

District: Astoria

Date:

May 27, 2008

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$786,235.50	\$350,533.68	\$1,136,769.18
		Project Work:	\$0.00
		Advertised Value:	\$1,136,769.18

5/27/08



"STEWARDSHIP IN FORESTRY"

District: Astoria

Date:

May 27, 2008

timber description

Location: Portions of Sections 11, 14, 15, 16, 21, 22, 23, 25, 26, 27, and 28, T8N, R9W, W.

M., Clatsop County, Oregon.

Stand Stocking:

60%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	12	0	95
Western Hemlock / Fir	14	0	92
Alder (Red)	13	0	90

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Volume by Grade	28	38	48	Camprur	Total
Douglas - Fir	311	1,132	996	0	2,439
Western Hemlock / Fir	2,612	3,997	3,552	0	10,161
Alder (Red)	0	0	0	1,096	1,096
Total	2,923	5,129	4,548	1,096	13,696



"STEWARDSHIP IN FORESTRY"

District: Astoria Date: May 27, 2008

comments: Wester

Western Hemlock and Sitka Spruce volumes were combined for calculation of one price. See volume spreadsheet and notice for species, sort, and grade volumes.

Pond Values Used: 1st Quarter Calendar Year 2008.

Expected Log Markets: Tillamook, OR and Longview, WA

Western Red Cedar Stumpage Price = Pond Value minus Logging Cost \$795/MBF = \$1,050/MBF - \$255/MBF

HAULING

Hauling costs equivalent to \$700 daily truck cost.

OTHER COSTS (with Profit & Risk to be added):

Additional Logging Costs:

Felling and Bucking \$30/MBF x 13,696 MBF =\$410,880
Branding and Painting \$1/MBF x 13,696 MBF = \$13,696
Rock for crossing underground utility lines on estimated 20 entry
points off Pipeline County Road. 10 cy per entry point equals 200
cubic yards at \$12.00 per yard placed and spread = \$2,400
Open and close dirt spurs (10 hrs X \$94) = \$940
Slash Piling on Cable Landings with log loader/shovel 20 landings
at 3 hours per landing = 60 hours X \$87.50/hr = \$5,250

TOTAL OTHER COSTS (with Profit & Risk to be added) = \$433,166

OTHER COSTS (No Profit & Risk added)

Slash Piling in Areas 1 and 2: $$120/hour \times 100 hours$ (excavator) or $$87.50/hour \times 137.1 hours$ (log loader) = \$12,000

Slash Piling in salvage areas: \$87.50/ hour x 55 hours (log loader) = \$4,812.50Slash Piling equipment move-in: 1 times x \$1,200/move = \$1,200

TOTAL OTHER COSTS (No Profit & Risk added): \$18,012.50

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"STEWARDSHIP IN FORESTRY"

District: **Astoria**

Timber Sale Appraisal Blastoria Salvage Sale 341-08-93

Date:

May 27, 2008

logging conditions

combination#: 1

Douglas - Fir

32.00%

Western Hemlock / Fir

32.00%

Alder (Red) yarding distance: Medium (800 ft) 32.00% downhill yarding:

logging system:

Process: Stroke Delimber

tree size:

Track Skidder

Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day:

7.0

bd. ft / load:

3.000

cost / mbf:

\$68.49

machines:

Stroke Delimber (B)

combination#: 2

Douglas - Fir

33.00%

Western Hemlock / Fir

33.00%

bd. ft / load:

Alder (Red)

33.00%

yarding distance: Medium (800 ft)

Cable: Small Tower <=40

downhill varding: Process: Stroke Delimber

logging system: tree size:

Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day:

6.0

cost / mbf:

\$157.46

machines:

Log Loader (A)

Stroke Delimber (A) Tower Yarder (Small)

combination#: 3

Douglas - Fir

28.00%

Western Hemlock / Fir

28.00%

Alder (Red)

28.00%

yarding distance: Medium (800 ft)

downhill yarding:

Track Skidder

Process: Stroke Delimber

logging system:

Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF

tree size: loads / day:

bd. ft / load: 7.0

3,000

cost / mbf:

\$68.49

machines:

Stroke Delimber (B)

combination#: 4

Douglas - Fir

7.00%

Western Hemlock / Fir

7.00%

Alder (Red)

7.00%

yarding distance: Medium (800 ft)

downhill yarding:

logging system:

Cable: Small Tower <=40

Process: Stroke Delimber

tree size:

Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF

loads / day:

6.0

bd. ft / load:

3,000

cost / mbf:

\$157.46



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Blastoria Salvage Sale 341-08-93

Date:

May 27, 2008

District: **Astoria** machines:

Log Loader (A) Stroke Delimber (A) Tower Yarder (Small)

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"STEWARDSHIP IN FORESTRY"

District:

Astoria

Date:

May 27, 2008

logging costs

Operating Seasons:	2.00	Profit Risk:	20.00%
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Project Costs: \$0.00 **Other Costs (P/R):** \$433,166.00

Slash Disposal: \$0.00 **Other Costs:** \$18,012.50

Miles of Road

Road Maintenance:

\$3.20

Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	0.0	0.0	0.0

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Hauling Costs

Species	\$/MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	3.0	3.0
Western Hemlock / Fir	\$0.00	3.0	3.0
Sitka Spruce	\$0.00	2.0	3.0
Alder (Red)	\$0.00	2.0	2.5

5/27/08



"STEWARDSHIP IN FORESTRY"

District: Astoria

Timber Sale Appraisal Blastoria Salvage Sale 341-08-93

Date:

May 27, 2008

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - \$104.08	Fir \$3.36	\$0.64	\$68.05	\$31.63	\$41.55	\$0.00	\$2.00	\$1.32	\$252.63
	·	·	400.00	QUITE	• • • • • • • • • • • • • • • • • • • •		+-	*****	7
Western F \$104.08	\$3.46	\$0.64	\$69.99	\$31.63	\$41.96	\$0.00	\$2.00	\$1.32	\$255.08
Alder (Red \$104.08	d) \$3.52	\$0.64	\$128.34	\$31.63	\$53.64	\$0.00	\$2.00	\$1.32	\$325.17

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Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$370.27	\$117.64	\$0.00
Western Hemlock / Fir	\$0.00	\$304.22	\$49.14	\$0.00
Alder (Red)	\$0.00	\$645.00	\$319.83	\$0.00

5/27/08



"STEWARDSHIP IN FORESTRY"

District: Astoria

Date:

May 27, 2008

summary

Amortize	

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Western Hemlock / Fir	0	\$0.00	\$0.00
Alder (Red)	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	2,439	\$117.64	\$286,923.96
Western Hemlock / Fir	10,161	\$49.14	\$499,311.54
Alder (Red)	1,096	\$319.83	\$350,533.68

Gross Timber Sale Value

Recovery:

\$1,136,769.18

Prepared by: Jay Morey

Phone: 503-325-5451

APPRAISAL ATTACHMENT Conversions from MBF to TONS

Species	MBF	Conversion Factor (TONS per MBF)	Total TONS Appai	4ppaised \$/MBF	Converted \$Ton	Gross Sale Value
Doua-fir	2,439	6.5	15,854	\$117.64	\$18.10	\$286,923.96
Hemlock/ true fir1	9,202	7.0	64,414	\$49.14	\$7.02	\$452,186.28
Sitka Spruce1	959	7.0	6,713	\$49.14	\$7.02	\$47,125.26
Red Alder	1.096	7.5	8,220	\$319.83	\$42.64	\$350,533.68
Red Cedar	•	6.5		\$795.00	\$122.31	
Total/ Average =	13,696	6.95	95,201			\$1,136,769.18

¹ Hemlock/ true fir/ and spruce volumes were combined in the appraisal to calculate one price.

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale: Date: Blastoria Salvage
May 6, 2008

MBF: __ \$\$/MBF: 13,696

By:

Jay Morey

		Move-in		1 1		
Type	Equipment/Rationale	Rate	Times	Hours	Rate	Cost
Interim	Grader 14G	\$668	1	20	\$90	\$2,468
Road	Dump Truck 12CY	\$140	2	10	\$73	\$1,010
Maintenance	FE Loader C966	\$668	1	4	\$74	\$964
1st Entry	1					
Interim	Grader 14G	\$668	1	20	\$90	\$2,468
Road	Dump Truck 12CY	\$140	2	10	\$73	\$1,010
Maintenance	FE Loader C966	\$668	1	4	\$74	\$964
2nd Entry						
	Grader 14G	\$668	1	30	\$90	\$3,368
Final	Dump Truck 12CY	\$140	2	36	\$73	\$2,908
Road	FE Loader C966	\$668	1	10	\$74	\$1,408
Maintenance	Labor	-		24	\$37	\$888
w/o compaction						
	Grader 14G	\$668	1	80	\$90	\$7,868
Final	Dump Truck 12CY	\$140	2	60	\$73	\$4,660
Road	FE Loader C966	\$668	1	16	\$74	\$1,852
Maintenance	Vibratory Roller	\$668	1	80	\$73	\$6,508
w/ compaction	Water Truck 2,500 gallon	\$163	1	50	\$78	\$4,063
	Labor			40	\$37	\$1,480
Total						

Interim Road Maintenance

Production Rates	Miles/day	Distance(miles)	Days	Hours
Grader	2.5	5.0	2.0	20.0

Final Road Maintenance - without compaction

Production Rates	Miles/day	Distance(miles)	Dáys	Hours
Grader	2.5	7.5	3.0	30.0

Final Road Maintenance - with compaction

i iliai Noau i	vialitionalio	C WILL COMPACIO		
Production Rates	Miles/day	Distance(miles):	Days	Hours
Grader	1.5	12.0	8.0	80.0
Vibratory Roller	1.5	12.0	8.0	80.0

TIMBER CRUISE REPORT

Blastoria Salvage

1. Sale Area Location:

The sale areas are located in portions of Sections 11, 14, 15, 16, 21, 22, 23, 25, 27, and 28 T8N, R9W, W. M., Clatsop County, Oregon.

2. Fund Distribution:

BOF = 100%

Tax Code =

1-01 (1.0%)

1-02 (29.6%)

1-04 (3.4%)

1-08 (66.0%)

3. Sale Acreage and Treatments by Area:

Area	Original Sale Name	Harvest Type	Net Acres	Survey Method
1	Astoria Basin Thinning/ Jackpipe	Modified Clearcut	625.5	GIS
2	Astoria Basin Thinning	Modified Clearcut	139.0	GIS
A, C, D, E	Mill Creek Combination/ None	Salvage	301.5	GIS
В	Williamsport Thinning	Salvage	204.0	GIS
F	Williamsport Thinning	Salvage	42.0	GIS
G through O	Astoria Basin Thinning	Salvage	196.0	GIS
TOTAL			1,508	

4. Cruise Method and Computations:

The Stand Level Inventory (SLI) data for all areas were used as a basis for this cruise. Harvest volumes for all areas are based on a percentage estimation of volume to be salvaged minus the volume harvested in previous sales and anticipated defect and breakage. Data from past timber timber sale cruises in the area were used to establish sort/grade volumes. The cruise calculations were processed in the Astoria District office. See attached spreadsheet.

5. Timber Description:

<u>Areas A and C (Salvage)</u> – Portions of these stands were not in previous timber sales. Area A consists of mixed conifer, mainly Western Hemlock and Sitka Spruce ranging from 40-84 years old. Area C consists of moderate sized, Western Hemlock, Douglas-fir, Sitka Spruce and alder with traces of cedar. Wind storms have significantly damaged portions of these stands, resulting in several large patches of blown-down timber with few standing trees remaining as well as scattered blow-down. These stands will be salvage logged, harvesting only those trees blown down and those that are root sprung (leaning).

<u>Areas B, and D through O (Salvage)</u> – These stands were "auto-mark" partial cut three to twelve years ago, and are approximately 40 to 65 years old, consisting of small and moderate sized Western Hemlock, Douglas-fir, Sitka Spruce and alder with traces of cedar. The condition of these stands are similar to Areas A and C and will be salvage logged in the same manner.

<u>Areas 1, and 2 (Modified Clearcut)</u> – These stands are similar to Areas A through O. These stands will be logged to salvage downed trees and the anticipated blow-down of the remaining standing trees. These stands range in age from 40 to 60 years old. These areas will require whole tree logging and the removal of saw logs and pulp.

- **6. Statistical Analysis and Stand Summary:** A statistical analysis was not calculated. See attached spreadsheet.
- 7. Volumes by Species and Sale Areas: Volumes do not include "in-growth". The total net MBF volumes by species and grade are as follows:

Species	DBH	Net. Vol.	2 Saw	3 Saw	4 Saw	Camp Run	Sale%
Douglas-fir	12"	2,439	311	1,132	996		18%
W. Hemlock / True Fir	14"	9,202	2,325	3,661	3,216		67%
Spruce	14"	959	287	336	336		7%
Alder	13"	1,096				1,096	8%
Totals		13,696	2,923	5,129	4,548	1,096	100

Gross volumes were reduced for defect and breakage by 25 percent.

Prepared by:	, Jay Morey	Date:	May 4, 2008
Approved by:	AL TILLE	Date:	5/15/2008

9. Attachment:

Volume Breakdown Spreadsheet (2 Pages)

X:\Sunset Unit\2009 FY Sales\Blastoria Salvage\Sale Prep\Cruise\Cruise Report-Blastoria Salvage.doc

Blastoria Salvage Estimated Volumes

Total MBF	937.4	1,844.0	1,784.6	2,324.8	6,890.7	4 477 5	1,477	497.0	1,974.8	1,770.6	127.7	118.2	419.4	2,435.8	589.0	212.3	151.5	247.5		113.3	99.5	212.8	32.3	53.3	47.6
Total BF less Damage & Breakage (-25%)	937,379	1,844,047	1,784,562	2,324,758		477 000	1,477,709	497,474		1,770,566	127,692	118,233	419,352		588,958	212,268	151,482	247,501		113,283	99,527		32,348	53,279	47,570
Total BF less Volume Previously Removed	1,249,838	2,458,729	2,379,416	3,099,677		4 060 740	01 / 608,1	905,239		2,360,755	170,256	157,644	559,136		785,278	283,024	201,976	330,001		151,044	132,702		43,130	71,038	63,427
% Volume Previosly Removed	30%	30%	%0	30%		/000	20%	20.2%		%0	%0	%0	%0		%0	%0	%0	%0	***************************************	%0	%0		30%	30%	30%
Total BF	1,785,483	3,512,471	2,379,416	4,428,111		0 0 4 0 0 0 0	2,013,003	047,370		2,360,755	170,256	157,644	559,136		785,278	283,024	201,976	330,001		151,044	132,702		61,615	101,483	90,610
BF/ Acre Total	21,105	25,179	25,179	18,122		797 00	27,107	200,70		33,344	14,188	13,137	49,047		19,247	14,896	25,247	17,742		24,167	19,515		18,122	18,122	18,122
Anticipated Salvage Acreage	84.6	139.5	94.5	244.4	563.0		99.9	7.07	125.1	70.8	12.0	12.0	11.4	106.2	40.8	19.0	8.0	18.6		6.3	6.8	13.1	3.4	5.6	5.0
Anticipated Salvage %	%06	%06	%06	%06		/000	%000 0000	0/D8		%09	40%	40%	09	2.0	 20%	20%	40%	40%		25%	40%		40%	40%	40%
Net Acres	94.0	155.0	105.0	271.5	625.5	7	2.00	70.07	139.0	118.0	30.0	30.0	19.0	197.0	204.0	38.0	20.0	46.5		25.0	17.0	42.0	8.5	14.0	12.5
Harvest Type	MC	MC	MC	MC		(5) M		Salvage	Salvage	Salvage	Salvage		Salvage	Salvage	Salvage	Salvage		Salvage	Salvage		Salvage	Salvage	Salvage
SLI Stand ID	23202	23132	23132	23136	Totals	*0000	12262	00707	Totals	23095	23100	23128	23127	Totals	23125	23046	23055	23103		23203	23218	Totals	23136	23136	23136
Cruise Data / SLI	SLI	SLI	SFI	STI		2	70	OL!		SLI	SLI	SLI	SLI	****	SLI	SLI	SLI	SLI		SLI	SLI		SLI	SLI	SLI
Area	1	1	1	ļ	1	c	7 0	7	2	A	А	Α	٧	Α	В	C	D	Ш		F	F	F	G	H	-

Blastoria Salvage Estimated Volumes

Total	66.1	113.7	68.0	79.3	147.3	158.6	71.0	224.8	62.6	118.5	13 696
Total BF less Damage & Breakage (-25%)	96,095		67,983	79,314		158,628	70,981	224,773	62,567	118,548	
Total BF less Volume Previously Removed	88,127		90,644	105,752		211,504	94,641	299,697	83,422	158,065	
% Volume Previosly Removed	30%		%0	30%		30%	30%	30%	30%	30%	
Total BF	125,895		90,644	151,074		302,148	135,202	428,138	119,174	225,807	
BF/ Acre Total	25,179		25,179	25,179		25,179	28,167	28,167	16,552	34,084	
Anticipated Salvage Acreage	5.0	10.0	3.6	6.0	9.6	12.0	4.8	15.2	7.2	9.9	968 1
Anticipated Salvage %	40%		40%	40%		40%	40%	40%	40%	72%	
Net Acres	12.5	25.0	9.0	15.0	24.0	30.0	12.0	38.0	18.0	26.5	1 508 0
Harvest	Salvage		Salvage	Salvage		Salvage	Salvage	Salvage	Salvage	Salvage	
SLI Stand ID	23132	Totals	23132	23132	Totals	23132	23221	23221	23263	23255	
Cruise Data / SLI	SLI		SLI	SLI		SLI	SLI	SLI	SLI	SLI	
Area		****	ح	٦	٦	노		Σ	z	0	

APPRAISAL ATTACHMENT Conversions from MBF to TONS

Doug-fir 2,439 6.5 15,854 \$117.64 \$18.10 Hemlock/ true fir¹ 9,202 7.0 64,414 \$49.14 \$7.02 Sitka Spruce¹ 959 7.0 6,713 \$49.14 \$7.02 Red Alder 1,096 7.5 8,220 \$319.83 \$42.64 Red Cedar 6.5 6.5 \$795.00 \$122.31	WBF TONS perMBF Total TONS Appaised \$MBF Control on the permBF 2,439 6.5 15,854 \$117.64 2,439 7.0 64,414 \$49.14 ce¹ 9,202 7.0 6,713 \$49.14 ce¹ 959 7.5 8,220 \$319.83 1,096 7.5 8,220 \$795.00	\$1,136,769.18		95,201	6.95	13,696	Total/ Average =
2,439 6.5 15,854 \$117.64 true fir' 9,202 7.0 64,414 \$49.14 ce' 959 7.0 6,713 \$49.14 1.096 7.5 8,220 \$310.83	MBF TONS perMBF) Total TONS Appaised \$MBF 2,439 6.5 15,854 \$117.64 4 true fir¹ 9,202 7.0 64,414 \$49.14 ruce¹ 959 7.0 6,713 \$49.14 ruce¹ 1.096 7.5 8.220 \$310.83	\$122.31	\$795.00	, , ,	6.5		Red Cedar
2,439 6.5 15,854 \$117.64 true fir ¹ 9,202 7.0 64,414 \$49.14 ce ¹ 959 7.0 6,713 \$49.14	MBF TONS perMBF) Total TONS Appaised \$MBF Appaised \$MBF Indicator 2,439 6.5 15,854 \$117.64 \$117.64 \$49.14	79 CV#	\$310.83	8 220	7.5	1.096	Red Alder
2,439 6.5 15,854 \$117.64 fir ¹ 9,202 7.0 64,414 \$49.14	MBF (TONS per MBF) Total TONS Appaised \$ MBF	\$7.02	\$49.14	6,713	7.0	959	Sitka Spruce ¹
2,439 6.5 15,854 \$117.64	MBF (TONS per MBF) Total TONS Appaised \$/MBF 2,439 6.5 15,854 \$117.64	\$7.02	\$49.14	64,414	7.0	9,202	Hemlock/ true fir ³
	MBF (TONS per MBF) Total TONS Appaised \$ MBF	\$18.10	\$117.64	15,854	<u>ი.</u> წ	2,439	Doug-fir

⁴ Hemlock/ true fir/ and spruce volumes were combined in the appraisal to calculate one price.







