



2019 MITA Annual Conference

January 24, 2019

Agenda

- Authority
- Damage Prevention Statistics
- Incidents
- Complaints
- Investigation Process
- Evidence and Documentation

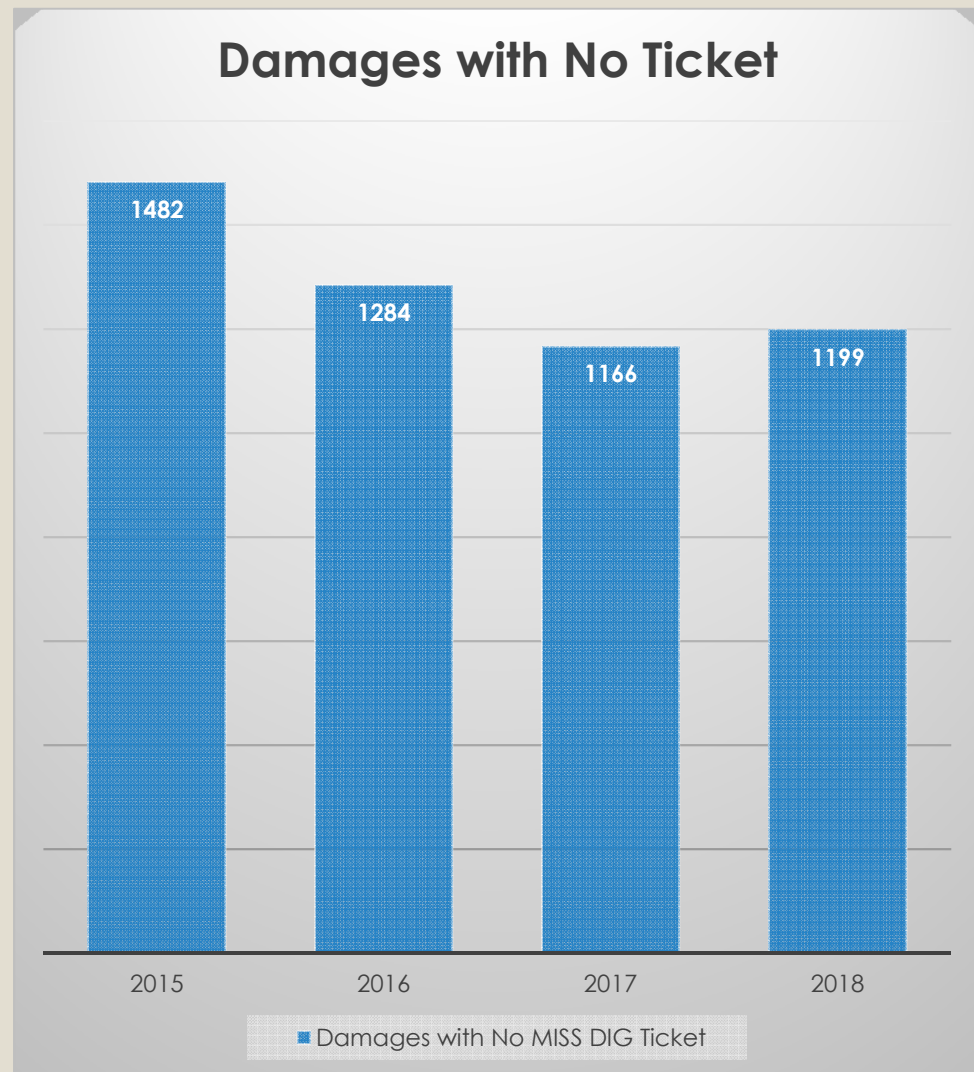
Authority

- State
 - Public Act 174 of 2013
 - Michigan Underground Facility Owners and Operators (Rule 460.11 *et seq.*)
 - Public Act 165 of 1969
 - Michigan Gas Safety Standards (Rules 460.20101 *et seq.*)
- Federal
 - Protecting our Infrastructure of Pipelines Enhancing Safety (PIPES) Act of 2016
 - 49 CFR Part 196 (Rules)
 - No Exemptions

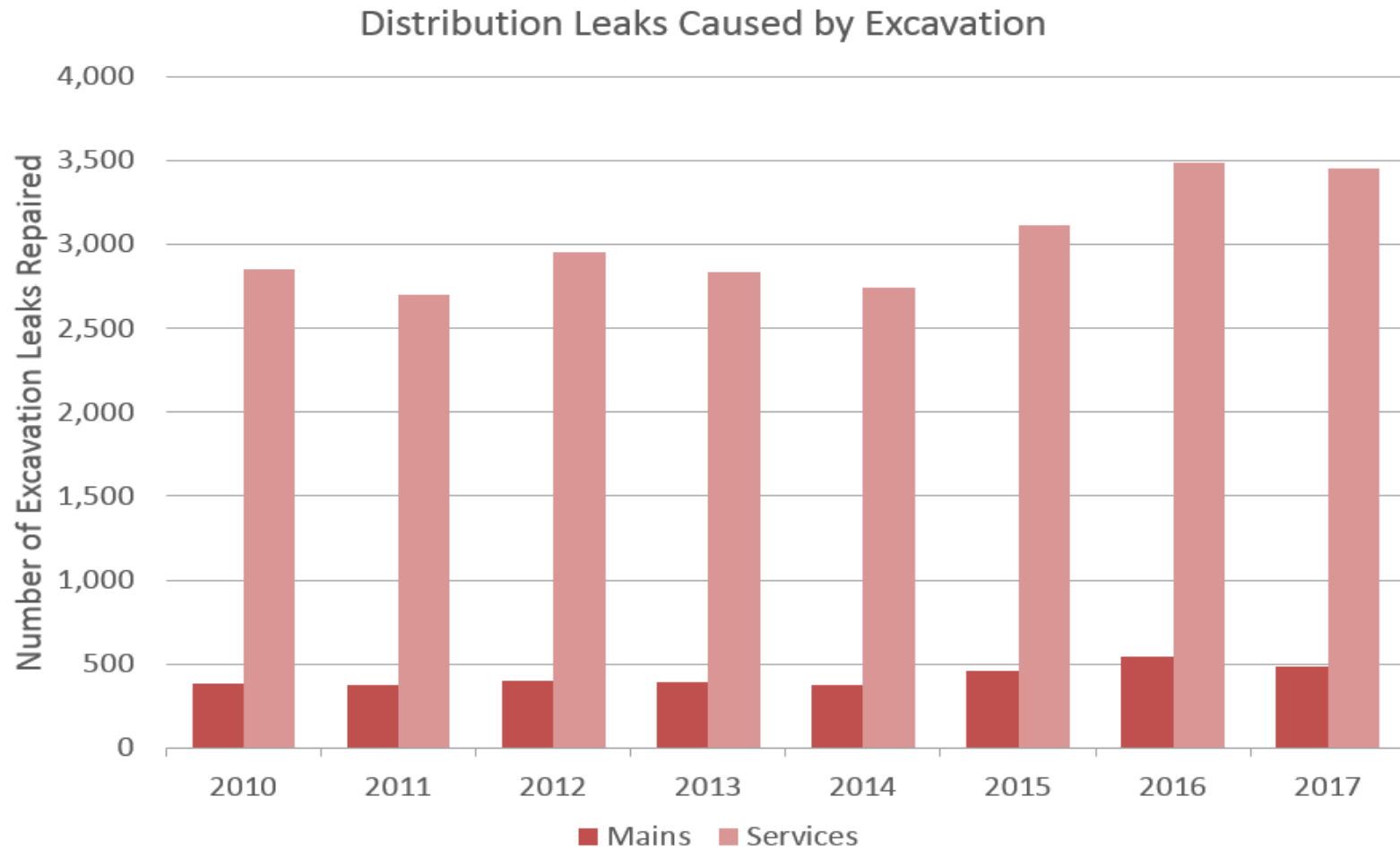
Damage Prevention Statistics

(Third Quarter Comparison)

- Damages
 - 2015 – 3670
 - 2016 – 3695
 - 2017 – 3545
 - 2018 – 3731
- Damages with No MISS DIG Ticket
 - 2015 – 1482
 - 2016 – 1284
 - 2017 – 1166
 - 2018 – 1199

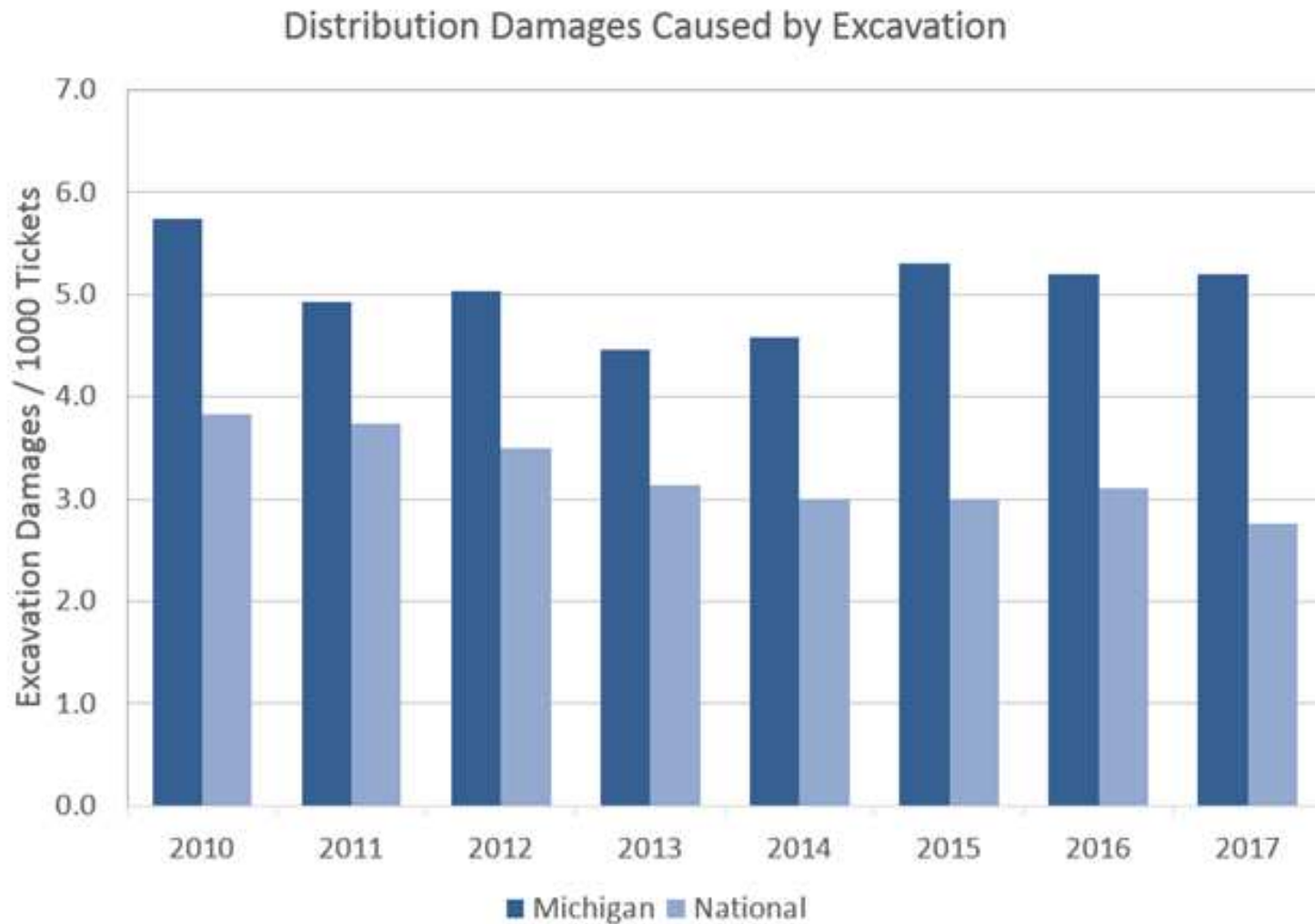


Damage Prevention Statistics



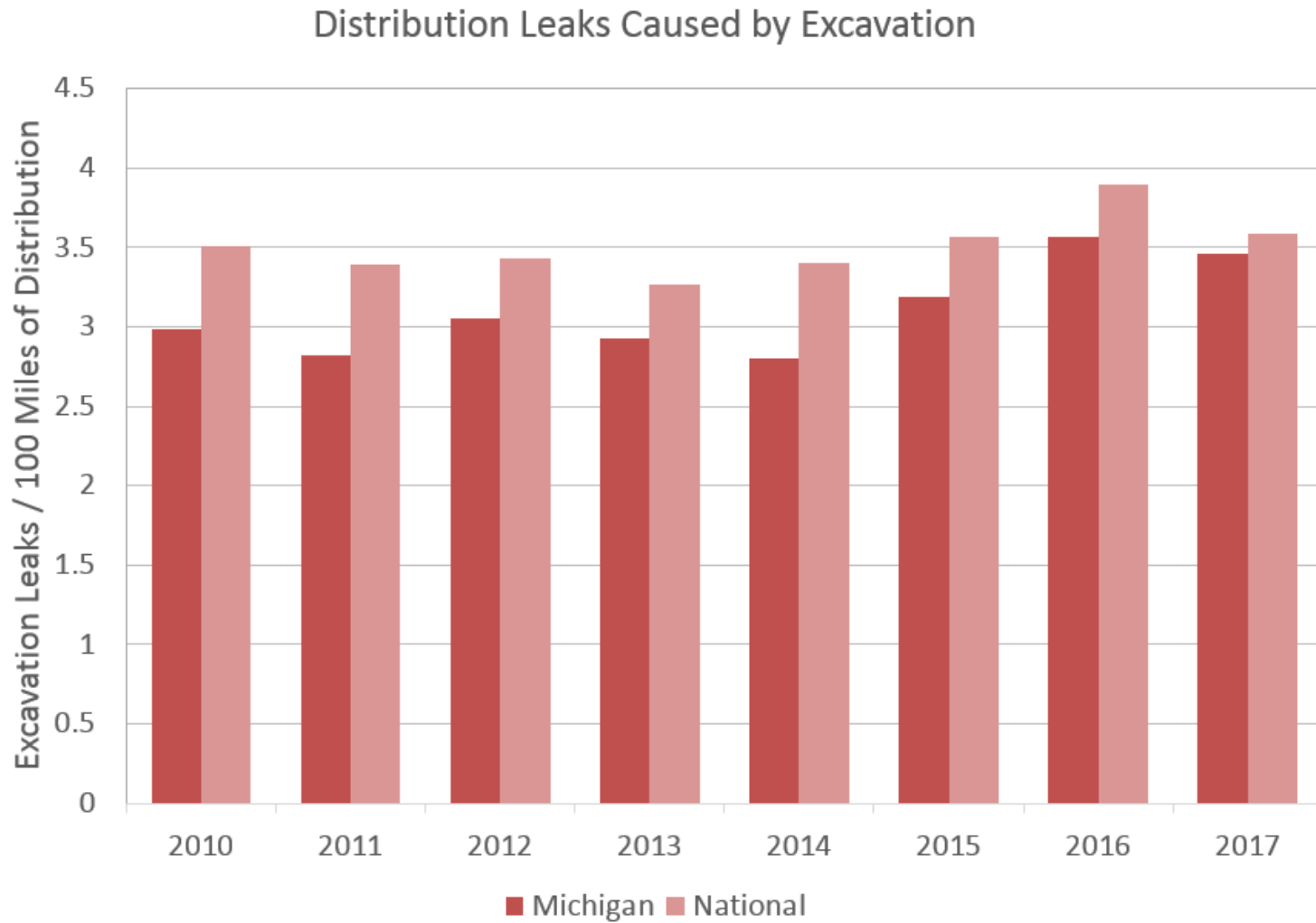
Source: 2010-2017 Annual Distribution Reports. Form PHMSA F7100.1-1

Damage Prevention Statistics



Source: 2010-2017 Annual Distribution Reports: Form PHMSA F7100.1-1

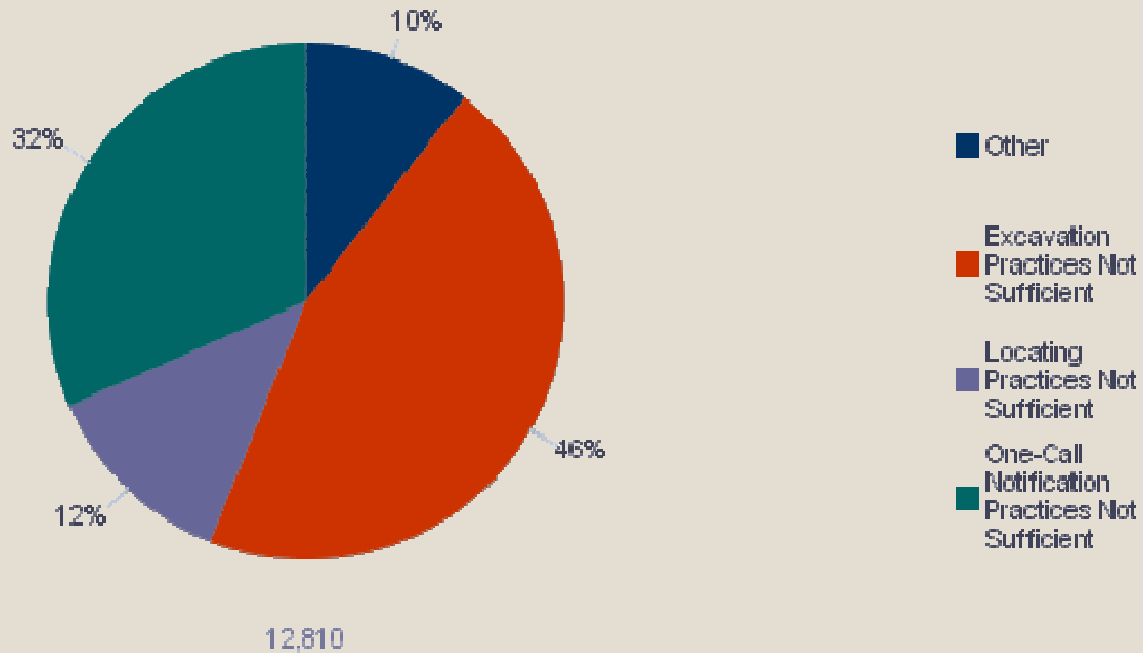
Damage Prevention Statistics



Source: 2010-2017 Annual Distribution Reports. Form PHMSA F7100.1-1

Damage Prevention Statistics

(Gas Distribution Pipeline Excavation Damages by Root Cause 2015 – Present)



Calendar Year	Number of Excavation Tickets	Number of Excavation Damages	One-Call Notification Practices Not Sufficient	Locating Practices Not Sufficient	Excavation Practices Not Sufficient	Other	One-Call Notification Practices Not Sufficient	Locating Practices Not Sufficient	Excavation Practices Not Sufficient	Other
2017	822,578	4,271	1,238	636	2,108	289	29%	15%	49%	7%
2016	827,516	4,272	1,361	466	1,999	446	32%	11%	47%	10%
2015	796,641	4,267	1,451	481	1,727	608	34%	11%	40%	14%

Incidents

(Milling)

Date of Incident	Injuries	Fatalities	Property Damage	Cause code	Gas Loss (Mcf)
6/18/15	0	0	\$304,155	Excavation Damage	103

Summary

A milling contractor removing asphalt pavement struck a 1-1/8-inch plastic service line. The service line had approximately 12-inches of cover at the damage location. The milling machine ignited the escaping gas.

Incidents

(Milling)

Violations

- Excavator: Warning – Call Before You Dig
- Facility Operator: Recommendation
 - Mark Facility as Shallow
 - Educate Contractor



Incidents

(Directional Drilling)

Date of Incident	Injuries	Fatalities	Property Damage	Cause code	Gas Loss (Mcf)
1/19/17	0	0	\$129,366	Excavation Damage	9834

Summary

A contractor installing telecommunications cable by directional drilling struck and punctured a 12-inch cast-iron main. Facility markings were not adequately provided in manner that permits the excavator to perform soft excavation at the location of the damaged pipe. Facility staker posted “on-going coordination” with no records.

Incidents

(Directional Drilling)

Violations

- Facility Operator:
 - Failed to Provide Adequate Markings
 - No Record of “On-Going Coordination”
 - Fines – \$10,000



Incidents

(Road Construction – Removing Facilities)

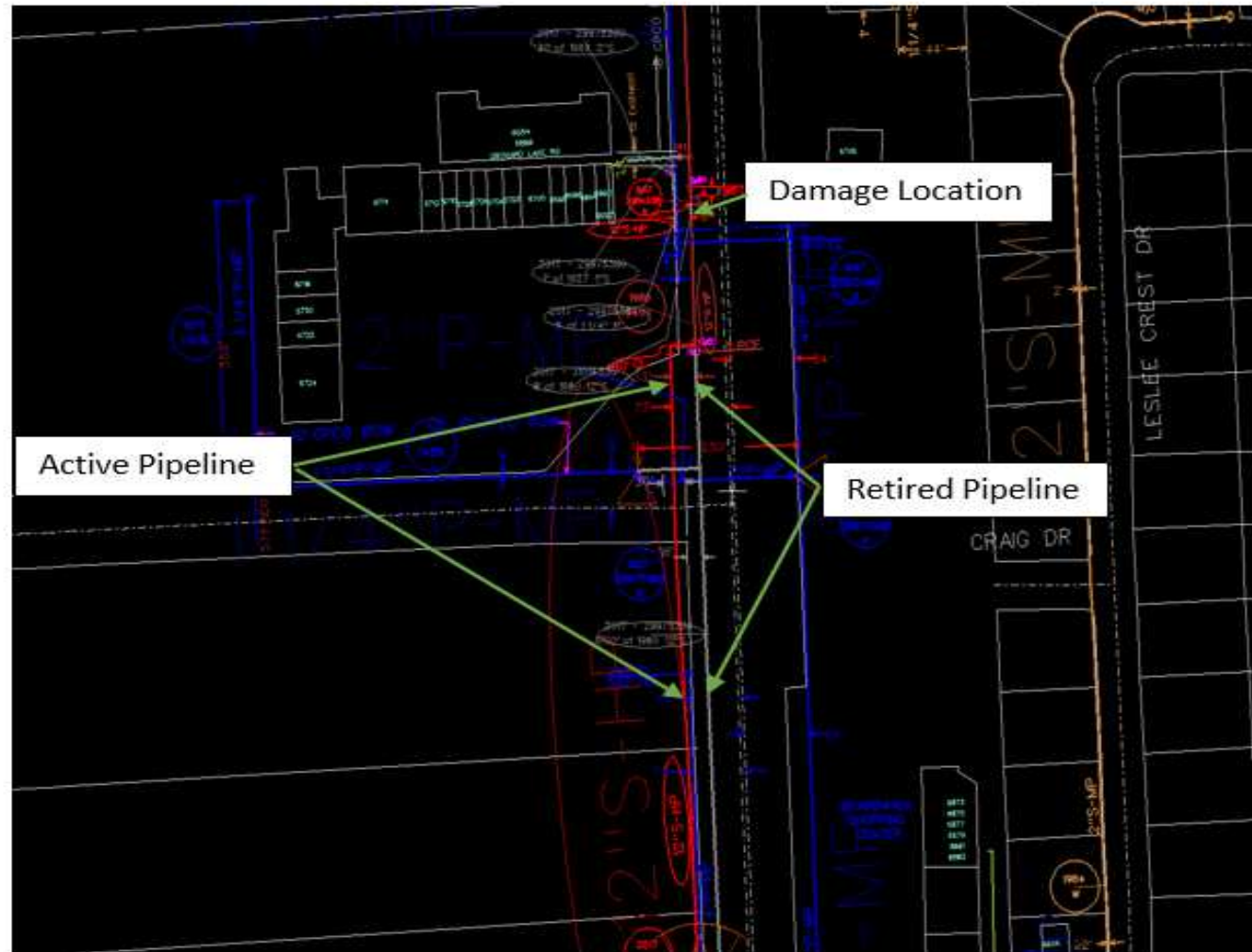
Date of Incident	Injuries	Fatalities	Property Damage	Cause code	Gas Loss (Mcf)
9/21/17	0	0	\$105,918	Excavation Damage	332
Summary					
A contractor saw-cutting an active 12-inch pipeline, believing it to be abandoned. Facility markings were not adequately provided in manner that permits the excavator to perform soft excavation at the location of the damaged pipe.					

Incidents

(Road Construction – Removing Facilities)

Violation

- Facility Operator – Failed to Provide Adequate Markings
- Fine – \$5000



Incidents

(Road Construction – Gutter)

Date of Incident	Injuries	Fatalities	Property Damage	Cause code	Gas Loss (Mcf)
5/29/18	0	0	\$110,254	Excavation Damage	30,500

Summary

A contractor installing roadside edge drain struck a one-inch high pressure natural gas steel service line. Contractor did not provide its own dig notice to the notification system. While investigating the incident, it was revealed that the facility owner/operator had also failed to mark the gas service line for another dig notice for this project.

Incidents

(Road Construction - Gutter)

Violations

- Excavator –
 - Failed to Provide a Dig Notice
 - Fine – \$500
- Facility Operator –
 - Failed to mark the gas service line.
 - Fine – \$5000



Incidents

(Directional Drill – River)

Date of Incident	Injuries	Fatalities	Property Damage	Cause code	Gas Loss (Mcf)
11/29/18	0	0	\$143,000	Excavation Damage	
Summary					
<p>A contractor installing electric conduit under river to serve island damaged four-inch steel main serving island.</p> <p>*Property damage is E-response only, pipeline replacement is pending.</p>					

Incidents

(Directional Drill - River)

Violations

- Excavator – Investigation Pending
- Facility Operator – Investigation Pending



Complaints

- Large Water Project
 - 12 Gas Service Line Damages
 - Excavator Cited for 6 Violations @ \$500 for each for a Total Penalty of \$3000 (Failure to Expose with Soft Excavation)
 - Facility Operator Cited for 12 Violations @ \$2000 for each for a Total Penalty of \$24,000 (Failure to Mark and Records)
- Drainage Field Installation
 - Excavator Made Several Calls for Additional Assistance due to No Markings
 - Facility operator Cited for 3 Violations @ \$5000 for each for a Total Penalty of \$15,000 (Failure to Mark)

Complaints

- Multiple Excavation Projects
 - Curb and Sidewalk Installations/Repair
 - Excavator Cited for 6 Violations @ \$500 for each for a total fine of \$3000 (Failure to Provide Dig Notice)
- Fence Post Installation
 - Post was Within 2 feet of a 20-inch High Pressure Pipeline
 - Discovered while Patrolling the Pipeline Right-of-way
 - Excavator Cited for a Violation with Penalty \$500 (for 1st Offense)

Investigation Process

- Complaints
- Incidents
- Onsite Damage Investigations
 - Reported Incidents per Public Act 165 of 1969
 - Staff Initiated
- Real Time Damage Notifications
 - No MISS DIG Ticket
 - Improper Positive Response
 - Short Notices/Non-Emergency Tickets
- Data Analysis and Investigations
 - Areas with High Occurrences of Damages
 - Late or No Positive Response
 - No MISS DIG Ticket

Investigation Process

- Evidence Typically Reviewed:
 - Complaint Form or Incident Report
 - MISS DIG Ticket(s)
 - Follow-up Information Requests
 - Facility Operator's Maps/Records/Sketches
 - Photographs (before and after)
 - Reports/Field Notes Documenting the Damage
 - Any Additional Evidence Provided by the Parties Involved

Investigation Process

- Damage Prevention Complaint Form
MPSC / Consumer Information / Inquiries and Complaints
https://w2.lara.state.mi.us/MPSC_Forms/complaint
- All Excavation Damage Incidents Reported per R 460.20503
Since April 1, 2014, are Investigated for Violations of Act 174

Investigation Process

(Compliance Letters)

- Aware of a Damage
- Probable Violation Exists
 - What was Violated
 - Evidence of the Violation
- Recommended Penalty
- Methods of Response
 - Informal Meeting
 - Contest the Violation
 - Not Contest and Pay Penalty
- Timing
 - 30 days Penalty Response
 - 60 days Written Response

Evidence and Documentation

- Pre-damage
 - MISS DIG Ticket Information
 - Communications with Excavator/Facility Owner/Locator
 - Photos/Videos
- Post-Damage
 - Communications with Excavator/Facility Owner/Locator
 - Photos/Videos
 - Maps, Drawings, and Sketches of Site with Measurements
 - Damage Report, Employee Statements, and Third Party Statements
 - On-going Communication Documentation and/or Records
- MISS DIG System Document Saving/Sharing Option
 - Communications Between Parties
 - Maps, Plans, Photos, Reports, etc.

Evidence and Documentation



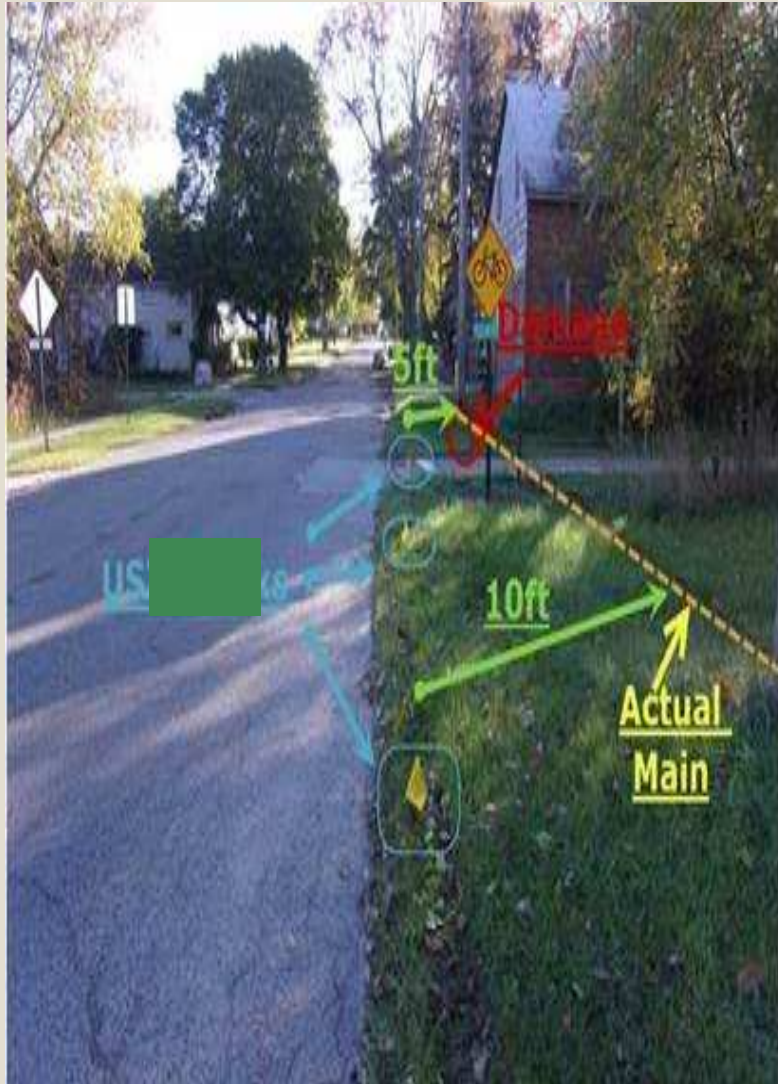
Evidence and Documentation



Evidence and Documentation



Evidence and Documentation



Evidence and Documentation



Evidence and Documentation



Evidence and Documentation

First Party
 Second Party
 Third Party

Damage Prevention Field Investigation Form

Date/Time of Damage: _____ / _____ Date/Time Notified: _____ / _____

Address: _____ City: _____

Investigation Start Time: _____ AM / PM Stop Time: _____ AM / PM

Facility Owner: _____ Owner notified by: _____

MISS DIG Ticket #: _____ Dig Start Date/Time: _____ / _____

Type of Facility: Transmission Distribution Main Service

Date of Install: _____ Pipe Material: _____ Diameter: _____

Depth of facility: _____ Operating Pressure: _____ psig MAOP: _____ psig

Number of Customer Outages: _____ N/A Number of Injuries: _____ N/A
(Requires overnight hospitalization)

Estimated Cost of Damage and Repair: \$ _____
(Property damage to Facility Owner and to Others, Repair Cost)

Were Marks Present?: Yes No Were Marks Accurate?: Yes No Distance off: _____
(Approximate location is at least 36" wide but not more than the facility width plus 12" on either side)

Were Operator Maps of Facilities Accurate?: Yes No

Were Marks Destroyed Prior to Excavation?: Yes No

Was Soft Excavation Performed?: Yes No Distance from Marks: _____
(Caution zone is 48" on either side of facility marks)

If excavation is parallel to facility caution zone, was the facility exposed at intervals necessary to establish precise facility location?: N/A Yes No Interval Length: _____

Was there Evidence of a facility with no marks present?: Yes No

Lack of positive response?: Yes No

Positive response indicating a facility present but no marks?: Yes No

Potential Cause of Damage: _____

Photo Log

1. _____	7. _____
2. _____	8. _____
3. _____	9. _____
4. _____	10. _____
5. _____	11. _____
6. _____	12. _____

1

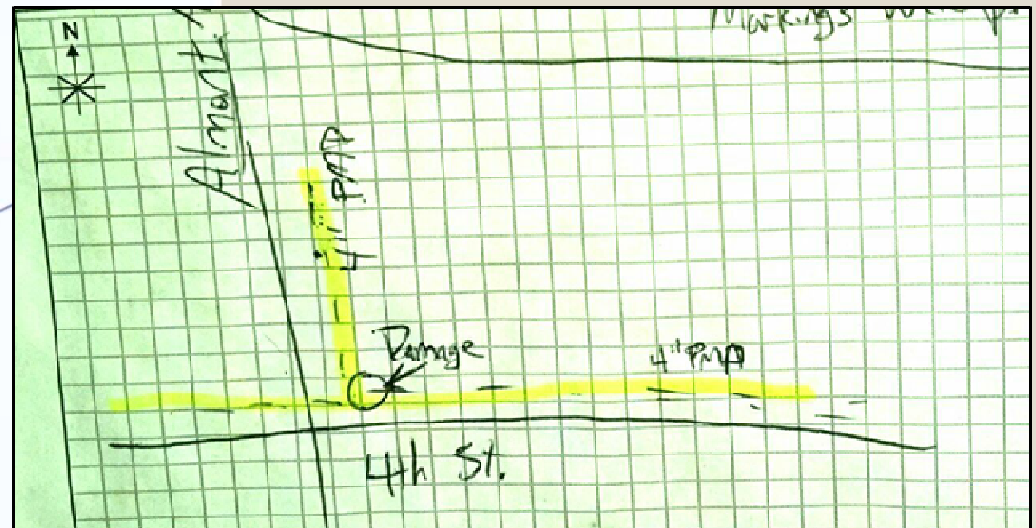
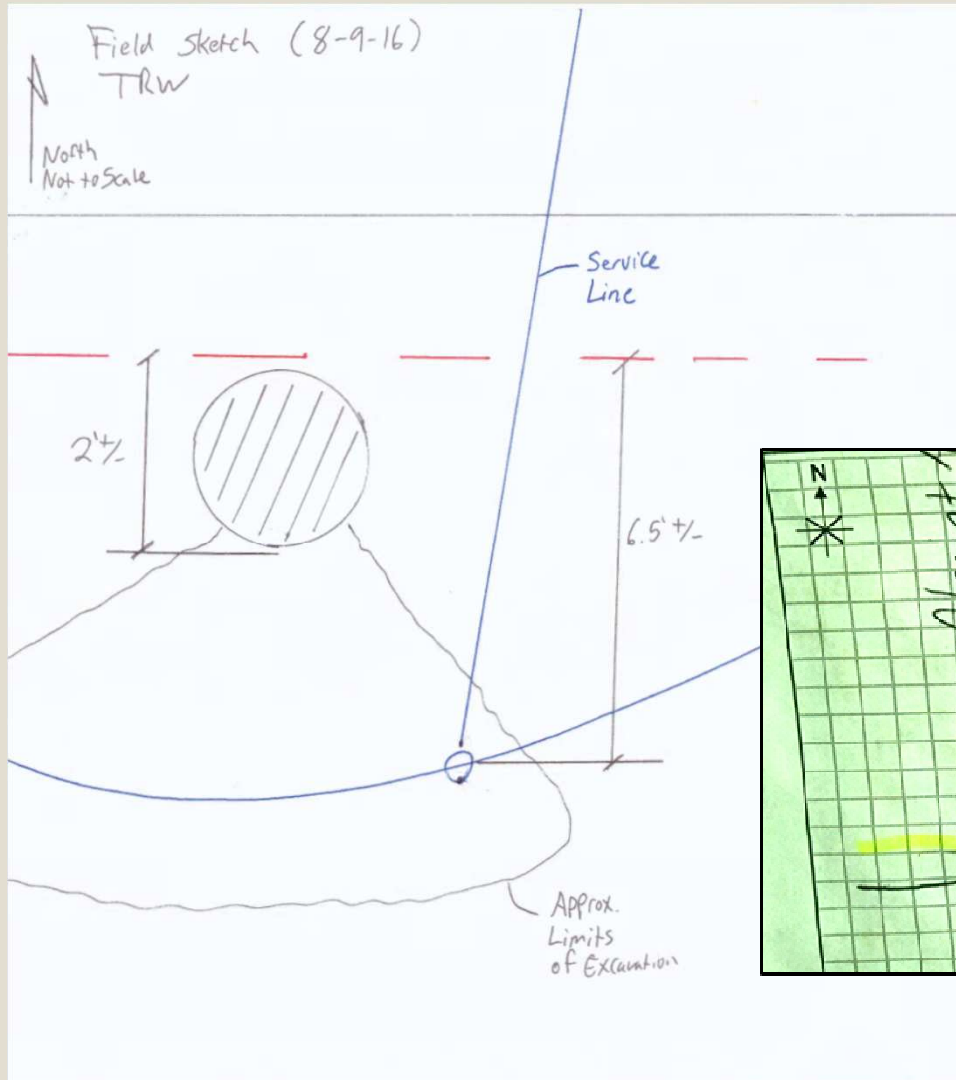
Pipeline Failure Investigation Report

Photo Documentation ⁽¹⁾			
Overall Area from best possible view. Pictures from the four points of the compass. Failed Component, Operator Action, Damages in Area, Address Markings, etc.			
Photo No.	Description	Photo No.	Description
1	IMG_0292 – Photo of the entire site, from the boring machine looking East towards the damage location.	16	IMG_0307 – Immediately adjacent to the excavation looking East.
2	IMG_0293 – Photograph of the markings DTE vs. Freedom at the driveway to the East of the damaged location. Looking Southeasterly.	17	IMG_0308 – Same as IMG_0307, only a little further back to better show the excavation.
3	IMG_0294 – Same details as IMG_0293, but looking East.	18	IMG_0309 – Northeast of the damaged location looking Southwest.
4	IMG_0295 – Same as IMG_0294, but with a clipboard for scale reference.	19	IMG_0310 – East of the damaged location showing the whole site.
5	IMG_0296 – Same details as IMG_0293, to show the contractors markings.	20	
6	IMG_0297 – West Edge of driveway to the East of damaged location, clipboard for reference scale. Looking East.	21	
7	IMG_0298 – Standing in the ditch looking East. One "spotting" hole in the foreground, another spotting hole existed before being filled in in the dirt patch to the East. Damaged location is in the distance "taped" off.	22	
8	IMG_0299 – Northwest of the damaged location looking Southeast. Dirt patch in the foreground is where the gas manifested.	23	
9	IMG_0300 – South of the damaged location looking North.	24	
10	IMG_0301 – West of the damaged location looking East.	25	
11	IMG_0302 – Markings to the North of the damaged location, looking South. Clipboard for reference.	26	
12	IMG_0303 – Same as IMG_0302, but with the end of the scraper to mark the faint yellow mark placed by the boring crew.	27	
13	IMG_0304 – Same as IMG_0303, but looking more into the distance.	28	
14	IMG_0305 – Same as IMG_0305, only closer to the excavation and looking more downward. The scraper still identifying a yellow mark from the boring crew.	29	
15	IMG_0306 – East of the damaged location looking West.	30	

Camera Type: Canon PowerShot SX120IS

Page 1 of 1
Form -11 Pipeline Failure Investigation Report (Rev. 03/17/2011 through Amdt. 192-116 & 195-95).

Evidence and Documentation



Public Service Commission

Gas Operations

LARA-MPSC-Operations@michigan.gov

