

# Appraisal Summaries

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# 14

The Appraisal Summary Reports combine appraisal information from the Volume summaries (Chapter 12) and the Harvesting Method summaries (Chapter 13). There are separate reports for Coast and Interior compilations.

Produce the Appraisal Summary Report even if the compilation does not meet appraisal standards.

When appropriate, these messages will be reported on all Appraisal Summary Reports:  
For Appraisal Purposes, Not for Appraisal Purposes, Sale is in the wet belt, Sale is in the dry belt, 100% Cruise, Stump Cruise.

## 14.1 Appraisal Summary - Coast

### 14.1.1 Header information

Include the following header information for the Coast **Appraisal** Summary Report.

1. License from card type A.
2. Cutting Permit from card type A.
3. Locality description from card type A.
4. Cruiser or agency from card type A.
5. Forest Inventory Zone and Unit (long name) from card type A.
6. Number of Blocks from card type A.
7. Total merchantable area from card type A.
8. Second growth percent<sup>\*</sup> from the All Method report.
9. Second growth net volume (m<sup>3</sup>) for the cutting authority.

\* The second growth percent and net volume reported is for coniferous species only.

### 14.1.2 Detail Information

Report the following detail information for the Coast Appraisal Summary Report.

#### 14.1.2.1 Species Grade Percent Table

Each row of the table would report the algorithm grade percent for a particular species from the All Method report (see Chapter 13). The reported species are:

1. Alder.
2. Balsam.
3. Cedar.
4. Cottonwood.

5. Cypress.
6. Fir.
7. Hemlock.
8. Lodgepole Pine.
9. Spruce.
10. White Pine (Albicaulis Pine).
11. Maple.
12. Birch.
13. Total.

The following information will be reported for each species:

1. Each grade percent.
2. The total net merchantable volume for each species and total from the All Method Report (see Chapter 13). Report the whole number.
3. Net Volume per Hectare and Net Volume – All (tree classes 1, 2, 3, 5, 7, 8, 9): Report the net merchantable volume for each species and total from the All Method Summary. Report the number to 3 decimal places.
4. Net Volume per Hectare and Net Volume – Live (tree classes 1, 2, 5, 8): Report the net merchantable volume for each species and total from the All Method Summary. Report the number to 3 decimal places.
5. Net Volume per Hectare and Net Volume – Dead Potential (tree classes 3, 7, 9): Report the net merchantable volume for each species and total from the All Method Summary. Report the number to 3 decimal places.

#### 14.1.2.2 Harvesting Method Parameter Table

Report each of these parameters for each Harvesting Method. The source of the data is the individual Harvesting Method report described in Chapter 13. Use the same number of significant digits **that are used for the Harvesting Method Report** parameters.

Net volume	Report the total net merchantable volume from the Harvesting Method Summary.
Net Volume per 10 m Log	Use <b>a 10 m log for coast appraisal cruises.</b>

Net Merchantable Volume per Hectare	Report the total net merchantable volume per hectare from the Harvesting Method summary.
Partial Cut Percent	Divide the post-reduction net merchantable volume by the pre-reduction net merchantable volume and multiply by 100.  Report this parameter for reduction compilations only.  Report to nearest whole number.

Example 14.1

For Harvesting Method 'SS', the pre-reduction net merchantable volume is 2367 m<sup>3</sup>. The post-reduction net merchantable volume is 1696 m<sup>3</sup>.

The partial cut percent is  $100 * (1696 / 2367) = 72$  percent

Average Slope Percent	Report the average slope percent from the Harvesting Method Report.
Down Tree Percent	Report the percent blowdown volume - net from the Harvesting Method Report.
Heavy Fire Percent	Report the percent heavy fire volume - net from the Harvesting Method Report.

## 14.1.2.3 Cutting Permit Parameters

Report each of the following parameters from the Cutting Permit volume summary report (see Chapter 12).

95 Percent Confidence Interval	Report the 95 percent confidence interval from the Cutting Permit statistical summary. Always report pre-reduction values.
Trees per Plot	Report the average number of trees per plot (excluding tree class 4 and 6) from the Cutting Permit Statistical Summary.
Percent Immature by Block	Report the percent immature parameter from the Block Volume Summaries.
Plots per Hectare	Report the plots per hectare (including count plots) from the Cutting Permit Statistical Summary.

14.1.2.4 All Method Parameters

Net volume per tree	Report net volume per tree from the All Method Summary.
Net volume per hectare	Report the Net volume per hectare from the All Method Summary.
NHSVPH	Report the coniferous, non-helicopter partial cut, net volume/hectare. <b>Heli single standing stem is a partial cut harvest method.</b>
Conventional Slope	Report total weighted non-helicopter Harvest Method Slope.

Example 14.2

NHSVPH:

Harvest Method	Total Net Coniferous Volume (m <sup>3</sup> )	Area (ha.)
CC	10,000	20
CS	5,000	20
HL	2,500	15
SL	500	10
FL	50	10
HW	2,500	15
SW	500	10
FW	50	10

Sum the cutting permit’s non-helicopter partial cut Harvest Method’s coniferous volumes.

$$10,000 + 5,000 + 2,500 + 2,500 = 20,000 \text{ m}^3$$

Sum the cutting permit’s non-helicopter partial cut Harvest Method’s areas.

$$20 + 20 + 15 + 15 = 70 \text{ ha.}$$

Divide the sum of the volumes by the sum of the areas.

$$20,000 / 70 = 285.71 \text{ m}^3/\text{ha}.$$

Report to 2 decimal places.

Example 14.3

Conventional Slope:

Cable                      Twenty-five hectares, average slope = 40 percent.

Ground Skidding        Twenty-five hectares, average slope = 20 percent.

Helicopter                Fifty hectares, average slope = 80 percent.

$$= (25 * 40 + 25 * 20) / (25 + 25) = 30 \%.$$

## 14.2 Coast Appraisal Summary - Sample Listing

Appraisal Summary Report																																																																																		
04-Mar-2014 01:12:48PM APPSM- 1 , P5 Filename: CoastMtdist_CoastTest_Mar2014. Compiled by: IFS Cruised by: DEF Version: 2013.02 IFS build 5858																																																																																		
Grades: MOP Computerized Computerized Decay Computerized Waste Computerized Breakage No Of Blocks : 1																																																																																		
PSYU: Skeena (Terrace) Region: 8 - Skeena District: 09 - Coast Mountain																																																																																		
Minimum DBH Top Diameter Stump Height																																																																																		
Mature Blocks: (cm) 17.5 15.0 30 Immature Blocks: (cm) 12.0 10.0 30 Standard Log Length: (m) 10.00																																																																																		
Net Area: [All Treatment Units : 2.0 ]																																																																																		
<b>All Method Summary</b>																																																																																		
Algorithm Grades %																																																																																		
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95% Confidence Interval 88.1 Plots/Ha 3.0 Cruised Trees/PLOT 3.3 Net 2nd Growth-Conifer % 43.4 Net 2nd Growth-Conifer (m3) 1036 Net Immature by Block % 001: 23% Non Heli Select Conifer (m3/ha) 1193.47 Heli Select Total (decimal) 0.00 Heli+Skyline Total (decimal) 0.00 Piece Size - Conifer (m3/10m log) 3.12 Cruise Date (YY-mm) 03-14 # Plots: 6 # <= 5yrs: 0 # > 5yrs: 0 # > 10yrs: 6 # no date: 0																																																																																		
FLACS: Full Volumes, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage, CruiseComp Copyright © 1996-2013, Industrial Forestry Service Ltd.																																																																																		

Figure 14.1 Coast Appraisal Summary - Sample Listing.

## 14.3 Appraisal Summary - Interior

### 14.3.1 Header Information

Include the following header information for the Interior Appraisal Summary Report.

1. License from card type A.
2. Cutting Permit from card type A.
3. Locality description from card type A.
4. Cruiser or agency from card type A.
5. Forest Inventory Zone and Unit (long name) from card type A.
6. Number of Blocks from card type A.
7. Total merchantable area from card type A.
8. Horse Logging net volume\* .
9. Helicopter clear cut net volume\* .
10. Helicopter partial cut net volume\* .

\* The total net merchantable volume from the individual Harvesting Method Reports.

### 14.3.2 Detail Information

Report the following detail information for the Interior Appraisal Summary Report.

#### 14.3.2.1 Species Parameter Table

Report each of the following parameters from the All Method summary for the following Species:

1. Balsam.
2. Cedar.

3. Fir.
4. Hemlock.
5. Larch.
6. Lodgepole Pine.
7. Spruce.
8. Yellow Pine (Ponderosa Pine).
9. White Pine.
10. Whitebark Pine.
11. Conifer - combine all coniferous Species in the compilation.
12. Total.

Net Volume	Report the net merchantable volume for each species, conifer and total from the All Method Summary.
Net Volume per Hectare and Net Volume - All (tree classes 1, 2, 3, 5, 7, 8, 9):	Report the net merchantable volume for each species, conifer and total from the All Method Summary. Report the number to 3 decimal places.
Net Volume per Hectare and Net Volume - Live (tree classes 1, 2, 5, 8):	Report the net merchantable volume for each species, conifer and total from the All Method Summary. Report the number to 3 decimal places.
Net Volume per Hectare and Net Volume - Dead Potential (tree classes 3, 7, 9):	Report the net merchantable volume for each species, conifer and total from the All Method Summary. Report the number to 3 decimal places.
Percent Decay	Report the percent decay - net from the All Method Summary.
Stud Log Percent	Report the percent stud log volume - net from the All Method Summary.
LRF	Report the Average LRF from the All Method Summary.
Burn Percent	Report the percent fire damage volume - net from the All Method Summary.

#### 14.3.2.2 Harvesting Method Parameter Table

Report each of the following parameters from the Harvesting Method summaries as described in chapter 13. Use the same number of significant digits for each parameter.

Net volume	Report the total net merchantable volume from the Harvesting Method Summary.
Average Slope Percent	Report the average slope percent from the Harvesting Method Summary.
Net Volume per Tree	Report the net merchantable volume per tree from the Harvesting Method Summary.
Net Volume per hectare	Report the net merchantable volume per hectare from the Harvesting Method Summary.
Stand Defect Percent	Report the percent total cull from the Harvesting Method Summary.
Partial Cut Percent	<p>Divide the post-reduction net merchantable volume by the pre-reduction net merchantable volume and multiply by 100.</p> <p>Report this parameter for reduction compilations only.</p> <p>Report to nearest whole number.</p>
All Fire Percent	Report the percent fire volume - net from the Harvesting Method Report.
Heavy Fire Percent	Report the percent heavy fire volume - net from the Harvesting Method Report.
Down Tree Percent	Report the percent blowdown volume - net from the Harvesting Method Report.
Dead Useless Percent	Report the percent dead useless trees from the Harvesting Method Report.
Lodgepole Pine volume for Highlead/Grapple Harvest Methods	<b>Lodgepole Pine volume for Highlead/Grapple Harvest Methods. This attribute is obsolete.</b>

### 14.3.2.3 All Method Parameter Table

Report each of the following parameters from the All Method summaries as described in chapter 13.

Net volume per tree                      Report net volume per tree from the All Method Summary.

Net volume per hectare                  Report the Net volume per hectare from the All Method Summary.

Slope    Report the slope from the All Method Summary.

**Cruise Dates (yy/mm)  
oldest date on the tally  
cards:**                      **Total # of Plots #<=5years #>5years #>10 years #No Date**

### 14.3.2.4 Appraisal Summary Page – Insect Damage Table

Report the following attributes in a tabular format below the Lodgepole Pine Harvesting Method attributes on the Interior Appraisal Summary Page:

Cutting Permit PL green attack net merchantable volume (m<sup>3</sup>)                      This is the PI insect code 1 (green attack) net merchantable volume reported in the “Cutting Permit Damage Summary (Insect) - All Treatment Unit” report.

Cutting Permit PL red attack net merchantable volume (m<sup>3</sup>)                      This is the PI insect code 2 (red attack) net merchantable volume reported in the “Cutting Permit Damage Summary (Insect) - All Treatment Unit” report.

Cutting Permit PL grey attack net merchantable volume (m<sup>3</sup>)                      This is the PI insect code 3 (grey attack) net merchantable volume reported in the “Cutting Permit Damage Summary (Insect) - All Treatment Unit” report.

All other species insect and defoliator attack net merchantable volumes                      This is the sum of the non-PI insect codes 1, 2, 3, 5, 6, 7, 8, X, Y beetle and defoliator net merchantable volume reported in the “Cutting Permit Damage Summary (Insect) - All Treatment Unit” reports. Do not include the “Normal” category in the sum of the net merchantable volume.

**All other species insect and defoliator attack net merchantable volumes**                      **This is the sum of the non-PI insect codes 1, 2, 3, 5, 6, 7, 8, X, Y beetle and defoliator net merchantable volume reported in the “Cutting Permit Damage Summary (Insect) - All Treatment Unit” reports.**

**Do not include the “Normal” category in the sum of the net merchantable volume.**

Refer to Figure 14.4 for the format of the new Interior Appraisal Summary page.

#### 14.3.2.5 Appraisal Summary Page – Lodgepole Pine Insect Damage by Block

Report the following attributes in a tabular format beside the Insect Damage Table on the Interior Appraisal Summary Page:

Report the lodgepole pine (PI) net volume percent in each block that is red and grey attack. Divide the PI red and grey attack net volume in each block by the total coniferous volume in each block and multiply by 100. The volume is expressed as percent (%) to **one decimal place**.

### 14.4 Interior Appraisal Summary – Sample Listing

APPSM- 1 , pl  
 13-Jul-2010 08:51:42PM  
 Filename: Interior-2010.ccp  
 Compiled by: TECO NRG Ltd.  
 Cruised by: DON CRUISER  
 Version: 2010.00 TNRG build 5745

**Appraisal Summary Report**

FIZ: E  
 PSYU: Creston  
 Region: 2 - Southern Interior  
 District: 9 - Arrow Boundary

**\*\*\* FOR APPRAISAL PURPOSES \*\*\***  
 Average Line Method  
 INTERIOR TEST 2010  
 Licence Number: TEST10 CP: INT  
 Project:  
 Location :

Grades: MOF Computerized  
 Computerized Decay  
 Computerized Waste  
 Computerized Breakage  
 No Of Blocks : 3

Utilization Levels: Minimum DBH Top Diameter Stump Height  
 Mature Blocks: (cm) 17.5 10.0 30  
 Immature Blocks: (cm) 12.0 10.0 30  
 Exception[PL]: (cm) 12.5 10.0 30  
 Standard Log Length: (m) 5.00

Net Area: [All Treatment Units : 22.0 ]

All Method Summary		Net Volume (m3)		Net Volume / ha		Decay%		Stud		LRF		All	
Code	Species	All	Live	All	Live	DP	DP	Log%	Log%	Fire%	Fire%	Burn%	Burn%
BA	Balsam	458	0	20.829	20.829	0.000	0.000	3	40	196	20	20	20
FI	Doug-Fir	353	261	16.032	11.869	4.163	3	53	188	0	0	0	0
HE	Hemlock	258	0	11.710	11.710	0.000	2	0	197	0	0	0	0
LO	Lodgepole Pine	4843	2436	220.120	110.746	109.374	1.0	31	143	0	0	0	0
SP	Spruce	1805	1690	82.026	76.820	5.206	4	45	190	4	4	4	4
WB	Whitebark Pine	125	125	5.685	5.685	0.000	1	0	192	100	0	0	0
WH	Western White Pine	220	0	10.005	10.005	0.000	1	0	179	0	0	0	0
HE	Yellow Pine	8183	8183	371.963	353.220	18.743	8	33	206	0	0	0	0
	Total	8183	5571	2612	371.963	253.220	118.743	8	33	4	4	4	4

  

Harvesting Method Summaries		Net Volume (m3)		Net Vol/ha		Defect%		Partial		All		Heavy		Down	
Species	Harvest Method	Volume	Slope%	Net Vol	Net Vol/ha	(DWB)	Cut%	Cut%	Fire%	Fire%	Treat	Useless%	Useless%	Treat	Useless%
All Species	SC	8183	10	0.58	371.963	21	21	4	1	6	3	3	3	3	3
Conifer	SC	8183	10	0.58	371.963	21	21	4	1	6	3	3	3	3	3
	All Methods	8183	10	0.58	371.963	21	21	4	1	6	3	3	3	3	3

  

Insect Damage Net Volume (m3)		L.P. Pine Red/Grey Attack % of Conifer by Block	
Green Attack	Red Attack	Grey Attack	Insect Damage
146	2290	078: 28%	088: 71%
2076	1335	098: 64%	

  

Cutting Authority	
95% Confidence Interval	28.5
Plots/Ha	0.5
Cruised Trees/Plot	6.5

FLAGS: Full Volume, Normal Cruise, All Trees Compiled, Measure Plots Only, Damage, , Net Belt Fir  
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Figure 14.2 Interior Appraisal Summary – Sample Listing..

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