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MINISTRY OF LANDS, PARKS AND HOUSING

NIMPKISH ISLAND
TIMBER APPRAISAL

JULY, 1984

ENTERED
IN M.P.R.
DATE: 8-7-89-11
INITIALS:.....

REID, COLLINS AND ASSOCIATES LIMITED

MINISTRY OF LANDS, PARKS AND HOUSING

NIMPKISH ISLAND
TIMBER APPRAISAL

JULY, 1984

Prepared by:



J.R. Jones, R.P.F.



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1.0 INTRODUCTION

In a letter dated March 15, 1984, with proposed terms of reference attached, the Ministry of Lands, Parks and Housing requested Reid, Collins and Associates Limited to submit a proposed work program to undertake an appraisal of timber value on the proposed Nimpkish Island Ecological Reserve.

Reid, Collins submitted a detailed proposal outlining its proposed work program on April 11, 1984. This proposal was reviewed by the Ministry of Lands, Parks and Housing, Ministry of Forests and Canadian Forest Products and approved after several changes.

In an agreement signed May 22, 1984, the Ministry of Lands, Parks and Housing retained Reid, Collins to provide the services described in Schedule 'A' which contained Reid, Collins' approved work program, together with the original terms-of-reference.

The timber on this proposed ecological reserve is part of an Old Temporary Tenure now designated as Timber Licence T0-103-Block 1. The cutting rights are held by Canadian Forest Products Ltd. which manages it as an integral part of Tree Farm Licence No. 37.

2.0 TERMS OF REFERENCE

The terms of reference and Reid, Collins' proposed work program for this appraisal are contained in Appendix I. The main points are summarized as follows:

- To ascertain the log grade percentages of the subject timber and apply them to a 1977 Ministry of Forests/Canadian Forest Products joint cruise to determine volume by species and industrial log grade.
- To determine costs of harvesting and delivering the subject timber to Howe Sound.
- To determine average log selling prices by industrial log grade based on published prices over the 5-year period 1977-1981 inclusive, all in terms of December 1981 dollars.
- To determine the market value of the subject timber by deducting the total delivered logging costs from the total market/selling price for the cruised volume.
- No value was to be given to deciduous species.
- Valuation date is December 31, 1981.

3.0 SYNOPSIS

The market value of the timber situated on the proposed Nimpkish Island Ecological Reserve, as at December 31, 1981, is appraised at \$909,350.00.

4.0 BACKGROUND

The timber is standing on one main island and a few adjacent islets in the Nimpkish (Kla-anch) River at approximately 650 feet in elevation above sea level. The ground is generally flat but broken by an occasional flood channel. The island is comprised of sand and gravel. The growing site is good. The Nimpkish River in this vicinity is a known salmon habitat. The location is 11 miles from the town of Woss.

The timber is generally mature and overmature Douglas-fir and cedar. There are 9 370 cunits of merchantable coniferous volume on 37.2 acres. This stand would provide an excellent winter logging chance once access by temporary bridge is achieved. A map of Nimpkish Island is contained in Appendix II.

The close utilization volume, 9.1" dbh less DW₂B, as determined by a joint Ministry of Forests/Canadian Forest Products 100% cruise undertaken in 1977, is as follows:

<u>Species</u>	<u>Volume (Cunits)</u>	<u>%</u>	<u>%</u>
Douglas-fir	5 850	61.7	62.4
cedar	3 020	31.8	32.2
hemlock	250	2.6	2.7
balsam	10	0.1	0.1
spruce	140	1.5	1.5
white pine	100	1.1	1.1
cypress	-	-	-
Sub-total	9 370	98.8	100.0
alder	100	1.1	-
maple	10	0.1	-
Total	9 480	100.0	-

96 '88

The timber on Nimpkish Island is Crown timber to which Canadian Forest Products Ltd. (CFP) holds cutting rights. It is part of an Old Temporary Tenure, Timber Licence 14062, which is now known as Timber Licence TO 103 - Block 1. CFP has elected to

pay full royalty, rather than appraised stumpage, on timber cut from this tenure. Timber Licence TO103 is managed as part of Tree Farm Licence Agreement #37, which is also held by Canadian Forest Products Ltd. The Licensee operates the tree farm licence as a going concern timber harvesting operation in order to supply raw material to its manufacturing plants.

A main logging road permits vehicle access to within less than ¼ mile of the west side of the island. Branch roads allow similar access on the east side. A railroad loading spur is situated within 3 miles - the Maquilla Reload. The rail haul to salt water at Beaver Cove is 51 mile (82.2 km).

Canadian Forest Products Ltd. has spent funds on capital improvements and installations in the Nimpkish Valley and at Beaver Cove. Permanent fixtures include camp and shops, railroad and truck log transport systems and log sorting and booming facilities. The company has developed a skilled labour force which is reasonably stable. In summary, an efficient infrastructure exists in the Nimpkish Valley for harvesting and transporting logs to market.

The Licensee is obligated to apply fire protection and basic silvicultural practices. Similar sites on TFL #37, to that supporting the subject stand of timber, tend to brush-in heavily, so they are burned and planted with jumbo stock.

The timber on Nimpkish Island would normally be harvested as part of and contribute to the approved Allowable Annual Cut of TFL #37. The Licensee was restricted from harvesting the timber on Nimpkish Island during 1977 - 81. Then in 1982 the island's volume was excluded from allowable annual cut calculations. Thus, the timber and land were effectively removed from TFL #37 at that time.

5.0 TIMBER ASSESSMENT

5.1 Sample Grade Cruise

Trees were graded on 35 fixed radius sample plots established on a 60 x 60 metre grid. A total of 348 trees were graded.

The following data was recorded for each tree on each plot: species, dbh (taped), pathological defects, and industrial log grade by 10-metre log length. All measurements were in metric. Industrial log grades were determined in accordance with the grade specifications attached to Reid, Collins' proposed work program in Appendix I.

The trees were graded by Mr. D.P. Swensson, Reid, Collins' cruising supervisor. Mr. Frank White, an independent log broker collaborated on site with Mr. Swensson. Representatives from CFP and the MoF monitored grading on a portion of the plots.

Cruise plots were compiled, as if one stratum, to the same specifications as the 1977 cruise. The height-diameter data/relationships established for the 1977 joint CFP/MoF cruise were used to calculate volumes. A log size distribution analysis was prepared for each grade. Computer compiled results are shown in Appendix III. Volume below the minimum allowable top diameter of any grade was allocated to a lower grade. Log grade percentages by species were calculated, based on the resultant volumes.

Species graded in the sample plots were Douglas-fir, cedar, hemlock and spruce. White pine and balsam grades were allocated from visual estimates on site.

5.2

Calculated Industrial Log Grade Distribution

<u>Species</u>	<u>Grade</u>	<u>%</u>
Douglas-fir	#1 peeler	9.5
	#2 peeler	3.5
	#3 peeler	18.9
	#4 peeler	0.3
	SFP	19.3
	#2 sawlog	28.1
	#3 sawlog	11.3
	gang	0.7
	chip'n'saw	0.7
	pulp	7.7
	Total	<u>100.0</u>
cedar	#2 lumber	7.6
	#2 shingle	6.0
	#2 sawlog	43.8
	#3 sawlog	13.6
	gang	1.4
	pulp	27.6
	Total	<u>100.0</u>
hemlock	#1 sawlog	2.8
	#2 sawlog	21.2
	#3 sawlog	28.3
	gang	11.2
	chip'n'saw	3.6
	pulp	32.9
	Total	<u>100.0</u>
spruce	blue spot peelable	18.6
	#2 sawlog	7.3
	#3 sawlog	27.7
	gang	17.5
	chip'n'saw	4.1
	pulp	2.4
	Total	<u>22.4</u> <u>100.0</u>
balsam	SFP	30.0
	gang	50.0
	pulp	20.0
	Total	<u>100.0</u>
white pine	SFP	30.0
	#2 sawlog	40.0
	#3 sawlog	20.0
	pulp	10.0
	Total	<u>100.0</u>

6.0 LOG SELLING PRICES

6.1 Base Log Selling Price

A base selling price was compiled for each individual log grade, by month, based on the price range published by an independent, reputable log brokerage house. The source of available pricing data was:

- . Jacobson-Phillips Logs Ltd. - 1977 - 11 months
- 1978 - 10 months
- . Patrick & Miles Logs Ltd. - 1979 - 12 months
- 1980 - 12 months
- 1981 - 10 months

The price recorded by month was the mid-point of the reported range. The prices shown in Appendix IV reflect adjustments made to a few prices of hemlock and balsam quoted in 1978. Reported prices were modified in order to maintain the traditional relationship between grades of a species and within a grade between species. An annual base price by grade was calculated for each year from the arithmetic average of monthly prices (Appendix IV).

6.2 Premiums to Base Price

A relatively slight sales premium was added to the average annual base price of #2 and #3 cedar sawlogs in the years 1979, 1980 and 1981 in order to reflect a particular market opportunity for Englewood "merch" cedar. (Refer to the pricing statement by Mr. Frank White in Appendix V.) These premiums are shown in Appendix IV.

The adjusted values for "merch" cedar were incorporated into calculations of average selling price in Appendix VI.

6.3 Unit Prices

The format of price quotations in Appendix IV varies between the periods 1977/78 and 1979/80/81, partly due to changes in merchandising practices, which results in the following kinds of inconsistencies:

- prices reported for a grade change from $\$/Mfbm$ to $\$/cunit$
- prices were reported for a grade for only part of the period 1977-1981
- some sorts are divided into high and low quality "sub-sorts", resulting in more than one price reported for a general industrial sort

Therefore, it was necessary to re-state some reported figures before calculating the average selling price in Appendix VI.

The following notes explain what measures were taken in order to achieve consistency and completeness of reported figures within any one grade, prior to calculating average selling price.

Gang Sawlogs:

- The $\$/Mfbm$ prices for #3 gang logs in 1977 and 1978 were converted to $\$/cunit$ prices in order to be consistent with pricing units used in 1979, 1980 and 1981 quotations, except for cedar.
- A cedar gang price was not quoted for 1979/80/81, therefore the $\$/Mfbm$ price for this period was based on the average base price for #3 merch less $\$25/Mfbm$.
- The conversion factors applied to gang sawlogs were obtained from the Council of Forest Industries and Western Forest Products Ltd.

Pulp Logs:

- . The \$/Mfbm prices for #3 pulp logs of hemlock, balsam, cedar and spruce in 1977 and 1978 were converted to \$/cunit prices in order to be consistent with the pricing units used in 1979/80/81.
- . Conversion factors applied to all species were obtained from the Council of Forest Industries.
- . The \$/cunit cedar pulp prices applied in 1979/80/81 are based on knowledge of market transactions. No cedar pulp price was reported in this period.
- . Douglas-fir #3 pulp in 1979/80/81 was priced at the average \$/Mfbm price computed for fir lumber rejects plus \$25/Mfbm. No fir #3 pulp price was reported in this period.
- . Pine pulp was priced the same as cedar pulp.

Cedar #2 Shingle: The price applied in each year 1979/80/81 was an average of the annual price computed for each of two merchandising sorts, #2 shingle and #2 shake.

Spruce Minor Sorts:

- . Prices for blue-spot in 1977 and 1978 were not reported independently, so Council of Forest Industries' figures in \$/cunit were applied. Mfbm prices 1979/80/81 were converted to \$/cunit @ 6.4 fbm/cubic foot.
- . Prices for peelable grade in 1979/80/81 were not reported. The prices applied were those for balsam peelable plus \$10/Mfbm.
- . Prices for chip'n'saw in 1979/80/81 were not reported. The prices applied were those for balsam chip'n'saw.

Hemlock Sawlogs: The price applied in each year 1979/80/81 was the average reported by grade for two general categories - standard lumber and standard merchantable.

Pine:

- . Peelable pine was priced the same as peelable balsam.
- . Sawlogs were priced at the figures reported by the Council of Forest Industries, excluding Lumber Rejects and Y grades.
- . Pine pulp was priced the same as cedar pulp.

Summary Comment - The above measures enabled the expression of value to be complete and in a consistent pricing unit for each grade, 1977 through 1981.

6.4

Calculation of Average Selling Price

Calculations of average selling price in December 31, 1981 dollars are shown in Appendix VI.

- . The annual Implicit Price Indices supplied by Statistics Canada were used to express annual average prices in terms of December 31, 1981 dollars. The price index for December 31, 1981 was determined as follows:

4th quarter 1981	259.4
1st quarter 1982	<u>266.0</u>
Average = IPI at Dec. 31, 1981	<u>262.7</u>

- . Conversion factors applied to average \$/Mfbm grade prices are applicable to Nimpkish Valley logs produced by the Englewood Logging Division of CFP.
- . The average price by grade in \$/cunit was applied to the calculation of overall selling price for each species, according to the proportion of each grade present.
- . Overall selling price of Nimpkish Island timber is based on the proportion of each species present.

- A periodic average selling price was calculated for the five years 1977 through 1981.

The average log selling price, as calculated in Appendix VI, is summarized for all species as follows:

	Dec. 31, 1981 Dollars
• Average Selling Price, 1977-81	<u>\$196.61/Cunit</u>

7.0 DELIVERED LOG COSTS

7.1 Basic Assumptions

This report assumes that the Englewood Logging Division is an efficient operator at the production levels permitted by TFL #37. Logs on Nimpkish Island would be harvested, transported, sorted and bundled in an expedient manner consistent with current practices. Resources would be utilized to achieve maximum production per day. Therefore, labour, machinery and equipment would be organized effectively to result in minimum overall cost.

Three temporary bridges will have to be constructed (one large span of approximately 30m over the Kila-anch River and two smaller spans across flood channels) to provide road access to Nimpkish Island. It is assumed that the physical conditions are the same as depicted on the map in Appendix II. Falling and bucking would begin promptly. The timber would be harvested as one setting: logs would be grapple-yarded to roadside, loaded onto trucks and then transferred directly to railcars. The timber would be moved from Nimpkish Island to Beaver Cove within one to two months. Total time required from start of road and bridge construction through to delivering logs to Howe Sound would be four to five months. The temporary bridge would be removed promptly following hazard abatement.

7.2 Costs Defined

Logging operating costs are defined as those out-of-pocket and other costs which CFP would bear as a burden if the timber on Nimpkish Island were harvested during the normal course of operating. Generally, these costs are: labour at full payroll costs, travel time and travel costs; supplies such as fuel, cable and tires; repair and maintenance; materials for road and bridge construction; wear and tear on machinery and equipment; operating overhead, supervision and administration; camp and cookhouse costs; royalty on timber cut and scaled; log towing; and finally, reforestation costs.

A general description of operating costs and contractual obligations follows:

Falling and Bucking - "full costs" for a winter show with valley bottom old growth:

- . labour, travel time and travel cost
- . fuel, oil and maintenance
- . physical "wear and tear" of equipment

Yard, Load and Truck Haul - "full costs" for grapple-yarding and highway trucks:

- . labour, travel time and travel cost
- . fuel, oil, etc., tires, cable, etc. and maintenance of machinery
- . physical "wear and tear" of equipment

- . fuel, oil, tires, wires, chains, boomsticks, etc. and maintenance of equipment
- . physical "wear and tear" of machinery and equipment

Towing - "full costs":

- . towing and insurance to Howe Sound only

Road Access and Temporary Bridge Construction:

- . labour
- . materials - utilizing old stringers on site wherever possible
- . fuel, oil, tires, etc. and maintenance of machinery (gravel trucks, etc.)
- . physical "wear and tear" of equipment and machinery

Forestry Costs:

- . hazard abatement by slashburning
- . reforestation by planting with jumbo stock supplied free by the Ministry of Forests

Camp and Cookhouse Costs:

- . for woods crew and other labour
- . camp costs - office, freight, shop, etc.

Operating Overhead, Supervision and Administration

Royalty

Average Cost of Royalty

	<u>Cunits</u>	<u>%</u>	<u>\$/m³</u>	<u>Pro-rate \$/m³</u>
Fir	5,850			
Spruce	140			
	<u>5,990</u>	63.9	\$2.00	1.28
Cedar	3,020			
W. Pine	100			
	<u>3,120</u>	33.3	\$1.50	.50
Hemlock	250			
Balsam	10			
	<u>260</u>	<u>2.8</u>	\$1.20	<u>.03</u>
ALL	<u>9,370</u>	<u>100.0</u>		<u>\$1.81/m³</u>

7.3 Estimated Phase Logging Costs

Phase logging cost estimates were made using the Vancouver Forest Region Stumpage Appraisal Manual as a guide for most phases. Information available from other sources was also considered.

Phase costs are summarized as follows:

*Manual is for average the
i - not average. For average
very easy & very hard selected
the i - not average*

*+ may affect - same for cost analysis
presented by Carfax*

<u>Phase</u>	<u>Cost</u> <u>Dec. 31, 1981 Dollars</u> <u>(\$/m³)</u>
• engineering	\$ 0.41
• construct road, landing & temporary bridge using local available materials on hand	1.53
• falling and bucking	1.67
• high-lead grapple yarding	3.50
• loading on truck @ 45m ³ /load	1.59
• truck haul	1.81
• Maquilla reload	.42
• rail haul	2.47
• road, rail and bridge maintenance	.45
• unload, sort, bundle, dump, boom	2.83
• log scaling	0.29
• cookhouse loss, camp expense, crew transportation and unallocated freight (\$1.67, \$2.16, \$1.86, \$0.12)	5.81
• operating and administrative overhead (\$5.31 + \$2.94)	8.25
• towing to Howe Sound, including insurance	2.03
• slash disposal & residual falling; plant to jumbo stock	.29
• average Royalty rate based on species distribution present	1.81
Total Delivered Log Cost =	35.16 \$/m³
Or	\$99.56 \$/cunit

*looks to be high
a high = 3.50
id high*

*sprayed
in Eng costs
to high
NO - new costs*

*3.50
+ 5.81
9.31*

8.0 APPRAISED MARKET VALUE

Market Value can be defined as:

"The highest price available in an open and unrestricted market between informed prudent parties under no compulsion to act and acting at arm's length, expressed in terms of money or money's worth".

For the purpose of this appraisal, Canadian Forest Products is considered to be one of the potential purchasers and the one most likely to submit the highest price. This price would not normally exceed the difference between the total selling price and the total delivered logging cost, which is defined in Schedule A of the agreement as the procedure to be employed in ascertaining market value.

Accordingly, market value is calculated as follows:

- Average log selling price - \$196.61/Cunit
- Average delivered log cost - 99.56/Cunit
- Market Value 97.05/Cunit

- Total Market Value = 9,370 cunits x \$97.05
= \$909,350

Market value is stated herein in terms of December 31, 1981 pre-tax dollars. Any income tax implications are expressly beyond the scope of this report.

APPENDICES

APPENDIX I

TERMS OF REFERENCE

MINISTRY OF LANDS, PARKS AND HOUSING

PROPOSAL FOR:
TIMBER APPRAISAL
PROPOSED NIMPKISH ISLAND ECOLOGICAL RESERVE

APRIL, 1984

REID, COLLINS AND ASSOCIATES LIMITED

MINISTRY OF LANDS, PARKS AND HOUSING

PROPOSAL FOR:
TIMBER APPRAISAL
PROPOSED NIMPKISH ISLAND ECOLOGICAL RESERVE

APRIL, 1984

Prepared by:

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**PROPOSAL FOR TIMBER APPRAISAL
PROPOSED NIMPKISH ISLAND ECOLOGICAL RESERVE**

1.0 OBJECTIVE

The objective of this appraisal is to provide a professional opinion of ~~value to owner of~~ ^{THE MARKET VALUE} of the timber on Nimpkish Island as at December 31, 1981. *Price WY*

2.0 DESCRIPTION OF AREA

The area is comprised of a number of islands separated by flood channels. Total area is approximately 20.0 hectares of which approximately 17.5 hectares contain merchantable timber. The area is flat and ground conditions are good. Main species are Douglas-fir and western red cedar.

3.0 TIMBER VOLUME

A joint Ministry of Forests/Canadian Forest Products 100% timber cruise was undertaken and compiled in 1977. As a basis for this appraisal, the close utilization volume, 7.1"+ dbh less DW₂B, as determined by this cruise will be used, as follows:

<u>Species</u>	<u>Volume (cunits)</u>	<u>%</u>
Douglas-fir	5 850	61.7
cedar	3 020	31.8
hemlock	250	2.6
balsam	10	0.1
spruce	140	1.5
white pine	100	1.1
cypress	-	-
Sub-total	<u>9 370</u>	<u>98.8</u>
alder	100	1.1
maple	<u>10</u>	<u>0.1</u>
Total	9 480	100.0

4.0 PROPOSED WORK PROGRAM

It is proposed to resample the area in order to establish percentage grade distribution by species by industrial log grades. Average market value for the 5-year period 1977 to 1981 will be determined for each grade. Delivered log costs to Howe Sound will be ascertained.

~~It is proposed that the appraised value to owner be the conversion return, calculated by deducting delivered log costs from market value/selling price of logs.~~ *pwa III*

Details of the above follow.

4.1 Cruising for Grade Determination

It is proposed to establish fixed radius plots (1/5 acre or metric equivalent) on a 60 x 60 metre grid, resulting in ± 40 plots.

The following data will be recorded for each tree on each plot:

- . species
- . dbh (taped)
- . pathological defects
- . industrial log grade by 10-metre log length

All measurements will be in metric.

Industrial log grade will be determined in accordance with the grade specifications in Appendix I. No grading will be undertaken for deciduous species. Poles/piling will not be graded separately.

No tree height measurements will be taken. The height-diameter data/relationships established for the 1977 cruise will be used.

Because of the unique nature of this transaction and the value of the timber involved, Reid, Collins proposes that its most experienced cruiser, Dennis Swensson, be used.

It is anticipated that an MoF Vancouver Regional Office observer and possibly one from CFP will visit the area. We suggest that this, plus any check cruising required, be undertaken when Reid, Collins staff are on site.

4.2 Grade/Volume Compilation

Cruise plots will be compiled to the same specifications as the 1977 cruise - close utilization volume 7.1"+ dbh less DW₂B, using zonal loss factors. Log grade percentages by species will be calculated and applied to the volumes in Section 3.0 to determine volumes by species and industrial log grades.

A log size distribution analysis will be prepared for each grade.

The compilation will treat the area sampled as one forest type.

4.3 Delivered Log Costs

Delivered unit log costs to Howe Sound, via existing Nimpkish log transport systems, will be determined.

An experienced Reid, Collins logging engineer will collect, review and verify local 1981 actual logging costs. He will visit and assess the area in question and adjust the average logging costs, if and as necessary, to reflect the site-specific situation. As a check, or in the absence of other data, phase costs may also be estimated using the applicable Vancouver Region Appraisal Manual as a guide.

Harvesting costs will reflect any permanent capital investments already in place such as for roads, transport systems, and dumping/sorting facilities.

Royalty, camp costs, logging overhead and forestry costs will be included in the delivered logging cost.

Average delivered logging costs will be determined for the 1981 calendar year and then expressed in terms of December 31, 1981 dollars.

4.4 Log Sales/Market Prices

Various alternatives for determination of average log selling prices have been reviewed and discussed between Mr. Frank White and Reid, Collins staff. The following method is proposed:

- . published Jacobson-Phillips Logs Ltd. and/or Patrick and Miles Logs Ltd. log prices by species and industrial grade for the years 1977 to 1981 inclusive will be used as basis for appraisal.
- . monthly log prices will be averaged for each calendar year and updated to December 31, 1981 dollars using Implicit Price Indices published by Statistics Canada.
- . the 5-year average selling prices of logs by species and grade will be determined.

In addition to the above:

- . Mr. Frank White will visit the Nimpkish Island area and Canadian Forest Products (CFP) dry land sort to familiarize himself with local conditions and procedures.
- . Reid, Collins and Mr. White will analyze CFP transaction evidence regarding "arms length" sale of sorted booms during the period 1977 to 1981.

From this, coupled with Mr. White's very extensive experience regarding log sales on the B.C. Coast, the Consultant will determine whether or not selling price premiums or discounts should be applied to any or all species/grade combinations in order to better reflect the CFP situation and ~~actual value to owner~~ ^{MARKET VALUE.}

FWA WJ

Conversion factors will be obtained, checked and verified in order to convert selling prices in Mfbm to sales value in dollars per cunit of standing timber.

MFBM

A weighted average selling price, adjusted as above if necessary, will be determined.

4.5 Appraised Value

^{MARKET VALUE}

FWA WJ

The appraised ~~value to owner~~, as at December 31, 1981, will be determined by deducting the total delivered logging costs from the total market/selling price for the volume given in Section 3.0.

~~Value to owner is considered equivalent to conversion return in this situation. It is considered by this consultant that conversion return is the most reasonable value, if not the only value, that is applicable in this instance.~~

FWA WJ

No value will be given to deciduous species.

4.6 Report

Five (5) copies of the final report will be prepared describing all procedures used and results obtained. These will be submitted to the Ministry of Lands, Parks and Housing.

5.0 PROJECT SCHEDULE

Work could commence within 2 weeks of contract award or notification to proceed.

A draft report will be submitted for review and discussion within 2 months of contract award.

A final report will be submitted within 2 weeks of written receipt of any request for clarification, acceptable revision, etc.

6.0 PROJECT PERSONNEL

The following Reid, Collins personnel, together with their project responsibility, are proposed for assignment to this project:

- . P.W. Appleby - Project Director
- . R. Jones - Project Manager, Appraisal and Report
- . D. Swensson - Grade Cruising
- . H. Hartwig - Logging Costs
- . J. Lochhead - Compilation
- . L. Barkley - Word Processing

Mr. Frank White, White Logs Ltd., will be the only sub-consultant used on this project. He will be responsible for providing market prices of logs by species and grade.

Current charge-out rates for the above are given in Appendix II.

7.0 COST ESTIMATE

The estimated cost to complete this project is \$18,150, broken down as follows:

<u>Phase</u>	<u>Fees</u>	<u>Expenses</u>	<u>Total</u>
preparation and planning	\$ 2,700	\$ -	\$ 2,700
grade cruising	3,000	550	3,550
compilation	100	400	500
logging costs	2,100	250	2,350
market/selling price, appraisal	4,900	250	5,150
supervision/liaison/meetings	2,500	-	2,500
report preparation	<u>1,250</u>	<u>150</u>	<u>1,400</u>
Total	\$16,550	\$1,600	\$18,150

LOG GRADES

LOG GRADE SPECIFICATIONS FOR STANDING TREES CRUISE BY STANDARD LOG LENGTH - 10 m - ALL SPECIES

FIR

Log Grade 1 (Peeler #1)

- Size: . minimum top DIB* 30" (76 cm)
- Growth: . not less than 8 annual rings per inch on outer 50% of scale
- Knot Indications: . surface clear
. 50% or over of net scaled contents to be in clear uniform coloured veneer
- Defects: . permissible defects are: fire scars; cat faces; pitch rings and seams; sweeps and crooks which, in the opinion of the cruiser, would not impare rotary cutting; butt rot is permitted provided the rot will not be visible, when bucked, any higher than 6' (2 m) above the stump
- Twist: Not to exceed:
. 1"/ft. in logs 30-35" diameter
. 1.5"/ft. in logs 36-40" diameter
. 2"/ft. in logs 41-60" diameter
. 2.5"/ft. in logs 61"+ diameter

Log Grade 2 (Peeler #2)

- Size: . minimum top DIB 30" (76 cm)
- Growth: . not less than 8 annual rings per inch on outer 50% of scale
- Knot Indications: . surface clear for half the length of log
. knots to be sound and tight, not exceeding 1.5 inches (4 cm)
- Defects: . permissible defects are: fire scars; cat faces; pitch rings and seams; sweeps and crooks which, in the opinion of the cruiser, would not impare rotary cutting; butt rot is permitted provided the rot will not be visible, when bucked, any higher than 6' (2 m) above the stump

* Top DIB's are guidelines for cruiser only.
Computer will sort logs by correct diameter based on tree taper.

Fir cont'd.

- Burls:
- . allow one 12" (30 cm) burl per block
 - . if over 12" (30 cm) burl allow one burl for each 17' (5.2 m)

- Twist: Not to exceed:
- . 1"/ft. in logs 30-35" diameter
 - . 1.5"/ft. in logs 36-40" diameter
 - . 2"/ft. in logs 41-60" diameter
 - . 3"/ft. in logs 61"+ diameter

Log Grade 3 (Peelers #3 and #4)

- Size: . minimum top DIB 18" (46 cm)
- Growth: . not less than 8 annual rings per inch on outer 50% of scale
- Knot Indications: . must have 8'6" (2.6 m) clear butt block
- . knots or indications on balance of log shall not exceed 1.5" (4 cm) in diameter and must be sound and tight
- Defects: . same as for Log Grade #2
- Burls: For logs 24" and over:
- . allow one 12" (30 cm) burl per block
 - . over 12" (30 cm) allow one burl for each 17'
- For logs 18-23":
- . allow one 6" burl per block
 - . over 7" allow one burl to each 17'
- Twist: . 1"/ft. in logs up to 30" diameter
- . 1.5"/ft. in logs 31-40" diameter
 - . 2"/ft. in logs 41-50" diameter
 - . 3"/ft. in logs 51"+ diameter

Log Grade 4 (Peeler #3)

- Size: . minimum top DIB 30" (76 cm)
- Same specifications as for #3 Peeler, except no clear butt block.

Log Grade 5 (S.F.P.) = Peeler quality "suitable for peeling".

- Size: . minimum top DIB 14" (36 cm)
- Growth: . not less than 6 annual rings per inch in outer 50% of scale

Fir cont'd.

- Knot Indications:
- . allow on full length of log, but shall not exceed 1.5" diameter
 - . must be sound and tight
 - . if 2 peeler blocks (17') (5.2 m) can be recovered, it is to be classified as peelable
 - . no clear block required

- Defects:
- . not permitted, except for butt rot which is as for Log Grade 1

- Burls:
- . allow one 6" (15 cm) burl or smaller burl per block on logs 14-18"

- Twist:
- . 1"/ft. in logs 14-29" top DIB

General Specifications - All Peeler and Peelable Grades

- . All logs shall, in the opinion of the cruiser, be suitable for rotary cutting.
- . Logs having more than 6' reduction for butt rot shall not be classed as peelable.

Log Grade 6 (Sawlog #2)

- Size:
- . minimum top DIB 12" (30 cm)

- Knot Indication:
- . knots are permissible, provided they are of a size, spacing and condition that permits production of 65% merchantable-grade lumber

- Defects:
- . sound and reasonably straight
 - . no rotten or bunch knots permitted - suitable for merchantable type lumber

- General:
- . all peeler type logs which contain more than the permissible allowance for butt rot, sap rot, weather checks, knots and a minimum of 65% good strong general purpose lumber

- Twist:
- . 1"/ft. in logs 12-17" diameter
 - . 2"/ft. in logs 18-26" diameter
 - . 3"/ft. in logs 40" and over diameter

Log Grade 7 (Sawlog #3 and Pee Wee)

- Size:
- . minimum top DIB 6" (15 cm)

- Length:
- . 10 m except for logs which may be somewhat longer or shorter to conform to top utilization

Fir cont'd.

- Knot Indication:
- . allow rough knots
 - . for Pee Wee 8-13" (20-34 cm) allow knots to 1.5"
 - . require 50% or better #2 common lumber or rough construction lumber
- Defects:
- . rough knots, scattered rotten knots, twist up to 4"/ft, pocket rot, or other defects allowed for Sawlog #3
 - . no defect allowed for Pee Wee
- General:
- . Sawlog #3 is generally a log with some defect but superior to pulp grade

Log Grade 8 (Pulp)

- Size:
- . minimum top DIB 6" (15 cm)
- Length:
- . 10 m except for top log
- Defects:
- . logs with excessive twist
 - . defects:
 - normal pulp logs with a minimum of 30% sound wood content of 10 m log, or at least 4 m of broken length and 75% sound wood, both of which are equal to 1/3 sound
 - abnormal pulp logs: extreme deformities, heavy close grouped knots, large knots, excessive defect acceptable
- Quality:
- . logs should produce 50% of net volume in clear chips
- Note:
- . no burned surfaces allowed

RED CEDAR

Log Grade 1 (#1 Lumber)

- . logs 20" (50 cm) and over in diameter that will cut 50% or over of scaled contents in clear inch lumber
- Knots:
- . in order for cedar logs to cut out 50% or over, it is essential that the presence of knots be limited from none in the smaller logs to a 90% surface clear log in the large logs
- Spiral Grain: Maximum deviation:
- . 1"/ft. on logs 20-33" diameter
 - . 1.5"/ft. on logs 34-43" diameter
 - . 2"/ft. on logs 44" and over diameter
- Other Defects:
- . lumber cedar logs should not contain an excessive amount of butt rot, shatter or pocket rot.

Log Grade 2 (#2 Lumber)

- . logs 20" (50 cm) and over in diameter that will cut 30 to 49% in clear inch lumber
- Knots:
- . these logs should be approximately 75% surface clear and will allow knots (not scattered) to a little larger degree than #1 Lumber
 - . rule of thumb - if, in the cruiser's opinion, 3/4 of length of log will cut out required amount of clear lumber for #1 Lumber, then the log shall be graded #2 Lumber
- Spiral Grain: Maximum deviation:
- . 1"/ft. on logs 20-33" diameter
 - . 1.5"/ft. on logs 34-43" diameter
 - . 2"/ft. on logs 44" and over diameter
- Other Defects:
- . lumber cedar logs should not contain an excessive amount of butt rot, shatter or pocket rot.

Log Grade 3 (#2 & #3 Shingle)

- Size:
- . minimum to DIB 16" (40 cm)
- Knots:
- . must have 18" clear wood between knots
 - . small pin knots are not permitted - must have 18" clear spacing for shingle block cutting

Red Cedar cont'd.

- Defects:
- . can contain logs that would otherwise be lumber grade, but have excessive splits, large knots (providing 18" spacing in them) deep cat face, half logs, etc.
 - . must have sound wood shell of at least 8" depth for half circumference of log
 - . must cut 75% of contents suitable for shingle without being impaired by knots

- Twist:
- . 1"/ft. in logs 16-29" diameter
 - . 1.5"/ft. in logs 30-39" diameter
 - . 2"/ft. in logs 40"+ diameter

Log Grade 4 (#2 & #3 merchantable sawlogs and tie cedar)

- Size: . minimum top DIB 6" (15 cm)
- Length: . minimum length 10 m except for top logs
- Knot Indications: . small to medium, tight knots too close together to permit clear lumber or shingle cutting
- . large rough logs better than pulp, but not good enough for shingle
 - . 50% or over of gross scale is suited to manufacturing lumber or shingles
- Defects: . all types of defects permitted, provided they do not occur to an extent that would cull the log
- Twist: . 2"/ft. in logs 8-17" diameter
- . 3"/ft. in logs 18-26" diameter
 - . twist in excess of 3" only allowed if occurring in part of the log

Log Grade 5 (Pulp)

- Size: . minimum top DIB 6" (15 cm)
- Defects:
- . logs not meeting sawlog grades
 - . logs with excessive twist
 - . rough logs and tops
 - . logs with excessive hollow centre
 - . logs with excessive deformities
 - . excessive sweep or kink that makes sawmilling expensive and difficult
 - . logs that, in the opinion of the cruiser, will be seriously shattered when felled
- Quality: . should produce 50% of net volume in clear chips
- . no burnt logs allowed

SPRUCE

Log Grade 1 (White Spot)

- logs 30" (76 cm) and over in diameter that will cut 50% or over of their scaled contents in B or better grades of clear lumber
- these logs should be reasonably straight, fine grained (not less than 8 annual rings to the inch), and free from horse mane except to a very slight degree

Knots: • varying from no knots in smaller logs to 90% surface clear

Twist
or Spiral Grain: • 1"/ft. on logs 30-35" diameter
 • 1.5"/ft. on logs 36-50" diameter
 • 2"/ft. on logs 51-60" diameter
 • 2.5"/ft. on logs 61" and over diameter

Log Grade 2 (Blue Spot)

Size: • minimum top DIB 24" (61 cm)

Growth: • not less than 8 annual rings per inch

Knot Indication: • logs to be 75% surface clear
 • only smaller, sound and tight knots allowed on remainder

Quality: • reasonably straight, free from defects that would impair cutting
 30% of net scale in clear lumber

Twist: • 1"/ft. in logs 24-35" diameter
 • 1.5"/ft. in logs 36-50" diameter
 • 2"/ft. in logs 51-60" diameter
 • 2.5"/ft. in logs 61" and over diameter

Horse Mane or
Wavy Grain: • slightly more than in white spot on larger logs

Log Grade 3 (Peelable)

Size: • minimum top DIB 14" (36 cm)

Knot Indication: • allow well spaced sound knots up to 1.5" (4 cm) for full length of
 log

Defects: • no butt rot, bunch knots or rotten knots permitted

Twist: • 1"/ft. in logs 14-35" diameter

YEAR 1980

VANCOUVER MARKET SELLING PRICE OF LOGS

M/FBR (except **** denotes \$ / cunit)

SPECIES	GRADE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	NO. OF ENTRIES	YEAR AVERAGE (BASE)	MARKET ADJUST'T (IF WHITE)	FINAL AVERAGE TALL TBR.	
DOUG. FIR	#1 PEELER	397.50	415.00	415.00	405.00	387.50	387.50	387.50	380.00	380.00	365.00	372.50	372.50	12	388.75		388.75	
	#2 PEELER	387.50	405.00	405.00	395.00	377.50	377.50	377.50	370.00	370.00	355.00	362.50	362.50	12	378.75		378.75	
	#3 PEELER	377.50	395.00	395.00	385.00	367.50	367.50	367.50	360.00	360.00	345.00	352.50	352.50	12	368.75		368.75	
	#4 PEELER	367.50	385.00	385.00	375.00	357.50	357.50	357.50	350.00	350.00	335.00	342.50	342.50	12	358.75		358.75	
	S. F. P.	357.50	375.00	375.00	365.00	347.50	347.50	347.50	340.00	340.00	325.00	332.50	332.50	12	348.75		348.75	
	#1 STD. SAMLOG	347.50	365.00	365.00	355.00	337.50	337.50	337.50	330.00	330.00	315.00	322.50	322.50	12	338.75		338.75	
	#2 STD. SAMLOG	337.50	355.00	355.00	345.00	327.50	327.50	327.50	320.00	320.00	305.00	312.50	312.50	12	328.75		328.75	
	#3 STD. SAMLOG	327.50	345.00	345.00	335.00	317.50	317.50	317.50	310.00	310.00	295.00	302.50	302.50	12	318.75		318.75	
	**** #3 GANG (8-14")	132.50	132.50	132.50	127.50	125.00	120.00	113.75	110.00	100.00	100.00	100.00	100.00	12	118.15		118.15	
	**** CHIP-N-SAW (6-9")	91.25	91.25	91.25	91.25	91.25	88.75	83.75	83.75	73.75	73.75	73.75	73.75	12	84.79		84.79	
	**** LUMBER REJECT	75.00	75.00	75.00	75.00	80.00	80.00	80.00	67.50	67.50	67.50	72.50	72.50	12	73.96		73.96	
	HEMLOCK	#1 STD. LBR TYPE	330.00	342.50	342.50	327.50	305.00	295.00	280.00	257.50	247.50	247.50	252.50	252.50	12	290.00		290.00
		#2 STD. LBR TYPE	325.00	337.50	337.50	322.50	300.00	290.00	275.00	252.50	242.50	242.50	247.50	247.50	12	285.00		285.00
#3 STD. LBR TYPE		320.00	332.50	332.50	317.50	295.00	285.00	270.00	247.50	237.50	237.50	242.50	242.50	12	280.00		280.00	
#1 STD. MERCH.		315.00	320.00	320.00	290.00	285.00	285.00	280.00	247.50	237.50	237.50	242.50	242.50	12	273.54		273.54	
#2 STD. MERCH.		310.00	315.00	315.00	285.00	280.00	280.00	255.00	242.50	232.50	232.50	237.50	237.50	12	268.54		268.54	
#3 STD. MERCH.		305.00	310.00	310.00	280.00	275.00	275.00	250.00	237.50	227.50	227.50	232.50	232.50	12	263.54		263.54	
**** #3 GANG (8-14")		115.00	112.50	113.75	112.50	112.50	112.50	107.50	97.50	95.00	90.00	93.75	96.25	12	104.90		104.90	
**** CHIP-N-SAW (6-9")		100.00	100.00	100.00	100.00	100.00	100.00	95.00	90.00	85.00	80.00	80.00	82.50	12	92.71		92.71	
**** #3 PULP		100.00	102.50	102.50	105.00	105.00	105.00	105.00	92.50	85.00	85.00	85.00	85.00	12	96.46		96.46	
**** LUMBER REJECT		80.00	82.50	82.50	85.00	85.00	85.00	85.00	72.50	65.00	65.00	65.00	65.00	12	76.46		76.46	
BALSAM	PEELABLE	320.00	320.00	320.00	305.00	305.00	305.00	280.00	260.00	250.00	245.00	245.00	245.00	12	283.33		283.33	
	STANDARD	308.75	313.75	313.75	283.75	283.75	283.75	255.00	240.00	230.00	230.00	235.00	235.00	12	266.88		266.88	
	**** GANG (8-14")	115.00	112.50	113.75	112.50	112.50	112.50	107.50	97.50	95.00	90.00	93.75	96.25	12	104.90		104.90	
	**** CHIP-N-SAW (6-9")	100.00	100.00	100.00	100.00	100.00	100.00	95.00	90.00	85.00	80.00	80.00	82.50	12	92.71		92.71	
	**** PULP	98.75	102.50	102.50	103.75	103.75	103.75	103.75	92.50	85.00	85.00	85.00	85.00	12	95.94		95.94	
	**** LUMBER REJECT	78.75	82.50	82.50	83.75	83.75	85.00	83.75	72.50	65.00	65.00	65.00	65.00	12	76.04		76.04	
CEDAR	#1 LUMBER	425.00	425.00	400.00	337.50	297.50	297.50	287.50	287.50	312.50	312.50	312.50	330.00	12	335.42		335.42	
	#2 LUMBER	375.00	375.00	350.00	312.50	272.50	272.50	262.50	262.50	287.50	295.00	295.00	305.00	12	305.42		305.42	
	#2 MERCH	280.00	280.00	275.00	260.00	222.50	222.50	212.50	212.50	222.50	222.50	232.50	245.00	12	239.79	27.00	266.79	
	#3 MERCH	270.00	270.00	265.00	250.00	212.50	212.50	202.50	202.50	202.50	212.50	222.50	235.00	12	229.79	21.00	256.79	
	#1 SHINGLE	252.50	252.50	252.50	227.50	217.50	217.50	217.50	217.50	217.50	217.50	217.50	237.50	12	228.75		228.75	
	#2 SHINGLE	242.50	242.50	242.50	217.50	207.50	207.50	207.50	207.50	207.50	207.50	207.50	227.50	12	218.75		218.75	
	#3 SHINGLE	232.50	232.50	232.50	207.50	197.50	197.50	197.50	197.50	197.50	197.50	197.50	217.50	12	208.75		208.75	
	#1 SHAVE LUMBER	362.50	362.50	337.50	290.00	280.00	280.00	270.00	270.00	295.00	305.00	305.00	315.00	12	306.64		306.64	
	#2 SHAVE LUMBER	332.50	332.50	307.50	265.00	255.00	255.00	245.00	245.00	270.00	280.00	280.00	290.00	12	279.79		279.79	
	#2 SHAKE	265.00	265.00	265.00	240.00	230.00	230.00	230.00	230.00	230.00	230.00	240.00	250.00	12	242.08		242.08	
	#3 SHAKE	255.00	255.00	255.00	230.00	220.00	220.00	220.00	220.00	220.00	220.00	230.00	240.00	12	232.08		232.08	
	#3 SCRAGG (6-9")	212.50	212.50	187.50	162.50	155.00	155.00	145.00	145.00	145.00	155.00	170.00	190.00	12	169.58		169.58	
	SPRUCE	WHITE SPOT	1050.00	1050.00	1050.00	950.00	950.00	950.00	950.00	950.00	850.00	850.00	850.00	850.00	12	941.67		941.67
BLUE SPOT		850.00	850.00	850.00	800.00	800.00	800.00	800.00	800.00	650.00	650.00	650.00	650.00	12	762.50		762.50	
#1 STD.		332.50	387.50	387.50	387.50	387.50	387.50	362.50	347.50	337.50	337.50	337.50	337.50	12	360.83		360.83	
#2 STD.		322.50	362.50	362.50	362.50	362.50	362.50	337.50	322.50	312.50	312.50	312.50	312.50	12	337.08		337.08	
#3 STD.		312.50	337.50	337.50	342.50	342.50	337.50	312.50	297.50	287.50	287.50	287.50	287.50	12	314.17		314.17	
**** #3 GANG		107.50	112.50	112.50	112.50	112.50	112.50	107.50	102.50	92.50	90.00	90.00	90.00	12	103.54		103.54	
**** #3 PULP		98.75	102.50	102.50	103.75	103.75	103.75	103.75	92.50	85.00	85.00	85.00	85.00	12	95.94		95.94	
**** LUMBER REJECT		78.75	82.50	82.50	83.75	83.75	83.75	83.75	72.50	65.00	65.00	65.00	65.00	12	75.94		75.94	

YEAR 1981

VANCOUVER MARKET SELLING PRICE OF LOGS

\$/MBM (except **** denotes \$ / cunit)

SPECIES	GRADE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	NO. OF ENTRIES	YEAR AVERAGE (BASE)	MARKET ADJUST'T (IF WHITE)	FINAL AVERAGE TALL TBR.	
DOUG. FIR	#1 PEELER	387.50	395.00	400.00	405.00	410.00	407.50				362.50	356.25	357.50	365.00	10	384.63	384.63	
	#2 PEELER	377.50	385.00	390.00	395.00	400.00	397.50				352.50	346.25	347.50	355.00	10	374.63	374.63	
	#3 PEELER	367.50	375.00	380.00	385.00	390.00	387.50				342.50	336.25	337.50	345.00	10	364.63	364.63	
	#4 PEELER	357.50	365.00	370.00	375.00	380.00	377.50				332.50	326.25	327.50	335.00	10	354.63	354.63	
	S. F. P.	347.50	355.00	360.00	365.00	370.00	367.50				322.50	316.25	317.50	325.00	10	344.63	344.63	
	#1 STD. SAWLOG	337.50	345.00	350.00	355.00	355.00	352.50				307.50	301.25	302.50	310.00	10	331.13	331.13	
	#2 STD. SAWLOG	327.50	335.00	340.00	340.00	345.00	342.50				297.50	291.25	292.50	300.00	10	321.13	321.13	
	#3 STD. SAWLOG	317.50	325.00	330.00	330.00	335.00	332.50				287.50	281.25	282.50	290.00	10	311.13	311.13	
	**** #3 GANG (8-14")	105.00	110.00	112.50	115.00	117.50	117.50				105.00	100.00	100.00	97.50	10	108.00	108.00	
	**** CHIP-N-SAW (6-9")	83.75	83.75	83.75	83.75	83.75	83.75				75.00	75.00	75.00	75.00	10	80.63	80.63	
	**** LUMBER REJECT	72.50	72.50	72.50	75.00	75.00	75.00				75.00	75.00	75.00	75.00	10	74.25	74.25	
	HEMLOCK	#1 STD. LBR TYPE	252.50	252.50	252.50	255.00	252.50	252.50				242.50	242.50	242.50	242.50	10	248.75	248.75
		#2 STD. LBR TYPE	247.50	247.50	247.50	247.50	247.50	247.50				237.50	237.50	237.50	237.50	10	243.50	243.50
#3 STD. LBR TYPE		242.50	242.50	242.50	242.50	242.50	242.50				232.50	232.50	232.50	232.50	10	238.50	238.50	
#1 STD. MERCH.		242.50	242.50	242.50	245.00	245.00	245.00				232.50	232.50	232.50	232.50	10	239.25	239.25	
#2 STD. MERCH.		237.50	237.50	237.50	240.00	240.00	240.00				227.50	227.50	227.50	227.50	10	234.25	234.25	
#3 STD. MERCH.		232.50	232.50	232.50	235.00	235.00	235.00				222.50	222.50	222.50	222.50	10	229.25	229.25	
**** #3 GANG (8-14")		95.00	95.00	92.50	92.50	92.50	92.50				85.00	80.00	80.00	82.50	10	88.75	88.75	
**** CHIP-N-SAW (6-9")		82.50	82.50	82.50	82.50	82.50	82.50				70.00	65.00	67.50	70.00	10	76.75	76.75	
**** #3 PULP		75.00	75.00	72.50	72.50	67.50	67.50				62.50	62.50	65.00	67.50	10	68.75	68.75	
**** LUMBER REJECT		55.00	55.00	52.50	52.50	47.50	47.50				42.50	42.50	45.00	47.50	10	48.75	48.75	
BALSAM	PEELABLE	245.00	255.00	255.00	255.00	255.00	255.00				242.50	242.50	242.50	242.50	10	249.00	249.00	
	STANDARD	235.00	235.00	235.00	235.00	235.00	235.00				225.00	225.00	225.00	225.00	10	231.00	231.00	
	**** GANG (8-14")	95.00	95.00	92.50	92.50	92.50	92.50				85.00	80.00	80.00	82.50	10	88.75	88.75	
	**** CHIP-N-SAW (6-9")	82.50	82.50	82.50	82.50	82.50	82.50				70.00	65.00	67.50	70.00	10	76.75	76.75	
	**** PULP	75.00	75.00	72.50	72.50	67.50	67.50				62.50	62.50	65.00	67.50	10	68.75	68.75	
	**** LUMBER REJECT	55.00	55.00	52.50	52.50	47.50	47.50				42.50	42.50	45.00	47.50	10	48.75	48.75	
CEDAR	#1 LUMBER	330.00	330.00	330.00	330.00	330.00	330.00				312.50	337.50	337.50	345.00	10	331.25	331.25	
	#2 LUMBER	305.00	305.00	305.00	305.00	305.00	305.00				287.50	287.50	287.50	300.00	10	299.25	299.25	
	#2 MERCH	245.00	245.00	245.00	252.50	252.50	252.50				242.50	247.50	247.50	255.00	10	248.50	254.50	
	#3 MERCH	235.00	235.00	235.00	242.50	242.50	242.50				232.50	237.50	237.50	245.00	10	238.50	244.50	
	#1 SHINGLE	237.50	237.50	237.50	237.50	237.50	237.50				245.00	245.00	245.00	245.00	10	243.50	243.50	
	#2 SHINGLE	227.50	227.50	227.50	227.50	242.50	242.50				235.00	235.00	235.00	235.00	10	233.50	233.50	
	#3 SHINGLE	217.50	217.50	217.50	217.50	232.50	232.50				225.00	225.00	225.00	225.00	10	223.50	223.50	
	#1 SHAKE LUMBER	315.00	295.00	295.00	295.00	295.00	312.50				287.50	307.50	307.50	307.50	10	303.50	303.50	
	#2 SHAKE LUMBER	290.00	270.00	270.00	270.00	285.00	285.00				267.50	285.00	285.00	285.00	10	278.75	278.75	
	#2 SHAKE	250.00	250.00	250.00	250.00	265.00	265.00				255.00	255.00	255.00	255.00	10	253.00	253.00	
	#3 SHAKE	240.00	240.00	240.00	240.00	255.00	255.00				245.00	245.00	245.00	245.00	10	245.00	245.00	
	#3 SCRAGS (6-9")	200.00	200.00	200.00	200.00	210.00	210.00				200.00	200.00	200.00	210.00	10	203.00	203.00	
	SPRUCE	WHITE SPOT	850.00	850.00	850.00	850.00	850.00	850.00				950.00	950.00	1025.00	1100.00	10	922.50	922.50
BLUE SPOT		650.00	650.00	650.00	650.00	650.00	650.00				750.00	750.00	825.00	900.00	10	722.50	722.50	
#1 STD.		350.00	350.00	325.00	325.00	325.00	325.00				325.00	325.00	475.00	575.00	10	370.00	370.00	
#2 STD.		317.50	317.50	292.50	292.50	282.50	282.50				282.50	282.50	267.50	267.50	10	288.50	288.50	
#3 STD.		287.50	287.50	262.50	262.50	252.50	252.50				252.50	252.50	237.50	237.50	10	258.50	258.50	
**** #3 GANG		100.00	105.00	105.00	105.00	105.00	105.00				85.00	85.00	85.00	85.00	10	96.50	96.50	
**** #3 PULP		75.00	75.00	72.50	72.50	67.50	67.50				62.50	62.50	65.00	67.50	10	68.75	68.75	
**** LUMBER REJECT		55.00	55.00	52.50	52.50	47.50	47.50				42.50	42.50	45.00	47.50	10	48.75	48.75	

		1977													
		GANG SAMPLES						CONVERT \$ / Mbd TO \$ / Cunit							
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	NO. OF ENTRIES	YEAR AVERAGE (BASE)
FIR	GANG \$ / M fbd	145.00	145.00	145.00	150.00	155.00	155.00	155.00	155.00	155.00		160.00	160.00	11	75.60
	f b \$ /cubic foot	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95		4.95	4.95		
	\$/CUBIC FOOT	71.78	71.78	71.78	74.25	76.73	76.73	76.73	76.73	76.73		79.20	79.20		
HEMLOCK	GANG \$ / M fbd	126.25	126.25	126.25	131.25	131.25	131.25	131.25	131.25	131.25		133.75	133.75	11	64.52
	f b \$ /cubic foot	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95		4.95	4.95		
	\$/CUBIC FOOT	62.49	62.49	62.49	64.97	64.97	64.97	64.97	64.97	64.97		66.21	66.21		
BALSAM	GANG \$ / M fbd	123.75	123.75	123.75	128.75	128.75	128.75	128.75	128.75	128.75		131.25	131.25	11	64.43
	f b \$ /cubic foot	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04		5.04	5.04		
	\$/CUBIC FOOT	62.37	62.37	62.37	64.89	64.89	64.89	64.89	64.89	64.89		66.15	66.15		
CEDAR	GANG \$ / M fbd	165.00	165.00	165.00	205.00	205.00	205.00	195.00	195.00	195.00		210.00	210.00	11	192.27
	f b \$ /cubic foot	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42		5.42	5.42		
	\$/CUBIC FOOT	67.07	67.07	67.07	69.78	69.78	69.78	69.78	69.78	69.78		71.14	71.14		

		1978													
		GANG SAMPLES						CONVERT \$ / Mbd TO \$ / Cunit							
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	NO. OF ENTRIES	YEAR AVERAGE
FIR	GANG \$ / M fbd	160.00	170.00	180.00		180.00	185.00	185.00	195.00	195.00		220.00	235.00	10	94.30
	f b \$ /cubic foot	4.95	4.95	4.95		4.95	4.95	4.95	4.95	4.95		4.95	4.95		
	\$/CUBIC FOOT	79.20	84.15	89.10		89.10	91.58	91.58	96.53	96.53		108.90	116.33		
HEMLOCK	GANG \$ / M fbd	133.75	137.50	137.50		142.50	145.00	145.00	145.00	148.75		157.50	163.75	10	72.09
	f b \$ /cubic foot	4.95	4.95	4.95		4.95	4.95	4.95	4.95	4.95		4.95	4.95		
	\$/CUBIC FOOT	66.21	68.06	68.06		70.54	71.78	71.78	71.78	73.63		77.96	81.06		
BALSAM	GANG \$ / M fbd	121.25	123.75	123.75		141.25	143.75	143.75	145.00	146.25		155.00	161.25	10	72.32
	f b \$ /cubic foot	5.04	5.04	5.04		5.04	5.04	5.04	5.04	5.04		5.04	5.04		
	\$/CUBIC FOOT	66.15	67.41	67.41		71.19	72.45	72.45	73.08	73.71		78.12	81.27		
CEDAR	GANG \$ / M fbd	210.00	230.00	230.00		240.00	240.00	240.00	235.00	235.00		270.00	287.50	10	241.75
	f b \$ /cubic foot	5.42	5.42	5.42		5.42	5.42	5.42	5.42	5.42		5.42	5.42		
	\$/CUBIC FOOT	71.14	73.17	73.17		78.59	78.59	78.59	78.59	80.62		85.37	89.43		

1977		PULP LOGS		CONVERT \$ / Mfbm TO \$ / Cunit												NO. OF ENTRIES	YEAR AVERAGE
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC				
FIR	PULP \$ / M fbm	55.00	55.00	55.00	55.00	55.00	55.00	57.50	57.50	57.50		57.50	57.50	11	56.14		
HEMLOCK	PULP \$ / M fbm	55.00	55.00	55.00	55.00	55.00	55.00	57.50	57.50	60.00		70.00	70.00	11	29.32		
	f b m /cubic foot	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00		5.00	5.00				
	\$/CUBIC FOOT	27.50	27.50	27.50	27.50	27.50	27.50	28.75	28.75	30.00		35.00	35.00				
BALSAM	PULP \$ / M fbm	55.00	55.00	55.00	55.00	55.00	55.00	57.50	57.50	60.00		70.00	70.00	11	29.91		
	f b m /cubic foot	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10		5.10	5.10				
	\$/CUBIC FOOT	28.05	28.05	28.05	28.05	28.05	28.05	29.33	29.33	30.60		35.70	35.70				
CEDAR	PULP \$ / M fbm	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00		40.00	40.00	11	13.63		
	f b m /cubic foot	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70		4.70	4.70				
	\$/CUBIC FOOT	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75		18.80	18.80				
SPRUCE	PULP \$ / M fbm	55.00	55.00	55.00	55.00	55.00	55.00	57.50	57.50	60.00		70.00	70.00	11	34.01		
	f b m /cubic foot	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80		5.80	5.80				
	\$/CUBIC FOOT	31.90	31.90	31.90	31.90	31.90	31.90	33.35	33.35	34.80		40.60	40.60				

1978		PULP LOGS		CONVERT \$ / Mfbm TO \$ / Cunit												NO. OF ENTRIES	YEAR AVERAGE
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC				
FIR	PULP \$ / M fbm	57.50	57.50	57.50		60.00	60.00	60.00	60.00	60.00		60.00	77.50	10	61.00		
HEMLOCK	PULP \$ / M fbm	70.00	70.00	70.00		85.00	85.00	85.00	85.00	90.00		95.00	95.00	10	41.50		
	f b m /cubic foot	5.00	5.00	5.00		5.00	5.00	5.00	5.00	5.00		5.00	5.00				
	\$/CUBIC FOOT	35.00	35.00	35.00		42.50	42.50	42.50	42.50	45.00		47.50	47.50				
BALSAM	PULP \$ / M fbm	70.00	70.00	70.00		85.00	85.00	85.00	85.00	90.00		95.00	95.00	10	42.33		
	f b m /cubic foot	5.10	5.10	5.10		5.10	5.10	5.10	5.10	5.10		5.10	5.10				
	\$/CUBIC FOOT	35.70	35.70	35.70		43.35	43.35	43.35	43.35	45.90		48.45	48.45				
CEDAR	PULP \$ / M fbm	40.00	40.00	40.00		40.00	40.00	62.50	62.50	62.50		62.50	70.00	10	24.44		
	f b m /cubic foot	4.70	4.70	4.70		4.70	4.70	4.70	4.70	4.70		4.70	4.70				
	\$/CUBIC FOOT	18.80	18.80	18.80		18.80	18.80	29.38	29.38	29.38		29.38	32.90				
SPRUCE	PULP \$ / M fbm	70.00	70.00	70.00		85.00	85.00	85.00	85.00	90.00		95.00	95.00	10	48.14		
	f b m /cubic foot	5.80	5.80	5.80		5.80	5.80	5.80	5.80	5.80		5.80	5.80				
	\$/CUBIC FOOT	40.60	40.60	40.60		49.30	49.30	49.30	49.30	52.20		55.10	55.10				

APPENDIX V

STATEMENT BY WHITE LOGS LIMITED

WHITE LOGS LIMITED

RECEIVED
JUL 25 1984

229 ROGERS BUILDING - 470 GRANVILLE STREET, VANCOUVER, B.C. V6C 1V5 - TELEPHONE 681-9948

Reid, Collins and Associates Limited,
1178 West Pender Street,
Vancouver, B. C.,
V6E 3X4.

Attention: Mr. J. R. Jones.

Re: Nimpkish Island Timber.

Following the initial meeting in your offices regarding the "Island", and subsequent meetings with Colin Baxter of Canadian Forest Products and yourself, I made a trip to the Nimpkish area.

On June sixth and seventh, 1984 I observed the Canadian Forest Products sorting practices at Beaver Cove and inspected the timber on the "Island".

The log prices, as published by various industry sources during the period of 1977 to 1981 were reviewed by yourself and myself. We also inspected and discussed Canadian Forest Products sales, external and internal, for the same period.

My opinion is that the average industry prices, as published, would represent the fair market value of the timber on the "Island" with on exception, and that is the merch cedar category between 1979 and 1981.

Canadian Forest Products initiated a market agreement with a local manufacturing company which resulted in higher prices. This is supported by their external sales invoices which shows that they received a premium price. It is

WHITE LOGS LIMITED

229 ROGERS BUILDING - 470 GRANVILLE STREET, VANCOUVER, B.C. V6C 1V5 - TELEPHONE 681-9948

page 2

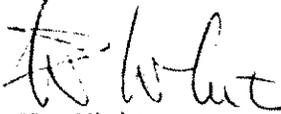
also supported by my observations of the merch cedar on the "Island".

I believe that an upwards adjustment, over average industry prices, would be in order for the years 1979 to 1981, as stated below.

Species: Cedar Merch.
Grade #2 and #3 Sawlogs.
1979 - + \$12.00 per MFBM
1980 - + \$27.00 per MFBM
1981 - + \$6.00 per MFBM

Yours truly,

White Logs Limited,


F. W. White.

APPENDIX VI

AVERAGE SELLING PRICE IN

DECEMBER 31, 1981 DOLLARS

PRICING PERIOD 1977 THROUGH 1981

CALCULATION OF AVERAGE SELLING PRICE IN DEC 31, 1981 DOLLARS

SPECIES	GRADE	YEAR	IPI	TALL TBR AVERAGE \$/MFBM	DEC. 31 1981 \$/MFBM	5 YR. AVG DEC 31/81 \$/MFBM	5 YR. AVG CONVERS'N FACTOR	5 YR. AVG DEC 31/81 \$/CUNIT	%	\$/CUNIT X	DOLLARS PER CUNIT		
											AVERAGE SEL PRICE \$/CUNIT	SPECIES % OF TOTAL	AVERAGE SEL PRICE \$/CUNIT
		1977	172.3	236.82	361.07								
		1978	183.8	270.50	365.62								
		1979	202.7	369.58	478.98								
		1980	225.2	388.75	452.48								
		1981	249.1	384.63	405.63								
DOUG-FIR	#1 PEELER	DEC. 31/81	262.7			417.16	0.69	287.84	0.095	27.34			
		1977	172.3	226.82	345.82								
		1978	183.8	260.50	372.33								
		1979	202.7	359.58	466.02								
		1980	225.2	378.75	441.82								
		1981	249.1	374.63	395.08								
DOUG-FIR	#2 PEELER	DEC. 31/81	262.7			404.21	0.69	278.91	0.035	9.76			
		1977	172.3	216.82	330.58								
		1978	183.8	250.50	358.03								
		1979	202.7	349.58	453.06								
		1980	225.2	368.75	430.15								
		1981	249.1	364.63	384.54								
DOUG-FIR	#3 PEELER	DEC. 31/81	262.7			391.27	0.67	262.15	0.189	49.55			
		1977	172.3	206.82	315.33								
		1978	183.8	240.50	343.74								
		1979	202.7	339.58	440.10								
		1980	225.2	358.75	418.49								
		1981	249.1	354.63	373.99								
DOUG-FIR	#4 PEELER	DEC. 31/81	262.7			378.33	0.65	245.91	0.003	0.74			
		1977	172.3	196.82	300.08								
		1978	183.8	230.50	329.45								
		1979	202.7	329.58	427.14								
		1980	225.2	348.75	406.82								
		1981	249.1	344.63	363.45								
DOUG-FIR	S. F. P.	DEC. 31/81	262.7			365.39	0.63	230.19	0.193	44.43			
		1977	172.3	170.68	260.23								
		1978	183.8	211.00	301.58								
		1979	202.7	306.25	396.90								
		1980	225.2	328.75	383.49								
		1981	249.1	321.13	338.66								
DOUG-FIR	#2 SAWLOG	DEC. 31/81	262.7			336.17	0.63	211.79	0.281	59.51			

CALCULATION OF AVERAGE SELLING PRICE IN DEC 31, 1981 DOLLARS

SPECIES	GRADE	YEAR	IPI	TALL TBR	DEC.31	5 YR.AVG	5 YR.AVG	%	\$/CUNIT	DOLLARS PER CUNIT					
				AVERAGE	1981	DEC31/81				CONVERS'N	DEC31/81	OF	\$/CUNIT	AVERAGE	SPECIES
				\$/MFBM	\$/MFBM	\$/MFBM	FACTOR	\$/CUNIT	SPECIES	GRADE %	SPECIES	TOTAL	% OF	SEL PRIC	ALL SPC
		1977	172.3	160.68	244.98										
		1978	183.8	201.00	287.28										
		1979	202.7	296.25	383.94										
		1980	225.2	318.75	371.83										
		1981	249.1	311.13	328.12										
DOUG-FIR	#3 SAWLOG	DEC.31/81	262.7			323.23	0.62	200.40	0.113			22.65			
				DOLLARS PER CUNIT											
		1977	172.3	75.60	115.26										
		1978	183.8	94.30	134.78										
		1979	202.7	135.00	174.96										
		1980	225.2	116.15	135.49										
		1981	249.1	108.00	113.90										
DOUG-FIR	GANG SAWLOG	DEC.31/81	262.7			134.88	1.00	134.88	0.007			0.94			
				DOLLARS PER CUNIT											
		1977	172.3	55.45	84.54										
		1978	183.8	76.25	108.98										
		1979	202.7	101.56	131.62										
		1980	225.2	84.79	98.91										
		1981	249.1	80.63	85.03										
DOUG-FIR	CHIF'N'SAW	DEC.31/81	262.7			101.82	1.00	101.82	0.007			0.71			
				\$ / M fbm											
		1977	172.3	56.14	85.59										
		1978	183.8	61.00	87.19										
		1979	202.7	88.75	115.02										
		1980	225.2	98.96	115.44										
		1981	249.1	99.25	104.67										
DOUG-FIR	PULP	DEC.31/81	262.7			101.58	0.50	50.79	0.077			3.91			
DOUG-FIR	ALL GRADES								1.000			219.54	0.624	137.00	

CALCULATION OF AVERAGE SELLING PRICE IN DEC 31, 1981 DOLLARS

SPECIES	GRADE	YEAR	TALL TBR AVERAGE IPI	DEC.31 \$/MFBM	5 YR.AVG DEC31/81 \$/MFBM	5 YR.AVG CONVERS'M FACTOR	%	\$/CUNIT X	DOLLARS PER CUNIT			
									% OF SPECIES	AVERAGE SEL PRICE % OF SPECIES	AVERAGE SEL PRICE ALL SPCS	
		1977	172.3	249.32	380.13							
		1978	183.8	330.75	472.73							
		1979	202.7	451.04	584.55							
		1980	225.2	305.42	356.28							
		1981	249.1	299.25	315.59							
CEDAR	#2 LUMBER	DEC.31/81	262.7		421.86	0.600	253.11	0.076	19.24			
		1977	172.3	216.14	329.54							
		1978	183.8	263.00	375.90							
		1979	202.7	267.08	346.14							
		1980	225.2	230.42	268.79							
		1981	249.1	244.25	257.59							
CEDAR	#2 SHINGLE	DEC.31/81	262.7		315.59	0.590	186.20	0.060	11.17			
		1977	172.3	235.11	358.46							
		1978	183.8	282.50	403.77							
		1979	202.7	364.92	472.94							
		1980	225.2	266.79	311.22							
		1981	249.1	254.50	268.39							
CEDAR	#2 SAWLOG	DEC.31/81	262.7		362.96	0.590	214.14	0.438	93.80			
		1977	172.3	225.11	343.22							
		1978	183.8	272.50	389.48							
		1979	202.7	354.92	459.98							
		1980	225.2	256.79	299.55							
		1981	249.1	244.50	257.85							
CEDAR	#3 SAWLOG	DEC.31/81	262.7		350.01	0.540	189.01	0.136	25.71			
		1977	172.3	192.27	293.15							
		1978	183.8	241.75	345.53							
		1979	202.7	317.92	412.03							
		1980	225.2	204.79	238.89							
		1981	249.1	213.50	225.16							
CEDAR	GANG SAWLOG	DEC.31/81	262.7		302.95	0.493	149.35	0.014	2.09			
		1977	172.3	13.03	19.87							
		1978	183.8	24.44	34.93							
		1979	202.7	35.00	45.36							
		1980	225.2	25.00	29.16							
		1981	249.1	25.00	26.36							
CEDAR	PULP	DEC.31/81	262.7		31.14	1.000	31.14	0.276	8.59			
CEDAR	ALL GRADES							1.000		160.59	0.322	51.71

CALCULATION OF AVERAGE SELLING PRICE IN DEC 31,1981 DOLLARS

SPECIES	GRADE	YEAR	IPI	TALL TBR AVERAGE \$/MFBM	DEC.31 1981 \$/MFBM	5 YR.AVG DEC31/81 \$/MFBM	5 YR.AVG DEC31/81 \$/CUNIT	%	\$/CUNIT X	DOLLARS PER CUNIT		
										AVERAGE SEL PRICE	% OF SPECIES	AVERAGE SEL PRICE
		1977	172.3	146.82	223.85							
		1978	183.8	158.75	226.90							
		1979	202.7	288.34	373.69							
		1980	225.2	281.77	328.69							
		1981	249.1	244.00	257.32							
HEMLOCK	#1 SAWLOG	DEC.31/81	262.7			282.09	0.64	180.54	0.028	5.06		
		1977	172.3	141.82	216.23							
		1978	183.8	153.75	219.75							
		1979	202.7	282.71	366.39							
		1980	225.2	276.77	322.86							
		1981	249.1	238.88	251.92							
HEMLOCK	#2 SAWLOG	DEC.31/81	262.7			275.43	0.62	170.77	0.212	36.20		
		1977	172.3	136.82	208.60							
		1978	183.8	148.75	212.60							
		1979	202.7	277.30	359.38							
		1980	225.2	271.77	317.02							
		1981	249.1	233.88	246.65							
HEMLOCK	#3 SAWLOG	DEC.31/81	262.7			268.85	0.56	150.56	0.283	42.61		
				DOLLARS PER CUNIT								
		1977	172.3	64.52	98.37							
		1978	183.8	72.09	103.04							
		1979	202.7	115.52	149.71							
		1980	225.2	104.90	122.37							
		1981	249.1	88.75	93.60							
HEMLOCK	GANG SAWLOG	DEC.31/81	262.7			113.42	1.00	113.42	0.112	12.70		
				DOLLARS PER CUNIT								
		1977	172.3	50.34	76.75							
		1978	183.8	68.75	98.26							
		1979	202.7	95.63	123.94							
		1980	225.2	92.71	108.15							
		1981	249.1	76.75	80.94							
HEMLOCK	CHIP'N'SAW	DEC.31/81	262.7			97.61	1.00	97.61	0.036	3.51		
				DOLLARS PER CUNIT								
		1977	172.3	29.32	44.70							
		1978	183.8	41.50	59.31							
		1979	202.7	65.31	84.64							
		1980	225.2	96.46	112.52							
		1981	249.1	68.75	72.50							
HEMLOCK	PULP	DEC.31/81	262.7			74.74	1.00	74.74	0.329	24.59		
HEMLOCK	ALL GRADES								1.000	124.67	0.027	3.37

CALCULATION OF AVERAGE SELLING PRICE IN DEC 31, 1981 DOLLARS

SPECIES	GRADE	YEAR	IPI	TALL TBR	DEC.31	5 YR.AVG	5 YR.AVG	%	%/CUNIT	AVERAGE	SPECIES	AVERAGE	
				AVERAGE	1981	DEC31/81	CONVERS'M	DEC31/81	OF	X	SEL PRICE	% OF	SEL PRICE
				\$/MFBM	\$/MFBM	\$/MFBM	FACTOR	\$/CUNIT	SPECIES	GRADE	%	TOTAL	ALL SPCS
				DOLLARS PER CUNIT									
		1977	172.3	263.20	401.29								
		1978	183.8	349.35	499.32								
		1979	202.7	478.00	619.49								
		1980	225.2	488.00	569.26								
		1981	249.1	462.40	487.65								
SPRUCE	BLUE SPOT	DEC.31/81	262.7			515.40	1.00	515.40	0.186	95.86			
				\$ / M f b m									
		1977	172.3	148.18	225.93								
		1978	183.8	165.00	235.83								
		1979	202.7	291.88	378.28								
		1980	225.2	293.33	342.17								
		1981	249.1	259.00	273.14								
SPRUCE	PEELABLE	DEC.31/81	262.7			291.07	0.64	186.28	0.073	13.60			
				DOLLARS PER CUNIT									
		1977	172.3	145.00	221.08								
		1978	183.8	163.58	233.51								
		1979	202.7	285.42	369.91								
		1980	225.2	337.08	393.21								
		1981	249.1	288.50	304.25								
SPRUCE	#2 SAWLOG	DEC.31/81	262.7			304.39	0.64	194.81	0.277	53.96			
				DOLLARS PER CUNIT									
		1977	172.3	135.00	205.83								
		1978	183.8	153.38	219.22								
		1979	202.7	273.33	354.24								
		1980	225.2	314.17	366.49								
		1981	249.1	258.50	272.61								
SPRUCE	#3 SAWLOG	DEC.31/81	262.7			283.68	0.58	164.53	0.175	28.79			
				DOLLARS PER CUNIT									
		1977	172.3	69.29	105.64								
		1978	183.8	78.73	112.53								
		1979	202.7	101.04	130.95								
		1980	225.2	103.54	120.78								
		1981	249.1	96.50	101.77								
SPRUCE	GANG SAWLOG	DEC.31/81	262.7			114.33	1.00	114.33	0.041	4.69			
				DOLLARS PER CUNIT									
		1977	172.3	50.32	76.72								
		1978	183.8	68.68	98.16								
		1979	202.7	95.63	123.94								
		1980	225.2	92.71	108.15								
		1981	249.1	76.75	80.94								
SPRUCE	CHIP'N SAW	DEC.31/81	262.7			97.58	1.00	97.58	0.024	2.34			
				DOLLARS PER CUNIT									
		1977	172.3	34.01	51.85								
		1978	183.8	48.14	68.81								
		1979	202.7	64.33	83.37								
		1980	225.2	95.94	111.92								
		1981	249.1	68.75	72.50								
SPRUCE	PULP	DEC.31/81	262.7			77.69	1.00	77.69	0.224	17.40			
SPRUCE	ALL GRADES								1.000	216.65	0.015	3.25	

CALCULATION OF AVERAGE SELLING PRICE IN DEC 31, 1981 DOLLARS

YES	GRADE	YEAR	IPI	TALL TR		5 YR. AVG		5 YR. AVG DEC31/81	%	\$/CUNIT	DOLLARS PER CUNIT		
				AVERAGE	1981	DEC31/81	CONVERS'N				OF	X	AVERAGE
				\$/MFBM	\$/MFBM	\$/MFBM	FACTOR	\$/CUNIT	SPECIES	GRADE %	SEL PRICE	% OF	SEL PRICE
		1977	172.3	148.18	225.93								
		1978	183.8	162.63	232.44								
		1979	202.7	281.88	365.32								
		1980	225.2	283.33	330.51								
		1981	249.1	249.00	262.59								
BALSAM	S. F. P.	DEC.31/81	262.7			283.36	0.61	172.85	0.300	51.85			
				DOLLARS PER CUNIT									
		1977	172.3	64.43	98.23								
		1978	183.8	72.32	103.36								
		1979	202.7	115.52	149.71								
		1980	225.2	104.90	122.37								
		1981	249.1	88.75	93.60								
BALSAM	BANG SAWLOG	DEC.31/81	262.7			113.46	1.00	113.46	0.500	56.73			
				DOLLARS PER CUNIT									
		1977	172.3	29.91	45.60								
		1978	183.8	42.33	60.50								
		1979	202.7	64.33	83.37								
		1980	225.2	95.94	111.92								
		1981	249.1	68.75	72.50								
	PULP	DEC.31/81	262.7			74.78	1.00	74.78	0.200	14.96			
BALSAM	ALL GRADES								1.000		123.54	0.001	0.12

CALCULATION OF AVERAGE SELLING PRICE IN DEC 31, 1981 DOLLARS

SPECIES	GRADE	YEAR	IPI	DOLLARS PER CUNIT								
				TALL TBR AVERAGE \$/MFBM	DEC.31 1981 \$/MFBM	5 YR.AVG DEC31/81 \$/MFBM	5 YR.AVG DEC31/81 CONVERS'N FACTOR	% OF SPECIES	\$/CUNIT X GRADE %	AVERAGE SEL PRICE % OF SPECIES TOTAL	AVERAGE SEL PRICE ALL SPCS	
		1977	172.3	148.18	225.93							
		1978	183.8	162.63	232.44							
		1979	202.7	281.88	365.32							
		1980	225.2	283.33	330.51							
		1981	249.1	249.00	262.59							
PINE	S. F. P.	DEC.31/81	262.7			283.36	0.63	178.52	0.300		53.55	

DOLLARS PER CUNIT												
		1977	172.3	42.21	64.36							
		1978	183.8	50.95	72.82							
		1979	202.7	84.03	108.90							
		1980	225.2	86.92	101.39							
		1981	249.1	89.97	94.88							

PINE	#2 SAWLOG	DEC.31/81	262.7			88.47	1.00	88.47	0.400		35.39	
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		1977	172.3	31.08	47.39							
		1978	183.8	39.36	56.26							
		1979	202.7	65.76	85.23							
		1980	225.2	77.07	89.90							
		1981	249.1	67.56	71.25							

PINE	#3 SAWLOG	DEC.31/81	262.7			70.00	1.00	70.00	0.200		14.00	
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PINE	PULP	DEC.31/81						PRICE @ CEDAR PULP	31.14	0.100	3.11	
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PINE	ALL GRADES								1.000		106.06	0.011	1.17
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ALL SPECIES GRADES													DEC 31/81 \$/cunit
-----													196.61
													=====

. 1.5"/ft. in logs 36"+ diameter

Log Grade 4 (#2 Sawlog)

Size: . 12" (30 cm) +

Same specifications as Douglas-fir, Log Grade #6

Log Grade 5 (#3 Sawlog and Pee Wee)

Size: . 6" (15 cm) +

Same specifications as Douglas-fir, Log Grade #7

Log Grade 6 (Pulp)

Size: 6" (15 cm) +

Same specifications as Douglas-fir, Log Grade #8

WHITE PINE

Log Grade 1 (#1 Sawlog)

- Size: . minimum top DIB 24" (61 cm)
- Knot Indication: . no knots or knot indications allowed on surface of the log
- Defects: . reasonably clear, straight, free from defects that impair value of clear lumber
- Quality: . produces 50% or better in clear lumber
- Twist: . 1"/ft. in logs 24-35" diameter
. 1.5"/ft. in logs 36-40" diameter
. 2"/ft. in logs 41-60" diameter
. 2.5"/ft. in logs 61"+ diameter

Log Grade 2 (#2 Sawlog)

- Size: . minimum top DIB 12" (30 cm)
- Knots, Defects and Twist: . same as Douglas-fir Log Grade 6 (#2 Sawlog)

Log Grade 3 (#3 Sawlog and Pee Wee)

- Size: . minimum top DIB 6" (15 cm)
- Same specifications as Douglas-fir Log Grade 7 (#3 Sawlog)

Log Grade 4 (Pulp)

- Size: . minimum DIB 6" (15 cm)
- Same specifications as Douglas-fir Log Grade 8 (Pulp).

HEMLOCK

Log Grade 1 (#1 Sawlog)

- Size: . minimum top DIB 26" (66 cm)
- Knot Indications: . allow few small, well spaced knots on the upper 30% of one quadrant or on the upper 20% of two quadrants
. less lenient attitude must apply on smaller logs
- Defects: . no defect allowed that would prevent the production of 50% or over of scaled contents in No. 2 clear, B, or better grade of lumber
- Twist: . 1"/ft. in logs 26-35" diameter
. 1.5"/ft. in logs 36"+ diameter

Log Grade 2 (#2 Sawlog)

- Size: . minimum top DIB 20" (50 cm)
- Knot Indications: . on logs near the minimum size for this grade any number of reasonably spaced, sound, tight knots not over 3/4" are allowed, or a smaller number of well spaced knots between 3/4" and 1.5" are acceptable, provided there are no other defects and a reasonable portion of the log is knot free
. larger logs will permit a greater number of knots of this size or knots up to 2.5" if so spaced that the requisite % of clears may be obtained
- Defects: . no defect allowed that would prevent the production of 65% or over of scaled contents in merchantable or better grade of lumber or 20% or better of a clear grade of lumber
. no conks or rotten branches
- Twist: . 0.5"/ft. in logs 20-25" diameter
. 1"/ft. in logs 26-35" diameter
. 1.5"/ft. in logs 36"+ diameter

Log Grade 3 (#3 Sawlog and Pee Wee)

- Size: . minimum top DIB 6" (15 cm)
- Length: . minimum length 10 m except for top log
- Knot Indications: . allow numerous small knots and well spaced (8-10' apart) large knots (3" diameter), or single limb or knot up to 4" diameter, provided not spaced closer than 17' (5 m) apart

- for Pee Wee allow knots to 1.5" and pin knots (0.5" diameter) for full length of log

Defects:

- no conks or rotten branches or excessive twist permitted for #3 Sawlog
- must produce 50% sound wood for lumber
- no defect at all allowed for Pee Wee

General:

- #3 Sawlog can be a log with butt defect

Log Grade 4 (Pulp)

Size:

- minimum top DIB 6" (15 cm)

Same specifications as Douglas-fir Log Grade 8 (Pulp)

BALSAM

Log Grade 1 (Lumber)

Size: . minimum top DIB 26" (66 cm) +

Same specifications as Hemlock Log Grade 1 (#1 Sawlog)

Log Grade 2 (Peelable)

Size: . minimum top DIB 14" (36 cm) +

Same specifications as Spruce Log Grade 3 (Peelable)

Log Grade 3 (Standard and Pee Wee)

Size: . minimum top DIB 6" (15 cm)

Same specifications as Hemlock Log Grade 3

Log Grade 4 (Pulp)

Size: . minimum top DIB 6" (15 cm) +

Same specifications as Douglas-fir Log Grade 8 (Pulp)

TERMS OF REFERENCE FOR TIMBER APPRAISAL
PROPOSED ECOLOGICAL RESERVE ON NIMPKISH ISLAND

Purpose

To appraise the value of timber on the Nimpkish Island Ecological Reserve proposal. The proposed Nimpkish Island Ecological Reserve is shown as outlined boldly in black on Schedule "A" attached.

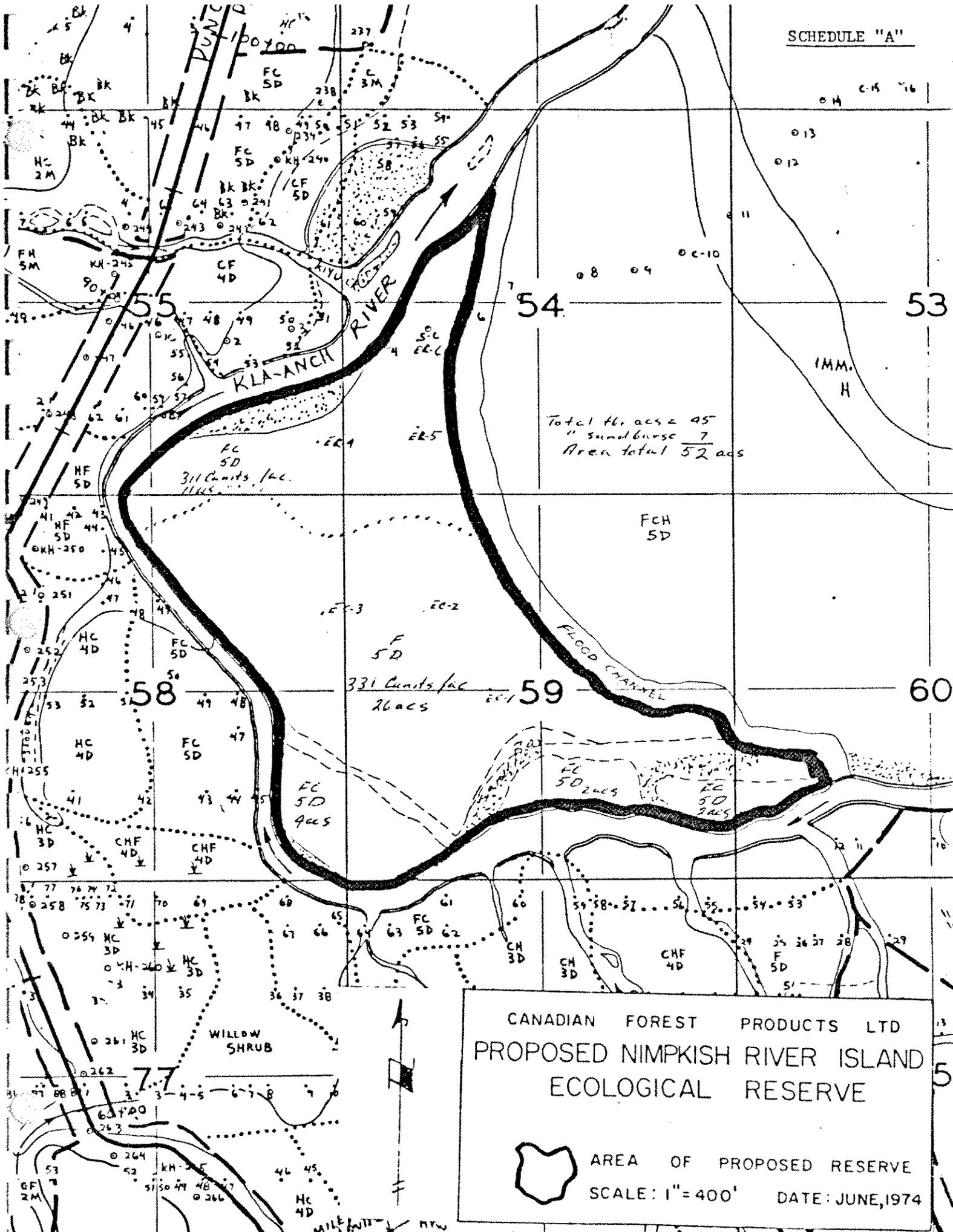
Terms of Reference

The appraisal will follow the document, "Instructions for Timberland Appraisals for Ministry of Forests' Exchanges", keeping in mind the following points referring to Item II, Temporary Tenures:

1. The existing cruise volumes will be used as a basis for timber valuation. However, the data will be adjusted by a log broker to reflect the new statutory grades. This will involve a field inspection by a professional forester on the Consultant's staff and a log broker hired by the Consultant as a subconsultant. Existing cruise information is attached as Schedule "B".
2. The Consultant will hire a log broker as a subconsultant to advise on market prices of logs by species and grades.
3. Referring to point 3b(ii) in the Instructions, the valuation will be conducted on the Timber Licence recognizing that it would be developed as part of the Tree Farm Licence with its present infrastructure. In other words, the harvesting costs will reflect any investments already in place.
4. The appraisal will be based on net value in average market conditions. ^{U.S.} The market cycle will be a five year period reflecting values from ~~December 31, 1976~~ ^{JANUARY 1, 1977} to December 31, 1981 inclusive. _{five} The date of valuation will be December 31, 1981, with extraction costs representative of the year 1981.
5. The Consultant will report to Lands, Parks and Housing as follows:
 - a) Presentation of a preliminary report to Lands, Parks and Housing and Canadian Forest Products by (date).
 - b) Meet with Lands, Parks and Housing and Canadian Forest Products jointly to discuss and revise the draft report as required.
 - c) Deliver 5 copies of the completed report to Lands, Parks and Housing for Lands, Parks and Housing distribution as follows:
 - Two copies Canadian Forest Products
 - One copy Ministry of Forests
 - Two copies Lands, Parks and Housing

APPENDIX II

MAP OF NIMPKISH ISLAND



Total 46.00 acs ± 45
 " Sandbar 7
 Area total 52 acs

FC 5D
 311 Units / ac
 11.5 acs

F 5D
 331 Units / ac
 26 acs

FC 5D
 9 acs

FC 5D
 2 acs

FC 5D
 2 acs

CANADIAN FOREST PRODUCTS LTD
 PROPOSED NIMPKISH RIVER ISLAND
 ECOLOGICAL RESERVE

 AREA OF PROPOSED RESERVE
 SCALE: 1" = 400' DATE: JUNE, 1974

WILLOW SHRUB

MILE

APPENDIX III

COMPILED VOLUME BY GRADE & SPECIES

(GRADE CRUISE REPORT UNDER SEPARATE COVER)

APPENDIX IV

MARKET SELLING PRICE OF LOGS BY YEAR

YEAR 1977

VANCOUVER MARKET SELLING PRICE OF LOGS

\$/MBM (except **** denotes \$ / unit)

SPECIES	GRADE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	MO. OF ENTRIES	YEAR	MARKET	FINAL		
															AVERAGE	ADJUST'T	AVERAGE		
														(BASE)	(F. WHITE)	TALL TBR			
DOUG. FIR	#1 PEELER	240.00	240.00	235.00	235.00	235.00	235.00	235.00	235.00	235.00	235.00	235.00	245.00	245.00	11	236.82		236.82	
	#2 PEELER	230.00	230.00	225.00	225.00	225.00	225.00	225.00	225.00	225.00	225.00	225.00	225.00	225.00	11	226.82		226.82	
	#3 PEELER	220.00	220.00	215.00	215.00	215.00	215.00	215.00	215.00	215.00	215.00	215.00	215.00	215.00	11	216.82		216.82	
	#4 PEELER	210.00	210.00	205.00	205.00	205.00	205.00	205.00	205.00	205.00	205.00	205.00	205.00	205.00	11	206.82		206.82	
	S. F. P.	200.00	200.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	195.00	11	196.82		196.82	
	#1 STD. SAWLOG	175.00	175.00	175.00	175.00	180.00	180.00	180.00	180.00	180.00	180.00	180.00	182.50	190.00	195.00	11	180.68		180.68
	#2 STD. SAWLOG	165.00	165.00	165.00	165.00	170.00	170.00	170.00	170.00	170.00	170.00	170.00	172.50	180.00	185.00	11	170.68		170.68
	#3 STD. SAWLOG	155.00	155.00	155.00	155.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00	162.50	170.00	175.00	11	160.68		160.68
	**** #3 GANG (8-14")	71.78	71.78	71.78	74.25	76.73	76.73	76.73	76.73	76.73	76.73	76.73	76.73	79.20	79.20	11	75.60		75.60
	**** CHIP-N-SAW (6-9")	48.75	48.75	48.75	48.75	55.00	55.00	55.00	55.00	55.00	55.00	55.00	55.00	65.00	65.00	11	55.45		55.45
	**** PULP	27.50	27.50	27.50	27.50	27.50	27.50	27.50	28.75	28.75	28.75	28.75	28.75	28.75	28.75	11	28.07		28.07
	LUMBER REJECT	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	11	40.00		40.00
HEMLOCK	#1 STD. MERCH.	145.00	145.00	145.00	147.50	147.50	147.50	147.50	147.50	147.50	147.50	147.50	147.50	147.50	11	146.82		146.82	
	#2 STD. MERCH.	140.00	140.00	140.00	142.50	142.50	142.50	142.50	142.50	142.50	142.50	142.50	142.50	142.50	11	141.82		141.82	
	#3 STD. MERCH.	135.00	135.00	135.00	137.50	137.50	137.50	137.50	137.50	137.50	137.50	137.50	137.50	137.50	11	136.82		136.82	
	**** #3 GANG (8-14")	62.49	62.49	62.49	64.97	64.97	64.97	64.97	64.97	64.97	64.97	64.97	64.97	66.21	66.21	11	64.52		64.52
	**** CHIP-N-SAW (6-9")	43.75	43.75	43.75	43.75	50.00	50.00	50.00	50.00	53.75	55.00	55.00	55.00	60.00	60.00	11	50.34		50.34
	**** #3 PULP	27.50	27.50	27.50	27.50	27.50	27.50	27.50	28.75	28.75	30.00	30.00	30.00	35.00	35.00	11	29.32		29.32
LUMBER REJECT	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	45.00	45.00	11	36.82		36.82	
BALSAM	PEELABLE	145.00	145.00	145.00	145.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	11	148.18		148.18	
	STANDARD	132.50	132.50	132.50	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	135.00	11	134.32		134.32	
	**** #3 GANG (8-14")	62.37	62.37	62.37	64.89	64.89	64.89	64.89	64.89	64.89	64.89	64.89	64.89	66.15	66.15	11	64.43		64.43
	**** CHIP-N-SAW (6-9")	43.75	43.75	43.75	43.75	50.00	50.00	50.00	50.00	53.75	55.00	55.00	55.00	60.00	60.00	11	50.34		50.34
	**** PULP	28.05	28.05	28.05	28.05	28.05	28.05	28.05	28.05	29.33	29.33	30.60	30.60	35.70	35.70	11	29.91		29.91
LUMBER REJECT	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	45.00	45.00	11	36.82		36.82	
CEDAR	#1 LUMBER	242.50	242.50	242.50	252.50	252.50	252.50	252.50	252.50	252.50	252.50	265.00	287.50	335.00	11	261.59		261.59	
	#2 LUMBER	232.50	232.50	232.50	242.50	242.50	242.50	242.50	242.50	242.50	242.50	255.00	262.50	315.00	11	249.32		249.32	
	#1 MERCH	225.00	225.00	222.50	233.75	237.50	237.50	237.50	237.50	237.50	237.50	237.50	240.00	250.00	11	235.11		235.11	
	#3 MERCH	225.00	225.00	212.50	223.75	227.50	227.50	227.50	227.50	227.50	227.50	227.50	230.00	240.00	11	225.11		225.11	
	#1 SHINGLE	210.00	210.00	210.00	220.00	220.00	227.50	227.50	227.50	227.50	227.50	227.50	247.50	280.00	11	226.14		226.14	
	#2 SHINGLE	200.00	200.00	200.00	210.00	210.00	217.50	217.50	217.50	217.50	217.50	217.50	237.50	250.00	11	216.14		216.14	
	#3 SHINGLE	190.00	190.00	190.00	200.00	200.00	207.50	207.50	207.50	207.50	207.50	207.50	227.50	240.00	11	206.14		206.14	
	**** #3 GANG	91.35	91.35	91.35	101.07	101.07	101.07	101.07	101.07	96.14	96.14	96.14	101.53	103.53	11	94.79		94.79	
	**** #3 SCRAP (6-9")	48.75	48.75	48.75	55.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	8	55.16		55.16	
	**** PULP	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	18.80	18.80	11	13.03		13.03
	LUMBER REJECT	17.50	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	11	19.77		19.77
SPRUCE	#1 STD.	152.50	152.50	152.50	155.00	155.00	155.00	155.00	155.00	155.00	155.00	157.50	157.50	157.50	11	155.00		155.00	
	#2 STD.	142.50	142.50	142.50	145.00	145.00	145.00	145.00	145.00	145.00	145.00	147.50	147.50	147.50	11	145.00		145.00	
	PEELABLE	145.00	145.00	145.00	145.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	11	148.18		148.18	
	#3 STD.	132.50	132.50	132.50	135.00	135.00	135.00	135.00	135.00	135.00	135.00	137.50	137.50	137.50	11	135.00		135.00	
	**** #3 GANG	67.07	67.07	67.07	69.78	69.78	69.78	69.78	69.78	69.78	69.78	69.78	71.14	71.14	11	69.29		69.29	
	**** CHIP-N-SAW (6-9")	43.75	43.75	43.75	43.75	50.00	50.00	50.00	50.00	53.75	55.00	55.00	60.00	59.75	11	50.32		50.32	
	**** #3 PULP	31.90	31.90	31.90	31.90	31.90	31.90	31.90	33.35	33.35	34.80	34.80	40.60	40.60	11	34.01		34.01	
LUMBER REJECT	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	45.00	45.00	11	36.82		36.82		

YEAR 1978

VANCOUVER MARKET SELLING PRICE OF LOGS

\$/MFB (except **** denotes \$ / cunit)

SPECIES	GRADE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	NO. OF ENTRIES	YEAR AVERAGE (BASE)	MARKET ADJUST (F. WHITE)	FINAL AVERAGE TALL TBR	
DOUG. FIR	#1 PEELER	245.00	245.00	255.00		255.00	265.00	265.00	275.00	275.00		305.00	320.00	10	270.50		270.50	
	#2 PEELER	225.00	225.00	245.00		245.00	255.00	255.00	265.00	265.00		295.00	310.00	10	260.50		260.50	
	#3 PEELER	225.00	225.00	235.00		235.00	245.00	245.00	255.00	255.00		285.00	300.00	10	250.50		250.50	
	#4 PEELER	215.00	215.00	225.00		225.00	235.00	235.00	245.00	245.00		275.00	290.00	10	240.50		240.50	
	S. F. P.	205.00	205.00	215.00		215.00	225.00	225.00	235.00	235.00		265.00	280.00	10	230.50		230.50	
	#1 STD. SAWLOG	195.00	200.00	210.00		210.00	215.00	215.00	225.00	225.00		252.50	262.50	10	221.00		221.00	
	#2 STD. SAWLOG	185.00	190.00	200.00		200.00	205.00	205.00	215.00	215.00		242.50	252.50	10	211.00		211.00	
	#3 STD. SAWLOG	175.00	180.00	190.00		190.00	195.00	195.00	205.00	205.00		232.50	242.50	10	201.00		201.00	
	**** #3 GANG (8-14")	79.20	84.15	89.10		89.10	91.50	91.50	96.53	96.53		108.90	116.33	10	94.30		94.30	
	**** CHIP-N-SAW (6-9")	65.00	68.75	68.75		70.00	76.25	78.75	78.75	81.25		85.00	90.00	10	76.25		76.25	
	**** PULP	28.75	28.75	28.75		30.00	30.00	30.00	30.00	30.00		30.00	38.75	10	30.50		30.50	
	LUMBER REJECT	40.00	40.00	40.00		40.00	40.00	40.00	40.00	40.00		45.00	50.00	10	41.50		41.50	
	HEMLOCK	#1 STD. LBR TYPE											176.25		1	176.25		176.25
		#2 STD. LBR TYPE											173.75		1	173.75		173.75
		#3 STD. LBR TYPE											168.75		1	168.75		168.75
#1 STD. MERCH.		147.50	150.00	155.00		155.00	157.50	157.50	160.00	160.00		170.00	175.00	10	158.75		158.75	
#2 STD. MERCH.		142.50	145.00	150.00		150.00	152.50	152.50	155.00	155.00		165.00	170.00	10	153.75		153.75	
#3 STD. MERCH.		137.50	140.00	145.00		145.00	147.50	147.50	150.00	150.00		160.00	165.00	10	148.75		148.75	
**** #3 GANG (8-14")		68.21	68.96	68.16		70.54	71.78	71.78	71.78	73.63		77.96	81.06	10	72.09		72.09	
**** CHIP-N-SAW (6-9")		60.00	60.00	60.00		62.50	67.50	67.50	67.50	72.50		67.50	87.50	10	68.75		68.75	
**** #3 PULP		35.00	35.00	35.00		42.50	42.50	42.50	42.50	45.00		47.50	47.50	10	41.50		41.50	
LUMBER REJECT		45.00	45.00	45.00		45.00	45.00	45.00	45.00	50.00		52.50	55.00	10	47.25		47.25	
BALSAM	PEELABLE	150.00	150.00	155.00		157.50	158.75	158.75	161.25	165.00		180.00	190.00	10	162.63		162.63	
	STANDARD	135.00	137.50	142.50		142.50	145.00	145.00	147.50	147.50		157.50	162.50	10	146.25		146.25	
	**** GANG (8-14")	66.15	67.41	67.41		71.19	72.45	72.45	73.08	73.71		78.12	81.27	10	72.32		72.32	
	**** CHIP-N-SAW (6-9")	60.00	60.00	60.00		62.50	67.50	67.50	67.50	72.50		67.50	87.50	10	68.75		68.75	
	**** PULP	35.70	35.70	35.70		43.35	43.35	43.35	43.35	45.90		48.45	48.45	10	42.33		42.33	
	LUMBER REJECT	45.00	45.00	45.00		45.00	45.00	45.00	45.00	50.00		52.50	55.00	10	47.25		47.25	
CEDAR	#1 LUMBER	375.00	375.00	375.00		375.00	362.50	335.00	327.50	327.50		362.50	372.50	10	354.75		354.75	
	#2 LUMBER	215.00	250.00	250.00		250.00	237.50	215.00	202.50	202.50		237.50	247.50	10	230.75		230.75	
	#2 MERCH	260.00	280.00	285.00		285.00	285.00	280.00	270.00	275.00		295.00	310.00	10	282.50		282.50	
	#3 MERCH	250.00	270.00	275.00		275.00	275.00	270.00	260.00	265.00		285.00	300.00	10	272.50		272.50	
	#1 SHINGLE	270.00	270.00	280.00		280.00	280.00	275.00	260.00	260.00		275.00	280.00	10	273.00		273.00	
	#2 SHINGLE	260.00	260.00	270.00		270.00	270.00	265.00	250.00	250.00		265.00	270.00	10	263.00		263.00	
	#3 SHINGLE	250.00	250.00	260.00		260.00	260.00	255.00	240.00	240.00		255.00	260.00	10	253.00		253.00	
	#1 SHAVE LUMBER												340.00		1	340.00		340.00
	#2 SHAVE LUMBER												330.00		1	330.00		330.00
	#2 SHAVE												285.00		1	285.00		285.00
	#3 SHAVE												275.00		1	275.00		275.00
	**** GANG	102.53	113.39	113.39		118.32	118.32	118.32	115.86	115.86		133.11	141.74	10	119.18		119.18	
	**** #3 SCRAGG (6-9")												252.50		1	252.50		252.50
	**** PULP	18.80	18.80	18.80		18.80	18.80	29.38	29.38	29.38		29.38	37.90	10	24.44		24.44	
	LUMBER REJECT	20.00	20.00	20.00		20.00	20.00	20.00	20.00	20.00		30.00	30.00	10	22.00		22.00	
SPRUCE	WHITE SPOT											537.50		1	537.50		537.50	
	BLUE SPOT											462.50		1	462.50		462.50	
	#1 STD.	157.50	161.25	165.00		170.00	175.00	175.00	175.00	175.00		185.00	195.00	10	173.38		173.38	
	#2 STD.	147.50	151.25	155.00		160.00	165.00	165.00	165.00	165.00		175.00	185.00	10	163.38		163.38	
	PEELABLE	150.00	150.00	155.00		165.00	165.00	165.00	170.00	170.00		175.00	185.00	10	165.00		165.00	
	#3 STD.	137.50	141.25	145.00		150.00	155.00	155.00	155.00	155.00		165.00	175.00	10	153.38		153.38	
	**** #3 GANG	71.14	73.17	73.17		78.59	78.59	78.59	78.59	80.62		85.37	89.43	10	78.73		78.73	
	**** CHIP-N-SAW (6-9")	59.75	59.75	59.75		62.50	67.50	67.50	67.50	72.50		67.50	87.50	10	68.68		68.68	
	**** #3 PULP	40.60	40.60	40.60		49.30	49.30	49.30	49.30	52.20		55.10	55.10	10	48.14		48.14	
	LUMBER REJECT	45.00	45.00	45.00		45.00	45.00	45.00	45.00	50.00		52.50	55.00	10	47.25		47.25	

YEAR 1979

VANCOUVER MARKET SELLING PRICE OF LOGS

\$/MBM (except **** denotes \$ / cunit)

SPECIES	GRADE	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	NO. OF ENTRIES	YEAR	MARKET	FINAL	
															AVERAGE	ADJUST'T	AVERAGE	
															(BASE)	(F. WHITE)	TALL TBR	
DOUG. FIR	#1 PEELER	315.00	325.00	345.00	355.00	370.00	375.00	375.00	380.00	390.00	390.00	407.50	407.50	12	369.58		369.58	
	#2 PEELER	305.00	315.00	325.00	345.00	360.00	365.00	365.00	370.00	380.00	380.00	397.50	397.50	12	359.58		359.58	
	#3 PEELER	295.00	305.00	325.00	335.00	350.00	355.00	355.00	360.00	370.00	370.00	387.50	387.50	12	349.58		349.58	
	#4 PEELER	285.00	295.00	315.00	325.00	340.00	345.00	345.00	350.00	360.00	360.00	377.50	377.50	12	339.58		339.58	
	S. F. P.	275.00	285.00	305.00	315.00	330.00	335.00	335.00	340.00	350.00	350.00	367.50	367.50	12	329.58		329.58	
	#1 STD. SAWLOG	265.00	275.00	290.00	300.00	315.00	320.00	320.00	325.00	335.00	335.00	352.50	352.50	12	316.25		316.25	
	#2 STD. SAWLOG	255.00	265.00	280.00	290.00	305.00	310.00	310.00	315.00	325.00	325.00	342.50	342.50	12	306.25		306.25	
	#3 STD. SAWLOG	245.00	255.00	270.00	280.00	295.00	300.00	300.00	305.00	315.00	315.00	332.50	332.50	12	296.25		296.25	
	**** #3 GANG (8-14")	122.50	127.50	132.50	137.50	137.50	137.50	137.50	137.50	137.50	137.50	137.50	137.50	12	135.00		135.00	
	**** CHIP-N-SAW (6-9")	95.00	100.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	96.25	96.25	12	101.56		101.56	
	**** LUMBER REJECT	55.00	55.00	60.00	60.00	60.00	65.00	65.00	65.00	65.00	65.00	75.00	75.00	12	63.75		63.75	
	HEMLOCK	#1 STD. LBR TYPE	197.50	227.50	267.50	280.00	315.00	315.00	315.00	325.00	340.00	340.00	355.00	355.00	12	303.54		303.54
		#2 STD. LBR TYPE	192.50	232.50	267.50	275.00	305.00	310.00	310.00	320.00	335.00	335.00	350.00	350.00	12	298.13		298.13
		#3 STD. LBR TYPE	187.50	227.50	257.50	270.00	295.00	305.00	305.00	315.00	330.00	330.00	345.00	345.00	12	292.71		292.71
#1 STD. MERCH.		187.50	215.00	240.00	240.00	275.00	275.00	285.00	285.00	305.00	310.00	325.00	325.00	12	273.13		273.13	
#2 STD. MERCH.		182.50	210.00	230.00	235.00	265.00	270.00	280.00	290.00	300.00	305.00	320.00	320.00	12	267.29		267.29	
#3 STD. MERCH.		177.50	205.00	225.00	230.00	255.00	265.00	275.00	285.00	295.00	300.00	315.00	315.00	12	261.88		261.88	
**** #3 GANG (8-14")		93.75	100.00	105.00	110.00	115.00	120.00	120.00	122.50	127.50	127.50	127.50	117.50	12	115.52		115.52	
**** CHIP-N-SAW (6-9")		83.75	86.25	91.25	93.75	93.75	96.25	96.25	96.25	102.50	102.50	102.50	102.50	12	95.63		95.63	
**** #3 PULP		47.50	47.50	48.75	50.00	52.50	55.00	57.50	57.50	65.00	75.00	90.00	97.50	12	65.31		65.31	
**** LUMBER REJECT		27.50	27.50	28.75	30.00	32.50	35.00	37.50	45.00	55.00	70.00	77.50	77.50	12	45.31		45.31	
BALSAM		FEELABLE	197.50	222.50	257.50	272.50	287.50	295.00	295.00	305.00	305.00	305.00	320.00	320.00	12	281.88		281.88
		STANDARD	177.50	202.50	232.50	242.50	267.50	277.50	277.50	292.50	303.75	308.75	323.75	323.75	12	269.17		269.17
		**** GANG (8-14")	93.75	100.00	105.00	110.00	115.00	120.00	120.00	122.50	127.50	127.50	127.50	117.50	12	115.52		115.52
		**** CHIP-N-SAW (6-9")	83.75	86.25	91.25	93.75	93.75	96.25	96.25	96.25	102.50	102.50	102.50	102.50	12	95.63		95.63
	**** PULP	46.88	46.88	47.50	48.75	51.88	54.38	56.88	63.75	73.75	88.75	96.25	96.25	12	64.33		64.33	
	**** LUMBER REJECT	26.88	26.88	26.88	28.75	31.88	34.38	36.88	43.75	53.75	68.75	76.25	76.25	12	44.27		44.27	
CEDAR	#1 LUMBER	427.50	475.00	525.00	500.00	500.00	475.00	475.00	475.00	525.00	500.00	475.00	475.00	12	486.46		486.46	
	#2 LUMBER	412.50	457.50	487.50	475.00	475.00	450.00	450.00	450.00	475.00	450.00	425.00	425.00	12	451.04		451.04	
	#3 MERCH	325.00	365.00	395.00	380.00	365.00	350.00	350.00	350.00	350.00	335.00	330.00	330.00	12	352.92	12.00	364.92	
	#4 MERCH	325.00	355.00	385.00	370.00	355.00	340.00	340.00	340.00	340.00	325.00	320.00	320.00	12	342.92	12.00	354.92	
	#1 SHINGLE	265.00	265.00	275.00	275.00	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	12	265.00		265.00	
	#2 SHINGLE	255.00	255.00	265.00	265.00	252.50	252.50	252.50	252.50	252.50	252.50	252.50	252.50	12	255.00		255.00	
	#3 SHINGLE	245.00	245.00	255.00	255.00	242.50	242.50	242.50	242.50	242.50	242.50	242.50	242.50	12	245.00		245.00	
	#1 SHAPE LUMBER	362.50	362.50	387.50	362.50	347.50	347.50	347.50	347.50	362.50	362.50	362.50	362.50	12	359.58		359.58	
	#2 SHAPE LUMBER	337.50	337.50	362.50	337.50	322.50	322.50	322.50	322.50	332.50	332.50	332.50	332.50	12	332.92		332.92	
	#3 SHAPE	285.00	285.00	285.00	285.00	285.00	275.00	275.00	275.00	275.00	275.00	275.00	275.00	12	279.17		279.17	
	#4 SHAPE	275.00	275.00	275.00	275.00	275.00	265.00	265.00	265.00	265.00	265.00	265.00	265.00	12	269.17		269.17	
	#5 SCRAGG (6-9")	277.50	290.00	307.50	307.50	292.50	272.50	272.50	272.50	272.50	272.50	262.50	262.50	12	280.21		280.21	
	SPRUCE	WHITE SPOT	600.00	650.00	750.00	800.00	900.00	950.00	1050.00	1050.00	1050.00	1050.00	1050.00	1050.00	12	912.50		912.50
		BLUE SPOT	512.50	550.00	650.00	700.00	700.00	750.00	850.00	850.00	850.00	850.00	850.00	850.00	12	746.88		746.88
#1 STD.		222.50	232.50	262.50	272.50	350.00	370.00	450.00	450.00	450.00	450.00	332.50	332.50	12	326.33		326.33	
#2 STD.		212.50	222.50	252.50	262.50	275.00	295.00	307.50	307.50	322.50	322.50	322.50	322.50	12	285.42		285.42	
#3 STD.		202.50	212.50	242.50	252.50	257.50	272.50	297.50	297.50	312.50	312.50	312.50	312.50	12	273.33		273.33	
**** #3 GANG		92.50	97.50	102.50	95.00	95.00	97.50	100.00	102.50	107.50	107.50	107.50	107.50	12	101.04		101.04	
**** #3 PULP		46.88	46.88	47.50	48.75	51.88	54.38	56.88	63.75	73.75	88.75	96.25	96.25	12	64.33		64.33	
**** LUMBER REJECT		26.88	26.88	26.88	28.75	31.88	34.38	36.88	43.75	53.75	68.75	76.25	76.25	12	44.27		44.27	