DOUGLAS-FIR-HEMLOCK
SIZE CLASS 3
PARTIAL CUT

A SERIES OF 6 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.
**DATA SHEET**

**Residue descriptive code** 1-BF-3-FC

<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>OTHER MEASUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>1.3</td>
<td>85</td>
<td>Average residue depth (feet) 0.4</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>2.8</td>
<td>224</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 76</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>4.8</td>
<td>356</td>
<td>Average duff and litter depth (inches) 1.3</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>0</td>
<td>0</td>
<td>Sound residue 3.1-inch diameter and larger Douglas-fir (percent) 71</td>
</tr>
<tr>
<td>20.1+</td>
<td>0</td>
<td>0</td>
<td>Western redcedar (percent) 13</td>
</tr>
<tr>
<td>Total</td>
<td>8.9</td>
<td>565</td>
<td>Rotted residue 3.1-inch diameter and larger (percent) 16</td>
</tr>
</tbody>
</table>

**HARVEST INFORMATION**

- Gross volume cruised (M fbm/acre) 8.2
- Net volume cruised (M fbm/acre) 7.9
- Average stems/acre cut 41
- Average d.b.h. of stems cut (inches) 12
- Stand age (years) 60
- Cutting prescription: Tree selection
- Yarding method: Tractor
- Slash treatment: None
- Period since cut or treatment (months) 1

**PRECOMMERCIAL THINNING INFORMATION**

- Stems cut/acre
- Stems remaining/acre
- Basal area/acre before
- Basal area/acre after
- Average d.b.h. before (inches)
- Average d.b.h. after (inches)
- Thinning method
- Slash treatment

**FUEL RATING**

- U.S. Forest Service Region 5
- Fuel type identification: LM
- REMARKS
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>2.0</td>
<td>112</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>2.1</td>
<td>129</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>10.8</td>
<td>733</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20.1+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>14.9</td>
<td>974</td>
</tr>
</tbody>
</table>

**Average residue depth (feet):** 0.2

**Ground area covered by residue 1/4-inch diameter and larger (percent):** 68

**Average duff and litter depth (inches):** 1.3

**Sound residue 3.1-inch diameter and larger Douglas-fir (percent):** 96

**Rotted residue 3.1-inch diameter and larger (percent):** 4

**Harvest Information**

<table>
<thead>
<tr>
<th>Gross volume cruised (M ft³/acre)</th>
<th>3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net volume cruised (M ft³/acre)</td>
<td>2.8</td>
</tr>
<tr>
<td>Average stems/acre cut</td>
<td>35</td>
</tr>
<tr>
<td>Average d.b.h. of stems cut (inches)</td>
<td>12</td>
</tr>
<tr>
<td>Stand age (years)</td>
<td>50</td>
</tr>
<tr>
<td>Cutting prescription</td>
<td>Tree selection</td>
</tr>
<tr>
<td>Yarding method</td>
<td>Rubber-tired skidder</td>
</tr>
<tr>
<td>Slash treatment</td>
<td>None</td>
</tr>
<tr>
<td>Period since cut or treatment (months)</td>
<td>8</td>
</tr>
</tbody>
</table>

**Precommercial Thinning Information**

<table>
<thead>
<tr>
<th>Stems cut/acre</th>
<th>Stems remaining/acre</th>
<th>Basal area/acre before</th>
<th>Basal area/acre after</th>
<th>Average d.b.h. before (inches)</th>
<th>Average d.b.h. after (inches)</th>
<th>Thinning method</th>
<th>Slash treatment</th>
</tr>
</thead>
</table>
# DATA SHEET

Residue descriptive code 3-DF-3-PC

<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>OTHER MEASUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>1.7</td>
<td>116</td>
<td>Average residue depth (feet) 0.5</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>3.6</td>
<td>289</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 91</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>14.6</td>
<td>1,057</td>
<td>Average duff and litter depth (inches) 2.0</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>6.8</td>
<td>728</td>
<td>Sound residue 3.1-inch diameter and larger Douglas-fir (percent) 47</td>
</tr>
<tr>
<td>20.1+</td>
<td>0</td>
<td>0</td>
<td>Western redcedar (percent) 2</td>
</tr>
<tr>
<td>Total</td>
<td>26.7</td>
<td>2,190</td>
<td>Rotted residue 3.1-inch diameter and larger (percent) 51</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HARVEST INFORMATION</th>
<th>PRECOMMERCIAL THINNING INFORMATION</th>
<th>FUEL RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross volume cruised (M ft³/acre)</td>
<td>Stems cut/acre</td>
<td>U.S. Forest Service Region 6</td>
</tr>
<tr>
<td>Net volume cruised (M ft³/acre)</td>
<td>Stems remaining/acre</td>
<td>fuel type identification</td>
</tr>
<tr>
<td>Average stems/acre cut</td>
<td>Basal area/acre before</td>
<td>MB</td>
</tr>
<tr>
<td>Average d.b.h. of stems cut (inches)</td>
<td>Basal area/acre after</td>
<td>REMARKS</td>
</tr>
<tr>
<td>Stand age (years)</td>
<td>Average d.b.h. before (inches)</td>
<td></td>
</tr>
<tr>
<td>Cutting prescription</td>
<td>Trunk selection</td>
<td>Average d.b.h. after (inches)</td>
</tr>
<tr>
<td>Yarding method</td>
<td>Tractor</td>
<td>Thinning method</td>
</tr>
<tr>
<td>Slash treatment</td>
<td>None</td>
<td>Slash treatment</td>
</tr>
<tr>
<td>Period since cut or treatment (months)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

57
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>OTHER MEASUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>1.9</td>
<td>108</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 82%</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>8.0</td>
<td>495</td>
<td>Average duff and litter depth (inches) 0.2</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>21.1</td>
<td>1,546</td>
<td>Sound residue 3.1-inch diameter and larger, Douglas-fir (percent) 45%</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>31.9</td>
<td>2,860</td>
<td>Rotted residue 3.1-inch diameter and larger (percent) 55%</td>
</tr>
<tr>
<td>20.1+</td>
<td>2.6</td>
<td>281</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65.5</td>
<td>5,290</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HARVEST INFORMATION</th>
<th>PREGCOMERCIAL THINNING INFORMATION</th>
<th>FUEL RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross volume cruised (M fbm/acre) 66.1</td>
<td>Stems cut/acre</td>
<td>U.S. Forest Service Region 6 fuel type identification MH</td>
</tr>
<tr>
<td>Net volume cruised (M fbm/acre) 59.6</td>
<td>Stems remaining/acre</td>
<td></td>
</tr>
<tr>
<td>Average stems/acre cut 105</td>
<td>Basal area/acre before</td>
<td></td>
</tr>
<tr>
<td>Average d.b.h. of stems cut (inches) 22</td>
<td>Basal area/acre after</td>
<td></td>
</tr>
<tr>
<td>Stand age (years) 90</td>
<td>Average d.b.h. before (inches)</td>
<td></td>
</tr>
<tr>
<td>Cutting prescription Shelterwood</td>
<td>Average d.b.h. after (inches)</td>
<td></td>
</tr>
<tr>
<td>Yarding method High-head</td>
<td>Thinning method</td>
<td></td>
</tr>
<tr>
<td>Slash treatment Fall broadcast burn</td>
<td>Slash treatment</td>
<td>REMARKS</td>
</tr>
<tr>
<td>Period since cut or treatment (months) 22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size class (inches)</td>
<td>Weight (tons/acre)</td>
<td>Volume (ft³/acre)</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>0.25-1.0</td>
<td>4.5</td>
<td>260</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>18.6</td>
<td>1,146</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>16.3</td>
<td>1,201</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>10.6</td>
<td>858</td>
</tr>
<tr>
<td>20.1+</td>
<td>26.6</td>
<td>2,457</td>
</tr>
<tr>
<td>Total</td>
<td>76.6</td>
<td>5,962</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HARVEST INFORMATION</th>
<th>PRECOMMERCIAL THINNING INFORMATION</th>
<th>FUEL RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross volume cruised (M fbm/acre)</td>
<td>Stems cut/acre</td>
<td>U.S. Forest Service Region 6</td>
</tr>
<tr>
<td>Net volume cruised (M fbm/acre)</td>
<td>Stems remaining/acre</td>
<td>fuel type identification</td>
</tr>
<tr>
<td>Average stems/acre cut</td>
<td>Basal area/acre before</td>
<td>MH</td>
</tr>
<tr>
<td>Average d.b.h. of stems cut (inches)</td>
<td>Basal area/acre after</td>
<td>REMARKS</td>
</tr>
<tr>
<td>Stand age (years)</td>
<td>Average d.b.h. before (inches)</td>
<td></td>
</tr>
<tr>
<td>Cutting prescription Shelterwood</td>
<td>Average d.b.h. after (inches)</td>
<td></td>
</tr>
<tr>
<td>Yarding method High-lead</td>
<td>Thinning method</td>
<td></td>
</tr>
<tr>
<td>Slash treatment None</td>
<td>Slash treatment</td>
<td></td>
</tr>
<tr>
<td>Period since cut or treatment (months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size class (inches)</td>
<td>Weight (tons/acre)</td>
<td>Volume (ft³/acre)</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>0.25-1.0</td>
<td>1.8</td>
<td>122</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>2.6</td>
<td>205</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>14.4</td>
<td>1,106</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>4.5</td>
<td>364</td>
</tr>
<tr>
<td>20.1+</td>
<td>64.4</td>
<td>4,882</td>
</tr>
<tr>
<td>Total</td>
<td>87.7</td>
<td>6,669</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HARVEST INFORMATION</th>
<th>PRECOMMERCIAL THINNING INFORMATION</th>
<th>FUEL RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross volume cruised (M fbm/acre)</td>
<td>6.3</td>
<td>U.S. Forest Service Region 6</td>
</tr>
<tr>
<td>Net volume cruised (M fbm/acre)</td>
<td>5.7</td>
<td>fuel type identification LM</td>
</tr>
<tr>
<td>Average stems/acre cut</td>
<td>46</td>
<td>REMARKS</td>
</tr>
<tr>
<td>Average d.b.h. of stems cut</td>
<td>11</td>
<td>Material 8.1+ inches in diameter was a result of logging old-growth stand in early 1960's.</td>
</tr>
<tr>
<td>Stand age (years)</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Cutting prescription Tree selection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yarding method Tractor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slash treatment Hand piled &amp; burned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Period since cut or treatment (months)</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>
DOUGLAS-FIR-HEMLOCK
SIZE CLASS 1
PRECOMMERCIAL THINNING

A SERIES OF 4 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.

2. Stumps are not included in residue quantities.

3. Rotted residue is that which would come apart or splinter when kicked.
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft²/acre)</th>
<th>Other Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>0.4</td>
<td>27</td>
<td>Average residue depth: (feet) 0.2</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>0.4</td>
<td>28</td>
<td>Ground area covered by residue 1/4-inch diameter and larger: (percent) 33</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>0</td>
<td>0</td>
<td>Average duff and litter depth: (inches) 1.3</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>0.1</td>
<td>1</td>
<td>Sound residue 3.1-inch diameter and larger: Douglas-fir (percent) 56, western redcedar (percent) 14</td>
</tr>
<tr>
<td>20.1+</td>
<td>0.8</td>
<td>55</td>
<td>Rotted residue 3.1-inch diameter and larger: (percent) 30</td>
</tr>
</tbody>
</table>

### Harvest Information
- Gross volume cruised (M ft³/acre) ____________________________
- Net volume cruised (M ft³/acre) ____________________________
- Average stems/acre cut ____________________________
- Average d.b.h. of stems cut (inches) ____________________________
- Stand age (years) ____________________________
- Cutting prescription ____________________________
- Yarding method ____________________________
- Slash treatment ____________________________
- Period since cut or treatment (months) ____________________________

### Precommercial Thinning Information
- Stems cut/acre: 5,347
- Stems remaining/acre: 700
- Basal area/acre before: 196
- Basal area/acre after: 61
- Average d.b.h. before (inches): 4
- Average d.b.h. after (inches): 4
- Thinning method: Chainsaw
- Slash treatment: Chipped

### Fuel Rating
- U.S. Forest Service Region 6
- Fuel type identification: 1
- Remarks: Residue loadings footnoted were present prior to thinning.
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>Other Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>0.7</td>
<td>41</td>
<td>Average residue depth (feet) 0.4</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>0.9</td>
<td>57</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 61</td>
</tr>
<tr>
<td>3.1-5.0</td>
<td>1/2.2</td>
<td>1/239</td>
<td>Average duff and litter depth (inches) 1.0</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>1/16.3</td>
<td>1/1,744</td>
<td>Sound residue 3.1-inch diameter and larger (percent)</td>
</tr>
<tr>
<td>20.1+</td>
<td>1/75.0</td>
<td>1/8,015</td>
<td>Rotted residue 3.1-inch diameter and larger (percent) 100</td>
</tr>
<tr>
<td>Total</td>
<td>1.6</td>
<td>1/93.5</td>
<td></td>
</tr>
</tbody>
</table>

**Harvest Information**

- Gross volume cruised (M ft³/ac) ______
- Net volume cruised (M ft³/ac) ______
- Average stems/acre cut ______
- Average d.b.h. of stems cut (inches) ______
- Stand age (years) ______
- Cutting prescription ______
- Yarding method ______
- Slash treatment ______
- Period since cut or treatment (months) ______

**Precommercial Thinning Information**

- Stems cut/acre 1,057
- Stems remaining/acre 241
- Basal area/acre before 113
- Basal area/acre after 47
- Average diameter before (inches) 4
- Average diameter after (inches) 6
- Thinning method Chain saw
- Slash treatment Hand piled & burned

**Fuel Rating**

- U.S. Forest Service Region 6 fuel type identification 1H

**Remarks**

Residue loadings footnoted were present prior to thinning.

* 1/ See remarks.
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume [ft(^3)/acre]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>2.1</td>
<td>0</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>2.9</td>
<td>0</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>2.7</td>
<td>1/2.9</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>0</td>
<td>1/30.1</td>
</tr>
<tr>
<td>20.1+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>7.7</td>
<td>1/13.0</td>
</tr>
</tbody>
</table>

**LOADING**

<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume [ft(^3)/acre]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OTHER MEASUREMENTS**

- Average residue depth (feet): 1.0
- Ground area covered by residue 1/4-inch diameter and larger (percent): 65
- Average duff and litter depth (inches): 0.5
- Sound residue 3.1-inch diameter and larger Douglas-fir (chinespin) (percent): 46
- Rotted residue 3.1-inch diameter and larger (percent): 56

**HARVEST INFORMATION**

<table>
<thead>
<tr>
<th>Gross volume cruised (M fbm/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net volume cruised (N fbm/acre)</td>
</tr>
<tr>
<td>Average stems/acre cut</td>
</tr>
<tr>
<td>Average d.b.h. of stems cut (inches)</td>
</tr>
<tr>
<td>Stand age (years)</td>
</tr>
<tr>
<td>Cutting prescription</td>
</tr>
<tr>
<td>Yarding method</td>
</tr>
<tr>
<td>Slash treatment</td>
</tr>
<tr>
<td>Period since cut or treatment (months)</td>
</tr>
</tbody>
</table>

**PRECOMMERCIAL THINNING INFORMATION**

<table>
<thead>
<tr>
<th>Stems cut/acre</th>
<th>Stems remaining/acre</th>
<th>Basal area/acre before</th>
<th>Basal area/acre after</th>
<th>Average d.b.h. before (inches)</th>
<th>Average d.b.h. after (inches)</th>
<th>Thinning method</th>
<th>Slash treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>159</td>
<td>219</td>
<td>52</td>
<td>43</td>
<td>5</td>
<td>6</td>
<td>Chainsaw</td>
<td>None</td>
</tr>
</tbody>
</table>

**U.S. Forest Service Region 6**

Fuel type identification: HH

**REMARKS**

Residue loadings footnoted were present prior to thinning.

1/ See remarks.
<table>
<thead>
<tr>
<th>Size class [inches]</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>OTHER MEASUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>4.1</td>
<td>272</td>
<td>Average residue depth (feet) 2.3</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>5.3</td>
<td>412</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 93</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>1.6/14.5</td>
<td>108/1/1,072</td>
<td>Average duff and litter depth (inches) 1.3</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>0/16.5</td>
<td>0/1/1,084</td>
<td>Sound residue 3.1-inch diameter and larger Douglas-fir (percent) 90</td>
</tr>
<tr>
<td>20.1+</td>
<td>0/81.5</td>
<td>0/1/5,620</td>
<td>Western redcedar (percent) 7</td>
</tr>
<tr>
<td>Total</td>
<td>11.0/111.6</td>
<td>802/1/7,746</td>
<td>Rotted residue 3.1-inch diameter and larger (percent) 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HARVEST INFORMATION</th>
<th>PRECOMMERCIAL THINNING INFORMATION</th>
<th>FUEL RATING</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross volume cruised (M fbm/acre)</td>
<td>Stems cut/acre: 1,058</td>
<td>U.S. Forest Service Region 6</td>
<td>Residue loadings footnoted were present prior to thinning.</td>
</tr>
<tr>
<td>Net volume cruised (M fbm/acre)</td>
<td>Stems remaining/acre: 317</td>
<td>Fuel type identification</td>
<td>HF</td>
</tr>
<tr>
<td>Average stems/acre cut</td>
<td>Basal area/acre before: 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average d.b.h. of stems cut (inches)</td>
<td>Basal area/acre after: 43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stand age (years)</td>
<td>Average d.b.h. before (inches): 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cutting prescription</td>
<td>Average d.b.h. after (inches): 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yarding method</td>
<td>Thinning method: Chainsaw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slash treatment</td>
<td>Slash treatment: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Period since cut or treatment (months)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1/ See remarks.
DOUGLAS-FIR-HARDWOOD
SIZE CLASS 4
CLEARCUT

A SERIES OF 7 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.

2. Stumps are not included in residue quantities.

3. Potted residue is that which would come apart or splinter when kicked.
### DATA SHEET
Residue descriptive code 1-DF103-4-CC

#### LOADING

<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tuns/acre)</th>
<th>Volume (ft³/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>1.1</td>
<td>70</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>3.1</td>
<td>252</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>3.7</td>
<td>265</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>2.5</td>
<td>235</td>
</tr>
<tr>
<td>20.1+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>10.4</td>
<td>812</td>
</tr>
</tbody>
</table>

#### OTHER MEASUREMENTS

- Average residue depth (feet) 0.2
- Ground area covered by residue 1/4-inch diameter and larger (percent) 55
- Average duff and litter depth (inches) 0
- Sound residue 3.1-inch diameter and larger Douglas-fir (percent) 32
- tanoak (percent) 18
- Rotted residue 3.1-inch diameter and larger (percent) 50

#### HARVEST INFORMATION

- Gross volume cruised (M ft³/acre) 46.4
- Net volume cruised (M ft³/acre) 33.3
- Average stems/acre cut 30
- Average d.b.h. of stems cut (inches) 35
- Stand age (years) 260
- Cutting prescription Clearcut
- Yarding method High-head
- Slash treatment Spring broadcast burn
- Period since cut or treatment (months) 112

#### PRECOMMERICAL THINNING INFORMATION

- Stems cut/acre
- Stems remaining/acre
- Basal area/acre before
- Average d.b.h. before (inches)
- Average d.b.h. after (inches)
- Thinning method
- Slash treatment

#### FUEL RATING

U.S. Forest Service Region 6 fuel type identification LM

REMARKS
- Down and dead hardwoods comprise much of the residue in this photo series level.
- The understory hardwood stand prior to logging, using rating criteria where:
  1 = <5 ft in height
  2 = 5-15 ft in height
  3 = >15 ft in height

A = 0-33% understory crown space occupied
B = 34-66%
C = 67-100%

was rated by District Foresters as 3C.

77
### DATA SHEET

Residue descriptive code 2-DPHD-4-CC

<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>OTHER MEASUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>2.0</td>
<td>132</td>
<td>Average residue depth (feet) 0.2</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>5.1</td>
<td>405</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 61</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>8.8</td>
<td>577</td>
<td>Average duff and litter depth (inches) 0</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>2.6</td>
<td>176</td>
<td>Sound residue 3.1-inch diameter and larger Douglas-fir (percent) 95</td>
</tr>
<tr>
<td>20.1+</td>
<td>0</td>
<td>0</td>
<td>Tan oak (percent) 5</td>
</tr>
<tr>
<td>Total</td>
<td>18.5</td>
<td>1,290</td>
<td>Rotted residue 3.1-inch diameter and larger (percent) 0</td>
</tr>
</tbody>
</table>

### HARVEST INFORMATION

<table>
<thead>
<tr>
<th>Gross volume cruised (M ft³/acre)</th>
<th>40.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net volume cruised (M ft³/acre)</td>
<td>35.0</td>
</tr>
<tr>
<td>Average stems/acre cut</td>
<td>23</td>
</tr>
<tr>
<td>Average d.b.h. of stems cut (inches)</td>
<td>33</td>
</tr>
<tr>
<td>Stand age (years)</td>
<td>200</td>
</tr>
<tr>
<td>Cutting prescription</td>
<td>Clearcut</td>
</tr>
<tr>
<td>Yarding method</td>
<td>High-lead</td>
</tr>
<tr>
<td>Slash treatment</td>
<td>Spring broadcast burn</td>
</tr>
<tr>
<td>Period since cut or treatment (months)</td>
<td>7</td>
</tr>
</tbody>
</table>

### PRECOMMERCIAL THINNING INFORMATION

<table>
<thead>
<tr>
<th>Stems cut/acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stems remaining/acre</td>
</tr>
<tr>
<td>Basal area/acre before</td>
</tr>
<tr>
<td>Basal area/acre after</td>
</tr>
<tr>
<td>Average d.b.h. before (inches)</td>
</tr>
<tr>
<td>Average d.b.h. after (inches)</td>
</tr>
<tr>
<td>Thinning method</td>
</tr>
<tr>
<td>Slash treatment</td>
</tr>
</tbody>
</table>

### FUEL RATING

| U.S. Forest Service Region 6 fuel type identification | MM |

### REMARKS

Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where:

1 = <5 ft in height
2 = 5-15 ft in height
3 = >15 ft in height

A = 0-33% understory crown space occupied
B = 34-66%
C = 67-100%

was rated by District Foresters as 2C.
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>OTHER MEASUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>1.3</td>
<td>85</td>
<td>Average residue depth (feet) 0.2</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>4.0</td>
<td>321</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 45</td>
</tr>
<tr>
<td>3.1-6.0</td>
<td>16.5</td>
<td>1,037</td>
<td>Average duff and litter depth (inches) 0</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>9.5</td>
<td>795</td>
<td>Sound residue 3.1-inch diameter and larger Douglas-fir (percent) 50</td>
</tr>
<tr>
<td>20.1+</td>
<td>6.8</td>
<td>530</td>
<td>tan oak (percent) 19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>other (percent) 1</td>
</tr>
<tr>
<td>Total</td>
<td>38.3</td>
<td>2,768</td>
<td>Rotted residue 3.1-inch diameter and larger (percent) 30</td>
</tr>
</tbody>
</table>

**DATA SHEET**

**Residue descriptive code: 3-DH5-4-CC**

**HARVEST INFORMATION**

- Gross volume cruised (M ft³/acre): 43.3
- Wet volume cruised (M ft³/acre): 36.7
- Average stems/acre cut: 29
- Average d.b.h. of stems cut (inches): 12
- Stand age (years): 200
- Cutting prescription: Clearcut
- Yarding method: Slackline
- Slash treatment: Spring broadcast burn
- Period since cut or treatment (months): <12

**PRECOMMERCIAL THINNING INFORMATION**

- Stems cut/acre: 29
- Stems remaining/acre: 26
- Basal area/acre before: 4.1
- Basal area/acre after: 2.8
- Average d.b.h. before (inches): 3.2
- Average d.b.h. after (inches): 2.4
- Thinning method: 2
- Slash treatment: Spring broadcast burn

**FUEL RATING**

U.S. Forest Service Region: 6
Fuel type identification: MM

<table>
<thead>
<tr>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where:</td>
</tr>
<tr>
<td>l = &lt;5 ft in height</td>
</tr>
<tr>
<td>2 = 5-15 ft in height</td>
</tr>
<tr>
<td>3 = &gt;15 ft in height and</td>
</tr>
<tr>
<td>λ = 0-33% understory crown space occupied</td>
</tr>
<tr>
<td>b = 34-66%</td>
</tr>
<tr>
<td>c = 67-100%</td>
</tr>
<tr>
<td>was rated by District Foresters as 3C.</td>
</tr>
</tbody>
</table>

81
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>OTHER MEASUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>3.7</td>
<td>244</td>
<td>Average residue depth (feet) 0.5</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>6.3</td>
<td>502</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 81</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>15.3</td>
<td>988</td>
<td>Average duff and litter depth (inches) 0</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>12.8</td>
<td>828</td>
<td>Sound residue 3.1-inch diameter and larger Douglas-Fir (percent) 82</td>
</tr>
<tr>
<td>20.1+</td>
<td>3.6</td>
<td>239</td>
<td>tan oak (percent) 16</td>
</tr>
<tr>
<td>Total</td>
<td>41.7</td>
<td>2,781</td>
<td>other (percent) 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rotted residue 3.1-inch diameter and larger (percent) 1</td>
</tr>
</tbody>
</table>

**HARVEST INFORMATION**

<table>
<thead>
<tr>
<th>Gross volume cruised (M fbm/acre)</th>
<th>.488</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net volume cruised (M fbm/acre)</td>
<td>.423</td>
</tr>
<tr>
<td>Average stems/acre cut</td>
<td>37</td>
</tr>
<tr>
<td>Average d.b.h. of stems cut (inches)</td>
<td>31</td>
</tr>
<tr>
<td>Stand age (years)</td>
<td>200</td>
</tr>
<tr>
<td>Cutting prescription Clearcut</td>
<td></td>
</tr>
<tr>
<td>Yarding method</td>
<td>High-lead</td>
</tr>
<tr>
<td>Slash treatment VUM*</td>
<td></td>
</tr>
<tr>
<td>Period since cut or treatment (months)</td>
<td>&lt;12</td>
</tr>
</tbody>
</table>

**PRECOMMERCIAL THINNING INFORMATION**

<table>
<thead>
<tr>
<th>Stems cut/acre</th>
<th>Stems remaining/acre</th>
</tr>
</thead>
</table>

**U.S. Forest Service Region 6**

**FUEL RATING**

**REMARKS**

Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where:

- \( I = \leq 5 \) ft in height
- \( 2 = 5-15 \) ft in height
- \( 3 = >15 \) ft in height

And

- \( A = 0-33\% \) understory crown space occupied
- \( B = 34-66\% \)
- \( C = 67-100\% \)

was rated by District Foresters as \( 3B \).

---

*Required yarding unmerchantable material (VUM) down to 8 inches, small end and 10 feet in length.*
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>2.7</td>
<td>179</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>4.8</td>
<td>386</td>
</tr>
<tr>
<td>3.1-5.0</td>
<td>37.8</td>
<td>2,045</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>24.8</td>
<td>1,233</td>
</tr>
<tr>
<td>20.1+</td>
<td>10.9</td>
<td>505</td>
</tr>
<tr>
<td>Total</td>
<td>81.0</td>
<td>4,348</td>
</tr>
</tbody>
</table>

**OTHER MEASUREMENTS**

- Average residue depth (feet) 0.8
- Ground area covered by residue 1/4-inch diameter and larger (percent) 83
- Average duff and litter depth (inches) 0
- Sound residue 3.1-inch diameter and larger (percent) 54
  - Madrone (percent) 43
  - Other (percent) 3
- Rotted residue 3.1-inch diameter and larger (percent) 1

**HARVEST INFORMATION**

- Gross volume cruised (M ft³/acre) 20.5
- Net volume cruised (M ft³/acre) 18.4
- Average stems/acre cut 119
- Average d.b.h. of stems cut (inches) 18
- Stand age (years) 270

**PRECOMMERCIAL THINNING INFORMATION**

- Cutting prescription: Clearcut
- Yarding method: Highlead
- Slash treatment: None
- Period since cut or treatment (months) <12

**FUEL RATING**

- U.S. Forest Service Region 6
- Fuel type identification: PH

**REMARKS**

- Down and dead hardwoods comprise much of the residue in this photo series level.
- The understory hardwood stand prior to logging, using rating criteria where:
  - 1 = <5 ft in height
  - 2 = 5-15 ft in height
  - 3 = >15 ft in height
- A = 0-33% understory crown space occupied
- B = 34-66%
- C = 67-100%
- was rated by District Foresters as 3C.
**DATA SHEET**

**Residue descriptive code 6-DFHD-4-CC**

<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Height (tons/acre)</th>
<th>Volume (ft²/acre)</th>
<th>Average residue depth (feet)</th>
<th>Ground area covered by residue 1/4-inch diameter and larger (percent)</th>
<th>Average duff and litter depth (inches)</th>
<th>Sound residue 3.1-inch diameter and larger tan oak (percent)</th>
<th>Douglas-fir (percent)</th>
<th>Other (percent)</th>
<th>Rotted residue 3.1-inch diameter and larger (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>6.6</td>
<td>371</td>
<td></td>
<td>2.1</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>10.4</td>
<td>833</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>51.6</td>
<td>2,047</td>
<td></td>
<td></td>
<td>75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>13.8</td>
<td>793</td>
<td></td>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.1+</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>81.4</td>
<td>4,844</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HARVEST INFORMATION**

- Gross volume cruised (M ft³/acre): 43.5
- Net volume cruised (M ft³/acre): 38.2
- Average stems/acre cut: 34
- Average d.b.h. of stems cut (inches): 34
- Stand age (years): 200
- Cutting prescription: Clearcut
- Yarding method: Slackline
- Slash treatment: None
- Period since cut or treatment (months): 12

**PRECOMMERCIAL THINNING INFORMATION**

- Stems cut/acre
- Stems remaining/acre
- Basal area/acre before
- Basal area/acre after
- Average d.b.h. before (inches)
- Average d.b.h. after (inches)
- Thinning method
- Slash treatment

**FUEL RATING**

- U.S. Forest Service Region 6 fuel type identification: FE

**REMARKS**

- Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where:
  - 1 = < 6 ft in height
  - 2 = 6-15 ft in height
  - 3 = >15 ft in height

- A = 0-21% understory crown space occupied
- B = 22-56%
- C = 57-100%

- was rated by District Foresters as 3C.
<table>
<thead>
<tr>
<th>SIZE CLASS (inches)</th>
<th>WEIGHT (tens/acre)</th>
<th>VOLUME (ft²/acre)</th>
<th>OTHER MEASUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>6.5</td>
<td>435</td>
<td>Average residue depth (feet) 1.0</td>
</tr>
<tr>
<td>1.1-2.0</td>
<td>10.5</td>
<td>842</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 95</td>
</tr>
<tr>
<td>1.1-9.0</td>
<td>77.5</td>
<td>4,683</td>
<td>Average duff and litter depth (inches) 0</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>16.1</td>
<td>842</td>
<td>Sound residue 3.1-inch diameter and larger (percent) 45</td>
</tr>
<tr>
<td>20.1+</td>
<td>0</td>
<td>0</td>
<td>Modrone (percent) 35</td>
</tr>
<tr>
<td>Total</td>
<td>110.8</td>
<td>6,202</td>
<td>Other (percent) 14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HARVEST INFORMATION</th>
<th>PRECOMMERCIAL THINNING INFORMATION</th>
<th>FUEL RATING</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross volume cruised (M ft³/acre) 56.7</td>
<td>Stems cut/acre</td>
<td>U.S. Forest Service Region 6</td>
<td>Down and dead hardwoods comprise much of the residue in this photo series level.</td>
</tr>
<tr>
<td>Net volume cruised (M ft³/acre) 46.6</td>
<td>Stems remaining/acre</td>
<td>Fuel type identification FF</td>
<td>The understory hardwood stand prior to logging, using rating criteria where:</td>
</tr>
<tr>
<td>Average stems/acre cut 34</td>
<td>Basal area/acre before</td>
<td></td>
<td>1 = &lt;5 ft in height</td>
</tr>
<tr>
<td>Average d.b.h. of stems</td>
<td>Basal area/acre after</td>
<td></td>
<td>2 = 5.1-15 ft in height</td>
</tr>
<tr>
<td>cut (inches) 31</td>
<td>Average d.b.h. before (inches)</td>
<td></td>
<td>3 = &gt;15 ft in height</td>
</tr>
<tr>
<td>Stand age (years) 206</td>
<td>Average d.b.h. after (inches)</td>
<td></td>
<td>and</td>
</tr>
<tr>
<td>Cutting prescription</td>
<td>Thinning method</td>
<td></td>
<td>A = 0-33% understory crown space occupied</td>
</tr>
<tr>
<td>Clearcut</td>
<td>Slash treatment</td>
<td></td>
<td>B = 34-66%</td>
</tr>
<tr>
<td>Yarding method</td>
<td>Period since cut or</td>
<td></td>
<td>C = 67-100%</td>
</tr>
<tr>
<td>Slackline</td>
<td>treatment (months)</td>
<td></td>
<td>was rated by District Foresters as 3C.</td>
</tr>
</tbody>
</table>
Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.

2. Stumps are not included in residue quantities.

3. Rotted residue is that which would come apart or splinter when kicked.
### DATA SHEET

#### Size Class (Inches) | Weight (tons/acre) | Volume (ft³/acre) | Average residue depth (feet) 0.1 | Ground area covered by residue 1/4-inch diameter and larger (percent) 40 | Average duff and litter depth (inches) 0.1 | Sound residue 3.1-inch diameter and larger madrone (percent) 16 | Douglas-fir (percent) 11 | Other (percent) 10 | Rotted residue 3.1-inch diameter and larger (percent) 63 |
---|---|---|---|---|---|---|---|---|---|
0.25-1.0 | 0.7 | 49 | | | | | | | |
1.1-3.0 | 3.4 | 270 | | | | | | | |
3.1-9.0 | 4.0 | 227 | | | | | | | |
9.1-20.0 | 4.2 | 415 | | | | | | | |
20.1+ | 0 | 0 | | | | | | | |
Total | 12.3 | 961 | | | | | | | |

#### Harvest Information
- Gross volume cruised (M fbm/acre): 20.3
- Net volume cruised (M fbm/acre): 16.4
- Average stems/acre cut: 9
- Average d.b.h. of stems cut (inches): 36
- Stand age (years): 250+ 
- Cutting prescription: Overstory removal
- Yarding method: Rubber-tired skidder
- Slash treatment: Machine piled
- Period since cut or treatment (months): <12

#### Precommercial Thinning Information
- Stems cut/acre
- Stems remaining/acre
- Basal area/acre before
- Basal area/acre after
- Average d.b.h. before (inches)
- Average d.b.h. after (inches)
- Thinning method
- Slash treatment

#### Fuel Rating
- U.S. Forest Service Region 6
- Fuel type identification: LL

#### Remarks
- Down and dead hardwoods comprise much of the residue in this photo series level.
- The understory hardwood stand prior to logging, using rating criteria where:
- 1: <5 ft in height
- 2: 5-15 ft in height
- 3: >15 ft in height
- A = 0-33% understory crown space occupied
- B = 34-66%
- C = 67-100%
- was rated by District Foresters as 3A.
## DATA SHEET
### Residue Descriptive Code: 2-DH2-4-PC

<table>
<thead>
<tr>
<th>Size Class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>2.0</td>
<td>132</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>8.7</td>
<td>893</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>5.1</td>
<td>409</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>2.8</td>
<td>235</td>
</tr>
<tr>
<td>20.1+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>18.6</td>
<td>1,469</td>
</tr>
</tbody>
</table>

### Other Measurements
- Average Residue Depth: 0.4 (feet)
- Ground Area Covered by Residue 1/4-inch Diameter and Larger: 69 (percent)
- Average Duff and Litter Depth: 5.4 (inches)
- Sound Residue 3.1-inch Diameter and Larger: 57 (percent)
  - Red Fir: 22 (percent)
  - Other: 19 (percent)
- Rotted Residue 3.1-inch Diameter and Larger: 2 (percent)

### Harvest Information
- Gross Volume Cruised (M Fm³/acre): 48.3
- Net Volume Cruised (M Fm³/acre): 37.5
- Average Stems/acre Cut: 29
- Average D.b.h. of Stems cut (inches): 38
- Stand Age (years): 253
- Cutting Prescription: Shelterwood
- Yarding Method: Skylime
- Slash Treatment: YUM
- Period since cut or treatment (months): <12

### Precommercial Thinning Information
- Stems cut/acre
- Stems remaining/acre
- Basal Area/acre before
- Basal Area/acre after
- Average d.b.h. before (inches)
- Average d.b.h. after (inches)
- Thinning method
- Slash treatment

### Fuel Rating
- U.S. Forest Service Region 6
- Fuel Type Identification: FB
- Remarks: Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where:
  - L = <5 ft in height
  - 2 = 5-15 ft in height
  - 3 = >15 ft in height
  - A = 0-33% understory crown space occupied
  - B = 34-66%
  - C = 67-100%

*Required yarding unmerchantable material (YUM) down to 8 inches in diameter, small end and 10 feet in length.

*95*
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>Other Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>1.7</td>
<td>116</td>
<td>Average residue depth (feet) 0.5</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>8.7</td>
<td>693</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 72</td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>16.9</td>
<td>1,237</td>
<td>Average duff and litter depth (inches) 0.1</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>8.1</td>
<td>730</td>
<td>Sound residue 3.1-inch diameter and larger white fir (percent) 51</td>
</tr>
<tr>
<td>20.1+</td>
<td>0</td>
<td>0</td>
<td>tan oak (percent) 15</td>
</tr>
<tr>
<td>Total</td>
<td>35.4</td>
<td>2,776</td>
<td>other (percent) 5</td>
</tr>
</tbody>
</table>

**Harvest Information**

- Gross volume cruised (M fbm/acre) 35.4
- Net volume cruised (M fbm/acre) 24.1
- Average stems/acre cut 16
- Average d.b.h. of stems cut (inches) 3.7
- Stand age (years) 250+
- Cutting prescription: Shelterwood
- Yarding method: High-head
- Slash treatment: YVM

**Commercial Thinning Information**

- Stems cut/acre
- Stems remaining/acre
- Basal area/acre before
- Basal area/acre after
- Average d.b.h. before (inches)
- Average d.b.h. after (inches)
- Thinning method
- Slash treatment

**Fuel Rating**

- U.S. Forest Service Region 6
- Fuel type identification: YM

**Remarks**

Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where:

1 = < 5 ft in height
2 = 5-15 ft in height
3 = > 15 ft in height

A = 0-33% understory crown space occupied
B = 34-66% 
C = 67-100%

Was rated by District Foresters as JA.

*Required yarding unmerchantable material (YVM) down to 8 inches in diameter, small end and 10 feet in length.*
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>Average residue depth (feet)</th>
<th>Ground area covered by residue 1/4-inch diameter and larger (percent) 95</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>5.2</td>
<td>345</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>10.7</td>
<td>859</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>12.9</td>
<td>785</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>5.7</td>
<td>340</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.1+</td>
<td>8.0</td>
<td>532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>42.5</td>
<td>2,861</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average residue depth (feet)</th>
<th>Ground area covered by residue 1/4-inch diameter and larger (percent) 95</th>
</tr>
</thead>
<tbody>
<tr>
<td>(percent) 95</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average duff and litter depth (inches) 1.1</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Sound residue 3.1-inch diameter and larger Douglas-fir (percent) 78</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>madrone (percent) 15</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>other (percent) 4</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rotted residue 3.1-inch diameter and larger (percent) 2</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Gross volume cruised (M ft³/acre) 37.4</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Net volume cruised (M ft³/acre) 29.8</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Average stems/acre cut 36</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Average d.b.h. of stems cut (inches) 37</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Stand age (years) 200</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Cutting prescription</th>
<th>Overstory removal</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Yarding method</th>
<th>Tractor</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Slash treatment</th>
<th>None</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Period since cut or treatment (months) 12</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Stems cut/acre</th>
<th>Stems remaining/acre</th>
<th>Basal area/acre before</th>
<th>Basal area/acre after</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>U.S. Forest Service Region 6</th>
<th>fuel type identification</th>
<th>HH</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>REMARKS</th>
</tr>
</thead>
</table>

Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where:

1 = <5 ft in height
2 = 5-15 ft in height
3 = >15 ft in height

A = 0-31% understory crown space occupied
B = 31-66%
C = 67-100%

was rated by District Foresters as 3B.
**DATA SHEET**

Residue descriptive code 5-0FHD-4-PC

<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>OTHER MEASUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>3.0</td>
<td>196</td>
<td>Average residue depth (feet) 0.5</td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>8.8</td>
<td>703</td>
<td>Ground area covered by residue 1/4-inch diameter and larger (percent) 85</td>
</tr>
<tr>
<td>3.1-5.0</td>
<td>29.8</td>
<td>1,781</td>
<td>Average duff and litter depth (inches) 1.2</td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>5.8</td>
<td>397</td>
<td>Sound residue 3.1-inch diameter and larger madrone (percent) 25</td>
</tr>
<tr>
<td>20.1+</td>
<td>33.2</td>
<td>2,726</td>
<td>Douglas-fir (percent) 19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>other (percent) 22</td>
</tr>
<tr>
<td>Total</td>
<td>80.5</td>
<td>5,799</td>
<td>Rotted residue 3.1-inch diameter and larger (percent) 34</td>
</tr>
</tbody>
</table>

**HARVEST INFORMATION**
- Gross volume cruised (M ft³/acre): 36.2
- Net volume cruised (M ft³/acre): 26.6
- Average stems/acre cut: 62
- Average d.b.h. of stems cut (inches): 26
- Stand age (years): 150
- Cutting prescription: Tree selection
- Yarding method: Mobile yarder
- Slash treatment: None
- Period since cut or treatment (months): -12

**PRECOMMERCIAL THINNING INFORMATION**
- Stems cut/acre
- Stems remaining/acre
- Basal area/acre before
- Basal area/acre after
- Average d.b.h. before (inches)
- Average d.b.h. after (inches)
- Thinning method
- Slash treatment

**FUEL RATING**
- U.S. Forest Service Region 6
- Fuel type identification: UH

**REMARKS**
- Down and dead hardwoods comprise much of the residue in this photo series level.
- The understory hardwood stand prior to logging, using rating criteria where:
  - 1 = <5 ft in height
  - 2 = 5-15 ft in height
  - 3 = >15 ft in height
- A = 0-33% understory crown space occupied
- B = 34-66%
- C = 67-100%

This was rated by District Foresters as ZC.
<table>
<thead>
<tr>
<th>Size class (inches)</th>
<th>Weight (tons/acre)</th>
<th>Volume (ft³/acre)</th>
<th>Average residue depth (feet) 0.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-1.0</td>
<td>2.5</td>
<td>166</td>
<td></td>
</tr>
<tr>
<td>1.1-3.0</td>
<td>8.7</td>
<td>693</td>
<td></td>
</tr>
<tr>
<td>3.1-9.0</td>
<td>14.0</td>
<td>1,055</td>
<td></td>
</tr>
<tr>
<td>9.1-20.0</td>
<td>31.4</td>
<td>2,413</td>
<td></td>
</tr>
<tr>
<td>20.1+</td>
<td>34.2</td>
<td>2,506</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>90.8</td>
<td>6,833</td>
<td></td>
</tr>
</tbody>
</table>

**Ground area covered by residue 1/4-inch diameter and larger (percent) 76**

**Average duff and litter depth (inches) 0.3**

**Sound residue 3.1-inch diameter and larger Douglas-fir (percent) 57**

**Port Orford-cedar (percent) **

**Rotted residue 3.1-inch diameter and larger (percent) 25**

---

**Harvest Information**

| Gross volume cruised (M fbm/acre) | 37.4 |
| Net volume cruised (M fbm/acre)  | 20.9 |
| Average stems/acre cut          | 10   |
| Average d.b.h. (inches)         | 46   |
| Stand age (years)               | 200+ |
| Cutting prescription (Overstory removal) |         |
| Yarding method                  | Tractor |
| Slash treatment                 | None |
| Period since cut or treatment (months) | <12 |

---

**Precommercial Thinning Information**

<table>
<thead>
<tr>
<th>Stems cut/acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stems remaining/acre</td>
</tr>
<tr>
<td>Basel area/acre before</td>
</tr>
<tr>
<td>Average d.b.h. before (inches)</td>
</tr>
<tr>
<td>Basel area/acre after</td>
</tr>
<tr>
<td>Average d.b.h. after (inches)</td>
</tr>
<tr>
<td>Thinning method</td>
</tr>
<tr>
<td>Slash treatment</td>
</tr>
</tbody>
</table>

---

**Fuel Rating**

U.S. Forest Service Region 6 fuel type identification HH

---

**Remarks**

Down and dead hardwoods comprise much of the residue in this photo series level. The understory hardwood stand prior to logging, using rating criteria where:

1 = <5 ft in height
2 = 5-15 ft in height
3 = >15 ft in height

A = 0-33% understory crown space occupied
B = 34-66%
C = 67-100% was rated by District Foresters as IA.
The PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION is to provide the knowledge, technology and alternatives for present and future protection, management and use of forest, range, and related environments.

Within this overall mission, the Station conducts and stimulates research to facilitate and to accelerate progress toward the following goals:

1. Providing safe and efficient technology for inventory protection, and use of resources.
2. Developing and evaluating alternative methods and levels of resource management.
3. Achieving optimum sustained resource productivity consistent with maintaining a high quality to test.

The area of research encompasses Oregon, Washington, Alaska, and, in some cases, California, Hawaii, the Western States, and the Nation. Results of the research are made available promptly. Project headquarters are at:

- Fairbanks, Alaska
- Juneau, Alaska
- Bend, Oregon
- Corvallis, Oregon
- La Grande, Oregon
- Portland, Oregon
- Olympia, Washington
- Seattle, Washington

Mailing address: Pacific Northwest Forest and Range Experiment Station
P.O. Box 3141
Portland, Oregon 97208
The FOREST SERVICE of the U.S. Department of Agriculture is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forests, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives — as directed by Congress — to provide increasingly greater service to a growing Nation.

The U.S. Department of Agriculture is an Equal Opportunity Employer. Applicants for all Department programs will be given equal consideration without regard to race, color, sex or national origin.