

Model Answers

Domain Forestry > Forest 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.

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



Question Set 1 – Log extraction



Question Set 2 – Breaking Out



Question Set 3 – Keeping Safe



Observation Checklist

Be observed carrying out breaking out under supervision.

You will need to:

- Use personal protective equipment.
- Identify and explain safe areas.
- Identify hazards and manage risks.
- Attach logs.



Worksite Verification

A worksite verifier must confirm your skills, knowledge and/or work.

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

Unit standard information

Explanatory notes

- All knowledge and competencies must be in accordance with accepted industry practice.

Definitions

- *Accepted industry practice* – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.
- *Forestry operations* include forest establishment, silviculture, harvesting, forest inventory, and forest and crew management.
- *PPE* – personal protective equipment as required for the task in accordance with accepted industry practice and worksite procedures. This may include but is not limited to high-viz, protective clothing, gloves, face and eye protection, safety helmet, approved footwear, chaps, hearing protection, and safety devices.
- *RT* refers to a radio telephone used for communication with other workers.
- *Talkie Tooter* refers to a remote control radio designed for use in logging.
- *Worksite procedures* refer to documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

References

- New Zealand Forest Owners Association, *Forest Practice Guides* (2019), and any subsequent amendments, available from <http://www.nzfoa.org.nz>.
- *Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations*, December 2012, available from <http://www.worksafe.govt.nz>.

Legislation

The following legislation (law) applies to this unit standard:

- Health and Safety at Work (HSW) Act 2015.
- Resource Management Act 1991.
- Resource Management (National Environmental Standards for Plantation Forestry) Amendment Regulations 2018.
- Heritage New Zealand Pouhere Taonga Act 2014, and any subsequent amendments.

Unit standard evidence map

Unit 23001 v5		Demonstrate knowledge of log extraction methods and breaking out, and attach logs under supervision	Level 2	Credits 10
Outcomes and Performance Criteria		Evidence	No.	
Outcome 1: Demonstrate knowledge of log extraction methods.				
		Worksite verification	1, 2, 3, 4	
1.1	The three main log extraction methods are described. Range: ground based, cable, aerial.	Question Set 1	1	
1.2	Extraction machines associated with ground based extraction and cable extraction are identified. Range: evidence of at least four machines is required.	Question Set 1	2	
1.3	The conditions to which each extraction method is suited are described. Range: terrain, ground conditions, environmental conditions.	Question Set 1	3, 4, 5, 6	
Outcome 2: Demonstrate knowledge of breaking out.				
2.1	Basic breaking out terminology is defined. Range: may include but is not limited to – drag, main rope, tail rope, skyline, piece size, blocks, payload, butt rigging, carriage, winch rope, bight, binding, strop, extraction cycle, pre-stropping, double-stropping, choker setting, ferrule; evidence of eight terms is required.	Question Set 2	1	
2.2	The term <i>clean-up</i> is defined and clean-up requirements for breaking out are described in accordance with accepted industry practice and worksite procedures. Range: log characteristics (length, diameter, green wood).	Question Set 2	2,3	
2.3	Factors that influence the payload of a machine are described.	Question Set 2	4	

2.4	Factors that should be taken into consideration when selecting the drag are explained.	Question Set 2	5
2.5	Strop types and strop components are described. Range : one of – chain and hook or wire rope, choker, and ferrule.	Question Set 2	6
2.6	Rules relating to strop placement on a stem are explained.	Question Set 2	7
2.7	Different stopping methods and the situations where each would be used are explained. Range: double wrap, figure eight, bridal strop, strop and half hitch.	Question Set 2	9
2.8	Two situations where a log may need to be re-stropped are described.	Question Set 2	10
2.9	Situations where it would be necessary to unhook a log are described.	Question Set 2	11
2.10	Methods for safe unhooking of the log are explained.	Question Set 2	12

Outcome 3: Identify and manage hazards while breaking out under supervision.


		Worksite verification	1, 2, 3, 4
3.1	Personal protective equipment and equipment required for breaking out is selected and used. Range: personal protective equipment includes but is not limited to – helmet, gloves, high visibility gear, safety boots, hydration pack or water bottle; equipment may include – Talkie Tooter, RT.	Observation Checklist	Part B: 1, 2, 3, 10
3.2	Safe areas in a breaking out site are identified from the breaking out plan and, for each area, a reason why they are safe is explained.	Question Set 3 Observation Checklist	1 Part B: 4, 10
3.3	Breaking out hazards are identified, and a method of control for each hazard is explained in accordance with accepted industry practice and worksite procedures. Range: hazards may include but are not limited to – unstable logs, moving ropes, moving logs, terrain, ground conditions, wire rope handling,	Question Set 3 Observation Checklist	2 Part B: 5, 10

	heavy lifting, rope failure, block failure, stump failure, bight of rope, machines, production pressure, debris, stumps, rocks, falling hazards, limited visibility, other operations, ropes binding, poor communication, dehydration; evidence of eight hazards is required.		
3.4	The need for on-going hazard identification and assessment is explained.	Question Set 3	3
3.5	Factors that affect hazard assessment and may introduce new hazards to the operation are explained. Range: may include – weather, terrain.	Question Set 3	4
Outcome 4: Demonstrate knowledge of communications systems used in breaking out.			
		Worksite verification	1, 2, 3, 4
4.1	Clear and agreed hand signals for ground based and/or cable extraction are used in accordance with worksite procedures. Range: cable – ahead on main rope, stop all ropes, emergency stop, slacken ropes, one log still attached, ahead on tailrope; ground based – stop (without ropes), position machine.	Observation Checklist	Part B: 7, 10
4.2	Industry recognised audible signals used in breaking out are described. Range: Methods of communication – Talkie Tooter, radio; evidence of audible signals using one method is required.	Question Set 3 Observation Checklist	5 Part B: 6, 10
Outcome 5: Attach logs under supervision.			
		Worksite verification	1, 2, 3, 4
5.1	Strop is attached under supervision and in accordance with accepted industry practice.	Question Set 2 Observation Checklist	8 Part B: 8, 9, 10

Question Set 1 – Log Extraction

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. 

Assessor


This question supports PC 1.1.

Judgement statement

- The candidate correctly describes the **three** main log extraction methods.

Example answers

Log extraction method	Description
Ground based	Using a tracked or wheeled machine to drag (extract) the logs from the felling face to the processing point.
Cable	Using a yarding machine and elevated ropes to extract the logs from the felling face to the processing point.
Aerial	Using a helicopter to extract the logs from the felling face to the processing point.

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.

Assessor

This question supports PC 1.2.

Judgement statements

- The candidate correctly identifies and describes **four** extraction machines.
- The candidate identifies at least **one** ground based and **one** cable machine.

Example answers

Machine	Description
Wheeled skidder	A rubber tired, four or six wheel drive machine with pivot steering, small blade and a winch/grapple.
Tracked skidder	Machine with steel tracks, skid steering, blade, and a winch/grapple.
Fixed tower hauler	A machine that has the tower fixed in place using guy ropes.
Swing yarder	A machine that has a boom to achieve elevated rope lift and a separate guy tower. The machine can swing on its base.

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

Assessor

This question supports PC 1.3.

Judgement statement

- The candidate correctly describes what terrain is best suited for ground based extraction.

Example answer

Flat / rolling terrain.

Meets manufacturer's specifications.

Downhill extraction is best.

Short haul distances.

4. What terrain is best suited for cable extraction? 

Assessor

This question supports PC 1.3.

Judgement statement

- The candidate correctly describes what terrain is best suited for cable extraction.

Example answer

Steep or broken terrain.

Environmentally sensitive areas.

Short to long haul distances.

5. What environmental conditions are best suited for ground based extraction?

Assessor

This question supports PC 1.3.

Judgement statement

- The candidate correctly describes what environmental conditions are best suited for ground based extraction.

Example answer

Rubber tyre machines:

- Firm, well drained soils.
- Even slopes.
- Downhill extraction.

Tracked machines:

- Firm, well drained soils.

Piece size – 1.0 – 2.0 tonne.

Downhill extraction.

6. What environmental conditions are best suited for cable extraction?

Assessor

This question supports PC 1.3.

Judgement statement

- The candidate correctly describes what environmental conditions are best suited for cable extraction.

Example answer

All soil types.

Piece size – 1.0 – 2.0 tonne.

Elevated backlines.

Even slopes.

Assessor – record key points from candidate’s verbal answers as accurately and fully as possible.

These answers were written by:

Candidate

Assessor



Question Set 2 – Breaking Out

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.

Assessor

This question supports PC 2.1.

Judgement statement

- The candidate correctly matches **eight** terms with the correct definition.

Example answers

Terms – General extraction		
1. Drag	2. Piece size	3. Payload
4. Head pull	5. Extraction cycle	6. Pre—stopping
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 extraction		
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.	5

A load-carrying device that runs freely along a wire rope for extraction of logs.	13
A group of stems or trees attached to a machine for extraction.	1
Where the strops are connected to the stems for the next drag while the previous drag is being extracted.	6
A towed two wheeled structure of "A" frame construction used to lift the butt end of stems off the ground during extraction.	18
The size of a tree that has been felled.	2
A wire rope used to return the main rope and butt rigging to the break-out site.	10
The general direction trees are felled in to make breaking out and extraction easier.	7
A rope fitted to a winch on a skidder or tractor.	15
The angle between two parts of a loaded rope running round a block (a dangerous position to stand or work).	14
The positioning of stems to make breaking out more efficient.	16
Attaching the strop or chain to the head (small end) of a stem for extraction.	4
A metal case surrounding a pulley, used to change the direction of a rope or increase pulling power.	12
Part of a network of tracks used by the extraction machine when dragging stems from the felling site to the processing area.	19
A short length of chain fitted with a hook, which forms a noose around stems to be extracted.	17
The wire rope used to pull the butt rigging into the landing.	9
Attaching the strop or chain to the butt (large end) of a stem for extraction.	8
A wire rope suspended between the hauler and a tailhold, which provides lift to a drag of logs, and upon which the carriage travels.	11
The weight of the drag.	3

2. What does clean-up mean?



Assessor

This question supports PC 2.2.

Judgement statement

The candidate correctly defines the term clean-up.

Example answer

The level to which the cutover must be cleared of merchantable wood. Usually measured by assessing the amount of waste left on the cutover.

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



Assessor

This question supports PC 2.2.


Judgement statements

The candidate correctly describes the clean-up requirements for breaking out for each log characteristic.

Answers are in accordance with accepted industry practice and the candidate's worksite procedures.

Example answers

Log characteristic	Description
Length	Minimum length that needs to be extracted.
Diameter	Minimum diameter that needs to be extracted (e.g. 10cm).
Merchantable wood	All green material that meets the minimum length and diameter requirements must be extracted.

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

Assessor

This question supports PC 2.3.

Judgement statement


- The candidate correctly describes three factors that can affect the payload of a machine.

Example answers

Horse power of the machine.

Piece size of the trees.

Number of strops.

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

Assessor


This question supports PC 2.4.

Judgement statement

- The candidate correctly explains what should be taken into consideration when selecting the draft for each factor.

Example answers

Factor	Explanation
Position of stems	Choose top stems first.
Location of stems	Stems should be aligned with the general extraction direction.
Size of stems	Balance out payload e.g. 1 large stem and 1 small stem; or 2 medium stems.

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

Assessor

This question supports PC 2.5.

Judgement statement

- The candidate correctly explains what should be taken into consideration when selecting the draft for each factor.

Example answers

Strop type / component	Description
Chain and hook	A length of chain with a hook on the end. The hook is hooked onto the chain to secure the log.
Wire rope	A length of wire rope with a ferrule on the end. This is passed through a choker hook to secure the log.
Choker	A choker is a hook that the ferrule is slotted into. It creates a noose around the log.
Ferrule	A metal fitting or knob on the end of a wire rope that fits into a choker to secure the wire rope.

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

Assessor

This question supports PC 2.6.

Judgement statement

- The candidate correctly explains the rule relating to strop placement on a stem for each of the listed methods.

Example answer

Method	Rule
Ground based extraction	12.1.4 ACOP - Strops shall be attached within 1.5 metres (if practicable) from the butt end of a stem or log.
Cable harvesting extraction, butt pull	12.2.14 ACOP – Where practicable, butt pulled stems shall have their strops attached within three metres of the butt end of the stem.
Cable harvesting extraction, head pull	12.2.15 ACOP – Where practicable, head pulled stems shall have their strops attached within five metres from the head end of the stem.

8. Give **three** reasons why strop placement is important.



Assessor

This question supports PC 5.1.

Judgement statement

- The candidate correctly explains the importance of correct strop placement.

Example answers

Minimise accidental unhooking.

Prevent stem and rigging damage.

Increased control of the drag.

Reduces environmental impact.

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.

Assessor

This question supports PC 2.7.

Judgement statements

- The candidate correctly explains how each stropping method is done.
- The candidate provides one method of when each stropping method should be used.

Example answers

Double wrap

How it is done

Pass the strap around the log twice before hooking.

When it is used

Smaller stems.

Head pulling.

Figure eight

How it is done

Two stems are hooked on using one strop with cross-over between stems.

When it is used

Smaller trees.

Shorter-length stems.

Head-pulling.

Bridal stop

How it is done

Two strops are used to hook on a stem that one strop does not reach around.

When it is used

Where a stem is too large for one strop to reach around the butt when securing the strop.

Strop and half hitch

How it is done

Take the chain under the stem, near the head, and put a half hitch in it on top of the stem. The section of chain that goes under itself will go towards the rigging.

Take the other end of the chain further down the stem. Draw it under the stem and back up to hook on itself.

When it is used

Downhill head-pulling.

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

Assessor

This question supports PC 2.8.


Judgement statement

- The candidate correctly describes **two** situations where a log may need to be re-stropped.

Example answers

Where the log has been long stropped. Once the log is broken free of obstacles, it should be re-stropped.

Where a log has slipped from the strop during extraction.

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

Assessor

This question supports PC 2.9.


Judgement statement

- The candidate correctly describes **two** situations where it would be necessary to unhook a log.

Example answers

May include:

If the log becomes jammed on an obstacle during in haul, when the log has reached the landing, when the stem is long stropped and needs strops or chains re-positioned, where payload of the machine has been exceeded.

12. Explain **two** methods for unhooking logs safely. 

Assessor

This question supports PC 2.10.

Judgement statement

- The candidate correctly explains two methods for unhooking logs safely.

Example answers

Unhook bottom logs first (poleman).

Logs must be stable and all tension in the strop has been released.

Assessor – record key points from candidate's verbal answers as accurately and fully as possible.

These answers were written by:


Candidate

Assessor



Question Set 3 – Keeping Safe

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. 

Assessor


This question supports PC 3.2.

Judgement statements

- The candidate correctly identifies **two** safe areas in their breaking out site.
- The candidate correctly explains why each area identified is safe.
- Answers are in accordance with accepted industry practice and the worksite procedures.

Example answers

Safe area	Out and behind the direction of pull.
Why it is safe As inhaul begins logs will tend to move downhill and towards direction of inhaul (away from breaker outs).	
Safe area	Outside of the extraction corridor
Why it is safe The ropes will tend to move towards each other moving the stems towards the centre of the extraction corridor.	

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

Assessor


This question supports PC 3.3

Judgement statements

- The candidate correctly gives at least **one** associated risk for each hazard and correctly explains how they would control it.
- Answer is in accordance with accepted industry practice and worksite procedures.

Example answers

Hazard	Risk	How I control it
Steep terrain	You may slide or fall down the hill/slope.	Move carefully across the cut over to avoid losing your footing.
Moving ropes	You may be hit by the rope.	Move to a safe retreat position before signalling for any rope movement and never climb over a moving rope.
Moving logs	You may be hit by the log.	Move into the safe area before signalling in haul.
Dehydration	You may lose concentration.	Take regular drink breaks during the day.
Poor communication	Operator may move machine before you are clear.	Establish communication methods with machine operator before you start breaking out.
Other operations – tree felling	You may be hit by a falling tree.	Be aware of where other operations are occurring / stay at least 2 tree lengths away from felling operations.
Working around machines	You may be hit by the machine.	Do not stand downhill from the extraction machine.
Unstable logs	You may fall off a log if it moves.	Do not walk on logs during breaking out.
Bight of the rope	Workers standing in the bight may be hit by moving ropes as the ropes come under tension.	Never stand in the bight of a working rope.
Wire rope handling	Manual handling of wire rope may cause cuts and abrasions from sprags, or may cause strains/falls when pulling out the winch rope.	Wear gloves and watch for and remove any sprags.
Heavy lifting	Lifting heaving items incorrectly can strain your back.	Use safe lifting techniques and have help with difficult or heavy lifts. Do not carry heavy equipment over obstacles or unstable ground.

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

Assessor


This question supports PC 3.4.

Judgement statement

- It is clear the candidate understands the reason for on-going risk management in a cable harvesting operation.

Example answer

The degree and type of risk can change, and new risks can arise at any time, especially as conditions and terrain change.

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

Give **two** examples for each.

Assessor

This question supports PC 3.5.

Judgement statements

- It is clear the candidate understands the factors that alter risks or introduce new risks in breaking-out.
- Two** examples for each are given.

Example answers

Factor	Examples
Change in weather conditions	<ul style="list-style-type: none"> • Rain and fog can affect visibility and ground stability. • Increase in temperature can affect the health of the breaker out – higher risk of dehydration, hypothermia, sunburn, or fatigue.
Change in terrain	<ul style="list-style-type: none"> • Steep terrain can increase the risk of slips or falls. • Steep slopes can affect machine stability. • Rocks can cause obstructions or dislodge on steep slopes.
Increased hindrance	<ul style="list-style-type: none"> • Ground vegetation can be unstable underfoot and can increase the risk of slips/falls. • It can block access to drags and to safe retreat areas. • Increased fire risk.

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

Assessor

This question supports PC 4.2.

Judgement statement

- The candidate correctly describes why each communication system is used in breaking out.

Example answers

Talkie Tooter

Combinations of short and/or long toots are used to communicate rope movements between the operator and the breaker out. Landing workers can also listen to the signals so they know what is happening.

RT

A two-way radio transmitter is used to communicate between the machine operator and the breaker out.

Assessor – record key points from candidate’s verbal answers as accurately and fully as possible.

These answers were written by:

Candidate

Assessor



Observation Checklist 1

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.

Assessor

This Observation Checklist supports PC 3.1, 3.2, 3.3 and Outcomes 4 and 5.

Judgement statement

- The completed Observation Checklist and attached evidence support the candidate's ability to:
- Use the correct PPE and equipment.
 - Identify safe areas.
 - Identify hazards and manage risks.
 - Establish effective communication while breaking out under supervision.
 - Attach logs under supervision.

Part A: Candidate to complete

Your name	Name recorded.
Worksite / company	Worksite / company recorded.

Part B: Assessor to complete

For each statement below, tick if you agree.

When breaking out under supervision, the candidate:

1. Wears and uses appropriate personal protective equipment (PPE). Must include:
- | | |
|---|---|
| <input checked="" type="checkbox"/> Helmet. | <input checked="" type="checkbox"/> Gloves. |
| <input checked="" type="checkbox"/> High visibility clothing. | <input checked="" type="checkbox"/> Safety boots. |
| <input checked="" type="checkbox"/> Hydration pack or water bottle. | |

Assessor – Each box must be ticked.

2. Ensures PPE is properly maintained.

3. Selects and uses additional equipment required in the operation. May include:
- | |
|---|
| <input type="checkbox"/> Talkie Tooter. |
| <input type="checkbox"/> RT. |

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

Assessor – Recorded information supports the candidate's ability to identify safe areas in a breaking out site.

5. Assesses and effectively controls the risks associated with **eight** of the following breaking-out hazards.
Please record control methods the candidate used:

	Control methods
<input type="checkbox"/> Terrain.	
<input type="checkbox"/> Unstable logs.	

Moving ropes.

Moving logs.

Heavy lifting.

Other operations.

Rope failure.

Block failure.

Stump failure.

Bight of rope.

Poor communication.

Dehydration.

Assessor - Recorded information supports the candidate's ability to assess and control risks relevant to the current operation.

6. Maintains communication between worksite personnel and the cable yarder operator.

Record the communication method(s) used:

- Talkie Tooter.
 Radio transmitter (RT).

Assessor - At least **one** method must be ticked and/or recorded.

7. Uses clear and agreed hand signals during ground based and/or cable extraction. Must include:

Cable Extraction

- | | |
|---|---|
| <input checked="" type="checkbox"/> Ahead on main rope. | <input checked="" type="checkbox"/> Slacken ropes. |
| <input checked="" type="checkbox"/> Stop all ropes. | <input checked="" type="checkbox"/> One log still attached. |
| <input checked="" type="checkbox"/> Emergency stop. | <input checked="" type="checkbox"/> Ahead on tailrope. |

Ground based

- | | |
|---|---|
| <input checked="" type="checkbox"/> Stop (without ropes). | <input checked="" type="checkbox"/> Position machine. |
|---|---|

Assessor - Recorded information supports the candidate's ability to use clear and agreed hand signals for ground based and/or cable extraction.

8. Hooks stop correctly.

9. Uses stopping methods(s) which:

Avoids accident unhooking.

Minimise stem breakage.

Minimise rigging damage.

Assessor - Each box must be ticked.

Throughout the observation, the candidate:

10. Completes all the above tasks in accordance with:

Daily breaking-out plan.

Worksite procedures.

Accepted industry practice.

Please provide specific comments on the candidate's ability to attach logs under supervision.

Any comments support the candidate's competency.

I confirm that:

- I have observed the candidate carry out all the above tasks to the standard required.

Yes

No

Assessor name

Assessor identified

Signature

Signed by assessor

Date

Date recorded



Worksite Verification

Assessor

This Worksite Verification supports PC 3.1, 3.2, 3.3 and Outcomes 4 and 5.

Judgement statements

- The form has been completed by someone who meets the criteria below.
- The completed form provides evidence of the candidate's ability to perform the required tasks / skills to worksite or operational standards.

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
 - 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 confirm that :

- | | | |
|----|--|-------------------------------------|
| 1. | Has demonstrated knowledge of log extraction methods and breaking out, and attaching logs under supervision, including: | <input checked="" type="checkbox"/> |
| | <input checked="" type="checkbox"/> Identifying and managing hazards while breaking out under supervision.
<input checked="" type="checkbox"/> Demonstrating knowledge of communications systems used in breaking out.
<input checked="" type="checkbox"/> Attaching logs under supervision. | |
| 2. | Can consistently and safely do the above to the standard of this operation. | <input checked="" type="checkbox"/> |
| 3. | Met worksite and operational requirements. | <input checked="" type="checkbox"/> |
| 4. | Completed any attached documentation to worksite / operational requirements. | <input checked="" type="checkbox"/> |

Please comment on the candidate's ability to do the above tasks.

Verifier name and title		Signature	
Phone / email		Date	