



U.S. Department of the Interior
Bureau of Land Management

Conducting Action Research





LESSON OBJECTIVE

By the end of this lesson each student should be able to...

- **Given a well file, review all applicable documents and information (i.e., permit, lease stipulations, conditions of approval, maps, etc.) and identify items of importance or issues relevant to the inspection being conducted.**



LESSON ROUTE

- **Action Research General Knowledge**
- **Process for Conducting Action Research:**
 - Locate Well File
 - Review APD and Sundry Notices
 - Review Other Applicable Documents
 - Review Lease Stipulations
 - Review AFMSS
 - Review Maps
 - Make Copies/Take Notes





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TOPIC 1: Action Research General Knowledge





Topic 1: Action Research

What is Action Research?

- **Review of the official material and applicable documents (i.e., permits, etc.) to prepare for an environmental inspection.**



Topic 1: Action Research

What is the purpose and importance of Action Research?

Action Research helps the surface inspector:

- Become familiar with past actions in the life of a well;
- Research relevant aspects of the approved permits and COAs in a well file;
- Become familiar with SUPOs, survey plats, lease stipulations, etc.;
- Prepare for the environmental inspection; and
- Help verify that the operator's activities are in compliance with lease stipulations, permits, and COAs



Topic 1: Action Research

What is needed to conduct Action Research?

What will the surface inspector review?

The inspector will need the official Well File to review the following:

- **APD, SUPO, & COAs**
- **Sundry Notices & COAs**
- **Correspondence**
 - **Emails, Letters, Phone Conversation Records**
 - **Correspondence with Landowner, Other Agencies, Operator, etc.**
- **Past ES Inspections**
- **Past or Ongoing Enforcement Actions**
- **Undesirable Events**



Topic 1: Action Research

What is needed to conduct Action Research?

What will the surface inspector review? (*Continued*)

The inspector will also need the following to review for Action Research:

- **Lease Terms & Conditions and Special Stipulations**
- **AFMSS**
- **Maps**
 - **(e.g., ArcMap, Google Earth, etc.)**





Topic 1: Action Research

Who is responsible for conducting Action Research?

YOU! (Oil and Gas Surface Inspector)



Caitlin Heryford, BLM Wyoming Intern

You are responsible, but other specialists in the office can assist you. PETs, LIEs, LLEs, your supervisor, and other surface inspectors in other offices, other offices, and state office can assist you.



Topic 1: Action Research

When is the best time to conduct Action Research?

Before Inspection vs. **After Inspection**





Action Research **Before** the Inspection

Benefits

Inspector would be able to:

- Familiarize themselves with the well history and approved stipulations, permits, COAs, etc.;
- Know what to look for in the field;
- Identify special COAs to keep in mind in the field;
- Be better prepared with the right tools for field compliance checks; and
- Verify jurisdiction.

Example:

During action research, the inspector reviewed the APD COAs and found that there is a height restriction of 14 feet and paint color requirement for all surface equipment on the well site. The inspector now knows to grab an appropriate measuring device and the BLM color chart for the inspection.



Action Research **After** the Inspection

If Action Research is only conducted after the inspection, the inspector may:

- Miss inspecting certain aspects of permit, sundry notices, or COAs.
- Not be prepared for certain field compliance checks.
- Waste time on non-jurisdictional wells.
- Duplicate inspections on wells that were recently inspected.

Example: After conducting an ES Surface Production inspection in the field, the inspector returned to the office and reviewed the APD COAs for the first time. The inspector found a COA that states that there is a 12" berm required around the edge of the production well pad. The inspector conducted 10 ES inspections that day and does not remember if there was a berm around this well pad.



Topic 1: Action Research

When is the best time to conduct Action Research?

In reality, the inspector is conducting action research before and after the field inspection.

- **The inspector is reviewing official well file documentation before the inspection to be better prepared for the inspection.**
- **The inspector would also review official well file documentation after the inspection to verify compliance.**



Topic 1: Action Research

What is the O&G Surface Inspector's responsibility when conducting Action Research?

- **Review appropriate official well file documentation, lease stipulations, AFMSS, and maps before the inspection to know what to inspect**
- **Keeping the official well or lease files organized**
- **Keeping the official documentation in the office**
- **Take notes or make copies of what you need to help you in the field**



Topic 1: Action Research

What guidance is available to assist the O&G Surface Inspector conduct Action Research?

- **H-3160-5 - Inspection and Enforcement Documentation and Strategy Development Handbook**
- **Office File Room or electronic filing structure**
- **Local Instruction Memorandums (IMs)**
- **Local knowledge: PETs, LIEs, LLEs, Other O&G Surface Inspectors**



Topic 1: Action Research

What are common mistakes O&G Surface Inspectors make when conducting Action Research?

- **Not reviewing lease stipulations**
- **Only reviewing the APD COAs and not the SUPO**
- **Not reviewing subsequent Sundry Notices**
- **Not reviewing past enforcement actions**
- **Not checking AFMSS**
 - **Not checking for recent inspections**

Color Blends

The Standard Environmental Colors chart was developed to assist with color selection to minimize the visual contrast of a facility in the landscape.

In order to ensure color accuracy, we set original color charts match point. When matching the color chips, request the artist to have their computer set on "natural light." Choose the new paint sample to the color chip under indirect or two-darker than the surrounding landscape to assist for normal viewing, normal lighting, and weathering.

Color Standard Environmental Colors chart by consulting your regional, local, or national distribution system or MESA, BLM, NOC, FMSD or BLM.gov or the 311.210-0745. Paper: Standard Environmental Colors System of MESA.



Topic 1: Action Research

What are the most common environmental inspection activities we do as inspectors?

- **Construction Inspection (SC)**
- **Drilling Inspection (SD)**
- **Interim Reclamation Inspection (IR)**
- **Production Inspection (SP)**
- **Abandonment Inspection (SA)**

You need to conduct action research for all these inspection activities!



Topic 1: Action Research

What is the purpose and importance of environmental inspections?

- **Verify that the operator is conducting operations in accordance with the approved permit, lease terms, stipulations, and COAs**
- **Verify that surface disturbances match approved permit survey plats/engineered designs**
- **Ensure the operator is conducting operations in a manner which protects natural resources and environmental quality (43 CFR 3162.5-1(a))**



TOPIC 2: Conduct Action Research Process

**ES – Environmental Surface
Inspections**



Topic 2: Action Research Process Steps - ES

The following seven steps to Action Research should be performed prior to conducting environmental inspections:

Step 1

- Locate Well File

Step 2

- Review APD and Sundry Notices

Step 3

- Review other Applicable Documents in Well File

Step 4

- Locate and Review Lease Terms & Conditions and Special Stipulations

Step 5

- Review AFMSS

Step 6

- Review Maps

Step 7

- Make Copies/Take Notes



Topic 2: Action Research Process Steps - ES

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Topic 2: Action Research Process Steps - ES

Step 1: Locate Well File

- **What is the purpose and importance of the well file?**
 - Holds the official permit, approved proposals, and documentation related to the well
 - Provides the official history of the well activities
- **Where is the well file located in your office?**
 - A secured office file cabinet or room
- **What are the components of the well file?**
 - APD, Sundries, NEPA documents, Inspections, Enforcement Actions, Correspondence, etc.



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Topic 2: Action Research Process Steps - ES

Step 2: Review APD and Sundry Notices

- **Which portion of APD relates most to ES inspections?**
 - Surface Use Plan of Operations
- **Why is it important to review COAs attached to APD?**
 - COAs supersede aspects of the APD
- **Why is it important to review Sundry Notices?**
 - They change the approved APD/COAs
 - Reports for subsequent well operations
- **What are the three types of Sundries Notices?**
 - Notice of Intent, Subsequent Report, Final Abandonment Notice



Topic 2: Action Research Process Steps - ES

Where can the inspector find the well completion date?

The completion date can be found on the completion report in the well file.

- *Within 30 days after the well completion, operators are required to submit a well completion report. (Onshore Order 1, IV.E.)*

Unless a variance is approved, earthwork for interim reclamation must be completed within six (6) months after the well completion date. (Onshore Order 1, XII.B.)



Topic 2: Action Research Process Steps - ES

Where can the inspector find the well plug date?

The plug date can be found in the well file

- *Within 30 days following well plugging, operators are required to submit a Subsequent Report of Plug and Abandon. (Onshore Order 1, XII.A.)*

Unless a variance is approved, earthwork for final reclamation must be completed within six (6) months after the plug date for a well. (Onshore Order 1, XII.B.)



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Topic 2: Action Research Process Steps - ES

Step 3: Review Other Applicable Documents in Well File

- **What are examples of other documents in the well file that are important to review?**

- Past Inspections
- Completion Report
- Past/Ongoing Enforcement Actions
- Undesirable Event Reports
- Correspondence with the Operator, Landowner, etc.

- **What are examples of other material in the well file that are not applicable to ensuring compliance?**

- NEPA Documents
- Notice of Staking (NOS)
- Onsite Inspection Notes



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Topic 2: Action Research Process Steps - ES

Step 4: Locate and Review Lease Terms & Conditions and Special Stipulations

- **Where can you find lease terms and conditions and special stipulations?**
 - Hard Copy Lease File
 - Ask Office Adjudicator
 - Who may request copy from the State Office
- **What are examples of special stipulations?**
 - No Surface Occupancy (NSO)
 - Controlled Surface Use (CSU)
 - Timing Limitations (TL)
 - Lease Notices (LN)



Topic 2: Action Research Process Steps - ES

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Topic 2: Action Research Process Steps - ES

Step 5: Review AFMSS

- **What information in AFMSS can you review?**
 - **Past ES Inspections**
 - To reduce redundancy
 - Review inspection notes
 - **Past/Ongoing Enforcement Actions**
 - **Undesirable Events**
 - **Approved/Accepted Sundry Notices**
 - **Well Information (lease, location, SME, etc.)**



Topic 2: Action Research Process Steps - ES

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Topic 2: Action Research Process Steps - ES

Step 6: Review Maps

- **What types of maps can you review?**

- **Hard Copy**

- BLM Maps, Operator Maps, etc.

- **ArcMap**

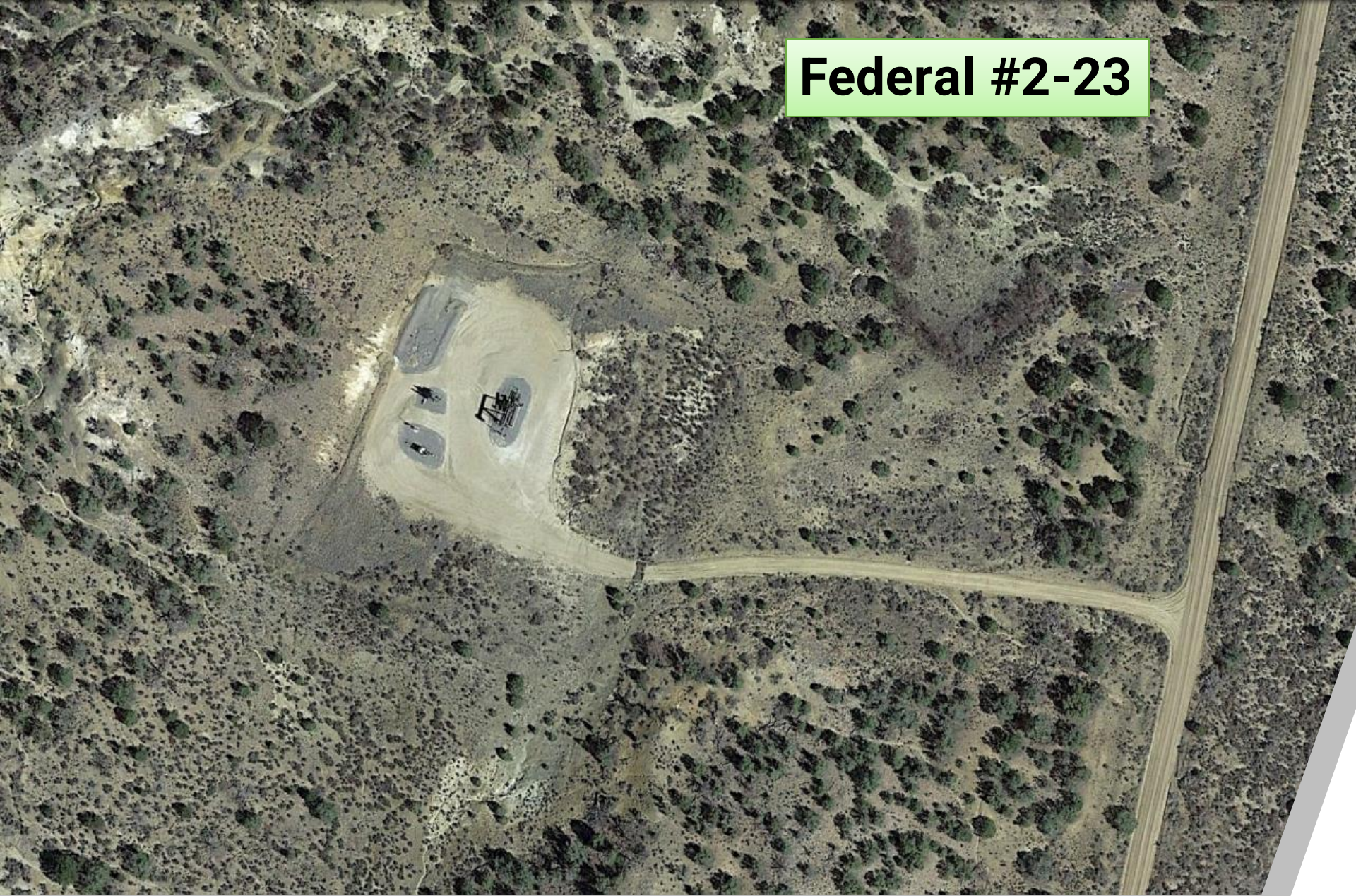
- Verify location
- Verify Jurisdiction (Fee/Fee/Fed)
 - Lease Boundaries, Surface Ownership, Resource Shapefiles, etc.

- **Google Earth**

- Aerial Imagery
- Past Imagery
- Find Route to Location

- **Other Maps**

Federal #2-23



This is a 2019 Google Earth image of well proposed to be plugged. During an inspection before plugging, NRS found reserve pit plastic in eastern fill slope...

Federal #2-23

Reserve Pit



This is a 1993 Google Earth image of the same well proposed to be plugged. Reserve pit appears to be in fill slope; NRS required an updated reclamation plan.

ArcMap Image

Federal 34-6-17 #4



SHL

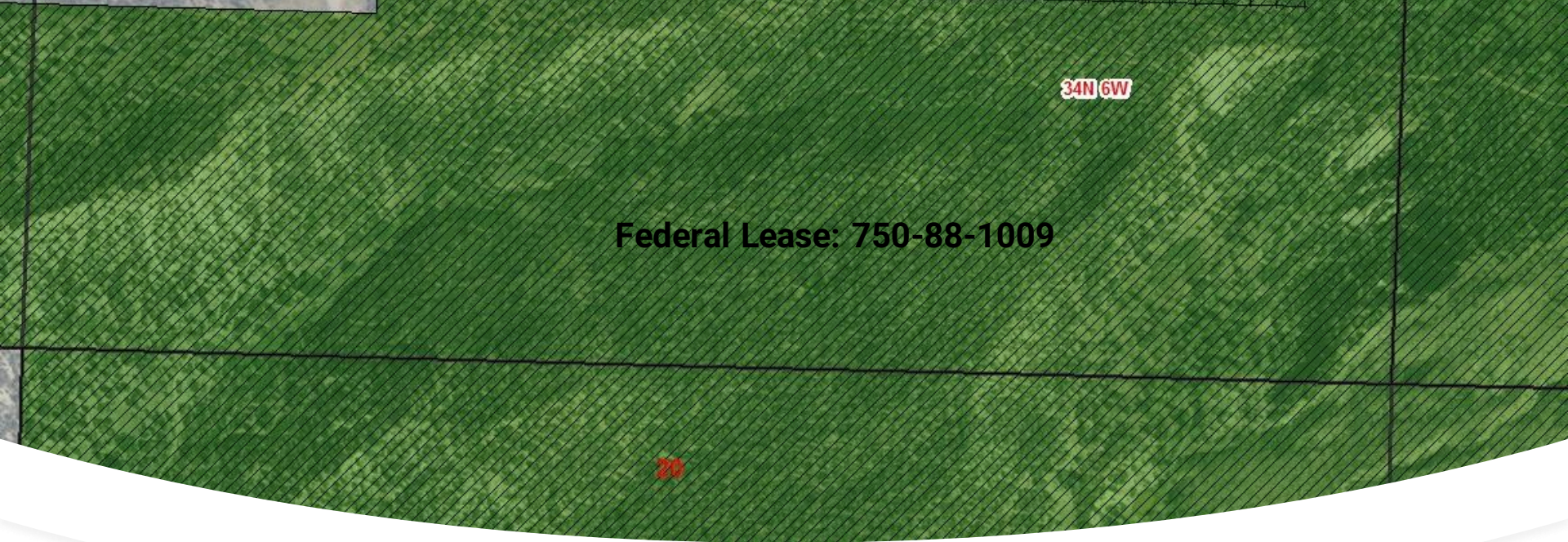
BHL

34N 6W

An inspector was planning to perform an ES-SP inspection for the Federal 34-6-17 #4. While looking in AFMSS for action research, the inspector found that the Federal 34-6-17 #4 had a Federal lease number and the surface owner was private. Is it Split-Estate or Fee/Fee/Fed? The inspector opened ArcMap to find out.

ArcMap Image

Federal 34-6-17 #4



In ArcMap, the inspector turned on the Federal Oil and Gas Lease layer. The inspector discovered that the well is not situated on a Federal oil and gas lease. The inspector concluded that this was Fee/Fee/Fed well and canceled the ES-SP inspection.



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Topic 2: Action Research Process Steps - ES

Step 7: Make Copies/Take Notes

- **If necessary - make hard or digital copies of information that may be useful in the field pertaining to environmental inspections.**
- **Take notes or make copies of important aspects of the APD/COAs, Lease Stipulations, Sundry Notices, etc.**
- **Remember to keep official documents organized in the well file (chronological order).**
- **Leave the official well file documents in the office!**
- **Only take what you need.**



Topic 2: Action Research Process Steps - ES

Those were the seven steps to Action Research.

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CONCLUSION

Conducting Action Research



LESSON OBJECTIVE

Each student should be able to...

- **Given a well file, review all applicable documents and information (i.e., permit, lease stipulations, conditions of approval, maps, etc.) and identify items of importance or issues relevant to the inspection being conducted.**



LESSON SUMMARY

- **Action Research General Knowledge**
- **Process for Conducting Action Research:**
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A photograph of a logging site. A large, dark, weathered log is being hoisted by a crane. The log is suspended by cables and is being moved across the site. In the background, there are green trees and a clear blue sky. The scene is set in a wooded area with various pieces of logging equipment visible.

End