MD-12 Reports User Guide

RAILINC

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Exhibits

Overview

MD-12 Report

MD-12 Reports are submitted to Railinc for analysis with the goal of reducing axle related mechanical service interruptions (derailments and other line of road failures) and increasing yard and shop efficiency.

Rule 43 in the *Field Manual of AAR Interchange Rules* establishes the minimum mechanical requirements for removing broken and defective axles. Refer to Rule 43 in the *Field Manual of the AAR Interchange Rules* for more information.

MD-12 forms allows users with permissions to report on broken and defective axles. Rule 43 is governed by the AAR and overseen by the AAR's Wheel, Axle, Bearing and Lubrication Committee (WABL). If you have questions about completing MD-12 forms, send an email to wabl@aar.com. If you experience technical difficulties with these electronic forms, contact Railinc's Customer Success Center at csc@railinc.com or 1-877-RAILINC (724-5462).

Accessing the Railinc Customer Success Center

The Railinc Customer Success Center provides reliable, timely, and high-level support for Railinc customers. Representatives are available to answer calls and respond to emails from 7:00 a.m. to 7:00 p.m. Eastern time, Monday through Friday, and provide on-call support via pager for all other hours to ensure support 24 hours a day, 7 days a week. Contact us toll-free by phone at 877-RAILINC (1-877-724-5462) or send an email directly to csc@railinc.com.

Getting Started

MD Reports is accessed using the Railinc Single Sign-On (SSO), which is accessed from the Railinc portal at https://public.railinc.com. The SSO Login is located at the upper right of the screen.

Register to Use Railinc SSO

For access to MD Reports and other Railinc applications, register to use Railinc Single Sign-On. Refer to the *Railinc Single Sign-On/Launch Pad User Guide* for information about the use of Railinc Single Sign-On.

Once SSO registration is complete, you request access to MD Reports within SSO.

Requesting MD Reports Access

After you receive authorization to use Railinc SSO, you must request general access to MD Reports by following instructions in the *Railinc Single Sign-On/Launch Pad User Guide*. To access MD Reports, select one or more of the available roles. Your level of access to the MD Reports is determined when you request access through Railinc Single Sign-On. Exhibit 1 shows a complete list of available roles as seen in SSO.

Exhibit 1. MD-12 Reports Applicable Permissions

MD Reports
Mechanical Defect Reporter

1 Select Roles   2 Confirm   3 Done

☐ MD-12 Field Reporter (MARK required)
MD-12 Field Reporter

☐ MD-12 Lab Reporter (MARK required)
MD-12 Lab Reporter

☐ MD-12 Report Reviewer (MARK required)
User who can view & edit MD-12 reports belonging to his/her company.

☐ MD-12 Sponsor (MARK required)
This is the role for a user be authorized to submit a MD-12 report on behave of a railroad

Comments...

0/255

Return   Next

MD-12 User Roles

Your assigned user role determines what functions you can perform. User roles are assigned by Railinc or by your company administrator through the Single Sign-On interface. The following user roles can be assigned to users of MD-12 Reports, with the subsequently listed functions:

MD-12 Field Reporter – Non-railroad field reporters must also be set up with Sponsor permissions before they can submit Field Reports on behalf of a railroad (reporter mark). For example, non-railroad Field Reporter (TTX) can submit a report if they have the Sponsor (BNSF) permissions. Railroad field reporters can submit Field Reports on behalf of a company. For railroad users, their mark will be both reporter and performer. This permission is approved by the MD Reports company admin.

- Submit Reports
- Search Reports
- View Reports
- Edit Reports
- Upload Images to Reports
- Delete Reports

MD-12 Lab Reporter – Only available to railroad users: Lab Reporter can submit Lab/Office Reports on behalf of a company (reporter and performer mark). This permission is approved by the MD Reports company admin.

- Submit Reports
- Search Reports
- View Reports
- Edit Reports
- Upload Images to Reports
- Delete Reports

MD-12 Sponsor – Non-railroad users are required to request and be granted this Sponsor permission by the railroad's company admin in order to submit Field Reports on behalf of the railroad (performer mark). A separate Sponsor permission is required for each railroad/mark needed.

- Submit Reports
- Search Reports
- View Reports
- Edit Reports
- Upload Images to Reports
- Delete Reports

MD-12 Report Reviewer – Railroad report reviewers using a field reporting non-railroad mark cannot edit Field Reports, but can edit Lab/Office Reports. Railroad report reviewers

using a field reporting railroad mark can edit Field Reports and Lab/Office Reports. Non-railroad report reviewers cannot submit or edit Lab/Office Reports.

- Search Reports
- View Reports
- Edit Reports
- Upload Images to Reports

MD-12 Report Viewer – User (WABL members) can view all submitted MD-12 reports.

- Search Reports
- View Reports

MD-12 Report Editor - User (WABL members) can edit all submitted MD-12 reports.

- Submit Reports
- Search Reports
- View Reports
- Edit Reports
- Upload Images to Reports
- Delete Reports

Logging In

To log into the MD Reports:

1. Open your internet browser and enter https://public.railinc.com to open the Railinc website.

2. Select the **Customer Login** link in the upper right of the page. The Account Access page is displayed.

3. Enter your **User ID** and **Password**. Select **Sign In**. The Railinc Launch Pad is displayed.

4. In **My Applications**, select **MD Reports**.

5. The MD Reports Home page is displayed. Menu items for MD-12 may vary depending on your roles and permissions. Exhibit 2 shows the menu items that support MD-12 Reports functionality.
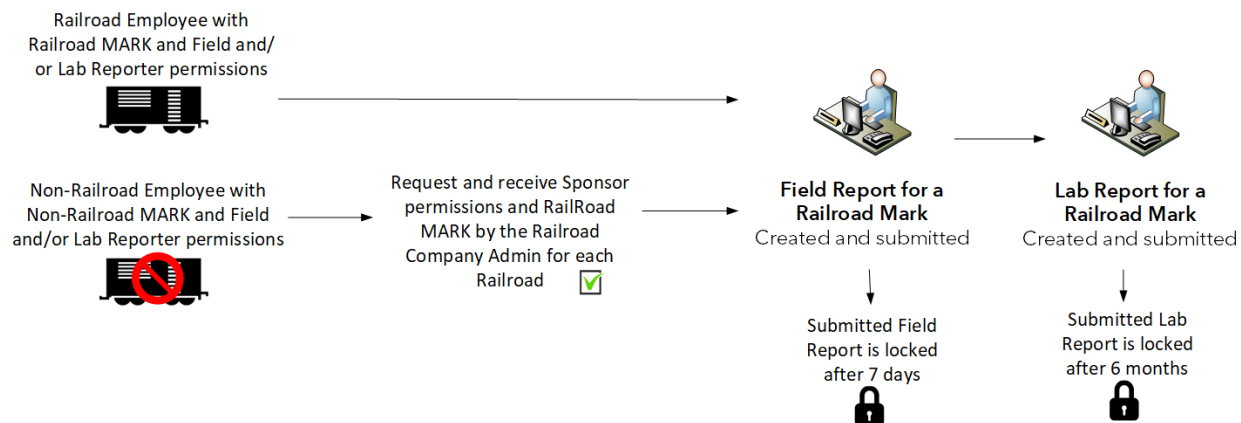
MD Reports Menu

Exhibit 2. MD-12 Menu

Logging Out

Select the **Sign Out** link in the upper right corner to end a MD Reports session. You are returned to the SSO Login Page.

MD-12 Report

MD-12 Report Workflow

Submit Field Report

To submit a Field Report, you must be assigned MD-12 Field Reporter permissions. Non-railroad field reporters must be set up with Sponsor permissions before they can submit Field Reports on behalf of a company (reporter mark). For example, non-railroad Field Reporter (TTX) can submit a report if they have the Sponsor (BNSF) permissions. Railroad field reporters can submit Field Reports on behalf of a company (mark is both reporter and performer).

All Field Reports have an editing window of one week.

Attn: Non-railroad users who need to submit the Field Report on behalf of a railroad (Performer MARK field pictured below), must first be granted the MD-12 Sponsor permission by the company admin of the railroad under their mark. You will see this information message when you do not have permissions to report a railroad mark.

Use the following procedure to complete MD-12 Field Reports:

1. Log into the MD Reports as described in Logging In. The MD Reports Home page is displayed (Exhibit 2).

2. From the menu bar, select **MD-12 > Submit Field Report**. The Submit MD-12 Defect Report page is displayed.

Exhibit 3. Submit MD-12 Field Report

Submit MD-12 Defect Report

Reporter Contact Information

Name *	
Phone Number *	
Email *	
City *	Cary
Country *	USA
Railroad/Company *	

State/Province * : NC

* Indicates required field

Lab/Office Performer

Performer MARK * :

Equipment Details

Equipment Initial * :   Equipment Number * :

Kind of Equipment * :

Axle Position * :   Gross Rail Load * :

Failure Information

Broken or Cracked * : ◉ Broken ○ Cracked   ❶ Broken means a fracture resulting in complete separation into parts.

Method of Detection * : D - Derailment   Number of Equipment Derailed:

Date of Failure :   Repair Date * :

Was Car Loaded or Empty? : ○ Loaded ○ Empty ◉ Unknown

Bearing Backing Ring Condition * :

Axle Image Attachments

It is recommended your attachments include at least 5-6 pictures of the failure. Recommended pictures are: **overall of axle, close-up of damaged area (specifically of fracture face), marks on the top, marks on the bottom, reconditioned stamp, Trademark.** The following formats are accepted: .JPEG, .GIF, .PNG. Each image must be less than or equal to 5MB in size. A maximum of 15 images are allowed.
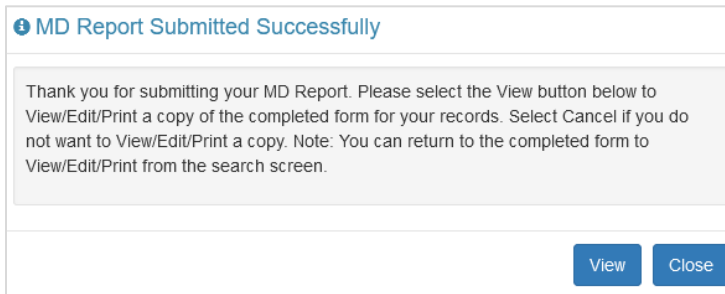
Attachment File: Browse... No file selected.

Repair Key Information ❓ Hide

Repair Key:

Save Draft   ☑Submit

3. Complete all required fields (marked with a red asterisk). See the *MD-12 Specification Document* for details about expected field values.

4. The **Reporter Contact Information** section on this page is prepopulated based on information in your SSO profile. Changing your contact information for this report does not change the information in your SSO profile.

5. Enter the mark for the report into the **Railroad/Company** field. This field is required.

6. Enter the **Lab/Office Performer** mark. This field is required.

6. Enter the **Equipment Details**: When the equipment initials and number are found in Umler, the **Kind of Equipment** and **Gross Rail Load** are automatically populated. If the car is not found, enter these fields.

7. In the **Failure Information** section, selecting **Broken** means a complete separation of parts. Select the **Method of Detection**. When **Derailment** is selected, enter the **Number of Equipment Derailed**.

8. In the **Axle Image Attachments** section, select **Browse** to attach images. It is recommended that you add at least 5-6 pictures of the failure. Recommended pictures are the overall axle, close-up of damaged area, marks on the bottom, reconditioned stamp and trademark image. Attach up to 15 images.

   a. Attach files in the following formats: .JPEG, .PNG, .GIF. Each image has a 5 MB size limit.
   b. Once an image is attached, you have the option to select **Remove** to remove it from the form.
   c. The recommended attachments are requested but are not required to submit Form MD-12.

Exhibit 4. MD-12 Field Report Attachment

9. MD-12 gives you the opportunity to customize a **Repair Key** for each report to help you keep track of each MD-12 axle reported. For example, you may want to name it with your name, the equipment ID and the date. When this field is left blank, the system will auto-generate a Repair Key for you.

10. Save the form as draft by clicking the **Save Draft** button. The draft is kept saved for 7 days. Reporters and Editors have the ability to save, view and edit drafts that they have created. A draft can be saved without entering all the mandatory fields. See Review Field Report Drafts.

11. When you have completed the form, click **Submit**. A submission success message is displayed.

Exhibit 5. MD-12 Field Report Successful Submission

ⓘ MD Report Submitted Successfully

Thank you for submitting your MD Report. Please select the View button below to View/Edit/Print a copy of the completed form for your records. Select Cancel if you do not want to View/Edit/Print a copy. Note: You can return to the completed form to View/Edit/Print from the search screen.

[View] [Close]

12. Select **View** to View/Edit/Delete the report. Select **Done** to close the box.

Submit Lab/Office Report

To submit a Lab/Office Report, you must be assigned MD-12 Lab Reporter permissions. Only railroad lab/office reporters can submit Lab Reports on behalf of a company (reporter mark).

All Lab Reports have an editing window of six months.

Use the following procedure to submit a lab report:

1. Log into the MD Reports as described in <u>Logging In</u>. The MD Reports Home page is displayed (<u>Exhibit 2</u>).
2. From the menu bar, select **MD-12** > **Lab/Office Reports**. The **Search MD-12 Reports** page is displayed.
3. Select **Search**. See <u>Exhibit 11</u> for an example of search results. Find a successfully submitted Field Report that needs a Lab Report.
4. Click the **View** link for an appropriate Field report located in the **Details** column.
5. A view of the Field Report is displayed. Scroll to the bottom of the report to see the button panel. Select **Submit/Edit Lab/Office Report**.

Exhibit 6. View Field Report Button Panel

[**✖Delete**] [**☑Edit**] [**☑Submit/Edit Lab/Office Report**]
[**← Search Results**]
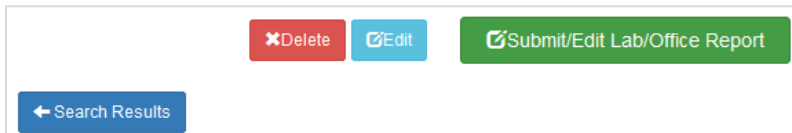
6. Scroll through the read-only Field Report to the **Lab Report** form.

Exhibit 7. Submit MD-12 Lab Report

Submit MD-12 Defect Lab Report

Reporter Contact Information

Name *	Michelle Ferrar
Phone Number *	9196515395
Email *	michelle.ferrar@railinc.com
City *	Cary
Country *	USA
Railroad/Company *	BNSF

State/Province * : NC

* Indicates required field

Axle Information

Axle Type * : ○ 2 ○ 4 ○ 5
See Specifications Document for Axle Type Reference Images

Axle Position * : 4

Axle Manufacturer *

Axle Heat Number *

Axle Grade *

Journal bearing Size *

Axle Serial Number *

Axle Manufacture Date *

Finish Machining Shop *

Wheel Information

Wheel Mounting Shop *

Wheel Mounting Date *

Bearing Information

Bearing Backing Ring Manufacturer *

Bearing Backing Ring Type *

Bearing Backing Ring Condition * : good

Axle Repair Information

Journal Repair (V) Information

V * : ☐ No Information ☐ Illegible
Side * : ○ Failed ○ Opposite ○ Unkown

V : ☐ No Information ☐ Illegible
Side : ○ Failed ○ Opposite ○ Unkown

V : ☐ No Information ☐ Illegible
Side : ○ Failed ○ Opposite ○ Unkown

(According to M-967 Spec) Repair Date *

Conversion Information

Conversion Shop

Conversion Date

Failure Information

Failure Origin * : ○ Surface ○ Internal

Location of Fracture *

Inches From Serial Number End *

Broken or Cracked * : ○ Broken ◉ Cracked
ⓘ Broken means a fracture resulting in complete separation into parts.

Axle Image Attachments

It is recommended your attachments include at least 5-6 pictures of the failure. Recommended pictures are: **overall of axle, close-up of damaged area (specifically of fracture face), marks on the top, marks on the bottom, reconditioned stamp, Trademark.** The following formats are accepted: .JPEG, .GIF, .PNG. Each image must be less than or equal to 5MB in size. A maximum of 15 labImages are allowed.
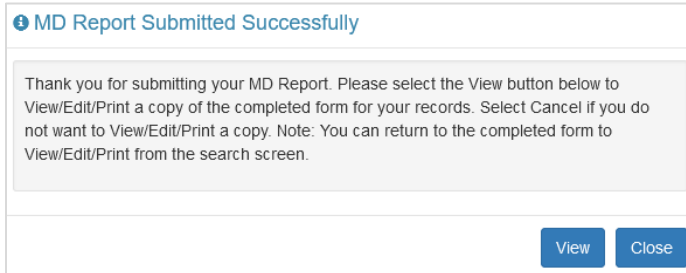
Attachment File: [Browse...] No file selected.

[Cancel] [Save Draft] [Submit]

7. Complete all required fields (marked with a red asterisk). See the *MD-12 Specification Document* for details about expected field values.

8. The **Reporter Contact Information** section on this page is prepopulated based on information in your SSO profile. Changing your contact information for this report does not change the information in your SSO profile.

9. Enter the mark for the report into the **Railroad/Company** field. This field is required.

10. Enter the **Axle Information** fields. When the **Axle Manufacturer** is unknown, use the drop-down to choose **XXXXXX – Unknown** located at the bottom of the list. If you need to add a shop to the **Finish Machining Shop**, see Add Shop Mark.

11. In the **Wheel Information** section, select the **Wheel Mounting Shop** and enter the **Wheel Mounting Date**. The **Wheel Mounting Date** must be later than the **Axle Manufacture Date**.

12. Enter the **Bearing Information** fields. Use the text field to provide a description of the **Bearing Backing Ring Condition**.

13. For **Axle Repair Information**, up to 12 characters can be entered into the **V** field. The **V** and **Side** fields may not pertain to every Lab Report. Since these are required fields, when no information is available or required or the information is illegible, select the **No Information** checkbox and the system populates the fields with **X**'s.

14. In the **Failure Information** section, selecting **Broken** means a complete separation into parts.

15. In the **Axle Image Attachments** section, select **Browse** to attach images. It is recommended that you add at least 5-6 pictures of the failure. Recommended pictures are the overall axle, close-up of damaged area, marks on the bottom, reconditioned stamp and trademark image. Attach up to 15 images.

    a. Attach files in the following formats: .JPEG, .PNG, .GIF. Each image has a 5 MB size limit.
    b. Once an image is attached, you have the option to select **Remove** to remove it from the form.
    c. The recommended attachments are requested but are not required to submit Form MD-12.

Exhibit 8. MD-12 Lab Report Attachment

16. Save the form as draft by clicking the **Save Draft** button. The draft is kept saved for 7 days. Reporters and Editors have the ability to save, view and edit drafts that they have

created. A draft can be saved without entering all the mandatory fields. See Review Field Report Drafts.

17. When you have completed the form, click **Submit**. A submission success message is displayed.

Exhibit 9. MD-12 Lab Report Successful Submission

❶ MD Report Submitted Successfully

Thank you for submitting your MD Report. Please select the View button below to View/Edit/Print a copy of the completed form for your records. Select Cancel if you do not want to View/Edit/Print a copy. Note: You can return to the completed form to View/Edit/Print from the search screen.

View   Close

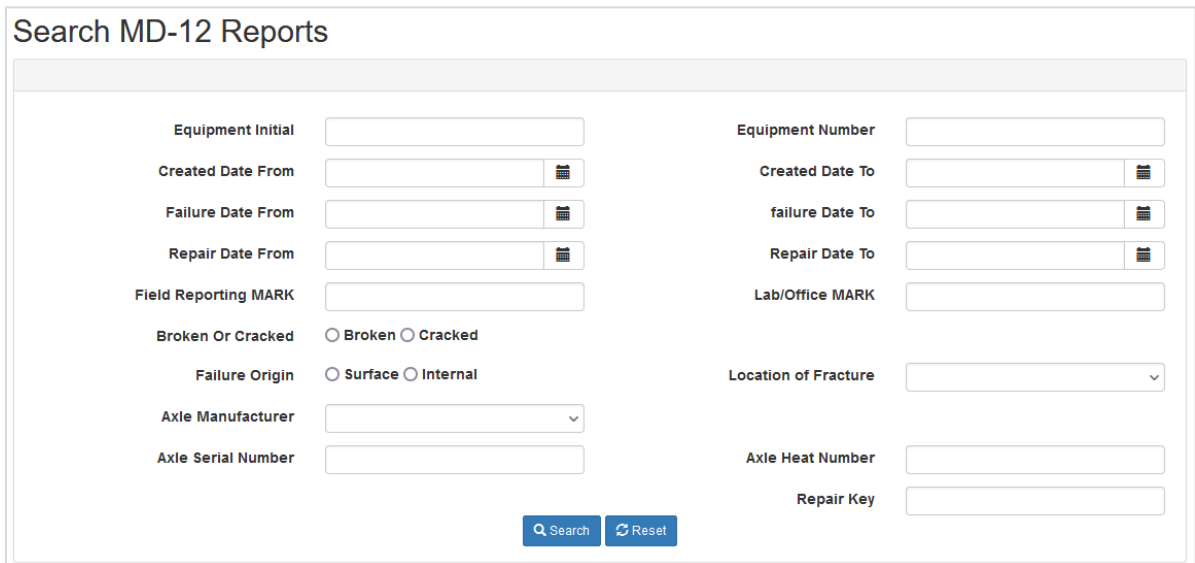18. Select **View** to View/Edit/Delete the report. Select **Done** to close the box.

Search MD-12 Reports

To search MD-12 Field and/or Lab Reports, you must be assigned to one or more of these roles: MD-12 Field Reporter, MD-12 Lab Reporter, MD-12 Reporter, MD-12 Report Reviewer or MD-12 Report Viewer.

Use the following procedure to search for MD-12 Reports:

1. Log into the MD Reports as described in Logging In. The MD Reports Home page is displayed (Exhibit 2).
2. From the menu bar, select **MD-12** > **Search Reports**. The **Search MD-12 Reports** page is displayed:

Exhibit 10. Search MD-12 Reports

Search MD-12 Reports

Equipment Initial		Equipment Number
Created Date From	📅	Created Date To 📅
Failure Date From	📅	failure Date To 📅
Repair Date From	📅	Repair Date To 📅
Field Reporting MARK		Lab/Office MARK
Broken Or Cracked	○ Broken ○ Cracked	
Failure Origin	○ Surface ○ Internal	Location of Fracture
Axle Manufacturer		
Axle Serial Number		Axle Heat Number
		Repair Key

🔍 Search   ⟳ Reset

3. To search for one or more MD-12 Reports, enter any or no criteria in the fields and select **Search**. An example of search results is displayed in the image below.
4. To view a report, click the **View** link for the appropriate row located in the **Details** column.

Exhibit 11. MD-12 Search Results

Edit MD-12 Reports

To edit MD-12 Field and/or Lab Reports, you must be assigned to one or more of these roles: MD-12 Field Reporter, MD-12 Lab/Office Reporter, MD-12 Report Reviewer or MD-12 Report Editor.

Keep in mind that Field Reports have an editing window of <u>one week</u> and Lab/Office Reports have an editing window of <u>six months</u>. Once these timelines have passed, the record is read-only and editing is no longer available.

Use the following procedure to edit MD-12 Reports:

1. Log into the MD Reports as described in Logging In. The MD Reports Home page is displayed.
2. From the menu bar, select **MD-12** > **Search Reports**. Search for reports as described in Search MD-12 Reports.

3. To open a report, click the **View** link for the appropriate row located in the **Details** column.
4. Scroll to the bottom of the report and select **Edit** to edit the <u>Field Report</u>. Select **Submit/Edit Lab/Office Report** to edit the <u>Lab Report</u>.
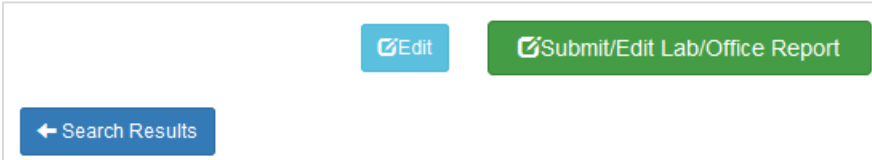
Exhibit 12. View Report Button Panels

A. Actions Available for Editable Submitted Field Report:

B. Actions Available for Editable Submitted Field Report and Saved as Draft Lab Report:
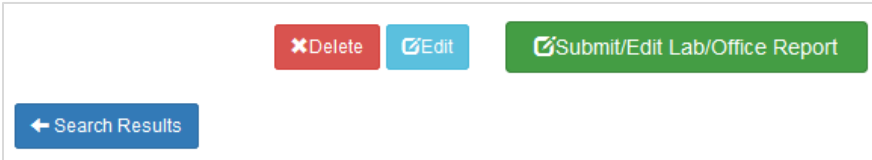
C. Actions Available for Editable Submitted Field and Submitted Lab Report:
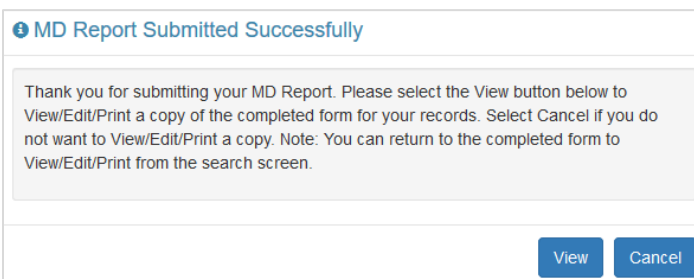

5. The Submit MD-12 Defect Report page displays. All fields are editable except for the Field Report's **Performer Mark** and **Repair Key** fields.
6. When you have made your updates to the form, select **Update**. Otherwise, select **Cancel** to close the record without updating.

Exhibit 13. Update Report Button Panel
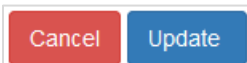
7. A submission successful message is displayed. Select **View** to view, edit or print the record. Select **Cancel** to close the the message.

Exhibit 14. MD-12 Update Submission Successful

ⓘ MD Report Submitted Successfully

Thank you for submitting your MD Report. Please select the View button below to View/Edit/Print a copy of the completed form for your records. Select Cancel if you do not want to View/Edit/Print a copy. Note: You can return to the completed form to View/Edit/Print from the search screen.

View   Cancel

Review Field Report Drafts

To review MD-12 draft Field Reports, you must be assigned to one or more of these roles: MD-12 Field Reporter, MD-12 Report Reviewer or MD-12 Report Editor.

Keep in mind that draft Field Reports are kept for a maximum of 7 days. Once 7 days have passed, the draft report is no longer available.

Use the following procedure to review MD-12 draft Field Reports:

1. Log into the MD Reports as described in <u>Logging In</u>. The MD Reports Home page is displayed (<u>Exhibit 2</u>).
2. From the menu bar, select **MD-12** > **Review Field Report Drafts**. Available draft Field Reports for your company mark are listed on the **MD-12 View Field Report Drafts** page.
3. To open a report, click the **View** link for the appropriate row located in the **Details** column.

Exhibit 15. View Field Report Drafts

MD-12 View Field Report Drafts

Total Items: 1

| Create Date	Last Modified Date	Date of Failure	Equipment Initial	Equipment Number	Kind of Equipment	Axle Position	Method of Detection	Attachments	Details
2021-08-06	2021-08-06		BNSF	0000000117	X	1	W	0	View

4. Scroll to the bottom of the report and click the **Edit** button. See <u>Edit MD-12 Reports</u> for details.

Exhibit 16. View Draft Field Report Button Panel

[Back to Drafts] [✖Delete] [☑Edit]
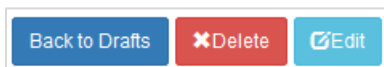
5. Once you've made your updates, select **Save Draft** to save your draft or **Submit** to submit the report. Once the report is submitted, the **Save Draft** button is no longer available when viewing the report.

Exhibit 17. Update Draft Field Report Button Panel
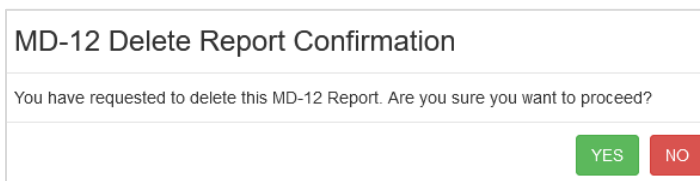
[Cancel] [Save Draft] [☑Submit]
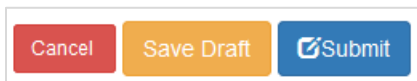
Delete MD-12 Reports

To delete MD-12 Field and/or Lab Reports, you must be assigned to one or more of these roles: MD-12 Field Reporter, MD-12 Lab/Office Reporter or MD-12 Report Editor.

Use the following procedure to delete MD-12 Reports:

1. Log into the MD Reports as described in <u>Logging In</u>. The MD Reports Home page is displayed (<u>Exhibit 2</u>).
2. From the menu bar, select **MD-12** > **Search Reports**. Search for reports as described in <u>Search MD-12 Reports</u>.
3. To open a report, click the **View** link for the appropriate row located in the **Details** column.
4. Scroll to the bottom of the report and click the **Delete** button (<u>Exhibit 12</u> A and B).
5. A **Delete Confirmation** pop-up box appears. Click **Yes** to make the changes or **No** to cancel.
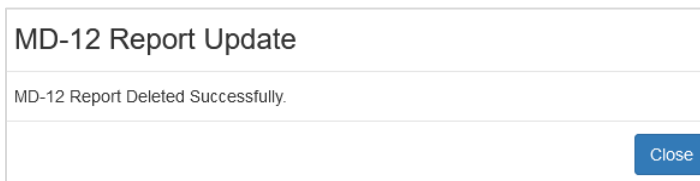
Exhibit 18. MD-12 Delete Confirmation

MD-12 Delete Report Confirmation

You have requested to delete this MD-12 Report. Are you sure you want to proceed?

YES   NO

6. If you click **Yes**, a confirmation pop-up box appears to indicate the report has been successfully deleted. Click **Close** to return to the Search Reports page.

Exhibit 19. MD-12 Delete Success Message

MD-12 Report Update

MD-12 Report Deleted Successfully.

Close

Add Shop Mark

To add or edit shop marks for MD-12 Reports, you must be assigned to one or more of these roles: MD-12 Field Reporter, MD-12 Lab/Office Reporter, MD-12 Report Reviewer or MD-12 Report Editor.

Use the following procedure to <u>add</u> a shop mark for MD-12 Reports:

1. Log into the MD Reports as described in <u>Logging In</u>. The MD Reports Home page is displayed (<u>Exhibit 2</u>).

2. From the menu bar, select **MD-12** > **Add Shop Mark**. Existing marks appear in alphabetical order below the form.

Exhibit 20. Add Shop Mark

3. The **Shop Mark** is the only required field, but entering the **Shop Name** allows you to verify that the shop is not already in the list before you add it. As you enter a shop name, all companies with the your entry as all or part of the name will appear in the results list.

4. Once you've entered the required information, select **Submit Shop Mark**. The new mark will initially appear at the top of the results.

Use the following procedure to <u>edit</u> a shop mark for MD-12 Reports:

1. Find the shop mark you want to edit in the results list. Shop marks are listed in alphabetical order.

2. Select the **Edit** link of the shop mark you want to edit.

Exhibit 21. Update Shop Mark

3. Update the shop mark fields as needed, and select **Update Shop Mark** to save your changes. The updated mark will initally appear at the top of the results.