Assessment Guide

Domain	Forestry	> Fore	est Foundation Skills		
Unit	23001	v5	Demonstrate knowledge of log extraction methods and breaking out, and attach logs under supervision	Level 2	Credits 10

Entry information

There are no pre-requisite requirements for this unit.

Candidate to complete				
Name	Company			
NSI No. Email / phone				
Pre-assessment confirmation				
I, the candidate,				
\Box Understand the assessment process and assessment requirements for this unit.				
\Box Understand the appeals and resubmission processes.				
\Box Believe I have the skills and knowledge to successfully complete the assessment.				
Assessor to complete				

Name	Company
Email / phone	
Pre-assessment confirmation	
□ I, the assessor , can confirm the candidate I	has achieved any pre-requisite requirements.

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Assessment instructions

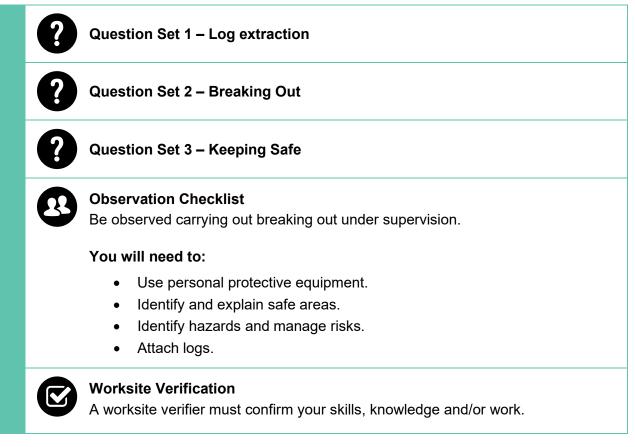
You will need to be able to show you can:

- Demonstrate knowledge of log extraction methods.
- Demonstrate knowledge of breaking out.
- Identify and manage hazards while breaking out under supervision.
- Demonstrate knowledge of communications systems used in breaking out.
- Attach logs under supervision.

Important information

- Carefully read through the rest of this Assessment so you know exactly what is expected.
- All evidence you provide for this assessment must be your own work.
- Clearly name and label all attached evidence.

What you need to do



You can also attach additional evidence which shows you have the required skills and knowledge, e.g. photos, worksite documents, checklists, work samples, videos.





These questions are about log extraction methods.

Use your own words. Your assessor may ask you more questions to check your understanding.

1. Describe the **three** main log extraction methods.

Log extraction method	Description
Ground based	
Cable	
Aerial	

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2. Name and describe **four** extraction machines used for ground based and cable extraction operations.

Include in your answer at least **one** ground based and **one** cable machine.

Description

3. What terrain is best suited for ground based extraction?





4.	What terrain	is	best	suited	for	cable	extraction?
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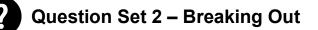
5.	What environmental	conditions are be	est suited for aro	ound based extraction?	
	what on whom on the		ool ountou ioi gio		

6.	What environmental	conditions are	best suited for	cable extraction?
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Assessor – record key points from candidate's verb	al answers as accurately a	nd fully as possible.
These answers were written by:	Candidate	□ Assessor



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These questions are about terminology, rules and situations relating to breaking out.

Use your own words. Your assessor may ask you more questions to check your understanding.

1. Below is a list of terms and definitions.

Match **eight** terms with the correct definition by writing the number of the term to the right of the definition.

Terms – General extraction					
1. Drag	2. Piece size	3. Payload			
4. Head pull	5. Extraction cycle	6. Pre—stropping			
7. Felling pattern	8. Butt pull				
Terms – Cable extraction					
9. Main rope	10. Tail rope	11. Skyline			
12. Block	13. Carriage	14. Bight			
Terms – Ground based ext	raction				
15. Winch rope	16. Bunching	17. Chain stop			
18. Arch	19. Extraction track				

Definition	Term
The total time taken to hook on, extract, and unhook one drag and return to the breaking out site.	
A load-carrying device that runs freely along a wire rope for extraction of logs.	
A group of stems or trees attached to a machine for extraction.	
Where the strops are connected to the stems for the next drag while the previous drag is being extracted.	
A towed two wheeled structure of "A" frame construction used to lift the butt end of stems off the ground during extraction.	

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The size of a tree that has been felled.	
A wire rope used to return the main rope and butt rigging to the break- out site.	
The general direction trees are felled in to make breaking out and extraction easier.	
A rope fitted to a winch on a skidder or tractor.	
The angle between two parts of a loaded rope running round a block (a dangerous position to stand or work).	
The positioning of stems to make breaking out more efficient.	
Attaching the strop or chain to the head (small end) of a stem for extraction.	
A metal case surrounding a pulley, used to change the direction of a rope or increase pulling power.	
Part of a network of tracks used by the extraction machine when dragging stems from the felling site to the processing area.	
A short length of chain fitted with a hook, which forms a noose around stems to be extracted.	
The wire rope used to pull the butt rigging into the landing.	
Attaching the strop or chain to the butt (large end) of a stem for extraction.	
A wire rope suspended between the hauler and a tailhold, which provides lift to a drag of logs, and upon which the carriage travels.	
The weight of the drag.	

2. What does clean-up mean?



3. For each log characteristic, describe the clean-up requirements for breaking out.

Log characteristic	Description
Length	
Diameter	
Merchantable wood	

4. Describe **three** factors that can affect the payload of a machine.



5. For each factor, explain what should be taken into consideration when selecting the draft.

Factor	Explanation
Position of stems	
Location of stems	
Size of stems	

6. Describe **one** of the strop types/components listed.

Strop type / component	Description
Chain and hook	
Wire rope	
Choker	
Ferrule	

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7. Explain the rule relating to strop placement on a stem for each of the listed methods.

Method	Rule
Ground based extraction	
Cable harvesting extraction, butt pull	
Cable harvesting extraction, head pull	

8. Give three reasons why strop placement is important.



9. For each stropping method:

- Explain how it is done.
- Give **one** method of when this stropping method should be used.

You may draw pictures to support your answer.

Double wrap
How it is done
When it is used
Figure eight
How it is done
When it is used
Bridal stop
How it is done
When it is used
Strop and half hitch
How it is done
When it is used

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This material has been moderated in the current format. Any changes must be resubmitted for moderation.

10. Describe **two** situations where a log may need to be re-stropped.

11. Describe **two** situations where it would be necessary to unhook a log.



12. Explain two methods for unhooking	logs safely.
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Assessor – record key points from candidate's verbal answers as accurately and fully as possible.		
These answers were written by:	Candidate	□ Assessor





These questions are about safe areas, and identifying hazards and controlling associated risks. Use your own words. Your assessor may ask you more questions to check your understanding.

1. Name **two** safe areas in your breaking out site and explain why they are safe.

Safe area	
Why it is safe	
Safe area	
Why it is safe	

2. For **eight** of the breaking out hazards listed, give **one** example of the associated risk, and explain how you would control it.

Hazard	Risk	How I control it
Steep terrain		
Moving ropes		
Moving logs		

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Dehydration	
Poor communication	
Other operations – tree felling	
Working around machines	
Unstable logs	
Bight of the rope	
Wire rope handling	
Heavy lifting	

3. Why is it important for hazard identification and risk management to be an ongoing process in a cable harvesting operation?



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4. Explain how the following **three** factors can increase risks or create new risks when breaking-out.

Give **two** examples for each.

Factor	Examples
Change in weather conditions	
Change in terrain	
Increased hindrance	



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5. Describe why each communication system listed below is used in breaking out.

Talkie Tooter	
RT	

Assessor – record key points from candidate's verbal answers as accurately and fully as possible.			
These answers were written by:	Candidate	□ Assessor	



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You must be observed carrying out breaking out under supervision.

You will need to:

You will need to:

- Complete Part A of the checklist. Your assessor will complete the rest.
- Use personal protective equipment.
- Identify and explain safe areas.
- Identify hazards and manage risks.
- Attach logs.
- You are encouraged to attach any other evidence that shows you can do the above tasks, such as photos or relevant worksite documents you prepared or completed.

You may be asked additional questions to check your knowledge and may need to demonstrate skills and/or carry out tasks more than once.

Note to the assessor

- Only tick off each task when satisfied the candidate can do it safely and consistently.
- All tasks must be carried out following accepted industry practice and worksite procedures.
- Where prompted, please record details of what you observed, e.g. comments about the candidate's performance, what the candidate did or said, and specific questions and responses.
- Attach any other evidence that shows what you observed and/or that supports your decision for the candidate's competency in the tasks, e.g. photos or relevant worksite documents.
- Relevant worksite documents will depend on the unit but examples could include tailgate meeting notes, daily work plans, hazard or risk registers, risk assessments, production records, quality control records, maintenance records, job prescription / maps, training notes / records.
- Check the candidate has completed Part A and has attached any required evidence.
- Copies or photos of documents are acceptable as evidence.



Part A: Candidate to complete					
Your	name				
Worksite / company					
Part E	Part B: Assessor to complete				
For each statement below, tick if you agree.					
10166	ach statement beit	ow, tick if you agre	ee.		
	breaking out un				
	breaking out un	der supervision,			
When	breaking out un Wears and uses	der supervision,	, the candidate:		
When	breaking out un Wears and uses include:	der supervision,	, the candidate: sonal protective equipment (PPE). Must		

4.	Identifies safe areas in a breaking out site in accordance with the breaking out
	plan.

Selects and uses additional equipment required in the operation. May include:

Record safe areas identified.

□ Talkie Tooter.

 \Box RT.

Ensures PPE is properly maintained.



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3.

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Flease	e record control met	thods the candidate used:	
		Control methods	
	errain.		-
🗆 U	nstable logs.		-
□ M	oving ropes.		-
□ M	oving logs.		-
	eavy lifting.		-
□ 0	ther operations.		-
	ope failure.		-
B	ock failure.		-
	tump failure.		-
🗆 Bi	ght of rope.		-
	oor ommunication.		-
	ehydration.		-
		1	
Mainta operat		between worksite personnel and the cable yarder	
-	the communicatio	n method(s) used:	
🗆 Ta	alkie Tooter.		
🗆 R	adio transmitter (R ⁻	Γ).	

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7.	Uses clear and agreed hand s extraction. Must include:	ignals during ground base	d and/or cable
	Cable Extraction		
	□ Ahead on main rope.	Slacken rop	pes.
	□ Stop all ropes.	One log still	l attached.
	□ Emergency stop.	Ahead on tag	ailrope.
	Ground based		
	\Box Stop (without ropes).	Position ma	ichine.
8.	Hooks strop correctly.		
9.	Uses stropping methods(s) wh	lich:	
	Avoids accident unhookin	g.	
	\Box Minimise stem breakage.		
	Minimise rigging damage.		
Throu	ighout the observation, the ca	ndidato	
	-		
10.	Completes all the above tasks	in accordance with:	
	 Daily breaking-out plan. 		
	Worksite procedures.		
	Accepted industry practic	е.	
	e provide specific comments on vision.	the candidate's ability to a	ttach logs under
confi	rm that:		
• Ih	ave observed the candidate car	ry out all the above tasks t	
the	e standard required.		□ No
Asses name	ssor Sig	Inature	Date

This material has been moderated in the current format. Any changes must be resubmitted for moderation.



Note to the worksite verifier

- The assessor takes this form into account when making their decision about the candidate's competency. It helps provide further evidence of the candidate's skills and knowledge beyond what the assessor can directly observe or where worksite requirements may vary.
- This form must be completed by someone who:
 - Has been approved by the assessor
 - o Has expertise in the assessed tasks (see Observation Checklist or Task Sheet for details)
 - Regularly supervises or manages the candidate in their worksite or operation.
- In-house assessors are not required to complete this form but may ask another suitable verifier to complete it if further evidence of competency is required.

Worksite verifier to complete					
I confi	rm that		:		\checkmark
1.	Has demonstrated knowledge of log extraction methods and breaking out, and attaching logs under supervision, including:				
	🗆 Identi	fying and managing hazards	while breaking out ι	under supervision.	
	Demo out.	onstrating knowledge of comn	nunications systems	s used in breaking	
	□ Attaching logs under supervision.				
2. Can consistently and safely do the above to the standard of this operation.					
3. Met worksite and operational requirements.					
4. Completed any attached documentation to worksite / operational requirements.					
Please comment on the candidate's ability to do the above tasks.					
Verifi	er name		Signature		
and ti	tle				
Phone	Phone / email Date				



Assessment result

Post-assessment feedback

Assessor judgement

I, the **assessor**, have reviewed the candidate's evidence for Unit Standard 23001 v5 and judge that it is sufficient and authentic.

I confirm the candidate can competently:

- Demonstrate knowledge of log extraction methods.
- Demonstrate knowledge of breaking out.
- □ Identify and manage hazards while breaking out under supervision.
- Demonstrate knowledge of communications systems used in breaking out.
- □ Attach logs under supervision.

Assessment result			
\Box I, the assessor , confirm the candidate has a	Stamp		
Signature Date			

Candidate response		
I, the candidate :	□ Agree with the assessment result.	□ Wish to appeal.
Signature		Date

