zone
Total Costs	$254,899 (includes emergency response and property damage and repairs)

Executive Summary

At approximately 15:00 on October 16, 2013, during a scheduled dig to evaluate and repair an anomaly in their CD803RC pipeline, Buckeye Partners, LP (Buckeye) personnel reported indications of combustible vapors inside the casing. The line was in gasoline service and had been isolated in preparation for the dig. At the time of the leak, the line pressure was 301 psig. The maximum operating pressure (MOP) was 1,176 psig.

The pipeline is used to transport refined products to the Rochester, NY, area. The incident location was southwest of Rochester, NY at the north end of the 285-foot cased crossing of the I-90 NYS Thruway in the Town of Chili, Monroe County, NY, 14546. This location is a shared ROW; with an active railway and tower mounted electrical transmission lines, both running parallel with the pipeline.

According to the metallurgical analysis, the leak was attributed to an electrical discharge that created a hole in the pipe wall of the carrier pipe. The surfaces of the hole were relatively smooth and shiny and showed no evidence of corrosion or corrosion products. Furthermore, no evidence of corrosion, mechanical damage, manufacturing defect, environmental cracking, or other degradation mechanism was found near the leak origin. It is likely that the metal loss occurred during a single electrical discharge event such as a lightning strike or AC power line fault.

A total of 0.07 barrels (less than 3 gallons) of product were lost from the pipeline as part of this incident. There was no environmental impact, fire, injuries, evacuations, or supply disruption as a result of the incident. An inspector from the New York State Department of Public Service (NYSDPS) was dispatched to the location on October 17, 2013, to conduct an investigation into the cause of the release.

System Details

Buckeye is an interstate pipeline operator that transports refined products by pipeline principally in the Northeastern and upper Midwestern states. Buckeye also performs operations and maintenance duties under contract on pipelines primarily in the Gulf Coast region. Buckeye provides terminal services, storage and refined product distribution services through ownership of more than 100 refined petroleum product terminals.

Unit 3201 includes segment CD803RC consisting of 190 miles of 10-inch pipeline that runs from Auburn to Rochester and Utica, NY. The CD803RC pipeline receives refined product from Buckeye's Auburn facility and sends it to various terminals in Rochester. Multiple products including diesel, gasoline, and jet fuel are transported. The pipeline was manufactured and installed in 1965 of 10.75-inch OD grade X46 low frequency ERW pipe with a 0.203-inch wall thickness and external coal tar enamel. In July 1992 an impressed current cathodic protection system was installed. The MOP of the segment is 1,176 psig as established by the upstream control location.

Events Leading up to the Failure

On June 6, 2012, Buckeye ran an Inline Inspection (ILI) tool as part of its Integrity Management Program (IMP). An external corrosion anomaly was identified at station 459+27 having a 55% deep external metal loss. This was the only anomaly identified in the pipe at this location.

Date	Details
6/6/2012	ILI Run on section that leaked on 10/16/2013
7/31/2012	ILI report issued
12/3/2012	ILI report analysis completed – dig list compiled Buckeye prioritized the feature per its Other Condition Prioritization Procedures and scheduled the repair.
5/2013	Buckeye applied for permits for dig locations in the NYS Thruway and Wetlands area
10/1/2013	Permits issued
10/14/2013	Excavation started - the downstream casing seal was removed with no indications of vapors
10/16/2013	Leak found - following additional excavation to expose the carrier pipe and casing, Buckeye and its contractor drilled a hole in the top of the casing. Upon removing the drill bit, combustible vapors were detected resulting in the notification of a potential release

Emergency Response

Upon positive indications of combustible vapors inside the pipe casing, Buckeye confirmed a release and began the notification process. On October 16, 2013, the New York State Department of Environmental Conservation (NYSDEC) was notified and Spill Number 1307359 was assigned (Appendix-C). NYSDEC recorded the spill as closed on December 1, 2013. The NRC was also notified and Incident Report #1063196 was assigned (Appendix-B). At 18:05, on October 16, the NYSDPS received a telephonic notification.

Excavation activities were being conducted under reduced pressure conditions. Upon indications of a release, Buckeye shut in the line at the Caledonia station and pressure was drained to the Rochester terminal tankage, producing a static (non-flowing) condition. Buckeye contracted a vacuum truck provider and placed a crew on site to monitor the situation overnight. The truck and containment materials remained on site until a temporary repair could be made. Buckeye monitored the repair at all times the line was in use, until such time as a permanent repair was made. This monitoring included a vacuum truck on site while the line was in operation.

NYSDPS Staff responded on October 17, 2013 to monitor repair activities. In addition, NYSDEC Staff responded to observe adjacent wetland boundaries and precautionary spill containment.

Summary of Return-to-Service

Investigation and repair efforts began on the morning of October 17, 2013. Investigation commenced with excavation over the north end of the casing moving upstream toward the anomaly. Lack of equal spacing between the casing and carrier pipe required removal of external loading to permit casing removal. The casing was being cleaned in preparation for cut out at approximately 15:45 on October 17 when product was visible from the annular space between the casing and the carrier pipe at the north end of the casing. Buckeye and their contactor recovered all product through the use of vacuum truck with containment equipment. The work area was adjacent to a wetland. Buckeye worked with the NYSDEC to properly stage and protect this area during excavation.

On October 18, 2013, the anomaly was located 68 feet inside the casing at the 6 o'clock position (Appendix-A). After cleaning and evaluation, a temporary Plidco bolt-on repair sleeve was installed. Seventy feet of casing was removed and a project-specific start up process involving repressuring the line and monitoring the pressure increase in increments was initiated. At 21:30 the line was placed back into service. The MOP was reduced from 1,176 psig to 1,000 psig and Buckeye assigned personnel for onsite monitoring while the line was in use until such time that a permanent repair was made.

A permanent repair was made on October 30, 2013, during regularly scheduled downtime. Buckeye qualified welders cut out a section of carrier pipe approximately 22 feet long and welded in new pretested pipe. The replacement pipe was 10.75-inch OD grade X52 low frequency ERW pipe with a 0.365-inch wall thickness. The repair included three welds made in accordance with Buckeye Weld Procedure Specification Number P2A. All tie-in welds were non-destructively tested by qualified personnel using X-ray radiographic inspection. Repairs were completed on October 31, 2013, and the CD803RC pipeline was returned to service. The MOP was reduced to 1,072 psig until the metallurgical analysis was finalized (Appendix-H). The MOP reduction was removed upon completion of the metallurgical analysis.

Investigation Details

The details of the investigation are provided below:

1. General Observations
    a. The MOP of the segment is 1,176 psig as established by the upstream control location.
    b. Normal operating pressure range is 250 to 400 psig.
    c. A pinhole leak was identified on the CD803RC pipeline 68 feet inside the casing (Appendix A) at the 6 o'clock position.
    d. The leak was not located within an HCA.
    e. Visual inspection during excavation indicated that cover over the pipeline exceeded requirements and that the external coating was intact.
    f. Buckeye made its initial Accident Report form 7000 submittal on November 14, 2013, and its final submittal on February 12, 2014 (Appendix D).
    g. Buckeye completed their final draft of their Incident Investigation Report on February 10, 2014 (Appendix E)
2. Buckeye conducted a hydrostatic test of this segment on July 14, 2004. The test consisted of a spike test to 1,615 psig followed by a 1-hour strength test at 1,451 psig. The hydrostatic test conducted in 1968 consisted of a 24-hour strength test at 1,490 psig.
3. Buckeye conducted a control room investigation that identified a leak alarm that sounded on October 14 2013 for 20 seconds. The operator reported that it is common for a leak alarm threshold to be approached or crossed during transitions involving pressure fluctuations, starting and stopping and raising and lowering delivery locations simultaneously. NYSDPS Staff does not attribute the alarm to this event.
4. ILI Review
    a. A MFL/Deformation Magpie ILI tool run occurred on June 19, 2007. Analysis of this run was completed on November 7, 2007, and showed no indications of an anomaly at station 459+27 (the section of the pipe that leaked in 2013).
    b. Another tool run was conducted on June 6, 2012. An anomaly was located at 459+27, at the 6 o'clock position on the pipe and it showed a wall loss of 55% wall thickness.
        i. Buckeye calculated a growth rate of 11% per year as determined by the December 3, 2012 analysis.
        ii. On December 3, 2012, Buckeye issued an Other Conditions dig, as required by 195.452(h)(4)(iv), for this location based on growth rate. This was the dig being conducted at the time of discovery of the leak.
        iii. NYSDPS Staff reviewed Buckeye's Integrity Management Manual (IMM) - Section 08 - Integrity Assessment Review and Repair_issued Jan_1_2010 (Appendix F) and Other Condition Prioritization Procedure issued August 21, 2010 (Appendix G). Specific attention was given to the IMM sections 8.3 Discovery of a Condition, and 8.4 Repair Conditions. Section 8 provided adequate detail to address the requirements of 195.452.

iv. Based on Section 8 of the IMM, Buckeye declared this anomaly as an "Other Condition". Buckeye scheduled this dig in accordance with their Other Conditions Prioritization Procedure (dated August 31, 2010). Based upon the procedure, this anomaly was considered a Category D with low values for both the alpha (1.5 in a range of 1.5 to 5) and the beta (2 in a range of 1 to 5) factors in their prioritization formula. The only factor that showed any concern was the gamma factor (a range of 0.25 to 4). Although the gamma factor used was not provided, NYSDPS assumed the highest gamma factor of 4 to calculate a Prioritization factor of 12 for this anomaly. The range of Prioritization factors is 0.375 to 100. A factor of 12 is a relatively low priority.

v. Buckeye's treatment of the ILI data was found to be acceptable with both company procedures and the requirements of 195.452.

5. Records and Procedures Reviewed

   a. Buckeye's Cathodic Protection (CP) Survey Report at station 456+00 (which included the section of pipe where the failure occurred), including pipe to soil and casing reads, was reviewed and found compliant for inspections conducted within the past three years. No indications of shorting were identified.

   b. The Pressure Piping Hydrostatic Test Record for certified replacement pipe conducted by Kruse Construction on May 23, 2013, was reviewed.

6. Visual observation of the carrier pipe exposed showed no evidence of corrosion or corrosion products. Direct assessment of pipe coating indicated that it appeared intact and in good condition. In addition, no significant defects were visible on the pipe surface exposed. The anomaly itself had a smooth surface appearance after cleaning and preparation for temporary repairs. Laboratory analysis confirmed these observations and reported no evidence of corrosion, mechanical damage, manufacturing defect, environmental cracking or other degradation mechanism.

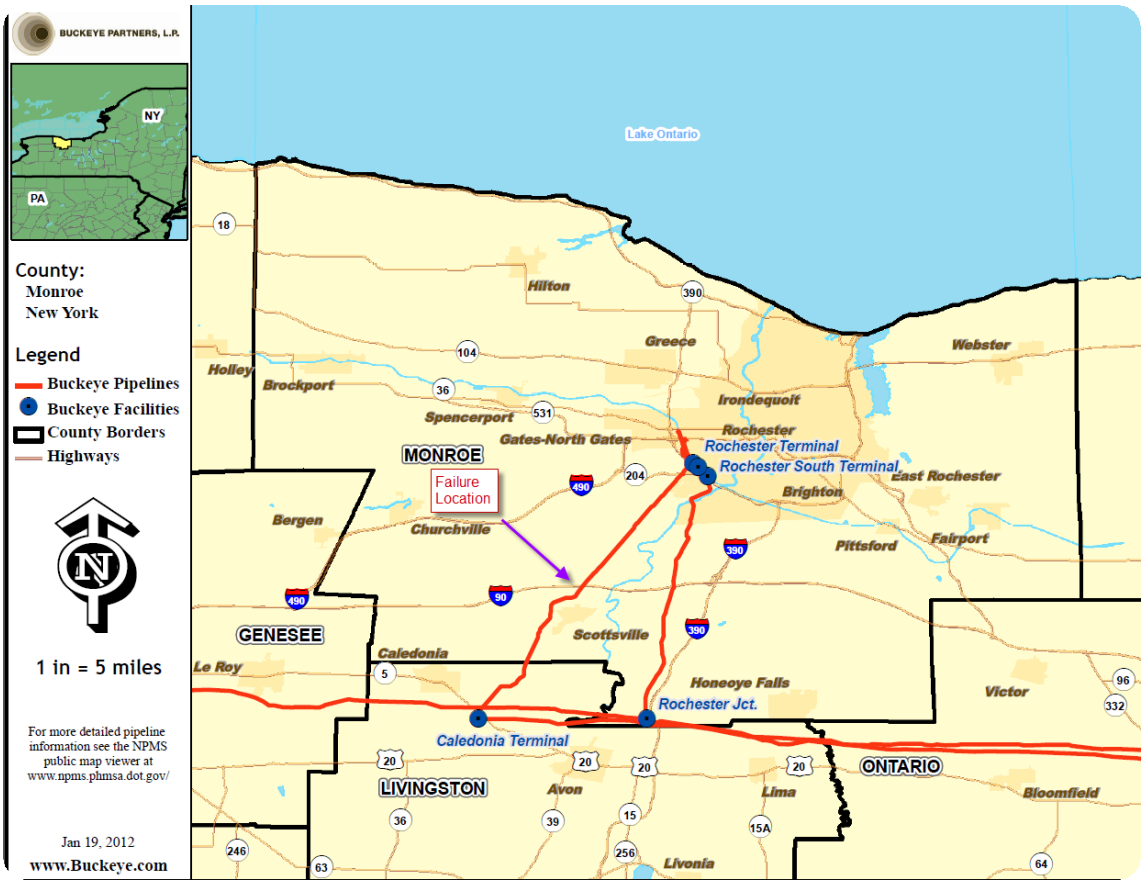
7. The cut out section and a portion of the casing were sent to Kiefner & Associates, Inc. (Kiefner) for examination. Metallurgical analysis of the anomaly showed a pronounced heat affected zone along the surfaces of the hole, along with melted and re-solidified metal. The pit had a smooth surface appearance and no evidence of corrosion or corrosion product. These taken together are significant evidence of an electrical discharge being the cause of the metal loss.

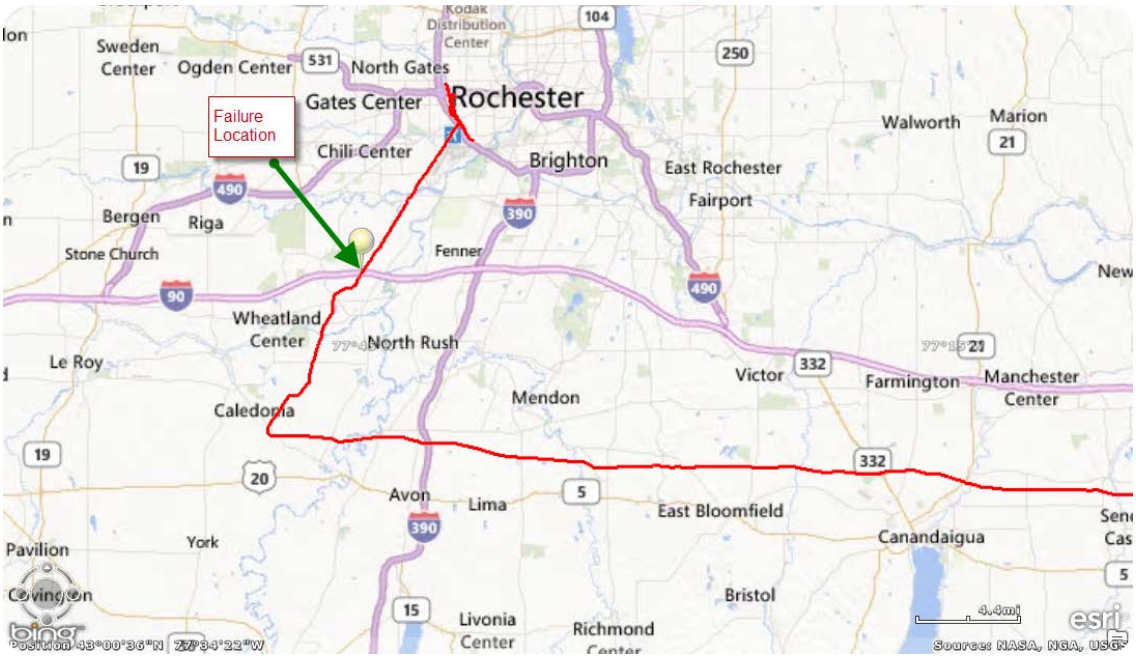
Findings and Contributing Factors

Approximately 22 feet of carrier pipe and 70 feet of casing were shipped to Kiefner for visual inspection, metallurgy and pipe material property testing (Appendix-H). Kiefner determined that the leak was attributable to an electrical discharge creating a pinhole in the external pipe wall. No evidence of corrosion or corrosion products existed near the anomaly. Pipe dimensions, properties and composition met the requirements of the 12th Edition of API 5L. The electrical discharge resulted in localized heating of the pipe wall above the melting point of the steel. Kiefner determined that the heat affected zone was continuous and uniform suggesting that the metal loss occurred immediately during a single electrical discharge event such as a lighting strike or AC power line fault.

Appendices

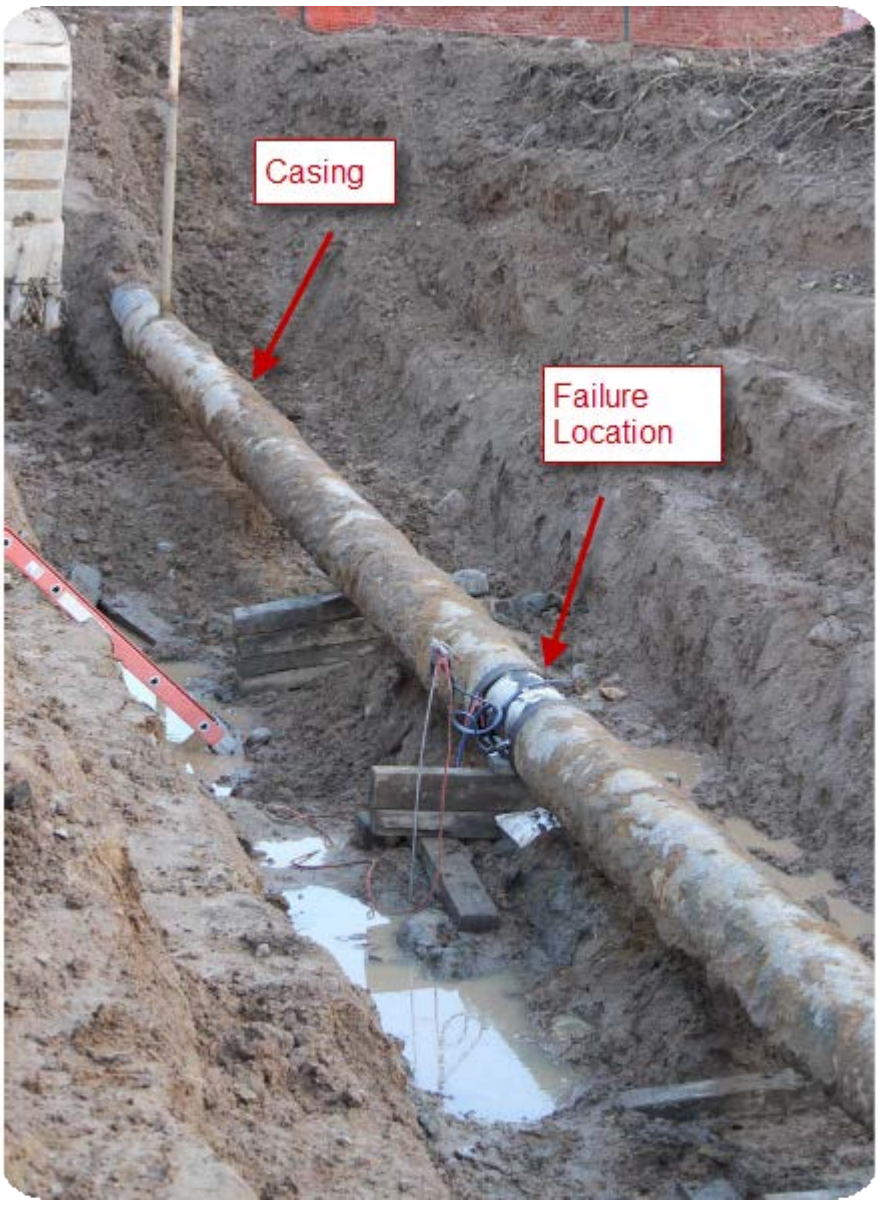
A. 144745 Appendix A - Maps and Photos and Leak Location
B. 144745 Appendix B - NRC 1063196
C. 144745 Appendix C - Spill Incidents Database 1307359
D. 144745 Appendix D - Form 7000 20130366 - 19013
E. 144745 Appendix E - Incident Investigation Report
F. 144745 Appendix F - Section 08 - Integrity Assessment Review and Repair_issued Jan_1_2010
G. 144745 Appendix G - Other Condition Prioritization Procedure issued August_31_2010
H. 144745 Appendix H - Kiefner Examination of In-Service Leak


BUCKEYE PARTNERS, L.P.
NY
PA
County:
Monroe
New York
Legend
Buckeye Pipelines
Buckeye Facilities
County Borders
Highways
1 in = 5 miles
For more detailed pipeline information see the NPMS public map viewer at www.npms.phmsa.dot.gov/
Jan 19, 2012
www.Buckeye.com
Lake Ontario
Hilton
Greece
Webster
Holley
Brockport
Spencerport
Gates-North Gates
Irondequoit
Rochester
Rochester Terminal
Rochester South Terminal
East Rochester
Brighton
MONROE
Failure Location
Bergen
Churchville
Pittsford
Fairport
GENESEE
Caledonia
Le Roy
Scottsville
Honeoye Falls
Rochester Jct.
Victor
Caledonia Terminal
ONTARIO
LIVINGSTON
Avon
Lima
Bloomfield
Livonia


Sweden Center
Ogden Center
North Gates
Gates Center
Rochester
Failure Location
Chili Center
Brighton
East Rochester
Fairport
Walworth
Marion
Bergen
Riga
Stone Church
Fenner
Wheatland Center
North Rush
Le Roy
Caledonia
Mendon
Victor
Farmington
Manchester Center
Avon
Lima
East Bloomfield
Canandaigua
Pavilion
York
Bristol
Livonia Center
Richmond
Source: NASA, NGA, USGS

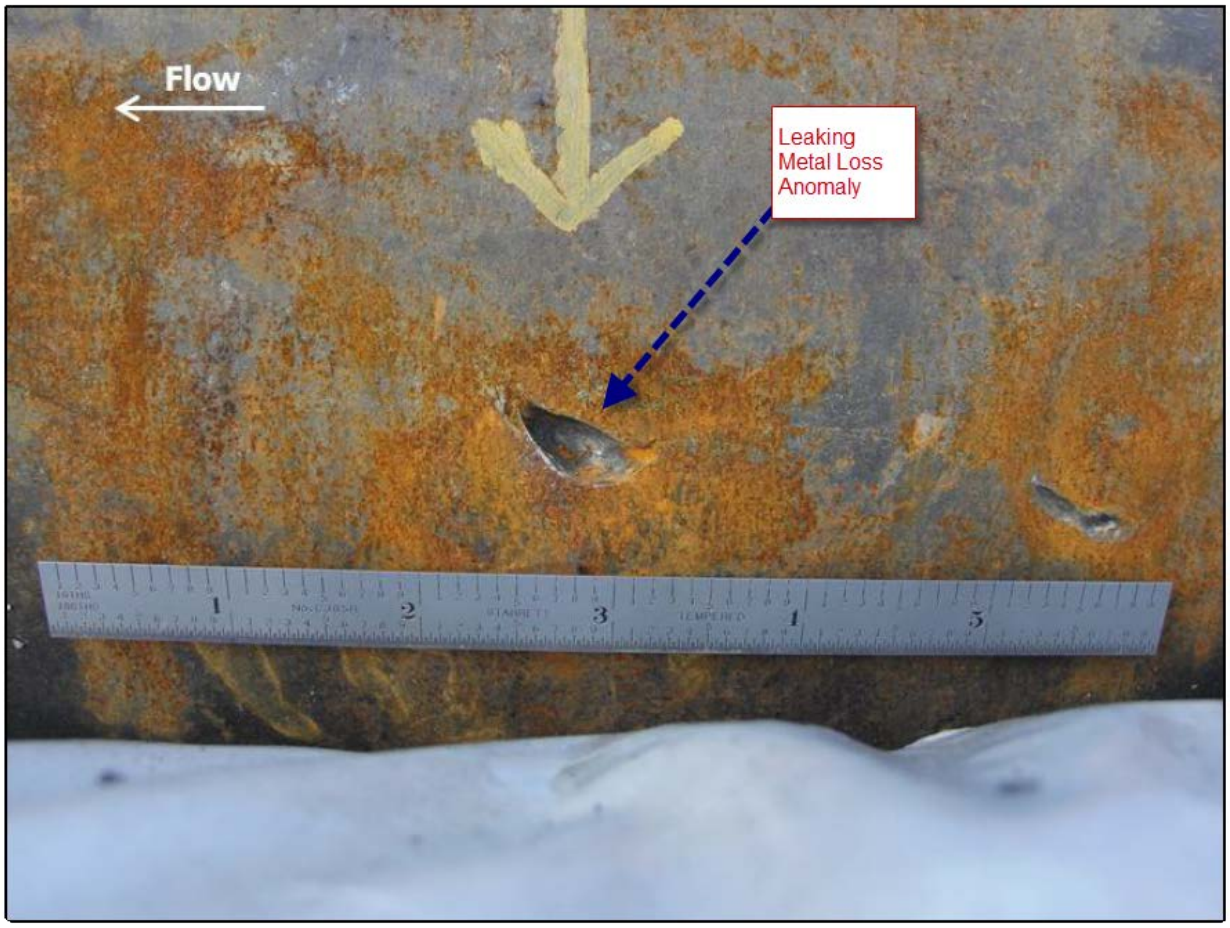

386
South Chili
Failure Location
Reed Rd
Mile of Woods
383
Scottsville Chili Rd
New York State Thruway
90
New York State Thruway
Scottsville Rd
253
84
North Rd
139
2365ft
esri
Source: USGS

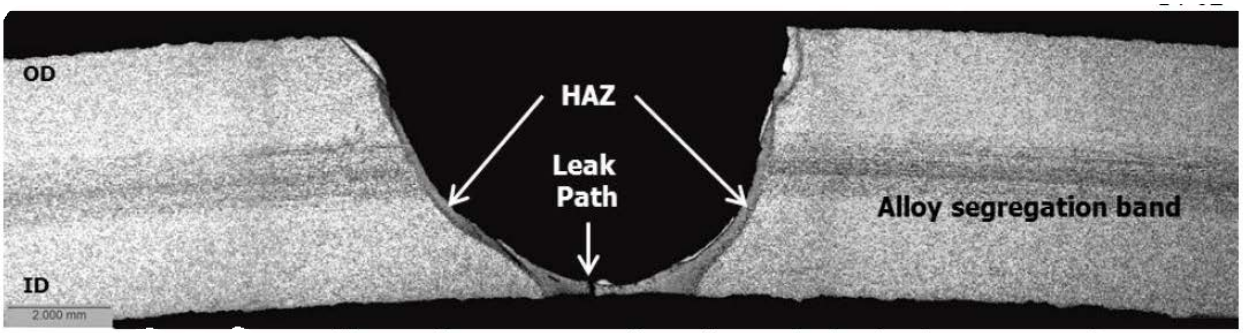

Failure Location
Active Railroad
Reed Rd
90
New York State Thruway
90
368ft
esri
© 2008 Microsoft Corp


Casing
Failure
Location


Failure at 6 o'clock


Leaking Metal Loss
Anomaly



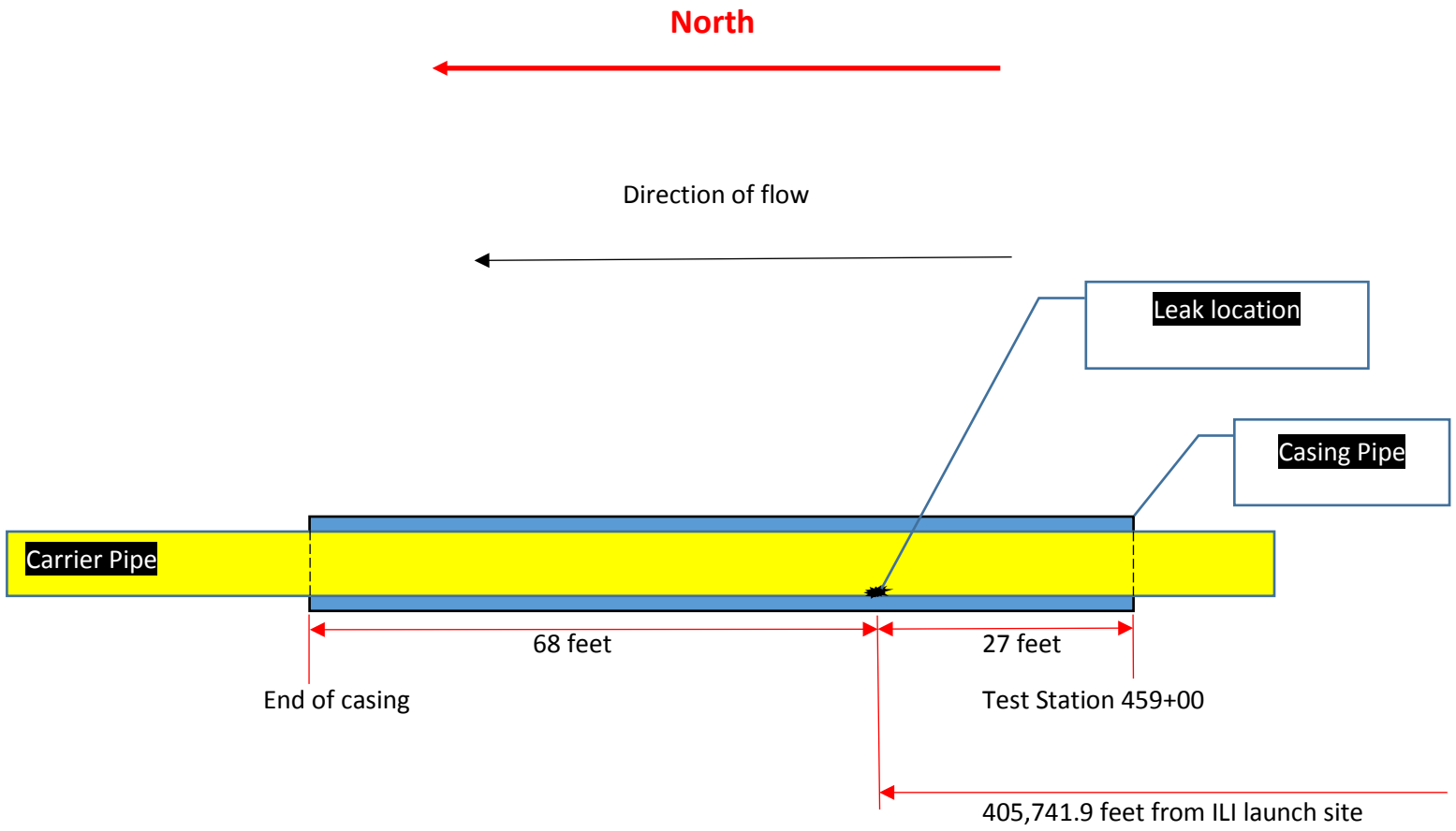


Metallographic section taken through the leaking anomaly


Plidco Temporary
Repair


New Pipe
installed

Prepared by NYS DPS 4/8/2015



NATIONAL RESPONSE CENTER 1-800-424-8802
*** For Public Use ***
Information released to a third party shall comply with any
applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 1063196

INCIDENT DESCRIPTION

**** THIS IS A POTENTIAL RELEASE ****
*Report taken at 16:51 on 16-OCT-13
Incident Type: PIPELINE
Incident Cause: EQUIPMENT FAILURE
Affected Area:
The incident was discovered on 16-OCT-13 at 15:00 local time.
Affected Medium: NON-RELEASE (N/A) STEEL CASING

SUSPECTED RESPONSIBLE PARTY

Organization: BUCKEYE PIPELINE CO
EMMAUS, PA 18049

Type of Organization: PRIVATE ENTERPRISE

INCIDENT LOCATION

REED ROAD County: MONROE
City: ROCHESTER State: NY

ROUTE 90

POTENTIALLY RELEASED MATERIAL(S)

CHRIS Code: GAS Official Material Name: GASOLINE: AUTOMOTIVE (UNLEADED)
Also Known As:
Qty Released: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

CALLER STATED THAT WHILE DIGGING A SMART PIG DIG UNDER THE CASING UNDERNEATH THE ROAD AND THEY DETECTED VAPORS WITHIN THE CASING.

INCIDENT DETAILS

Pipeline Type: DISTRIBUTION
DOT Regulated: YES
Pipeline Above/Below Ground: BELOW
Exposed or Under Water: NO
Pipeline Covered: UNKNOWN

DAMAGES

Fire Involved:	NO	Fire Extinguished: UNKNOWN		
INJURIES:	NO	Hospitalized:	Empl/Crew:	Passenger:
FATALITIES:	NO	Empl/Crew:	Passenger:	Occupant:
EVACUATIONS:	NO	Who Evacuated:	Radius/Area:	
Damages:	NO			

Closure Type		Description of Closure	Length of Closure	Direction of Closure	
Air:	N				
Road:	N				Major Artery: N
Waterway:	N				
Track:	N				

Passengers Transferred: NO

Environmental Impact: UNKNOWN
Media Interest: UNKNOWN Community Impact due to Material:

REMEDIAL ACTIONS

REDUCE THE PRESSURE IN THE LINE, SHUT THE LINE IN.
Release Secured: UNKNOWN
Release Rate:
Estimated Release Duration:

WEATHER

Weather: UNKNOWN, ºF

ADDITIONAL AGENCIES NOTIFIED

Federal:
State/Local: DEC
State/Local On Scene:
State Agency Number: 1307359

NOTIFICATIONS BY NRC

ATLANTIC STRIKE TEAM (MAIN OFFICE)
16-OCT-13 17:03
DHS PROTECTIVE SECURITY ADVISOR (PSA DESK)
16-OCT-13 17:03
DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)
16-OCT-13 17:03
U.S. EPA II (MAIN OFFICE)
16-OCT-13 17:08
NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)
16-OCT-13 17:03
NJ OFC HMLND SECURITY & PREPAREDNES (COMMAND CENTER)
16-OCT-13 17:03
NJ STATE POLICE (MARINE SERVICES BUREAU)
16-OCT-13 17:03
NOAA RPTS FOR NY (MAIN OFFICE)
16-OCT-13 17:03
NATIONAL RESPONSE CENTER HQ (AUTOMATIC REPORTS)
16-OCT-13 17:03
NTSB PIPELINE (MAIN OFFICE)
16-OCT-13 17:03
BUREAU TOXIC SUBSTANCE (MAIN OFFICE)
16-OCT-13 17:03
NY STATE DEC SPILL HOTLINE (MAIN OFFICE)
16-OCT-13 17:03
PIPELINE & HAZMAT SAFETY ADMIN (OFFICE OF PIPELINE SAFETY (AUTO))
16-OCT-13 17:03
SECTOR BUFFALO (INTEL OFFICE)
16-OCT-13 17:03
USCG DISTRICT 1 (COMMAND CENTER)
16-OCT-13 17:03
USCG DISTRICT 9 (COMMAND CENTER)
16-OCT-13 17:03

ADDITIONAL INFORMATION

*** END INCIDENT REPORT # 1063196 ***

NEW YORK STATE
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

Spill Incidents Database Search Details

Spill Record

Administrative Information

DEC Region: 8
Spill Number: 1307359

Spill Date/Time

Spill Date: 10/16/2013 **Spill Time:** 03:00:00 PM
Call Received Date: 10/16/2013 **Call Received Time:** 04:46:00 PM

Location

Spill Name: PIPELINE BY ADDRESS
Address: 3 REED ROAD & ROUTE I90
City: SCOTTSVILLE **County:** MONROE

Spill Description

Material Spilled	Amount Spilled	Resource Affected
Gasoline	UNKNOWN	Unknown

Cause: Unknown
Source: Commercial/Industrial
Waterbody:

Record Close

Date Spill Closed: 12/01/2013

"Date Spill Closed" means the date the spill case was closed by the case manager in the Department of Environmental Conservation (the Department). The spill case was closed because either; a) the records and data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial activities are necessary, or b) the case was closed for administrative reasons (e.g., multiple reports of a single spill consolidated into a single spill number). The Department however reserves the right to require additional remedial work in relation to the spill, if in the future it determines that further action is necessary.

If you have questions about this reported incident, please contact the Regional Office where the incident occurred.
Refine Current Search

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed $100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed $1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0047 EXPIRATION DATE: 01/31/2014
U.S Department of Transportation Pipeline and Hazardous Materials Safety Administration	**Original Report Date:**	11/14/2013
	No.	20130366 - 19013 --- (DOT Use Only)

ACCIDENT REPORT - HAZARDOUS LIQUID 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.*

PART A - KEY REPORT INFORMATION

Report Type: *(select all that apply)*	**Original:**	**Supplemental:**	**Final:**
		Yes	**Yes**
Last Revision Date:	02/12/2014		
1. Operator's OPS-issued Operator Identification Number (OPID):	1845		
2. Name of Operator	BUCKEYE PARTNERS, LP		
3. Address of Operator:			
3a. Street Address	FIVE TEK PARK 9999 HAMILTON BOULEVARD		
3b. City	BREINIGSVILLE		
3c. State	Pennsylvania		
3d. Zip Code	18031		
4. Local time *(24-hr clock)* and date of the Accident:	10/16/2013 16:25		
5. Location of Accident:			
Latitude:	43.0456		
Longitude:	-77.74824		
6. National Response Center Report Number (if applicable):	1063196		
7. Local time *(24-hr clock)* and date of initial telephonic report to the National Response Center (if applicable):	10/16/2013 16:52		
8. Commodity released: *(select only one, based on predominant volume released)*	Refined and/or Petroleum Product (non-HVL) which is a Liquid at Ambient Conditions		
- Specify Commodity Subtype:	Gasoline (non-Ethanol)		
- If "Other" Subtype, Describe:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Ethanol Blend, then % Ethanol Blend: %:			
- If Biofuel/Alternative Fuel and Commodity Subtype is Biodiesel, then Biodiesel Blend (e.g. B2, B20, B100): B			
9. Estimated volume of commodity released unintentionally (Barrels):	.07		
10. Estimated volume of intentional and/or controlled release/blowdown (Barrels):			
11. Estimated volume of commodity recovered (Barrels):	.07		
12. Were there fatalities?	No		
- If Yes, specify the number in each category:			
12a. Operator employees			
12b. Contractor employees working for the Operator			
12c. Non-Operator emergency responders			
12d. Workers working on the right-of-way, but NOT associated with this Operator			
12e. General public			
12f. Total fatalities (sum of above)			
13. Were there injuries requiring inpatient hospitalization?	No		
- If Yes, specify the number in each category:			
13a. Operator employees			
13b. Contractor employees working for the Operator			
13c. Non-Operator emergency responders			

13d. Workers working on the right-of-way, but NOT associated with this Operator	
13e. General public	
13f. Total injuries (sum of above)	
14. Was the pipeline/facility shut down due to the Accident?	No
- If No, Explain:	The line was already isolated for an ILI dig
- If Yes, complete Questions 14a and 14b: *(use local time, 24-hr clock)*	
14a. Local time and date of shutdown:	
14b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	
15. Did the commodity ignite?	No
16. Did the commodity explode?	No
17. Number of general public evacuated:	
18. Time sequence *(use local time, 24-hour clock)*:	
18a. Local time Operator identified Accident:	10/16/2013 16:25
18b. Local time Operator resources arrived on site:	10/16/2013 16:25

PART B - ADDITIONAL LOCATION INFORMATION

1. Was the origin of Accident onshore?	Yes
If Yes, Complete Questions (2-12)	
If No, Complete Questions (13-15)	
- If Onshore:	
2. State:	New York
3. Zip Code:	14546
4. City	Scottsville
5. County or Parish	Monroe
6. Operator-designated location:	Survey Station No.
Specify:	45946.68
7. Pipeline/Facility name:	CD803RC
8. Segment name/ID:	CD803RC
9. Was Accident on Federal land, other than the Outer Continental Shelf (OCS)?	No
10. Location of Accident:	Pipeline Right-of-way
11. Area of Accident (as found):	Underground
Specify:	Under soil
- If Other, Describe:	
Depth-of-Cover (in):	
12. Did Accident occur in a crossing?	Yes
- If Yes, specify below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	Yes
Cased/ Uncased/ Bored/drilled	Cased
- If Water crossing –	
Cased/ Uncased	
- Name of body of water, if commonly known:	
- Approx. water depth (ft) at the point of the Accident:	
- Select:	
- If Offshore:	
13. Approximate water depth (ft) at the point of the Accident:	
14. Origin of Accident:	
- In State waters - Specify:	
- State:	
- Area:	
- Block/Tract #:	
- Nearest County/Parish:	
- On the Outer Continental Shelf (OCS) - Specify:	
- Area:	
- Block #:	
15. Area of Accident:	

PART C - ADDITIONAL FACILITY INFORMATION

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

- If Pipe, specify:	Pipe Body
3a. Nominal diameter of pipe (in):	10
3b. Wall thickness (in):	.203
3c. SMYS (Specified Minimum Yield Strength) of pipe (psi):	46,000
3d. Pipe specification:	X46
3e. Pipe Seam , specify:	Longitudinal ERW - Low Frequency
- If Other, Describe:	
3f. Pipe manufacturer:	Unknown
3g. Year of manufacture:	1965
3h. Pipeline coating type at point of Accident, specify:	Other
- If Other, Describe:	Mastic Coating
- If Weld, including heat-affected zone, specify:	
- If Other, Describe:	
- If Valve, specify:	
- If Mainline, specify:	
- If Other, Describe:	
3i. Manufactured by:	
3j. Year of manufacture:	
- If Tank/Vessel, specify:	
- If Other - Describe:	
- If Other, describe:	
4. Year item involved in Accident was installed:	1965
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:	Pinhole
- If Other, Describe:	Thruwall pitting
- 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?	No
7. Did the released commodity reach or occur in one or more High Consequence Area (HCA)?	No
7a. If Yes, specify HCA type(s): *(Select all that apply)*	
- Commercially Navigable Waterway:	
Was this HCA identified in the "could affect"	

determination for this Accident site in the Operator's Integrity Management Program?	
- High Population Area:	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Other Populated Area	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Drinking Water	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
- Unusually Sensitive Area (USA) - Ecological	
Was this HCA identified in the "could affect" determination for this Accident site in the Operator's Integrity Management Program?	
8. Estimated Property Damage:	
8a. Estimated cost of public and non-Operator private property damage	$ 0
8b. Estimated cost of commodity lost	$ 0
8c. Estimated cost of Operator's property damage & repairs	$ 198,899
8d. Estimated cost of Operator's emergency response	$ 56,000
8e. Estimated cost of Operator's environmental remediation	$ 0
8f. Estimated other costs	$ 0
Describe:	
8g. Total estimated property damage (sum of above)	$ 254,899

PART E - ADDITIONAL OPERATING INFORMATION

1. Estimated pressure at the point and time of the Accident (psig):	301.00
2. Maximum Operating Pressure (MOP) at the point and time of the Accident (psig):	1,176.00
3. Describe the pressure on the system or facility relating to the Accident (psig):	Pressure did not exceed MOP
4. Not including pressure reductions required by PHMSA regulations (such as for repairs and pipe movement), was the system or facility relating to the Accident operating under an established pressure restriction with pressure limits below those normally allowed by the MOP?	No
- If Yes, Complete 4.a and 4.b below:	
4a. Did the pressure exceed this established pressure restriction?	
4b. Was this pressure restriction mandated by PHMSA or the State?	
5. Was "Onshore Pipeline, Including Valve Sites" OR "Offshore Pipeline, Including Riser and Riser Bend" selected in PART C, Question 2?	Yes
- If Yes - (*Complete 5a. – 5e. below)*	
5a. Type of upstream valve used to initially isolate release source:	Remotely Controlled
5b. Type of downstream valve used to initially isolate release source:	Remotely Controlled
5c. Length of segment isolated between valves (ft):	84,480
5d. Is the pipeline configured to accommodate internal inspection tools?	Yes
- If No, Which physical features limit tool accommodation? (*select all that apply)*	
- Changes in line pipe diameter	
- Presence of unsuitable mainline valves	
- Tight or mitered pipe bends	
- Other passage restrictions (i.e. unbarred tee's, projecting instrumentation, etc.)	
- Extra thick pipe wall (applicable only for magnetic flux leakage internal inspection tools)	
- Other -	
- If Other, Describe:	
5e. For this pipeline, are there operational factors which significantly complicate the execution of an internal inspection tool run?	No
- If Yes, Which operational factors complicate execution? (*select all that apply*)	
- Excessive debris or scale, wax, or other wall buildup	

- Low operating pressure(s)	
- Low flow or absence of flow	
- Incompatible commodity	
- Other -	
- If Other, Describe:	
5f. Function of pipeline system:	> 20% SMYS Regulated Trunkline/Transmission
6. Was a Supervisory Control and Data Acquisition (SCADA)-based system in place on the pipeline or facility involved in the Accident?	Yes
If Yes -	
6a. Was it operating at the time of the Accident?	Yes
6b. Was it fully functional at the time of the Accident?	Yes
6c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
6d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
7. Was a CPM leak detection system in place on the pipeline or facility involved in the Accident?	Yes
- If Yes:	
7a. Was it operating at the time of the Accident?	Yes
7b. Was it fully functional at the time of the Accident?	Yes
7c. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the detection of the Accident?	No
7d. Did CPM leak detection system information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Accident?	No
8. How was the Accident initially identified for the Operator?	Local Operating Personnel, including contractors
- If Other, Specify:	
8a. If "Controller", "Local Operating Personnel", including contractors", "Air Patrol", or "Guard Patrol by Operator or its contractor" is selected in Question 8, specify the following:	Operator employee
9. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Accident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: *(provide an explanation for why the operator did not investigate)*	The leak was too small to be detected by leak detection systems or by the controller
- 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:	G4 - Other Outside Force Damage

G1 - Corrosion Failure - only one **sub-cause** can be picked from shaded left-hand column

External Corrosion:	
Internal Corrosion:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Describe:	
2. Type of corrosion: *(select all that apply)*	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other:	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following: *(select all that apply)*	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes :	
4a. Was failed item considered to be under cathodic protection at the time of the Accident?	
If Yes - Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the Accident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the Accident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
- If Internal Corrosion:	
6. Results of visual examination:	
- Other:	
7. Type of corrosion *(select all that apply)*: -	
- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other:	
- If Other, Describe:	
8. The cause(s) of corrosion selected in Question 7 is based on the following *(select all that apply)*: -	
- Field examination	
- Determined by metallurgical analysis	
- Other:	
- If Other, Describe:	
9. Location of corrosion *(select all that apply)*: -	
- Low point in pipe	
- Elbow	
- Other:	

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

G2 - Natural Force Damage - only one **sub-cause** can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	

- If Other, Describe:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Describe:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Describe:	
- If High Winds:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Accident generated in conjunction with an extreme weather event?	
6a. If Yes, specify: *(select all that apply)*	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Describe:	
G3 - Excavation Damage - only one **sub-cause** can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
- If Excavation Damage by Operator (First Party):	
- If Excavation Damage by Operator's Contractor (Second Party):	
- If Excavation Damage by Third Party:	
- If Previous Damage due to Excavation Activity:	
Complete Questions 1-5 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
1. Has one or more internal inspection tool collected data at the point of the Accident?	
1a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run: -	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
2. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
3. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
4. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	

5. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
5a. If Yes, for each examination, conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
Complete the following if Excavation Damage by Third Party is selected as the sub-cause.	
6. Did the operator get prior notification of the excavation activity?	
6a. If Yes, Notification received from: *(select all that apply)* -	
- One-Call System	
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
7. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	
8. Right-of-Way where event occurred: *(select all that apply)* -	
- Public	
- If "Public", Specify:	
- Private	
- If "Private", Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
9. Type of excavator:	
10. Type of excavation equipment:	
11. Type of work performed:	
12. Was the One-Call Center notified?	
12a. If Yes, specify ticket number:	
12b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
13. Type of Locator:	
14. Were facility locate marks visible in the area of excavation?	
15. Were facilities marked correctly?	
16. Did the damage cause an interruption in service?	
16a. If Yes, specify duration of the interruption (hours)	
17. Description of the CGA-DIRT Root Cause *(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well):*	
Root Cause:	
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	
G4 - Other Outside Force Damage - *only one **sub-cause** can be selected from the shaded left-hand column*	
Other Outside Force Damage – Sub-Cause:	Other Outside Force Damage
- If Nearby Industrial, Man-made, or Other Fire/Explosion as Primary Cause of Incident:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	

2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Describe:	
- If Routine or Normal Fishing or Other Maritime Activity NOT Engaged in Excavation:	
- If Electrical Arcing from Other Equipment or Facility:	
- If Previous Mechanical Damage NOT Related to Excavation:	
Complete Questions 3-7 ONLY IF the "Item Involved in Accident" (from PART C, Question 3) is Pipe or Weld.	
3. Has one or more internal inspection tool collected data at the point of the Accident?	
3a. If Yes, for each tool used, select type of internal inspection tool and indicate most recent year run:	
- Magnetic Flux Leakage	
Most recent year conducted:	
- Ultrasonic	
Most recent year conducted:	
- Geometry	
Most recent year conducted:	
- Caliper	
Most recent year conducted:	
- Crack	
Most recent year conducted:	
- Hard Spot	
Most recent year conducted:	
- Combination Tool	
Most recent year conducted:	
- Transverse Field/Triaxial	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
4. Do you have reason to believe that the internal inspection was completed BEFORE the damage was sustained?	
5. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
6. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident:	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site:	
Most recent year conducted:	
7. Has one or more non-destructive examination been conducted at the point of the Accident since January 1, 2002?	
7a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted:	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
- If Intentional Damage:	
8. Specify:	
- If Other, Describe:	
- If Other Outside Force Damage:	
9. Describe:	electrical discharge

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

Describe:	
6. Has one or more hydrotest or other pressure test been conducted since original construction at the point of the Accident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
7. Has one or more Direct Assessment been conducted on the pipeline segment?	
- If Yes, and an investigative dig was conducted at the point of the Accident -	
Most recent year conducted:	
- If Yes, but the point of the Accident was not identified as a dig site -	
Most recent year conducted:	
8. Has one or more non-destructive examination(s) been conducted at the point of the Accident since January 1, 2002?	
8a. If Yes, for each examination conducted since January 1, 2002, select type of non-destructive examination and indicate most recent year the examination was conducted: -	
- Radiography	
Most recent year conducted:	
- Guided Wave Ultrasonic	
Most recent year conducted:	
- Handheld Ultrasonic Tool	
Most recent year conducted:	
- Wet Magnetic Particle Test	
Most recent year conducted:	
- Dry Magnetic Particle Test	
Most recent year conducted:	
- Other	
Most recent year conducted:	
Describe:	
G6 – Equipment Failure - only one **sub-cause** can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify: *(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:	
- If Other – Describe:	
- If Defective or Loose Tubing or Fitting:	
- If Failure of Equipment Body (except Pump), Tank Plate, or other Material:	
- If Other Equipment Failure:	
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	
- Mismatched items (different manufacturer for tubing and tubing fittings)	
- Dissimilar metals	
- Breakdown of soft goods due to compatibility issues with transported commodity	
- Valve vault or valve can contributed to the release	
- Alarm/status failure	
- Misalignment	
- Thermal stress	
- Other	
- If Other, Describe:	

G7 - Incorrect Operation - only one **sub-cause** can be selected from the shaded left-hand column

Incorrect Operation – Sub-Cause:	
Damage by Operator or Operator's Contractor NOT Related to Excavation and NOT due to Motorized Vehicle/Equipment Damage	No
Tank, Vessel, or Sump/Separator Allowed or Caused to Overfill or Overflow	No
1. Specify:	
- If Other, Describe:	
Valve Left or Placed in Wrong Position, but NOT Resulting in a Tank, Vessel, or Sump/Separator Overflow or Facility Overpressure	No
Pipeline or Equipment Overpressured	No
Equipment Not Installed Properly	No
Wrong Equipment Specified or Installed	No
Other Incorrect Operation	No
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?	
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:	

PART H - NARRATIVE DESCRIPTION OF THE ACCIDENT

During scheduled dig on the CD803RC pipeline, Buckeye operations personnel reported the smell of vapors inside the casing. The line had already been isolated for purposes of performing the dig. The line was further pressured down and an investigation to determine the source of the vapors was begun. All necessary notifications were made. An anomaly was located 68' inside the casing. Product was contained in the casing and no free product was released to the soil. Permanent repairs, which included replacing a section of damaged pipe, were completed on October 31, 2013 and the line was returned to service. The removed section of pipe has been sent for metallurgical analysis to determine the root cause of the release. All product was cleaned up and

no remediation is necessary.

UPDATE February 12, 2014 - Final Analysis details
The leak was attributed to an electrical discharge that created a hole in the external pipe wall. The external surface of the hole showed evidence of surface melting. The surfaces of the hole were relatively smooth and shiny and showed no evidenceof corrosion or corrosion products. Furthermore, no evidence of corrosion, mechanical damage, manufacturing defect, environmental cracking or other degradation mechanism were found near the leak origin

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Hope Sandler
Preparer's Title	Sr. Compliance Specialist
Preparer's Telephone Number	610-904-4916
Preparer's E-mail Address	Hsandler@Buckeye.com
Preparer's Facsimile Number	
Authorized Signature's Name	John Reinbold
Authorized Signature Title	Compliance Manager
Authorized Signature Telephone Number	610-904-4185
Authorized Signature Email	Jreinbold@Buckeye.com
Date	02/12/2014

Appendix E

Incident Investigation Report

This document is on file at PHMSA

Appendix F

Integrity Assessment Review and Repair

Issued January 1, 2010

This document is on file at PHMSA

Appendix G

Other Condition Prioritization Procedure

Issued August 31, 2010

This document is on file at PHMSA

Appendix H

Kiefner Examination of In-Service Leak

This document is on file at PHMSA