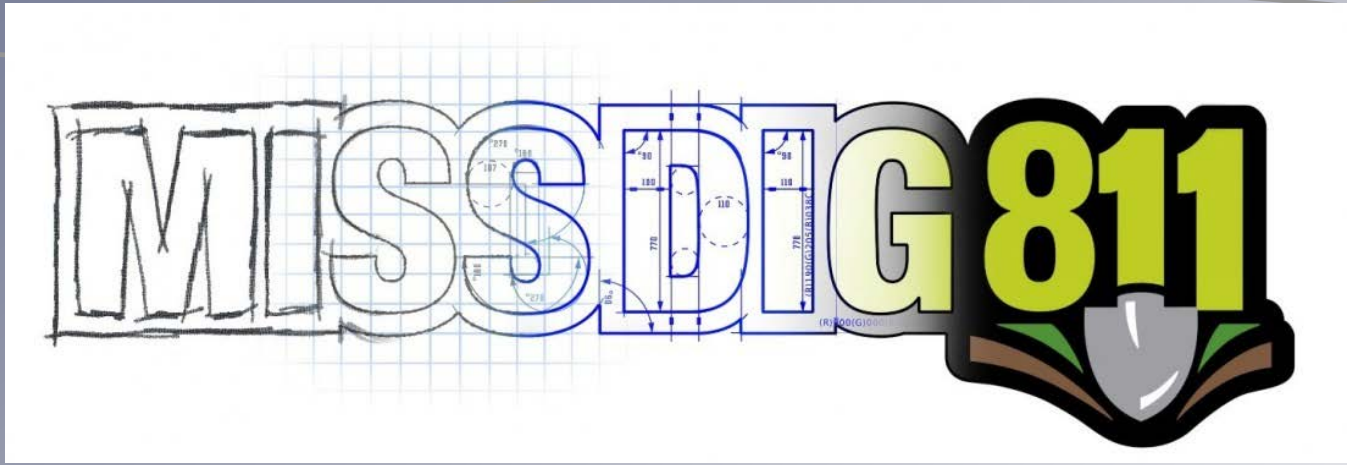
MISSDIG811


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MISS DIG
23rd Annual Meeting & Expo
March 15 &16, 2018

- The legal requirements of damage reporting under PA 174
- Damage reporting to the GSS
- How to document markings prior to excavation and what documents to maintain once a line has been damaged

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Agenda

- Legal Requirements to Report Damages
  - Public Act 174 of 2013 (PA 174)
  - MISS DIG Underground Facility Damage Prevention and Safety (Rules and Policy)
  - Excavators (GSS)
- Damage Prevention Statistics
- Incidents
- Investigation Process
- Evidence and Documentation

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Authority

- State
  - Public Act 174 of 2013
  - Michigan Underground Facility Owners and Operators (Rules)
  - Public Act 165 of 1969
  - Michigan Gas Safety standards (Rules)
- Federal
  - Protecting our Infrastructure of Pipelines Enhancing Safety (PIPES) Act of 2016
  - 49 CFR Part 196 (Rules)
  - No Exemptions

Damage Reporting

- MCL 460.731 – The commission shall:
  - Establish requirements for reporting incidents

    MPSC / Documents Library

    http://www.michigan.gov/mpsc/0,4639,7-159-16370---,00.html
  - Maintain information on damaged facilities
  - Make any information maintained under this subsection publicly available

    MPSC / Natural Gas / Documents Library

    http://www.michigan.gov/mpsc/0,4639,7-159-16385_17143---,00.html

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Damage Reporting

- MISS DIG Underground Facility Damage Prevention and Safety Rule 460.40 – Facility owners, facility operators, or excavators shall:
  - Provide damage information to the commission upon commission request

    MPSC / Documents Library / Administrative Rules/Laws

    http://www.michigan.gov/mpsc/0,4639,7-159-16370_52012---,00.html
- Memo To: Michigan Underground Facility Owners and Operators
  - Beginning June 15, 2015, facility owners or operators will be required to file data involving damage to underground facilities with the MPSC

    (See Link: Establish requirements for reporting incidents)

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Damage Reporting

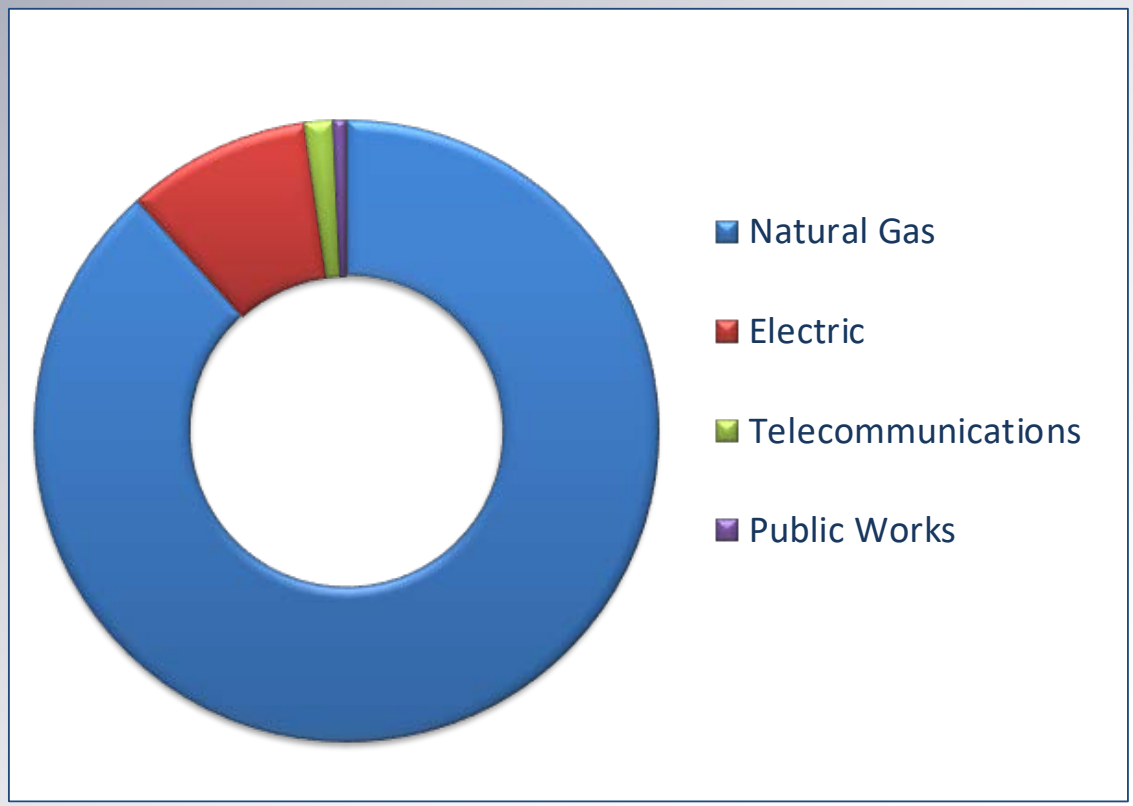
- Quarterly submissions
- Submission to be completed using a CSV file
- Include fields shown in the sample CSV file

2016 Data

> 90% of natural gas distribution customers are accounted

< 50% of electric distribution customers are accounted for

Poor response from others



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Damage Reporting

Includes:

- Persons involved in the damage and submission of information
- Date and location of the damage
- Facility operation information
- Excavation information
- Notification and marking information
- Downtime
- Description of damages
- Root cause

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Damage Reporting

- Submittals from other parties will be accepted as well
- Data will be used for improvements to reduce underground damages
- Data collected is consistent with CGA DIRT so data can be shared
- MISS DIG 811-Gold Shovel Standard – FAQ
  - The utility that sustained the damage should report the damage to the MPSC per Public Act 174
  - The entity that caused the damage to the utility would report the Damage on the GSS website
  - Data collected from GSS would be shared with DIRT

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Damage Prevention Statistics

Michigan	
Excavation Damages	4,272
Excavation Tickets	827,516
Excavation Damages / 1000 Tickets	5.2

National	
Excavation Damages / 1000 Tickets	3.1

Source: 2016 Annual Distribution Reports. Form PHMSA F7100.1-1

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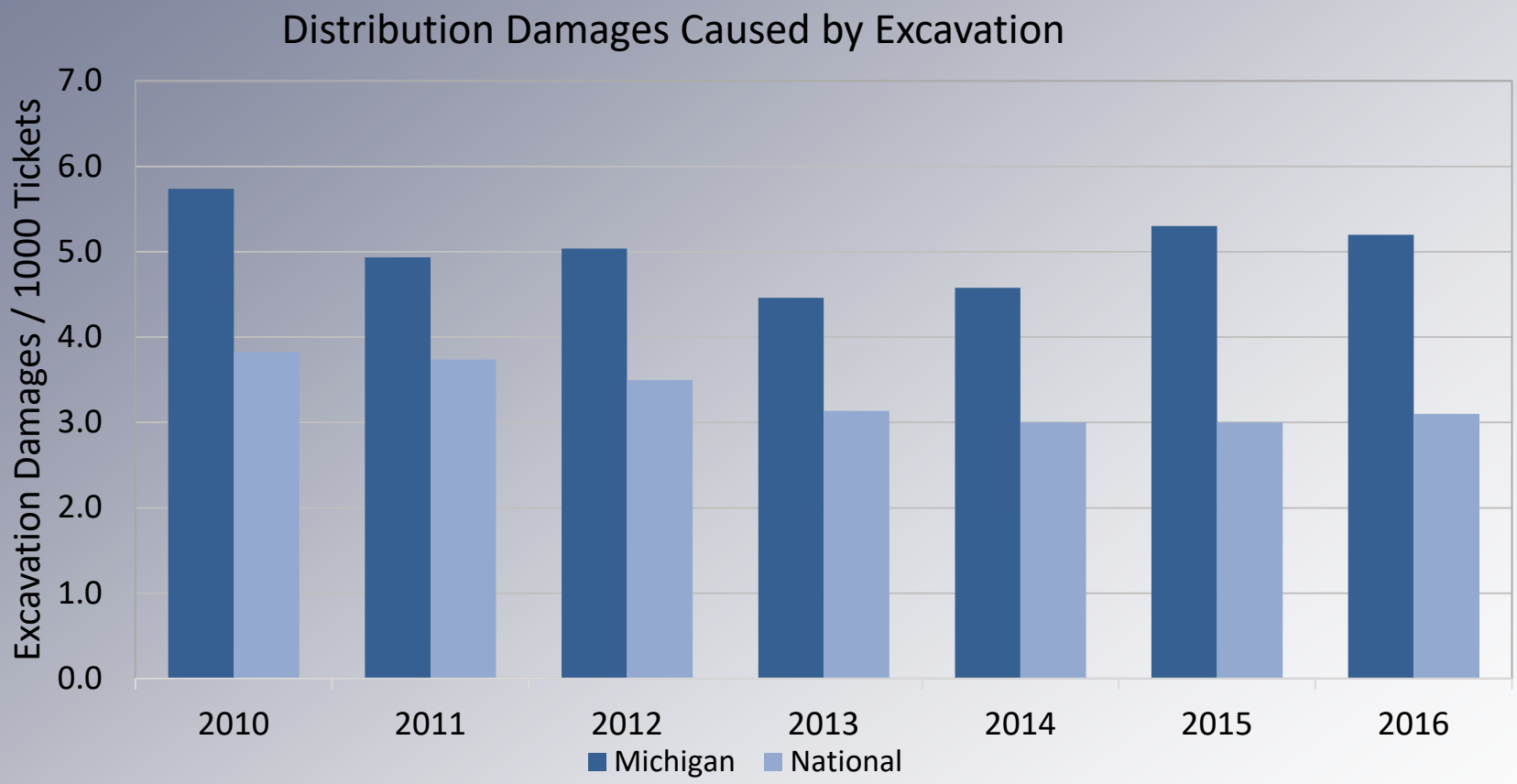
Damage Prevention Statistics



Source: 2010-2016 Annual Distribution Reports. Form PHMSA F7100.1-1

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Damage Prevention Statistics

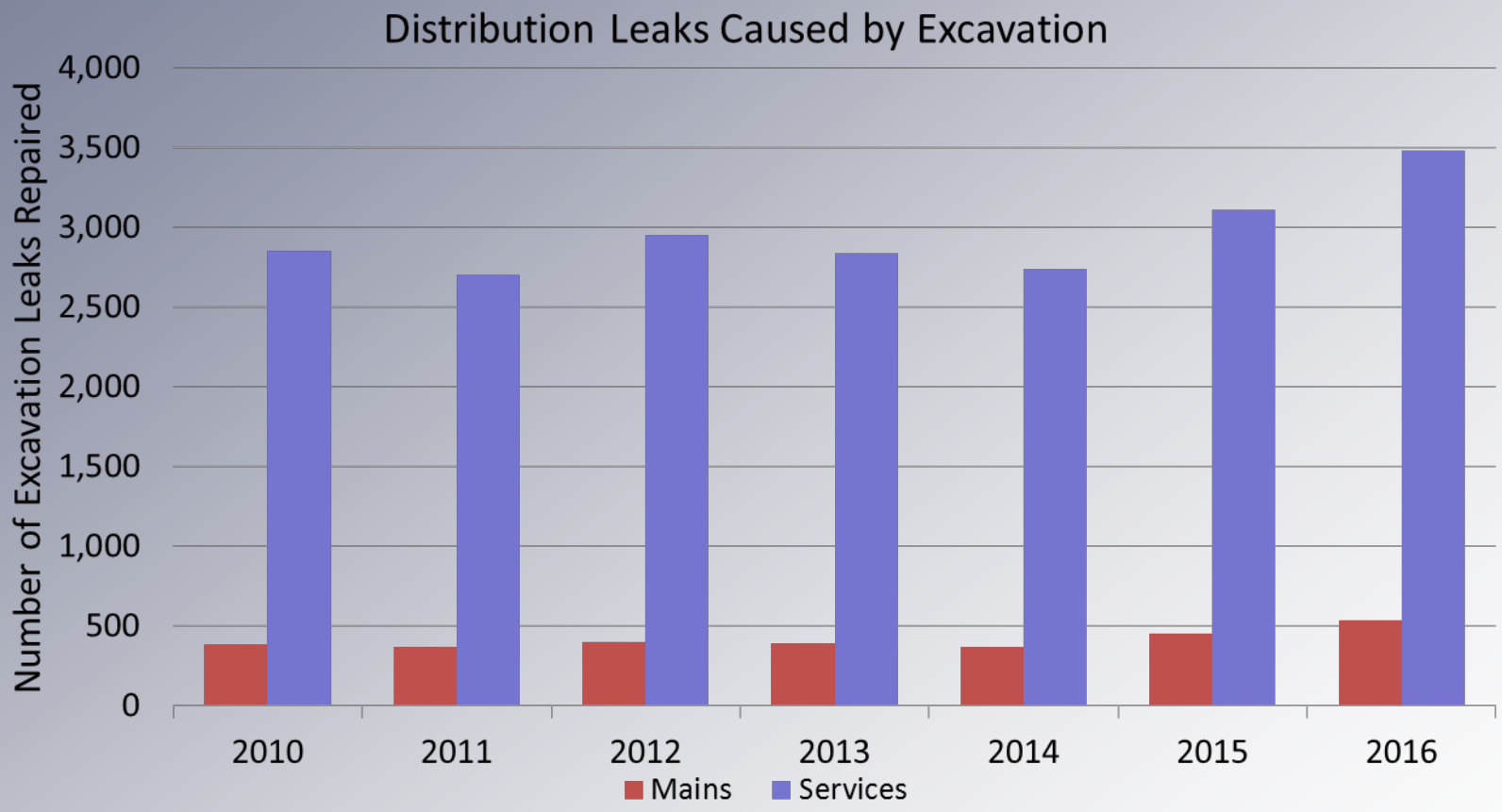
2016 Distribution Pipeline Excavation Leak Summary

Mains	
Excavation Leaks	539
Leaks / 100 Miles of Main	0.92

Services	
Excavation Leaks	3484
Leaks / 1000 Services	1.06

Source: 2016 Annual Distribution Reports. Form PHMSA F7100.1-1

Damage Prevention Statistics



Source: 2010-2016 Annual Distribution Reports. Form PHMSA F7100.1-1

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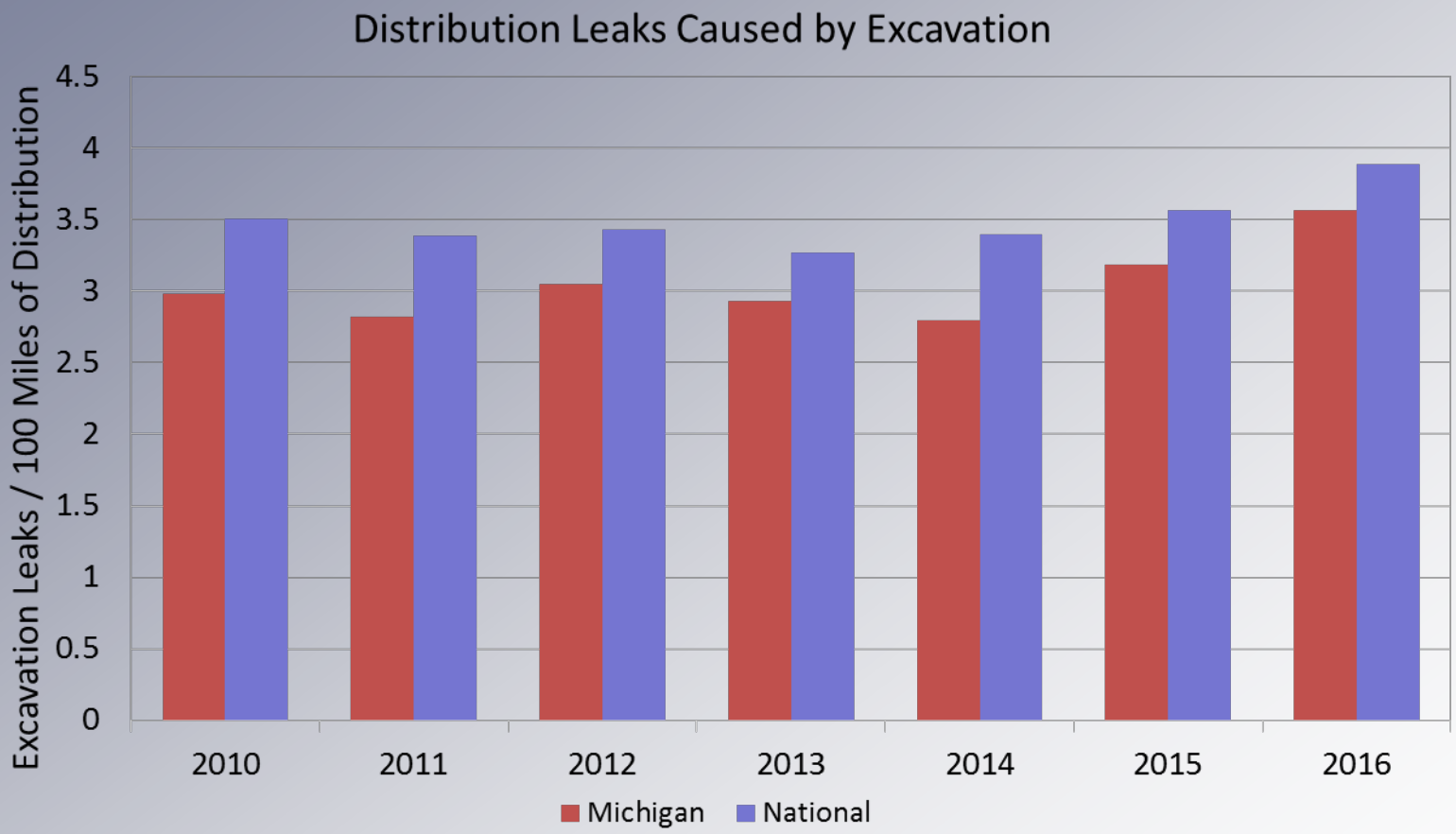
Damage Prevention Statistics



Source: 2010-2016 Annual Distribution Reports. Form PHMSA F7100.1-1

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Incidents

(Milling)

Incidents

(Milling)

Facility Owner – Report and Recommendations

- Mark as shallow
- Educate Excavator

Excavator – Violation Letter

- Milling is not exempt
- Not providing a dig notice

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Incidents

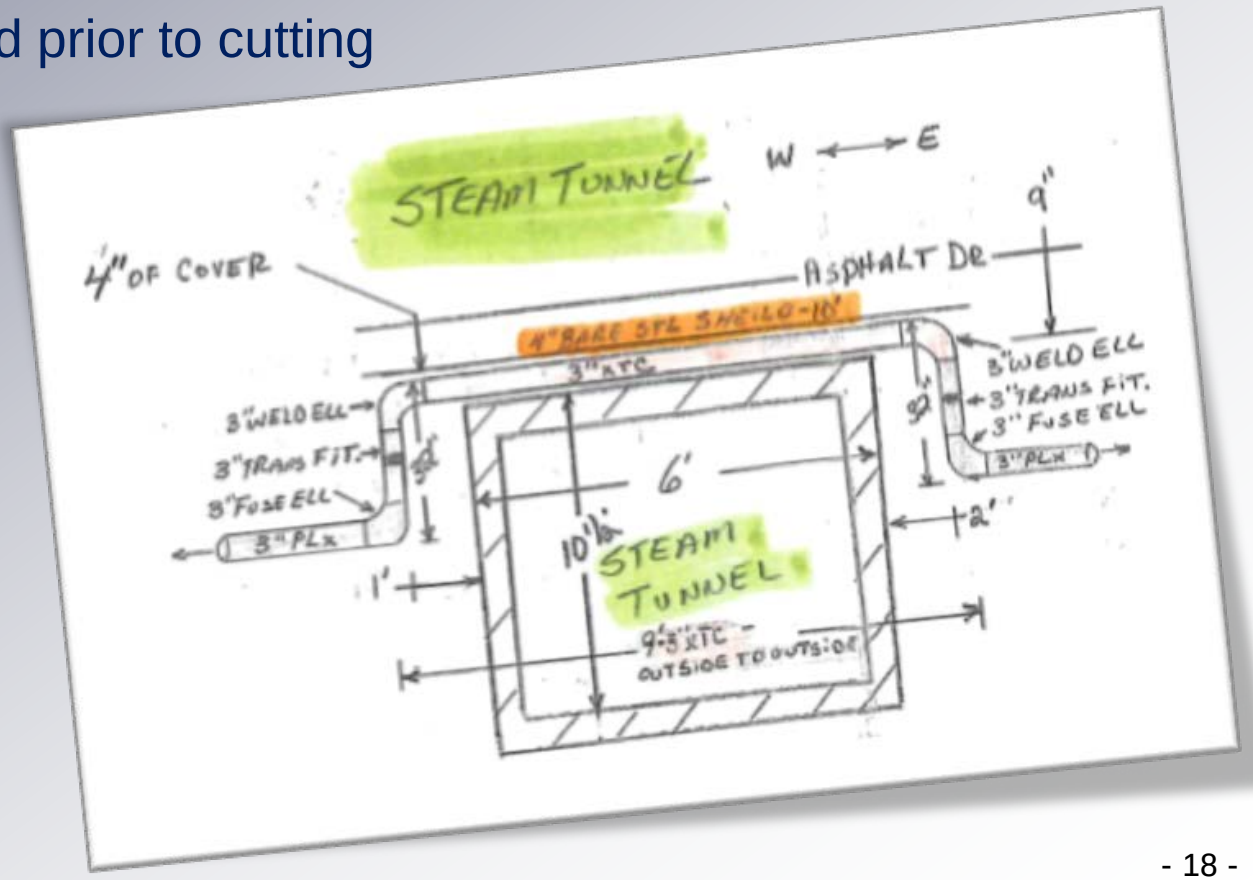
(Saw Cutting)

Incidents

(Saw Cutting)

Investigation Pending

- Facilities marked correctly
- Facilities not exposed prior to cutting
- Michigan Damage Prevention Board DRAFT Best Practice for Shallow Facilities



Incidents

(Change of Scope)

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Incidents

(Change of Scope)

Incidents

(Change of Scope)

Facility Owner – Report and Recommendations

- Use isolation valves • Timely reporting • Procedures for securing site • Improved communications with ERs • Dispatching crews

Facility Owner – Non-compliances

- **Installing valves** • Following joining procedures • Joining procedures not on site • **Failure to keep records** • **Failure to mark entire scope** • **Failure to follow EPs** • Failure to monitor work area for gas
- $40,000 fine

Excavator – Violation Letter

- Failure to provide additional notice to the notification system and stop excavation in the immediate vicinity if the excavator has reason to suspect the presence of an unmarked facility

Incidents

(Crossbore)

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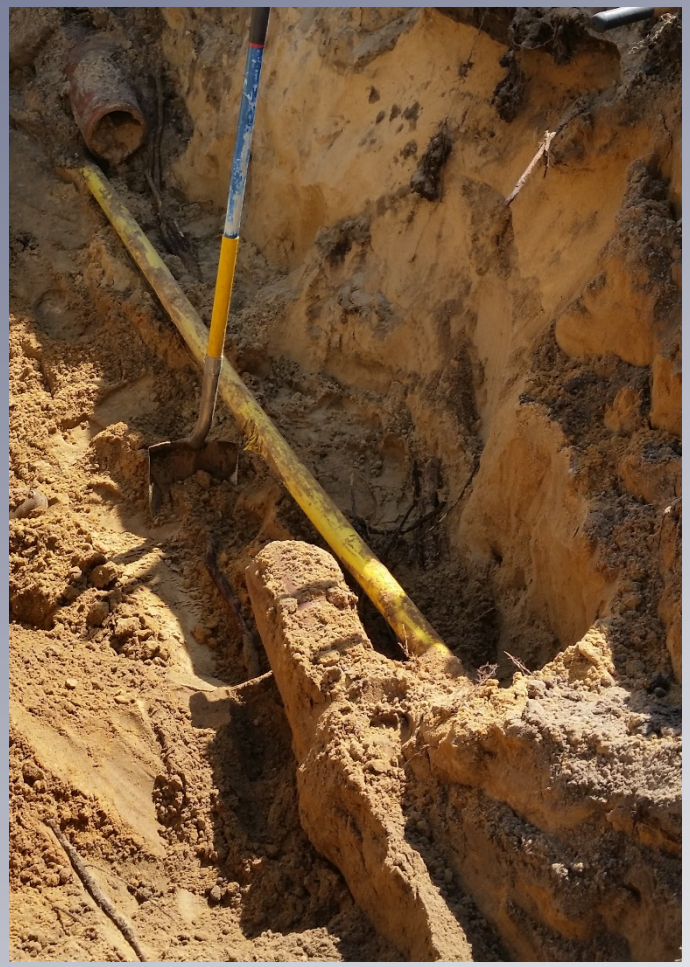
Incidents

(Crossbore)



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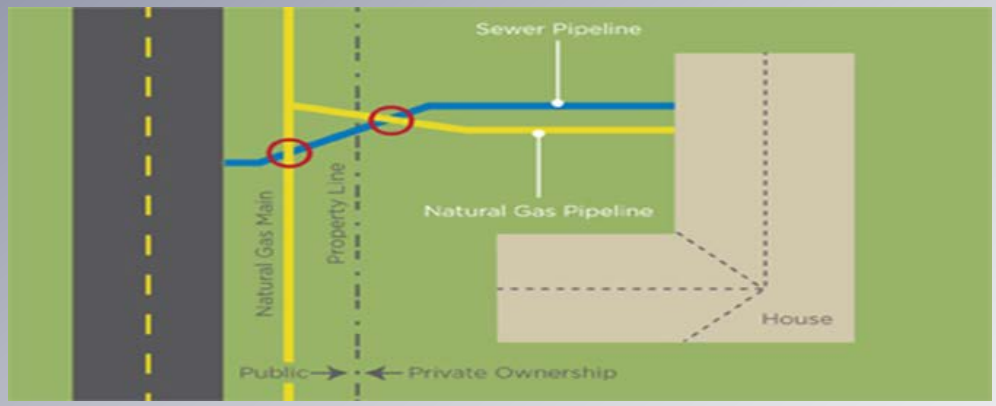
Incidents

(Crossbore)

- Facility Owner – Report and Non-compliance
  - Failure to follow procedures regarding exposing facilities
- Excavator (who installed gas main) – Warning Letter
- Michigan Damage Prevention Board Best Practice 2015-03



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Incidents

(Protection of Facilities)

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Incidents

(Protection of Facilities)

Investigation Pending

- Surface loading stress
- 4’ cover
- 8” steel installed in 1950
- Girth weld failure
- Increased leak survey

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Complaints
(Recent)

- Cable facility owner failing to mark drops
  - Invisible fence contractor
  - Documented 22 locations where cable was not marked
  - $500 for each violation for total fine of $11,000
- Multiple gas service line damages on one project
  - Water project with 12 damages
  - Excavator cited for 6 violations @ $500 for each for a total fine of $3000
  - Facility owner cited 12 violations @ $2000 for each for a total fine of $24,000

Investigation Process

(Historically)

Damage Prevention

- Complaint Driven
- Remote Investigations
- Request Data
  - Excavator(s)
  - Facility Owner

Pipeline Safety

- Incident Report Driven
- Remote Investigation
- Onsite Investigations
- Request Data
  - Excavator(s)
  - Facility Owner
  - Third Parties (ER)

Investigation Process

(Data Collection)

- Evidence typically reviewed:
  - Complaint form or incident report
  - MISS DIG ticket(s)
  - Follow up information requests
  - Facility operator's maps/records
  - Photographs
  - Reports/field notes documenting the damage
  - Any additional evidence provided by the parties involved

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Investigation Process

(Future)

- Complaints
- Incidents
- Onsite Damage Investigations
- Data Analysis and Investigations
  - Areas with high occurrences of damages
  - Late or no positive response
  - No MISS DIG ticket

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Investigation Process

(Complaints/Incidents)

- Damage prevention complaint form

  MPSC / Consumer Information / Inquiries and Complaints

  http://efile.mpsc.state.mi.us/phpsc/consinfo/form/

- Excavation damage incidents are reported under R 460.20503 since April 1, 2014, have been investigated for violations of Act 174

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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

Evidence and Documentation

Michigan Public Service Commission

Evidence and Documentation

Michigan Public Service Commission

Evidence and Documentation

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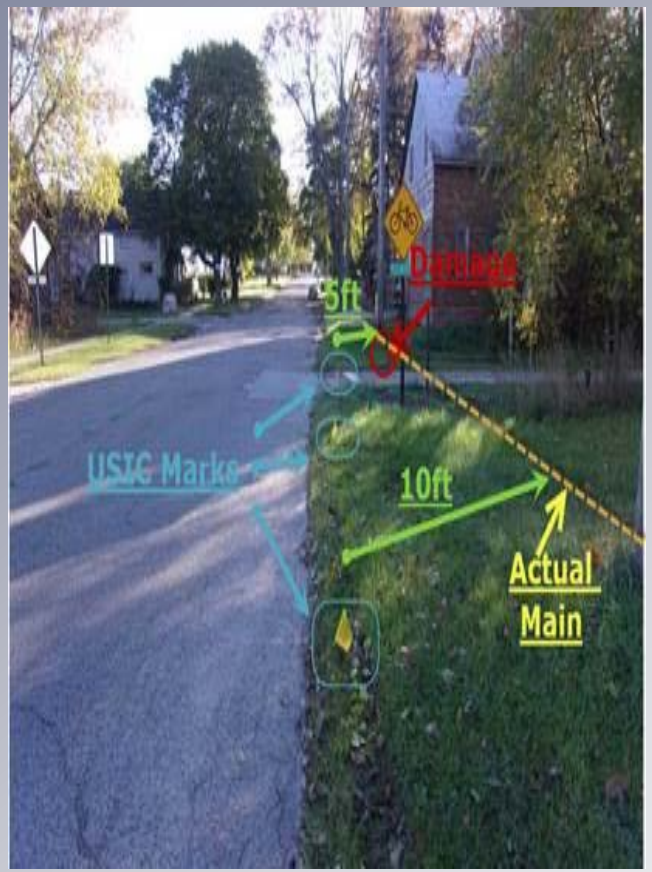
Evidence and Documentation



Evidence and Documentation

Evidence and Documentation

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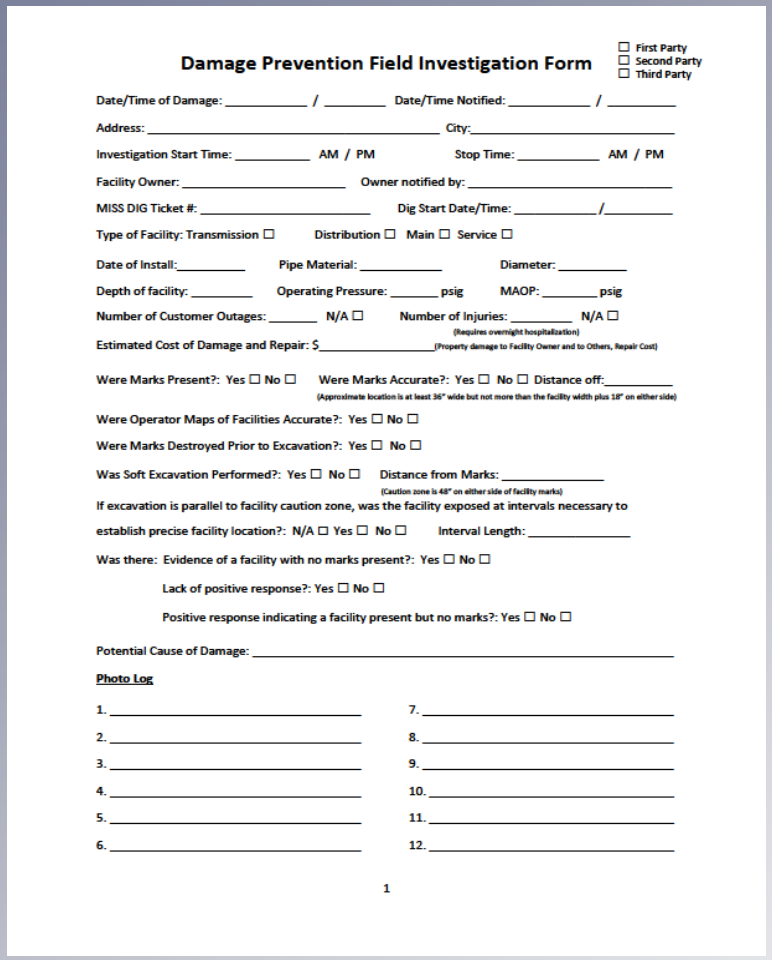
Evidence and Documentation



Damage Prevention Field Investigation Form

☐ First Party
☐ Second Party
☐ Third Party

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 18" 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 ☐

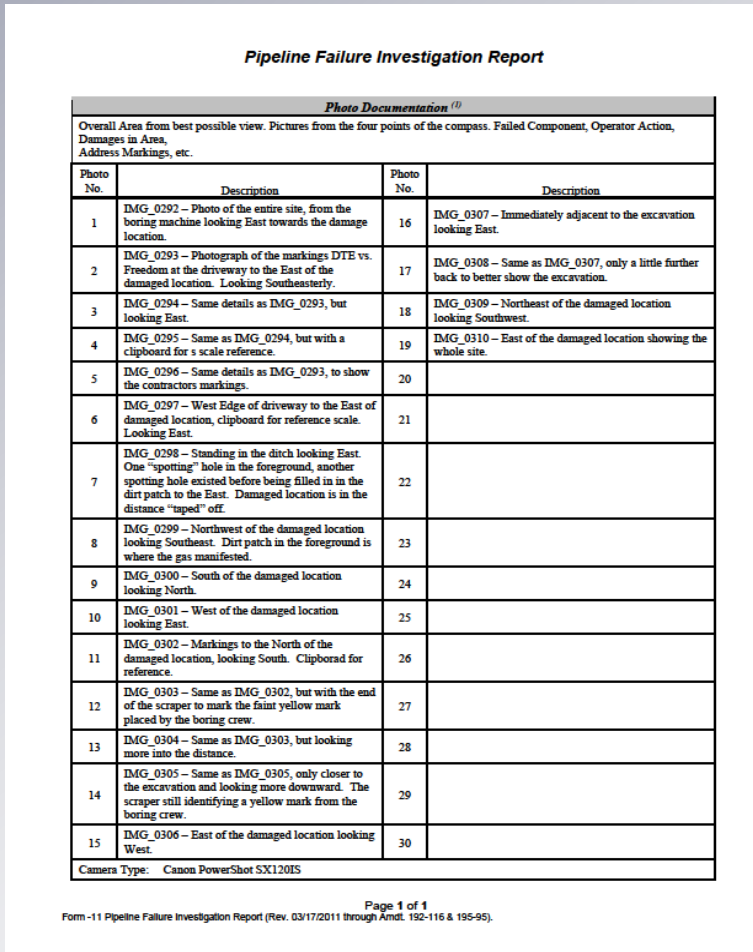
Positive response indicating a facility present but no marks?: Yes ☐ No ☐

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 s 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. Clipborad 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).

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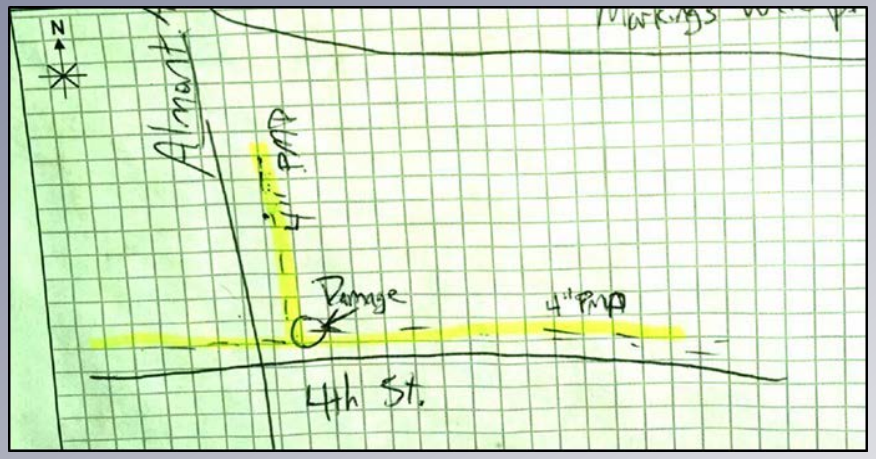
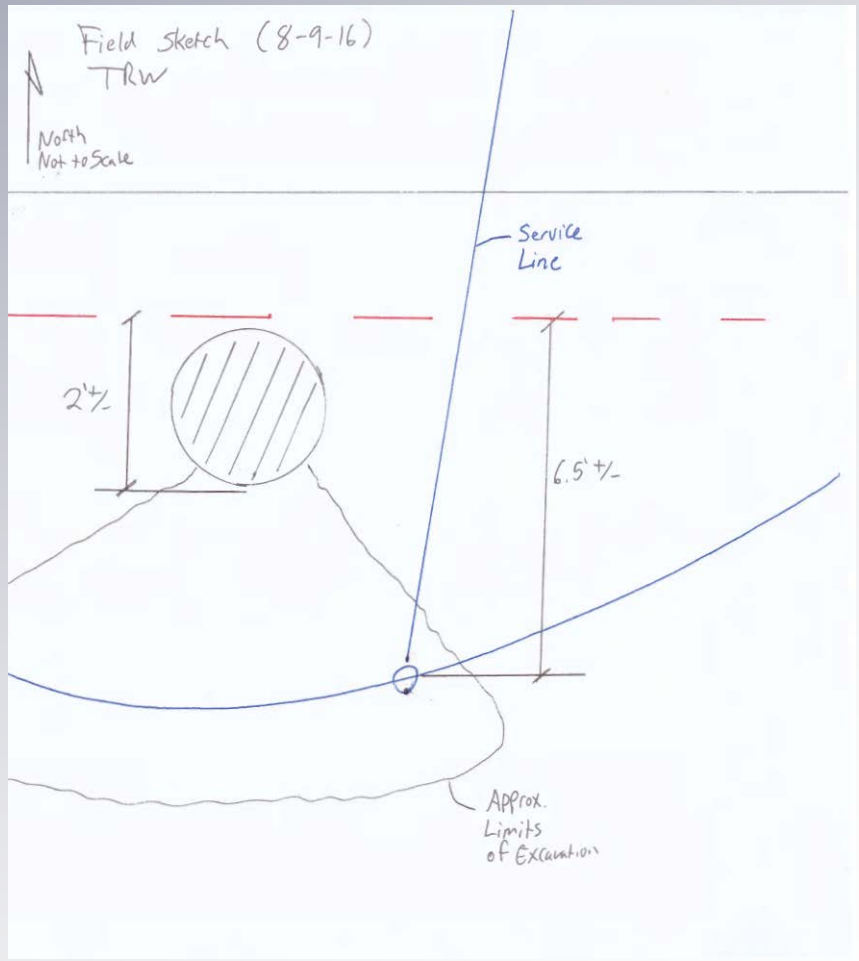
Evidence and Documentation





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Gas Operations

MPSC-Operations@michigan.gov

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Call before you dig.

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