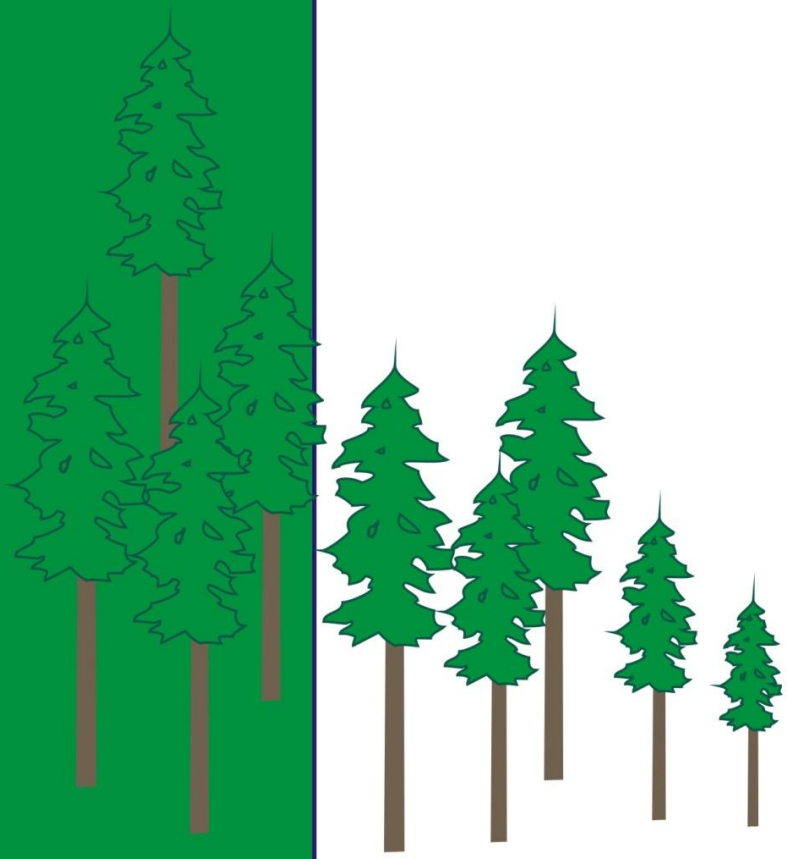
BRITISH COLUMBIA

Coast Log Prices



July 1, 2012

Timber Pricing Branch

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1. INTRODUCTION

The purpose of this document is to provide information about the process used to calculate coast log prices. The process is designed to derive and report average log selling prices for prime, arm's-length log sales completed in the Vancouver log market (VLM) by species and grade.

Prime log sales are defined as first time sales of logs for domestic consumption occurring in the VLM. An arm's-length transaction involves a sale between two parties who are independent of each other with no special consideration, such as preferred pricing arrangements, special services, etc., made because of one party's relation to the other. The party providing the logs must be compensated at fair market value.

Timber Pricing Branch receives approximately 11,000 log sales invoices annually. By analyzing log sales through the collection of log sale invoices from the forest industry, the ministry is able to calculate log prices for the various species and grades of logs sold in the VLM.

The *Coast Appraisal Manual* defines the VLM geographic catchment area and describes how log prices are used in determining stumpage rates.

The Vancouver Log Market geographic FOB catchment area is defined as area adjacent to:

i. the Strait of Georgia;

ii. the Strait of Juan de Fuca;

iii. Alberni Inlet east of a line drawn south from Amphitrite Point;

iv. Quatsino Sound;

v. Johnstone Strait;

vi. the Queen Charlotte Strait south of a line drawn west from Cape Caution; and

vii. Fraser River west of the bridge at the confluence of the Pitt River.

2. LOG PRICE DATA COLLECTION

Log sales invoices are submitted in confidence to Timber Pricing Branch where they are reviewed for completeness and reasonableness prior to being entered into the ministry log pricing system. The log sales data may also be provided in summary format by both log sellers and log purchasers. No duplicate log sales transactions will be entered into the log pricing system.

Currently, the following data is captured from the original invoices:

- log vendor and buyer,
- log sort type[1]
    - where not specifically identified on the invoice, Timber Pricing Branch staff make a determination of sort type based on criteria as outlined in Appendix 4 (old growth) and Appendix 6 (second growth);
- sale type (old growth timber or second growth timber)[2];
- volume and number of logs sold by species and grade including boomsticks where applicable:
    - unless there is evidence shown on the invoice that the boomsticks have been scaled before, or there is a letter on file with Timber Pricing Branch indicating that all boomsticks are previously scaled, the value shown on the invoices for these items is entered into the log pricing system and used in the calculation of log prices;
- selling price per cubic metre (m^3); and,
- total value of all logs sold including boomsticks where applicable.

The amounts shown on an invoice for boom chains and applicable taxes are not entered into the log pricing system or used in log price calculations, as they have no bearing on the value of the logs.

3. LOG PRICE DATA VERIFICATION

Industry records are reviewed periodically to ensure that log sale transactions from the VLM are accurately reported to the ministry. With the change to the Market Pricing System, the necessity to review invoices for accuracy and completeness will become even more important and occur on a more frequent basis.

All financial information submitted to Timber Pricing Branch in support of log price determination is protected against disclosure by both the *Forest Act* and the *Freedom of Information and Protection of Privacy Act*. Financial information may only be released in summary form so that the source of the information may not be determined.

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[1] Examples of sort type include High-grade, chip n saw, sawlog, merch, gang, pulp, peeler, etc. All logs graded and scaled under Coast grading and scaling rules (regardless of indicated industry sort) are included in log price calculations. The only exceptions are burnt logs and cants, which are not included in log price calculations.

[2] As defined in the *Coast Appraisal Manual*: i) old growth is coniferous timber 141 years old or greater; and
ii) second growth is coniferous timber less than 141 years old.

4. LOG PRICE CALCULATIONS

Invoices for both old growth and second growth timber may be flat priced, spread priced or may show a combination of flat price and spread price. The published log prices used for stumpage determinations are calculated by combining timber volumes and values from flat price (once converted, see below) and spread price data into a single log price for each species/grade combination.

1. OLD GROWTH TIMBER - SPREAD PRICE

Where an invoice for old growth timber shows individual prices per cubic metre for each species/grade combination it is considered to be a spread price invoice.

Log price reports are calculated by dividing the total invoiced value of each species/grade combination for the time period in question by the total volume of each species/grade combination invoiced in the same time period. Please see Appendix 1 for an example of these calculations.

2. OLD GROWTH TIMBER - FLAT PRICE

Where an invoice for old growth timber shows a single price per cubic metre for all species/grade combinations listed in the invoice, it is considered to be flat priced.

In order to approximate the recent market value of each species/grade combination, the total value of each species/grade combination on the invoice is adjusted. The adjustment factors, as shown in Appendix 3 are subject to periodic review and adjustment. Please see Appendix 2 for an example of the conversion from flat pricing to spread pricing and the calculation of log prices for a converted invoice.

3. SECOND GROWTH TIMBER

Invoices that are identified as second growth are processed separately from old growth timber invoices in order to separate data into the appropriate category for reporting purposes. Where no indication is made on the invoice it is assumed to be old growth timber and subject to the processes outlined in (1) and (2) above.

In order to approximate the recent market value of each species/grade combination, the total value of each species/grade combination on the invoice is adjusted. The adjustment factors for second growth are shown in Appendix 5.

Second growth timber invoice data is used in the calculation of log prices for stumpage appraisal purposes where the database of second growth log sales is large enough to be statistically valid. Where there is insufficient data there is a requirement to adjust or combine with old growth timber data as outlined below. See appendix 7 for the second growth conversion table.

For certain species/grades, a conversion factor as shown in Appendix 7 is applied against the log prices of old growth timber at the species/grade level. For example, second growth H grade cedar is given a value factor of 90 percent of old growth H grade cedar. These conversion values are reviewed periodically by the ministry in consultation with the coast log selling price subcommittee.

5. PUBLISHED LOG PRICES

A set of log prices, by species and log grade, is developed using VLM sales data for each one-month reporting period. The data is used to produce a three-month schedule of log prices, by species and log grade, used for stumpage rate determinations. A three-month schedule is also created for second growth stumpage determinations[2]. These schedules are published on the web monthly by Timber Pricing Branch and can be found at:

www.for.gov.bc.ca/hva/logreports.htm; and

www.for.gov.bc.ca/hva/parameters.htm.

It should be noted that log prices used in the stumpage appraisal process combine hemlock and balsam into hembal.

For stumpage appraisal purposes, the log price for pine grades D and F are administratively set to be equal to the log price for pine grade H.

The volumes and values associated with deciduous logs (alder, birch, cottonwood and maple) are collected in the old growth table for information purposes but are omitted from any stumpage appraisal calculations.

Also for stumpage appraisal purposes, in a month where there is insufficient data to calculate a log price for a species/grade combination the log price is administratively set to be equal to the log price from the previous period.

Timber Pricing Branch calculates and reports log prices to the nearest $\$0.01/m^3$.

[2] Second growth timber is defined in the *Coast Appraisal Manual* as timber that is less than 141 years old.

APPENDIX 1

SPREAD PRICE INVOICE CALCULATION (FOR MANY INVOICES)

Inv. 001		Inv. 002		Inv. 003		Inv. 004		**Log Price Totals**
Species	CE	Species	CE	Species	CE	Species	CE	
Grade	H	Grade	H	Grade	H	Grade	H	
Volume (m^3)	412.71	Volume (m^3)	351.47	Volume (m^3)	400.24	Volume (m^3)	376.80	1,541.22
Value ($)	33,809.20	Value ($)	27,546.57	Value ($)	38,214.95	Value ($)	30,700.66	130,274.38

Log price for H grade cedar based on Invoices #001 - #004: $84.53/$m^3$ ($130,274.38 / 1,541.22 m^3)

APPENDIX 2

FLAT PRICE INVOICE CONVERTED TO SPREAD PRICE

This invoice represents a flat rate fir large peeler sort.

			(a)			(b)	(c)	(d)=(b)*(c)	(f)=((a)*(c))/(e)
Pieces	Grade	Species	Volume	$/m^3	Amount	Percent of Volume	Relative Value from Appd 3	Factor	Species Log Price
3	B	FI	14.96	180.00	2,692.80	2.20%	110%	0.024170	$200.94
126	C	FI	319.92	180.00	57,585.60	46.99%	100%	0.469897	$182.67
1	D	FI	5.57	180.00	1,002.60	0.82%	200%	0.016362	$365.34
116	H	FI	340.38	180.00	61,268.40	49.99%	95%	0.474951	$173.54
246			680.83			100.00%		**0.985381**	

(e)=sum(d)

Total amount of this flat priced invoice 122,549.40

Log price of this flat rate invoice (a) 180.00

($122,549.40 / 680.83m^3)

This invoice represents a flat rate HemBal high grade sort.

			(a)			(b)	(c)	(d)=(b)*(c)	(f)=((a)*(c))/(e)
Pieces	Grade	Species	Volume	$/m^3	Amount	Percent of Volume	Relative Value	Factor	Species Log Price
10	D	HE	66.70	190.00	12,673.00	39.84%	100%	0.398447	$200.42
2	F	HE	15.20	190.00	2,888.00	9.08%	85%	0.077180	$170.35
2	H	HE	21.40	190.00	4,066.00	12.78%	70%	0.089486	$140.29
10	D	BA	64.10	190.00	12,179.00	38.29%	100%	0.382915	$200.42
24			167.40			100.00%		**0.948029**	

(e)=sum(d)

Total amount of this flat priced invoice 31,806.00

Log price of this flat rate invoice (a) 190.00

($31,806.00 / 167.40m^3)

Where :

(a) = The flat rate log price of the invoice as calculated by dividing total invoice value by total invoice volume.

(b) = The volume for the specific species / grade combination divided by the total invoice volume.

(c) = This percentage is taken from the Spread Price Relative Value Tables.

(Please see Appendix 3)

The Spread Price Relative Value Table values were derived in consultation with the coast log selling price subcommittee during the winter of 2010 and are subject to periodic review and adjustment.

(d) = By multiplying the figure in column (b) by the relative value in column (c) a conversion factor is calculated for each species / grade combination on the invoice.

(e) = The sum of all the species/grade factors develops a total factor to be applied against the whole invoice.

(f) = By multiplying the relative value percentage of the species/grade combination (c), by the flat rate invoice log price (a) then dividing this product by the entire invoice factor (e) the species/grade specific log price is calculated for this invoice.

APPENDIX 3

OLD GROWTH
FLAT PRICE – SPREAD PRICE RELATIVE VALUES EFFECTIVE JULY 1, 2012

All Deciduous

	ALL
System code>	D
Grade	
X	100
Y	100
Z	0

Cedar

	Lumber	Large Merch.	Small Merch.	Gang	Utility Sawlog	Large Shingle	Utility Shingle	Chip n' Saw	Large Pulp	Small Pulp
System code>	A	M	N	G	S	L	U	C	X	Y
Grade										
D	100	135	130	150	150	150	150	100	200	125
F	85	115	115	140	150	125	150	100	200	125
H	70	100	100	110	135	100	120	100	200	125
I	55	80	90	100	125	80	115	100	200	125
J	0	65	95	100	125	50	90	115	200	125
K	80	100	100	90	135	115	140	100	200	125
L	60	75	85	80	110	100	130	100	200	125
M	0	60	60	70	90	80	100	100	200	125
U	0	30	50	80	100	50	85	100	200	110
X	0	10	10	40	90	40	75	80	170	100
Y	0	0	0	0	0	0	0	0	100	40
Z	0	0	0	0	0	0	0	0	0	0

Cypress

	High Grade	Standard Sawlog	Gang	Utility Sawlog	Large Pulp	Small Pulp
System code>	H	S	G	U	X	Y
Grade						
D	100	160	160	180	125	125
F	80	130	160	145	125	125
H	60	100	160	130	125	125
I	25	75	120	120	125	125
J	0	65	100	65	125	125
U	15	35	80	100	110	110
X	5	10	50	75	100	100
Y	0	0	0	25	40	40
Z	0	0	0	0	0	0

OLD GROWTH
FLAT PRICE – SPREAD PRICE RELATIVE VALUES EFFECTIVE JULY 1, 2012

Fir

	High Grade	Lumber	Large Peeler	Shop	Standard Sawlog	Small Peeler or Gang	Chip n' Saw	Utility	Large Pulp	Small Pulp
System code>	H	O	P	Q	S	G	C	U	X	Y
Grade										
B	70	75	110	125	125	140	120	120	120	100
C	60	75	100	100	110	130	120	120	120	100
D	100	145	200	150	150	160	120	120	120	100
F	80	100	140	125	130	150	120	120	120	100
H	65	80	95	100	100	120	120	120	120	100
I	50	55	75	80	90	110	120	100	120	100
J	0	0	75	50	80	100	120	90	100	100
U	0	40	40	50	60	80	100	80	120	100
X	0	0	20	25	40	40	75	60	100	100
Y	0	0	0	0	0	0	0	40	80	100
Z	0	0	0	0	0	0	0	0	0	0

Hemlock / Balsam

	High Grade	Lumber	Standard	Gang Peeler	Gang	Chip n' Saw	Utility Sawlog	Large Pulp	Small Pulp
System code>	H	O	S	P	G	C	U	X	Y
Grade									
D	100	115	135	120	115	110	120	100	100
F	85	100	115	110	115	110	120	100	100
H	70	80	100	110	115	110	120	100	100
I	50	70	95	90	100	110	100	100	100
J	0	0	85	100	100	110	90	100	100
U	0	0	60	80	80	100	85	100	100
X	0	0	50	0	50	90	75	100	100
Y	0	0	0	0	0	0	65	100	100
Z	0	0	0	0	0	0	0	0	0

Pine

	Standard Sawlog	Gang	Small Pulp
System code>	S	G	Y
Grade			
D	135	160	100
F	120	150	100
H	100	120	100
I	80	110	100
J	60	100	100
U	45	80	100
X	35	40	100
Y	0	0	100
Z	0	0	0

OLD GROWTH
FLAT PRICE – SPREAD PRICE RELATIVE VALUES EFFECTIVE JULY 1, 2012

Spruce

	High Grade	Shop/Lg. Merch	Standard Sawlog	Gang	Chip n' Saw	Large Pulp	Small Pulp
System code>	H	O	S	G	C	X	Y
Grade							
D	100	170	200	115	110	100	100
E	85	150	170	115	110	100	100
F	80	135	160	115	110	100	100
G	65	110	130	115	110	100	100
H	60	100	100	100	110	100	100
I	40	80	90	90	110	100	100
J	0	0	80	100	110	100	100
U	0	50	60	80	100	100	100
X	0	25	50	60	90	100	100
Y	0	0	0	0	0	100	100
Z	0	0	0	0	0	0	0

APPENDIX 4

OLD GROWTH
MINISTRY PRICING SYSTEM LOG GRADES AND EQUIVALENT SORTS

Species	Log Sort & System Code	Main Grades	Minor Grades	Trace Grades	Avg. Log Volume	Comments
All Deciduous	*(code – D)*					*Sawlog W grade recorded as X grade.
Cedar	Lumber *(code – A)*	D, F, H	K, L	I	3.0 m^3 – 6.5 m^3	* Equivalent to high grade in other species.
	Large Merch. *(code – M)*	H	F, D	K, I	>4.0 m^3	* Large diameter sawlog with some clear potential.
	Small Merch /House logs. *(code – N)*	H, I	J	F, L, M, U	2.0 m^3 – 4.0 m^3	* Good quality sawlog.
	Gang *(code – G)*	J	H, U	X	0.6 m^3 – 1.2 m^3	* Good millable sawlog.
	Utility Sawlog *(code – S)*	U, X	I, J, M, Y	H, L	< 1.5 m^3	* A rough or risky gang log, won't cut great merchantable lumber, smaller sized log.
	Large Shingle *(code – L)*	L, M, K		U, X, I	1.8 m^3 – 3.5 m^3	* Good shake/shingle potential.
	Utility Shingle *(code – U)*	M, L	K, U, X		< 1.5 m^3	* Low quality shake/shingle log
	Chip n' Saw *(code – C)*	U, J, X		Y, M	< 0.5 m^3	* Same criteria across all species with this sort.
	Large Pulp *(code – X)*	U, X, Y, M			~ 1.0 m^3	* Often cedar pulp logs are included as "filler" in utility sorts.
	Small Pulp *(code – Y)*	Y, U, X, M			0.2 m^3 – 1.0 m^3	* Same as large pulp, only smaller logs.
Cypress	High Grade *(code – H)*	D, F, H		I	~ 3.5 m^3	* Lumber, high grade, temple
	Standard Sawlog *(code – S)*	H, I	F, J, U	D	< 3.0 m^3	* No Y grade allowed in this sort.
	Gang *(code – G)*	J, U, I	H, X		~ 0.75 m^3	
	Utility Sawlog *(code – U)*	U, X, I		H, J, Y	0.6 m^3 – 3.0 m^3	* Defects limit lumber recovery.
	Large Pulp *(code – X)*	X, Y, or Y, X	U	J	>1.0 m^3	* Suitable for chipping.
	Small Pulp (*code – Y)*	X,Y or Y,X	U	J	< 1.0 m^3	

OLD GROWTH
MINISTRY PRICING SYSTEM LOG GRADES AND EQUIVALENT SORTS

Species	Log Sort & System Code	Main Grades	Minor Grades	Trace Grades	Avg. Log Volume	Comments
Fir	High Grade *(code – H)*	D, F	H, B		> 4.5 m^3	* Custom cut.
	Lumber *(code – O)*	F, H, B, C	D		3.5 m^3 – 5.0 m^3	* Custom cut.
	Shop *(code – Q)*	H	D, F	B, C, U	2.5 m^3 – 5.0 m^3	*Custom cut.
	Large Peeler *(code – P)*	C, H		F, B, I	2.0 m^3 – 3.5 m^3	* Check if purchaser is a plywood or veneer producer, good quality low risk logs, size determines grades. Suitable for peeling or custom cut.
	Standard Sawlog *(code – S)*	H, I	C, J, U	X, F	2.0 m^3 – 3.5 m^3	* Good quality sawlog.
	Gang/Sm. Peeler *(code – G)*	J		H, I, U, X	0.6 m^3 – 1.2 m^3	* Smaller than a standard log, still produces good lumber.
	Chip n' Saw *(code – C)*	U, J, X		Y	< 0.4 m^3	* Same criteria as other species (see HemBal).
	Utility *(code – U)*	U, X, Y	I	H	> 1.0 m^3	* Due to fir's propensity to grow spiral grained, the log avg. could be anything greater than 1.0 m.
	Large Pulp *(code – X)*	X, Y, U			> 1.0 m^3	* Not a desired sort due to fir's high pitch content, basically good for firewood.
	Small Pulp *(code – Y)*	U, X, Y		J	< 1.0 m^3	
						General note: Fir pulp grade logs do not make the same quality end product as HemBal pulp grade logs.
HemBal	High Grade *(code – H)*	D, F	H		4.0 m^3 – 7.0 m^3	* A very specific sort, strictly a measure of log quality.
	Lumber *(code – O)*	F, H	D	I	2.75 m^3 – 4.5 m^3	
	Standard *(code – S)*	H, I	J, U, F	X	1.8 m^3 – 3.5 m^3	* Large diameter sawlog, limited clear, merchantable construction lumber.
	Gang Peeler *(code – P)*	J	H	I, U	0.7 m^3 – 1.2 m^3	* Uniform log size, plywood/veneer producing log, minor taper, will look like a good gang sort but peelers will demand a slightly higher price.
	Gang *(code – G)*	J	U	X, I, H	0.6 m^3 – 1.2 m^3	* Good solid sawlog, same as above, small sawlog.
	Chip n' Saw *(code – C)*	U, J	Y	X	< 0.5 m^3	* 4 to 7 inch top, sound sawlog
	Utility Sawlog *(code – U)*	I, U, X		H	~ 2.0 m^3	* May cut poor quality lumber, larger log average than gang, better price than pulp logs.
	Large Pulp *(code – X)*	X, Y, U		I	1.5 m^3 – 2.0 m^3	* May not produce lumber, will be pulped, a sort based on log size, higher proportion of Y's than utility sawlog.
	Small Pulp *(code – Y)*	U, X, Y	J		0.3 m^3 – 0.7 m^3	* May not produce lumber, sort based on log size, very small log average.

OLD GROWTH
MINISTRY PRICING SYSTEM LOG GRADES AND EQUIVALENT SORTS

Species	Log Sort & System Code	Main Grades	Minor Grades	Trace Grades	Avg. Log Volume	Comments
Pine	Standard Sawlog *(code – S)*	H, I	J, U	X, Y	> 1.0 m^3	* A low volume species, usually all held for one boom load out. Large diameter sawlog.
	Gang *(code – G)*	J	H, I	U	> 1.0 m^3	* Sawlog suitable for lumber or veneer.
	Pulp *(code – Y)*	U,X,Y	J	I	< 1.0 m^3	* Chipper wood. Poor quality pulp due to high pitch content.
Spruce	High Grade *(code – H)*	E, D, F, G	H	I	> 6.0 m^3	* Specific sort based on quality, may not find large quantities of H.
	Shop/Lg. Merch *(code – O)*	H, G, I		F, D, U	> 4.0 m^3	* A very large log average, H is median grade, could have full range of grades around it.
	Standard *(code – S)*	H, I	U	J, G, X	2.5 m^3 – 4.0 m^3	* A quality sawlog.
	Gang *(code – G)*	J		U, X, H, I	0.6 m^3 – 1.2 m^3	* Same criteria as other species, a good sawlog.
	Chip n Saw *(code – C)*	U, X, Y		Y	<0.4 m^3	
	Large Pulp *(code – X)*	X, Y	U	I	> 1.5 m^3	* Extremely risky sawlog.
	Small Pulp *(code – Y)*	U, X, Y		J	0.2 m^3 – 1.0 m^3	* Too small for sawlog, very small and poor quality log.

APPENDIX 5

SECOND GROWTH
FLAT PRICE – SPREAD PRICE RELATIVE VALUES

Cedar

	Poles/ House Logs	Merch	Gang	Shingle	Utility/ Powder	Chip n' Saw	Pulp
System code>	A	N	G	L	U	C	Y
Grade							
D	100	100	100	110	100	100	100
F	100	100	100	110	100	100	100
H	100	100	100	110	100	100	100
I	100	95	100	100	100	100	100
J	100	95	100	50	100	100	100
K	0	75	75	120	100	100	100
L	0	70	70	110	100	100	100
M	0	60	60	100	100	100	100
U	70	70	80	90	100	100	100
X	0	50	50	50	50	50	100
Y	0	0	0	0	0	0	50
Z	0	0	0	0	0	0	0

Fir

	Poles/ House Logs	Gang Peeler	Select/Large Peeler	Standard Sawlog	Gang Sawlog	Chip n' Saw	Pulp
System code>	A	O	P	S	G	C	Y
Grade							
B	115	100	125	105	100	100	100
C	115	100	100	105	100	100	100
D	115	100	125	105	100	100	100
F	115	100	125	105	100	100	100
H	100	110	95	105	100	100	100
I	90	100	90	100	100	100	100
J	80	100	85	95	100	100	100
U	70	70	60	80	70	90	100
X	0	50	50	50	50	50	100
Y	0	0	0	0	0	0	100
Z	0	0	0	0	0	0	0

SECOND GROWTH
FLAT PRICE – SPREAD PRICE RELATIVE VALUES

Hemlock/Balsam

	Standard	Gang	Chip n' Saw	Pulp
System code>	S	G	C	Y
Grade				
D	100	100	100	100
F	100	100	100	100
H	100	100	100	100
I	95	100	100	100
J	95	100	100	100
U	80	85	90	100
X	60	75	80	100
Y	0	0	0	100
Z	0	0	0	0

Spruce

	Standard Sawlog	Gang	Pulp
System code>	S	G	Y
Grade			
D	100	100	100
E	100	100	100
F	100	100	100
G	100	100	100
H	100	100	100
I	95	100	100
J	95	100	100
U	80	85	100
X	60	75	100
Y	0	0	100
Z	0	0	0

APPENDIX 6

SECOND GROWTH SORT DESCRIPTIONS

Species	Log Sort & System Code	Main Grades	Minor Grades	Trace Grades	Avg. Log Volume	Comments
Cedar	Poles/House Logs *(code – A)*	H, J	I	U	> 0.75 m^3	
	Merch *(code – N)*	H, I	J	U	1.3 m^3 – 3.0 m^3	* Good quality sawlog.
	Gang *(code – G)*	J	H, U, I	X	0.6 m^3 – 1.2 m^3	* Good millable sawlog.
	Shingle *(code – L)*	M	I, U, H	J, L, K	< 1.5 m^3	* Low quality shake/shingle log.
	Utility/Powder *(code – U)*	J, I, U	X, M	Y	> 0.5 m^3	* Low grade sawlog or shingle, may include powder.
	Chip n' Saw *(code – C)*	U, J	X	Y, M	< 0.5 m^3	* Same criteria across all species with this sort.
	Pulp *(code – Y)*	Y, U, X, M			< 1.0 m^3	* Not suitable for lumber.
Fir	Poles/House Logs *(code – A)*	H, J	I, C	U	> 0.75 m^3	
	Gang Peeler *(code – O)*	J		H, I, U, X	0.5 m^3 – 1.2 m^3	* Used for veneer manufacture.
	Select/Large Peeler *(code – P)*	C, H, J		I	1.3 m^3 – 3.5 m^3	* Good quality sawlogs. Suitable for peeling or custom cut.
	Standard Sawlog *(code – S)*	H, I	J, U	C, X	1.3 m^3 – 3.5 m^3	* Good quality sawlog.
	Gang Sawlog *(code – G)*	J	I, U	H, X	0.5 m^3 – 1.2 m^3	* Lower quality than gang peeler. Produces good quality lumber.
	Chip n' Saw *(code – C)*	U, J		X	< 0.4 m^3	* Same criteria as other species (see HemBal).
	Pulp *(code – Y)*	U, X, Y		J	< 1.0 m^3	* Not suitable for lumber or veneer.
HemBal	Standard *(code – S)*	H, I	J, U	X	1.2 m^3 – 3.0 m^3	* Large diameter sawlog, merchantable construction lumber of log quality.
	Gang *(code – G)*	J	U	X, I, H	0.6 m^3 – 1.2 m^3	* Good solid sawlog, same as above, small sawlog.
	Chip n' Saw *(code – C)*	U, J	X	Y	< 0.5 m^3	* 6 to 7 inch top, sound sawlog
	Pulp *(code – Y)*	U, X, Y	J	I, H	<1.0 m^3	* Sort based on log size, very small log average.
Spruce	Standard Sawlog (code – S)	H, I	U	J, X	1.2 m3 – 3.0 m3	* A quality sawlog.
	Gang/Peeler (code – G)	J	U	X, H, I	0.6 m^3 – 1.2 m^3	* Good solid sawlog, same as above, small sawlog.
	Pulp (code – Y)	U, X, Y	J	I, H	< 1.0 m3	* Will not produce lumber, sort based on log size, very small log average.

APPENDIX 7

SECOND GROWTH CONVERSION TABLE TO PRODUCE "TABLE 52" FOR STUMPAGE CALCULATION PURPOSES

	hembal	cedar	fir	spruce	pine
Grade					
B			use H		
C			actual 2G		
D	use H	use H	use H	use H	OG
E				use H	
F	use H	use H	use H	use H	OG
G				use H	
H	0.97*OG	0.90*OG	actual 2G	use hembal H	OG
I	1.05*OG	0.99*OG	actual 2G	use hembal I	OG
J	actual 2G	actual 2G	actual 2G	use hembal J	OG
K		OG + 2G blend			
L		OG + 2G blend			
M		OG + 2G blend			
U	OG + 2G blend	OG + 2G blend	OG + 2G blend	use hembal U	OG
X	OG + 2G blend	OG + 2G blend	OG + 2G blend	use hembal X	OG
Y	OG + 2G blend	OG + 2G blend	OG + 2G blend	use hembal Y	OG

OG = old growth AMV

2G = second growth AMV

* = multiply