



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary West Beagle Sale 341-06-63

District: Tillamook

Date: 4/5/06

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$622,971.44	\$275,986.20	\$898,957.64
		Project Work	(\$243,320.00)
		Advertised Value	\$655,637.64



Timber Sale Appraisal Timber Description West Beagle Sale 341-06-63

"STEWARDSHIP IN FORESTRY"

District: Tillamook

Location: Portions of Sections 30, 31, 32, T1S, R7W, & Sections 25 and 36, T1S, R8W & Sections 5 and 6, T2S, R7W, W.M.; Tillamook County, Oregon.

Date: 4/5/06

Stand Stocking: 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	15	0	95
Alder (Red)	15	0	100

Volume by Grade	Douglas - Fir	Alder (Red)	Total
2S	306	0	306
2S 12"+	0	262	262
3S	1,612	0	1,612
3S 10" - 11"	0	237	237
4S	406	0	406
4S 8" - 9"	0	467	467
Total	2,324	966	3,290

Comments: Pond Values Used: 1st Quarter Calendar Year 2006.

Western Red Cedar Price = \$985/MBF - \$380/MBF = \$605/MBF

Red Alder Grades are diameter grades: 2S = 12" and greater,
3S = 10" & 11" & 4S = 8" & 9".

TOTAL OTHER COSTS (Profit and Risk to be Added) = \$14,805.

Brand and Paint: \$2/MBF x 3290MBF = \$6,580.

Truck Assist (Area 4): \$35/MBF x 235MBF = \$8,225.

TOTAL OTHER COSTS (No Profit and Risk) = \$164,709.

Additional Hauling Cost:

DF [\$700/day - (\$460/day x 1.15%)]/ 6.8MBF/day = \$25/MBF x 2324MBF = \$58,100

Alder [\$700/day - (\$460/day x 1.15%)]/9MBF/day = \$19/MBF x 966MBF = \$18,354

Slash Piling: 293 acres x \$2.20/acre = \$645.

Trask River Road Public Safety Road Fee: \$25/MBF x 3290MBF = \$82,250.

Four Non-Project Dirt Spurs: 16 Sta x \$200/Sta = \$3,200.

Approaches (Pit Run): 4 Sta x 50 C.Y./Sta x \$8.00/C.Y. = \$1,600.

Tank Trap Installation (Road Closure): \$50/Tank Trap x 4 Tank Trap = \$200.

Water Bar Installation: 4 Hours x \$90/hour = \$360.

MAINTENANCE COST = \$3.48/MBF.

Pit Run Rock: \$8/C.Y. x 3.3MMBF x 3.9mi x 10C.Y./MBF/mi / 3290MBF =
\$0.31/MBF.

Crushed Rock: \$6/C.Y. x 3.3MMBF x 3.3mi x 12C.Y./MBF/mi / 3290MBF
= \$0.24/MBF.

Interim Grading: \$250/mi x 7.2mi x 3 Gradings / 3290MBF = \$1.64/MBF.

Final Grading: \$500/mi x 3.3mi / 3290MBF = \$0.50/MBF.

Compaction: \$11/Sta x 173Sta / 3290MBF = \$0.58/MBF.

Mobilization: \$700 / 3290MBF = \$0.21/MBF.



Timber Sale Appraisal

Logging Conditions

West Beagle

Sale 341-06-63

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	15.75%	
	Alder (Red)	17.31%	
Yarding Distance:	Long (1,500 ft)		Downhill Yarding: No
Logging System:	Cable: Medium Tower >40 - <70		Process: Stroke Delimber
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	5		Bd. Ft./Load: 3,000
Cost/MBF:	\$218.84		
Machines:	Log Loader (A)		
	Stroke Delimber (A)		
	Tower Yarder (Medium)		
Combination#: 2	Douglas - Fir	67.88%	
	Alder (Red)	70.23%	
Yarding Distance:	Medium (800 ft)		Downhill Yarding: No
Logging System:	Cable: Medium Tower >40 - <70		Process: Stroke Delimber
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	5		Bd. Ft./Load: 3,300
Cost/MBF:	\$198.95		
Machines:	Log Loader (A)		
	Stroke Delimber (A)		
	Tower Yarder (Medium)		
Combination#: 3			
Yarding Distance:	Short (400 ft)		Downhill Yarding: No
Logging System:	Cable: Medium Tower >40 - <70		Process: Stroke Delimber
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	5		Bd. Ft./Load: 3,300
Cost/MBF:	\$198.95		
Machines:	Log Loader (A)		
	Stroke Delimber (A)		
	Tower Yarder (Medium)		
Combination#: 4	Douglas - Fir	16.37%	
	Alder (Red)	12.46%	

Yarding Distance: Short (400 ft)
Logging System: Track Skidder
Tree Size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
Loads/Day: 5
Cost/MBF: \$213.26

Downhill Yarding: Yes
Process: Feller Buncher
Bd. Ft./Load: 3,300

Machines:

Feller Buncher w/ Delimber
Log Loader (B)
Stroke Delimber (B)
Track Skidder



Timber Sale Appraisal

Logging Costs

West Beagle

Sale 341-06-63

"STEWARDSHIP IN FORESTRY"

Date: 4/5/06

Operating Seasons: 3.0

Profit & Risk: 15%

Project Costs: \$243,320

Other Costs (P/R): \$14,805

Slash Disposal: \$0

Other Costs: \$164,709

Road Maintenance: \$3.48

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	0.0	0.0	0.0

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	2.0	3.4
Alder (Red)	\$0.00	3.0	3.0



Timber Sale Appraisal Logging Costs Breakdown West Beagle Sale 341-06-63

"STEWARDSHIP IN FORESTRY"

Costs	Douglas - Fir	Alder (Red)
Logging	204.42	204.18
Road Maintenance	3.66	3.48
Fire Protection	2.47	2.47
Hauling	69.16	51.10
Other (P/R appl.)	4.50	4.50
Profit & Risk	42.63	39.86
Slash Disposal	0.00	0.00
Scaling	2.00	0.00
Other	50.06	50.06
Total	378.90	355.65

Amortization	0.00	0.00
Pond Value	646.96	641.35
Stumpage	268.06	285.70
Amortized	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary West Beagle Sale 341-06-63

Amortized

	Douglas - Fir	Alder (Red)
MBF	0.00	0.00
Value	0.00	0.00
Total	0.00	0.00

Unamortized

	Douglas - Fir	Alder (Red)
MBF	2,324.00	966.00
Value	268.06	285.70
Total	622,971.44	275,986.20

Gross Timber Sale Value

Recovery \$898,957.64

Prepared by: Jim Neuman

Date: 4/5/06

District: Tillamook

Phone: (503) 842-2545



PROJECT SUMMARY SHEET

Sale: West Beagle

CONSTRUCTION

Point	I to J	14+25	stations =	\$12,534.26
Point	Q to R	14+10	stations =	\$11,912.23
SUBTOTAL CONSTRUCTION				\$24,446.49

IMPROVEMENT

Point	A to B	77+20	stations =	\$44,022.98
Point	K to L	66+25	stations =	\$59,555.14
SUBTOTAL IMPROVEMENT				\$103,578.12

RECONSTRUCTION

Point	C to D	32+10	stations =	\$29,578.60
Point	E to F	5+90	stations =	\$4,597.03
Point	G to H	4+40	stations =	\$3,496.36
Point	M to N	23+30	stations =	\$17,251.69
Point	O to P	30+55	stations =	\$23,415.18
SUBTOTAL IMPROVEMENT				\$78,338.86

SPECIAL PROJECTS

Stockpile				\$34,860.00
SUBTOTAL SPECIAL PROJECTS				\$34,860.00

MOVE IN

\$2,096.39

GRAND TOTAL

\$243,319.86

SUMMARY OF CONSTRUCTION COST

Sale:	<u>West Beagle</u>		Road:	<u>A to B</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles		Improvement -	<u>77+20</u> stations <u>1.46</u> miles
EXCAVATION -			TOTAL EXCAVATION	\$0.00
ENDHAUL -			TOTAL ENDHAUL	\$0.00
ROCK 0+00 to 77+20	2,358 cy. of Crushed	@	\$17.73 per c.y.=	<u>\$41,807.34</u>
			TOTAL ROCK	\$41,807.34
SPECIAL PROJECTS				
Grade and shape road -	77.20	stations @	\$15.50 per station	\$1,196.60
Roll subgrade w/ vibratory roller prior to rocking -	77.20	stations @	\$13.20 per station	\$1,019.04
			TOTAL SPECIAL PROJECTS	\$2,215.64
GRAND TOTAL				\$44,022.98

SUMMARY OF CONSTRUCTION COST

Sale:	<u>West Beagle</u>				Road: <u>C to D</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles				Reconstruction - <u>32+10</u> stations <u>0.61</u> miles
CLEARING AND GRUBBING -					
Scattering		1.030	acres @	\$980.00 per acre =	<u>\$1,009.40</u>
				TOTAL CLEARING AND GRUBBING	\$1,009.40
EXCAVATION -					
Road Earthwork		32.10	sta. @	\$140.00 per sta. =	\$4,494.00
Through Cut Excavation / Drift		12.00	Hr. @	\$140.00 per Hr. =	<u>\$1,680.00</u>
				TOTAL EXCAVATION	\$6,174.00
ENDHAUL -					<u>TOTAL ENDHAUL</u>
					\$0.00
CULVERTS - MATERIALS & INSTALLATION					
	<u>Culverts</u>				
	26 LF of 18"	\$442.00		0 LF of 24"	\$0.00
	0 LF of 30"	\$0.00		0 LF of 36"	\$0.00
	0 LF of 42"	\$0.00		0 LF of 48"	\$0.00
	0 LF of 54"	\$0.00		0 LF of 60"	\$0.00
	0 LF of 66"	\$0.00		0 LF of 72"	\$0.00
		<u>\$442.00</u>			<u>\$0.00</u>
	<u>Half Rounds</u>				
	0 LF of 21"	\$0.00		0 LF of 30"	\$0.00
	0 LF of 36"	\$0.00		0 LF of 42"	\$0.00
		<u>\$0.00</u>			<u>\$0.00</u>
	<u>Culvert Stakes & Markers</u>				
	0 stakes	\$0.00			
	1 markers	\$8.00			
		<u>\$8.00</u>			
				TOTAL CULVERTS	\$450.00
ROCK					
0+00 to	32+10	2,127	cy. of	Pit-Run	@ \$9.49 per c.y. = \$20,185.23
JCT Rock	0+00	30	cy. of	Pit-Run	@ \$7.79 per c.y. = <u>\$233.70</u>
					TOTAL ROCK
					\$20,418.93
SPECIAL PROJECTS					
Grade and shape road -		32.10	stations @	\$15.50 per station	\$497.55
Roll subgrade w/ vibratory roller prior to rocking -		32.10	stations @	\$13.20 per station	\$423.72
Grass seed and fertilize -		0.74	acres @	\$220.00 per acre	\$162.80
Mulching -		0.737	acres @	\$600.00 per acre	\$442.20
				TOTAL SPECIAL PROJECTS	\$1,526.27
GRAND TOTAL					\$29,578.60

SUMMARY OF CONSTRUCTION COST

Sale:	West Beagle					Road:	E to F			
Construction -	0+00	stations				Reconstruction -	5+90	stations		
	0.00	miles					0.11	miles		
CLEARING AND GRUBBING - Scattering			0.080	acres @	\$980.00	per acre =	\$78.40			
							TOTAL CLEARING AND GRUBBING			\$78.40
EXCAVATION - Road Earthwork			5.90	sta. @	\$120.00	per sta. =	\$708.00			
							TOTAL EXCAVATION			\$708.00
ENDHAUL -							TOTAL ENDHAUL			\$0.00
ROCK 0+00 to JCT Rock	5+90 0+00	386 20	cy. of cy. of	Pit-Run Pit-Run	@ @	\$8.75 per c.y.= \$7.60 per c.y.=	\$3,377.50 \$152.00			\$3,529.50
SPECIAL PROJECTS										
Grade and shape road -				5.90	stations @	\$15.50	per station	\$91.45		
Roll subgrade w/ vibratory roller prior to rocking -				5.90	stations @	\$13.20	per station	\$77.88		
Grass seed and fertilize -				0.14	acres @	\$220.00	per acre	\$30.80		
Mulching -				0.135	acres @	\$600.00	per acre	\$81.00		
							TOTAL SPECIAL PROJECTS			\$281.13
GRAND TOTAL									\$4,597.03	

SUMMARY OF CONSTRUCTION COST

Sale:	West Beagle					Road:	G to H			
Construction -	<u>0+00</u> stations					Reconstruction -	<u>4+40</u> stations			
	<u>0.00</u> miles						<u>0.08</u> miles			
CLEARING AND GRUBBING - Scattering					0.040 acres @	\$980.00 per acre =	<u>\$39.20</u>			
							TOTAL CLEARING AND GRUBBING			\$39.20
EXCAVATION - Road Earthwork					4.40 sta. @	\$120.00 per sta. =	<u>\$528.00</u>			
							TOTAL EXCAVATION			\$528.00
ROCK										
0+00 to	4+40	293	cy. of	Pit-Run	@	\$8.76 per c.y. =	\$2,566.68			
JCT Rock	0+00	20	cy. of	Pit-Run	@	\$7.68 per c.y. =	<u>\$153.60</u>			
							TOTAL ROCK			\$2,720.28
SPECIAL PROJECTS										
Grade and shape road -					4.40 stations @	\$15.50 per station	\$68.20			
Roll subgrade w/ vibratory roller prior to rocking -					4.40 stations @	\$13.20 per station	\$58.08			
Grass seed and fertilize -					0.10 acres @	\$220.00 per acre	\$22.00			
Mulching -					0.101 acres @	\$600.00 per acre	\$60.60			
							TOTAL SPECIAL PROJECTS			\$208.88
							GRAND TOTAL			\$3,496.36

SUMMARY OF CONSTRUCTION COST

Sale:	<u>West Beagle</u>		Road: <u>I to J</u>
Construction -	<u>14+25</u> stations <u>0.27</u> miles		Improvement - <u>0+00</u> stations <u>0.00</u> miles
CLEARING AND GRUBBING - Scattering	1.310 acres @	\$980.00 per acre =	<u>\$1,283.80</u>
		TOTAL CLEARING AND GRUBBING	\$1,283.80
EXCAVATION - Road Earthwork	14.25 sta. @	\$120.00 per sta. =	<u>\$1,710.00</u>
		TOTAL EXCAVATION	\$1,710.00
ROCK			
0+00 to	14+25	958 cy. of	Pit-Run @ \$8.96 per c.y. = \$8,583.68
JCT Rock	0+00	20 cy. of	Pit-Run @ \$7.46 per c.y. = <u>\$149.20</u>
			TOTAL ROCK \$8,732.88
SPECIAL PROJECTS			
Grade and shape road -	14.25 stations @	\$15.50 per station	\$220.88
Roll subgrade w/ vibratory roller prior to rocking -	14.25 stations @	\$13.20 per station	\$188.10
Grass seed and fertilize -	0.92 acres @	\$220.00 per acre	\$202.40
Mulching -	0.327 acres @	\$600.00 per acre	\$196.20
		TOTAL SPECIAL PROJECTS	\$807.58
		GRAND TOTAL	\$12,534.26

SUMMARY OF CONSTRUCTION COST

Sale:	<u>West Beagle</u>				Road:	<u>K to L</u>			
Construction -	0+00	stations			Improvement -	66+25	stations		
	0.00	miles				1.25	miles		
CLEARING AND GRUBBING -									
Side cast			0.046	acres @	\$660.00	per acre =	\$30.36		
Widening			0.207	acres @	\$660.00	per acre =	\$136.62		
Scattering			4.260	acres @	\$980.00	per acre =	\$4,174.80		
							TOTAL CLEARING AND GRUBBING	\$4,341.78	
EXCAVATION -									
Road Earthwork			66.25	sta. @	\$90.00	per sta. =	\$5,962.50		
Pullback			134	cy. @	\$1.40	per c.y. =	\$187.60		
Widening			1557	cy. @	\$1.40	per c.y. =	\$2,179.80		
							TOTAL EXCAVATION	\$8,329.90	
ENDHAUL -									
Pullback	64+00	to	65+00	134	cy. @	\$1.07	per c.y. =	\$143.38	
Widening	14+00	to	16+00	445	cy. @	\$1.63	per c.y. =	\$725.35	
Widening	20+00	to	22+50	1112	cy. @	\$1.63	per c.y. =	\$1,812.56	
Spread & compact				1691	cy. @	\$0.25	per c.y. =	\$422.75	
							TOTAL ENDHAUL	\$3,104.04	
CULVERTS - MATERIALS & INSTALLATION									
			<u>Culverts</u>						
			154	LF of 18"	\$2,618.00		0	LF of 24"	\$0.00
			0	LF of 30"	\$0.00		0	LF of 36"	\$0.00
			0	LF of 42"	\$0.00		0	LF of 48"	\$0.00
			0	LF of 54"	\$0.00		0	LF of 60"	\$0.00
			0	LF of 66"	\$0.00		0	LF of 72"	\$0.00
					\$2,618.00				\$0.00
			<u>Half Rounds</u>						
			0	LF of 21"	\$0.00		0	LF of 30"	\$0.00
			0	LF of 36"	\$0.00		0	LF of 42"	\$0.00
					\$0.00				\$0.00
			<u>Culvert Stakes & Markers</u>						
			0	stakes	\$0.00				
			5	markers	\$40.00				
					\$40.00				
							TOTAL CULVERTS	\$2,658.00	
ROCK									
0+00 to	66+25	4,394	cy. of	Pit-Run	@	\$8.41	per c.y. =	\$36,953.54	
JCT Rock	0+00	150	cy. of	Pit-Run	@	\$6.43	per c.y. =	\$964.50	
							TOTAL ROCK	\$37,918.04	
SPECIAL PROJECTS									
Grade and shape road -			66.25	stations @	\$15.50	per station	\$1,026.88		
Roll subgrade w/ vibratory roller prior to rocking -			66.25	stations @	\$13.20	per station	\$874.50		
Grass seed and fertilize -			1.77	acres @	\$220.00	per acre	\$389.40		
Mulching -			1,521	acres @	\$600.00	per acre	\$912.60		
							TOTAL SPECIAL PROJECTS	\$3,203.38	
							GRAND TOTAL	\$59,555.14	

SUMMARY OF CONSTRUCTION COST

Sale:	<u>West Beagle</u>				Road: <u>M to N</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles				Reconstruction - <u>23+30</u> stations <u>0.44</u> miles
CLEARING AND GRUBBING -					
Side cast		0.046 acres @	\$660.00 per acre =	\$30.36	
Widening		0.207 acres @	\$660.00 per acre =	\$136.62	
Scattering		0.860 acres @	\$980.00 per acre =	\$842.80	
			TOTAL CLEARING AND GRUBBING		\$1,009.78
EXCAVATION -					
Road Earthwork		23.30 sta. @	\$120.00 per sta. =	\$2,796.00	
			TOTAL EXCAVATION		\$2,796.00
CULVERTS - MATERIALS & INSTALLATION					
	<u>Culverts</u>				
	0 LF of 18"	\$0.00	0 LF of 24"	\$0.00	
	0 LF of 30"	\$0.00	0 LF of 36"	\$0.00	
	0 LF of 42"	\$0.00	0 LF of 48"	\$0.00	
	0 LF of 54"	\$0.00	0 LF of 60"	\$0.00	
	0 LF of 66"	\$0.00	0 LF of 72"	\$0.00	
		\$0.00		\$0.00	
	<u>Half Rounds</u>				
	0 LF of 21"	\$0.00	0 LF of 30"	\$0.00	
	0 LF of 36"	\$0.00	0 LF of 42"	\$0.00	
		\$0.00		\$0.00	
	<u>Culvert Stakes & Markers</u>				
	0 stakes	\$0.00			
	0 markers	\$0.00			
		\$0.00			
			TOTAL CULVERTS		\$0.00
ROCK					
0+00 to 23+30	1,560 cy. of	Pit-Run	@ \$7.91 per c.y. =	\$12,339.60	
				TOTAL ROCK	\$12,339.60
SPECIAL PROJECTS					
Grade and shape road -	23.30 stations @	\$15.50 per station	\$361.15		
Roll subgrade w/ vibratory roller prior to rocking -	23.30 stations @	\$13.20 per station	\$307.56		
Grass seed and fertilize -	0.53 acres @	\$220.00 per acre	\$116.60		
Mulching -	0.535 acres @	\$600.00 per acre	\$321.00		
			TOTAL SPECIAL PROJECTS		\$1,106.31
				GRAND TOTAL	\$17,251.69

SUMMARY OF CONSTRUCTION COST

Sale:	<u>West Beagle</u>	Road:	<u>O to P</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles	Reconstruction -	<u>30+55</u> stations <u>0.58</u> miles
CLEARING AND GRUBBING -			
Side cast	0.046 acres @	\$660.00 per acre =	\$30.36
Widening	0.207 acres @	\$660.00 per acre =	\$136.62
Scattering	1.120 acres @	\$980.00 per acre =	<u>\$1,097.60</u>
		TOTAL CLEARING AND GRUBBING	\$1,264.58
EXCAVATION -			
Road Earthwork	30.55 sta. @	\$120.00 per sta. =	<u>\$3,666.00</u>
		TOTAL EXCAVATION	\$3,666.00
CULVERTS - MATERIALS & INSTALLATION			
	<u>Culverts</u>		
	0 LF of 18"	\$0.00	
	0 LF of 30"	\$0.00	
	0 LF of 42"	\$0.00	
	0 LF of 54"	\$0.00	
	0 LF of 66"	<u>\$0.00</u>	
		\$0.00	
	<u>Half Rounds</u>		
	0 LF of 21"	\$0.00	
	0 LF of 36"	<u>\$0.00</u>	
		\$0.00	
	<u>Culvert Stakes & Markers</u>		
	0 stakes	\$0.00	
	1 markers	<u>\$8.00</u>	
		\$8.00	
		TOTAL CULVERTS	\$968.00
ROCK			
0+00 to	30+55	2,031 cy. of	Pit-Run
			@
			\$7.91 per c.y. =
			<u>\$16,065.21</u>
			TOTAL ROCK
			\$16,065.21
SPECIAL PROJECTS			
Grade and shape road -	30.55 stations @	\$15.50 per station	\$473.53
Roll subgrade w/ vibratory roller prior to rocking -	30.55 stations @	\$13.20 per station	\$403.26
Grass seed and fertilize -	0.70 acres @	\$220.00 per acre	\$154.00
Mulching -	0.701 acres @	\$600.00 per acre	\$420.60
		TOTAL SPECIAL PROJECTS	\$1,451.39
		GRAND TOTAL	\$23,415.18

SUMMARY OF CONSTRUCTION COST

Sale:	<u>West Beagle</u>					Road:	<u>Q to R</u>
Construction -	<u>14+10</u> stations <u>0.27</u> miles					Improvement -	<u>0+00</u> stations <u>0.00</u> miles
CLEARING AND GRUBBING -							
Side cast		0.046	acres @	\$660.00	per acre =		\$30.36
Widening		0.207	acres @	\$660.00	per acre =		\$136.62
Scattering		1.290	acres @	\$980.00	per acre =		\$1,264.20
						TOTAL CLEARING AND GRUBBING	\$1,431.18
EXCAVATION -							
Road Earthwork		14.10	sta. @	\$140.00	per sta. =		\$1,974.00
						TOTAL EXCAVATION	\$1,974.00
ROCK							
0+00 to	14+25	958	cy. of	Pit-Run	@	\$7.91 per c.y.=	<u>\$7,577.78</u>
							TOTAL ROCK
							\$7,577.78
SPECIAL PROJECTS							
Grade and shape road -		14.10	stations @	\$15.50	per station		\$218.55
Roll subgrade w/ vibratory roller prior to rocking -		14.10	stations @	\$13.20	per station		\$186.12
Remove large stumps -		1.00	lump sum @	\$130.00			\$130.00
Grass seed and fertilize -		0.91	acres @	\$220.00	per acre		\$200.20
Mulching -		0.324	acres @	\$600.00	per acre		\$194.40
						TOTAL SPECIAL PROJECTS	\$929.27
GRAND TOTAL							\$11,912.23

ROCK DEVELOPMENT COST SUMMARY

Pit:	Pit Run	Location:	Sec.31 , T1S, R7W, W.M.
Sale:	West Beagle	Road:	12947 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	12947 c.y.
Drill Pct.:	50%	In Place Total:	9248 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact.	\$7,650.00
Drill & Shoot:	\$2.50 /cu.yd. x 4624 cu.yds. = \$11,560.00
Rip Rock	\$1.90 /cu.yd. x 4624 cu.yds. = \$8,785.60
Load Dump Truck:	\$0.70 /cu.yd. x 12947 cu.yds. = \$9,062.90

Subtotal \$37,058.50

Move In and set up Drill and Compressor	1	@	\$370.20	=	\$370.20
Move in Grader	1	@	\$167.90	=	\$167.90
Move in D-8	1	@	\$527.02	=	\$527.02
Move in Excavator	1	@	\$574.76	=	\$574.76
Move in Trucks	4	@	\$116.81	=	\$467.24
Rock Truck Assist					\$9,860.00
					Subtotal \$11,967.12

TOTAL PRODUCTION COSTS \$49,025.62

Base Cost= \$3.79 Per Cu.Yd.

Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST
C to D	\$4.00	\$1.70	\$3.79	\$9.49	2127	\$20,185.23
C to D JCT Rock	\$3.40	\$0.60	\$3.79	\$7.79	30	\$233.70
E to F	\$3.26	\$1.70	\$3.79	\$8.75	386	\$3,377.50
E to F JCT Rock	\$3.21	\$0.60	\$3.79	\$7.60	20	\$152.00
G to H	\$3.27	\$1.70	\$3.79	\$8.76	293	\$2,566.68
G to H JCT Rock	\$3.29	\$0.60	\$3.79	\$7.68	20	\$153.60
I to J	\$3.47	\$1.70	\$3.79	\$8.96	958	\$8,583.68
I to J JCT Rock	\$3.07	\$0.60	\$3.79	\$7.46	20	\$149.20
K to L	\$2.92	\$1.70	\$3.79	\$8.41	4394	\$36,953.54
K to L JCT Rock	\$2.04	\$0.60	\$3.79	\$6.43	150	\$964.50
M to N	\$2.42	\$1.70	\$3.79	\$7.91	1560	\$12,339.60
O to P	\$2.33	\$1.70	\$3.79	\$7.82	2031	\$15,882.42
Q to R	\$1.93	\$1.70	\$3.79	\$7.42	958	\$7,108.36
					Total C.Y. 12947	Sub Total \$108,650.01

TOTAL ROCKING COSTS \$108,650.01

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Toll		Location: SW 1/4, NE 1/4, Sec 16, T2S, R7W
Sale:	West Beagle		Road: 2358 c.y.
Swell:	1.40		Stockpile: 3000 c.y.
Shrinkage:	1.16		Total Truck Loads: 5358 c.y.
Drill Pct.:	100%		In Place Total: 3827 c.y.

Pit Development & Cleanup include the following: Clearing and grubbing of pit & Waste area, end-hauling of overburden and other waste, \$2,317.88
 Placing and compacting overburden and waste in waste area, and grass seeding and mulch waste area.

Drill & Shoot:	\$2.50	/cu.yd.	x	3827	cu.yds.	=	\$9,567.50
Push Rock:	\$0.60	/cu.yd.	x	5358	cu.yds.	=	\$3,214.80
Load Screen and Crusher:	\$0.60	/cu.yd.	x	5358	cu.yds.	=	\$3,214.80
Screen Rock Prior to Crushing:	\$0.75	/cu.yd.	x	5358	cu.yds.	=	\$4,018.50
Crush 2 1/2"-0" Rock	\$2.50	/cu.yd.	x	5358	cu.yds.	=	\$13,395.00
Load Dump Truck:	\$0.70	/cu.yd.	x	5358	cu.yds.	=	\$3,750.60
Load Dump Truck - Screened Reject:	\$0.60	/cu.yd.	x	402	cu.yds.	=	\$241.20
End-haul Screened Reject to Waste Area:	\$2.10	/cu.yd.	x	402	cu.yds.	=	\$844.20
Oversize Reduction:	\$4.50	/cu.yd.	x	804	cu.yds.	=	\$3,618.00

Subtotal \$44,182.48

Move In/Set-up Crusher							\$4,400.00
Move In and set up Drill and Compressor	1		@	\$364.23	=		\$364.23
Move in Roller and Compactor	1		@	\$364.23	=		\$364.23
Move in Grader	1		@	\$167.90	=		\$167.90
Move in D-8	1		@	\$520.03	=		\$520.03
Move in Loader	1		@	\$404.87	=		\$404.87
Move in Trucks	6		@	\$114.75	=		\$688.50
Move in Water Truck	1		@	\$134.82	=		\$134.82
						Subtotal	\$7,044.58

TOTAL PRODUCTION COSTS \$51,227.06

Base Cost= \$9.56 Per Cu.Yd.

Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST	
A to B	5.72	2.45	9.56	17.73	2358	41,807.34	
Stockpile	1.46	0.60	9.56	11.62	3000	34,860.00	
				Total C.Y.	5358	Sub Total	76,667.34

TOTAL ROCKING COSTS 76,667.34

Move-In Calculations

Sale: West Beagle

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
24.0	Highway	35
10.0	Main Lines	11
5.0	Steep Grades	5

No.	EQUIPMENT DESCRIPTION	Move in Cost	Pilot Cars	Within Area Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
0	Drill & Compressor	\$0.00		\$46.00	0.00	0.00	0	\$0.00	\$0.00
0	Brush Cutter	\$0.00		\$4.00	0.00	0.00	0	\$0.00	\$0.00
1	Graders	\$167.90		\$3.65	0.00	1.50	1.5	\$5.48	\$173.38
0	Loader (Small)	\$0.00	1	\$3.55	0.00	0.00	0	\$0.00	\$0.00
0	Loader (Med. & Large)	\$0.00	1	\$9.00	0.00	0.00	0	\$0.00	\$0.00
1	Rollers (smooth/grid) & Compactors	\$370.20		\$5.00	0.00	0.00	0	\$0.00	\$370.20
0	Excavators (Small)	\$0.00		\$22.00	0.00	0.00	0	\$0.00	\$0.00
0	Excavators (Med.)	\$0.00		\$35.50	0.00	0.00	0	\$0.00	\$0.00
1	Excavators (Large)	\$590.53	1	\$44.80	0.00	0.00	0	\$0.00	\$590.53
0	Tired Backhoes/Skidders	\$0.00		\$3.00	0.00	0.00	0	\$0.00	\$0.00
0	Tractors (D6)	\$0.00	2	\$7.10	0.00	0.00	0	\$0.00	\$0.00
0	Tractors (D7)	\$0.00	2	\$11.30	0.00	0.00	0	\$0.00	\$0.00
1	Tractor (D8)	\$558.56	2	\$15.10	0.00	0.00	0	\$0.00	\$558.56
2	Dump Truck (10 cy +)	\$286.91		\$2.85	0.00	0.00	0	\$0.00	\$286.91
0	Dump Truck (Off Hiway)	\$0.00	1	\$4.75	0.00	0.00	0	\$0.00	\$0.00
1	Water Truck (1500 Gal)	\$116.81		\$2.85	0.00	0.00	0	\$0.00	\$116.81
0	Water Truck (2500 Gal)	\$0.00		\$2.85	0.00	0.00	0	\$0.00	\$0.00

TOTAL MOVE-IN COSTS:	\$2,096.39
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**OREGON DEPARTMENT OF FORESTRY
CRUISE REPORT**

West Beagle
341-06-63

1. **Type of Sale:** Regeneration harvest: Douglas-fir-Recovery & Red Alder-Cash
2. **Legal Description:** Portions of Sections 30, 31, 32, T1S, R7W, 25, 36, T1S, R8W & 5, 6, T2S, R7W, W.M., Tillamook County, Oregon.
3. **Sale Acreage:** The sale boundary was plotted on a digital orthophotograph and the acreage was calculated with GIS.

Area	Harvest Type	Sale Acres	Net Acres
1	Modified Clearcut	116	104
2	Retention Cut	22	22
3	Modified Clearcut	35	31
4	Modified Clearcut	75	66
5	Retention Cut	8	8
6	Modified Clearcut	94	92
7	Retention Cut	19	19
Total		RC 49 MC 320	RC 49 MC 293

Sale Acres

Area within the Timber Sale Boundary signs.

Net acres for calculating the advertised volume

Sale acres less roads, stream buffers and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

4. **Cruising Procedures:**

- A. **Cruise Method:** A total of 64 plots were taken in the Modified Clearcut areas and 32 plots in the Retention Cut areas. Half the plots were tally plots and half were measure plots. Cruise lines and plots were placed to obtain representative sampling throughout the seven sale areas in an east-west or north-south grid pattern. On all plots, trees were tallied by diameter class and species. On measure plots, heights and grades were recorded for all merchantable species. For net board feet/acre, the coefficient of

variation was 57.2% for the Modified Clearcuts and 48.1% for the Retention Cuts for a total coefficient of variation of 62.4%. For the net board feet/acre the standard error was 7.2% for the Modified Clearcuts & 8.5% for the Retention Cuts for a total of 6.4%.

- B. **Plot size:** All plots were variable radius full point plots. A BAF of 27.78 was used for conifers and hardwoods in all areas. The point of tree observation was 4.5 feet.
- C. **Grading System:** Tree heights were measured to a merchantable top of 6" outside bark for conifers and 9" outside bark for hardwoods. Minimum DBH outside bark for merchantability was 8" for conifers and 10" for hardwoods. Minimum log volume was 20 bf for conifers and 30 bf for hardwoods. Douglas-fir was graded using Columbia River rules favoring a 40' log. Grade recorded for red alder was dependent on the outside bark. small-end diameter of the merchantable log. A diameter of 8" & 9" = 4S. A diameter of 10" & 11" = 3S. A diameter of 12" and greater = 2S.
- D. **Defect and Breakage:** A 5% defect and breakage reduction was applied to Douglas-fir and a 10% reduction to red alder volumes.
- E. **Cruiser Names / Dates:** Ed Wallmark, Jim Neuman & Erin Wilson, Dec., 2005.
5. **Computation Procedures:** Plot data was entered into SuperAce for computation of stand tables. Take and leave trees were determined and SuperAce was rerun to compute basal area, V-BAR, stand tables and diameters. This data was entered into a volume summary worksheet to compute sale volumes based on the average V-Bar on the cruised timber.
6. **Timber Description:** The sale contains 41 year Douglas-fir with symptoms of Swiss Needle Cast and red alder. About 20% of the alder in Area 3 and 5% of the in Area 6 has been sprayed. There was scattered cedar, spruce, hemlock, noble fir and big leaf maple through out the sale. In Area 7, there is an average of seven hemlocks per acre.
7. **Revenue Distribution:**
100% FDF
Tax Code: 9-2
Deed No. 117
70% Rehabilitation Obligated
8. **Appendices:**
- Volume Summary
- Logging Plan

Prepared by: Jim Neuman
Date: 1-11-05



"STEWARDSHIP IN FORESTRY"

West Beagle

Volume Summary

Area I Modified Clearcut							
104 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	14	98	99	9.7	1009	5%	959
Alder	15	33	62	2.0	208	10%	187
TOTAL					1217		1146

Area II Retention Cut							
22 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	13	105	103	10.8	238	5%	226
Alder	14	21	74	1.6	35	10%	32
TOTAL					273		258

Area III Modified Clearcut							
31 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	15	69	68	4.7	146	5%	139
Alder	18	23	55	1.3	40	10%	36
TOTAL					186		175

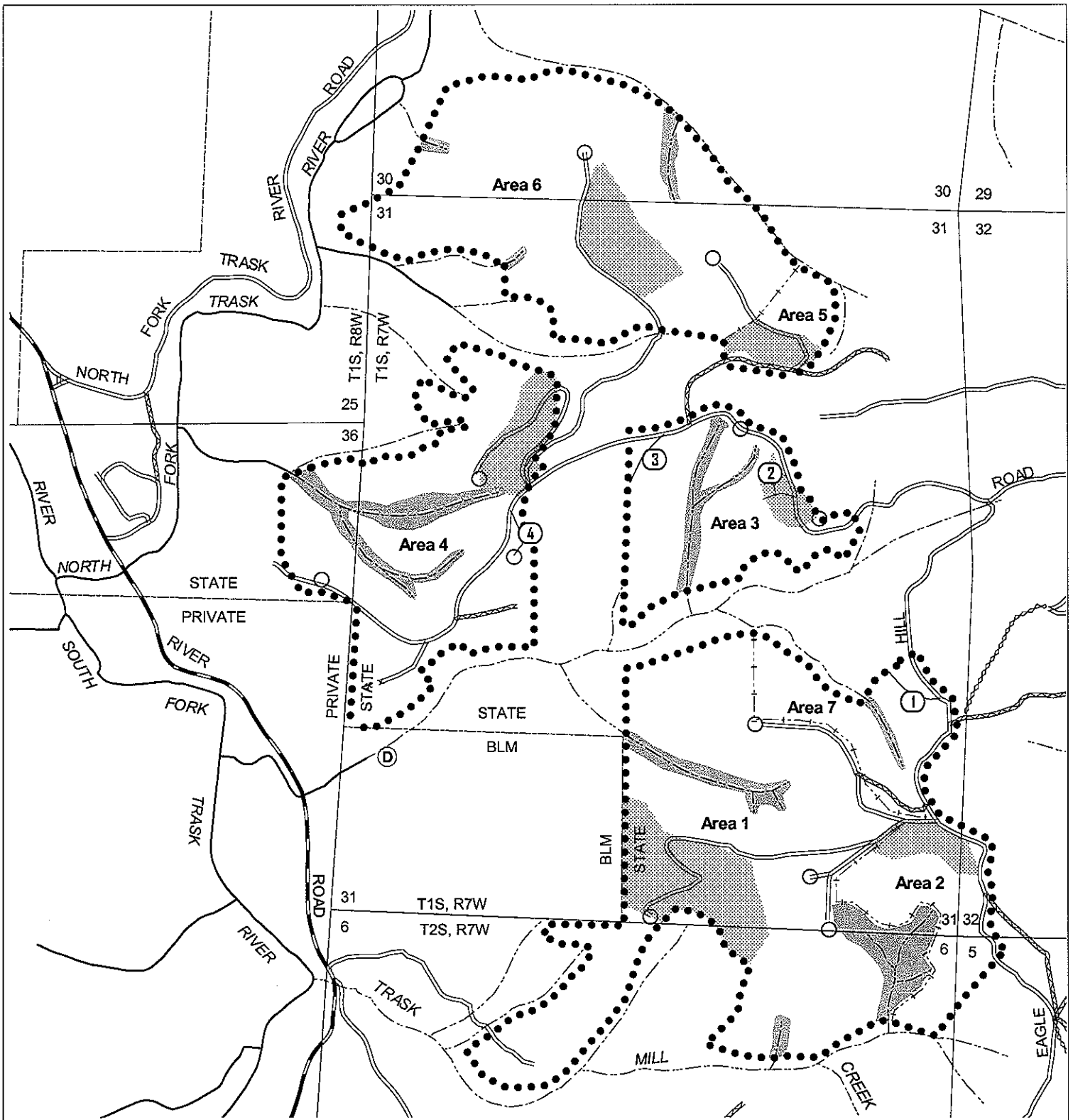
Area IV Modified Clearcut							
66 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	16	36	110	4.0	264	5%	251
Alder	16	75	82	6.2	409	10%	368
TOTAL					673		619

Area V Retention Cut							
8 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	12	116	98	11.4	91	5%	86
Alder	16	19	70	1.3	10	10%	9
TOTAL					101		95

Area VI Modified Clearcut							
92 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	15	61	89	5.4	497	5%	472
Alder	15	57	67	3.8	350	10%	315
TOTAL					847		787

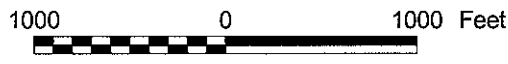
Area VII Retention Cut							
19 acres							
SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	17	88	121	10.6	201	5%	191
Alder	16	26	44	1.1	21	10%	19
TOTAL					222		210

TOTAL SALE VOLUME			
SPECIES	MBF	D&B	Net Vol. (MBF)
Douglas-fir	2446	5%	2324
Alder	1073	10%	966
TOTAL	3519		3290



- Landing
- Ⓧ Domestic water supply intake
- Ⓜ Helicopter landing zone
- Ⓣ Truck turn-around
- ▭ Cable yarding
- ▨ Ground yarding
- ▩ Helicopter yarding
- ▧ Downhill yarding
- ▦ Buffer
- ▨ Non-required thinning
- - - Area boundary
- Sale boundary
- Ownership boundary
- Perennial Type-F stream
- - - Perennial Type-N stream
- === Surfaced road
- Unsurfaced road
- == State/Federal highway
- County road
- ② Non-project road
- - - Swing road
- ▨ Legacy road
- ××× Blocked road
- OHV trail
- - - Non-motorized trail
- T T Transmission line

LOGGING PLAN
 Timber Sale Contract No. 341-06-63
 West Beagle
 Portions of Sections 30, 31 and 32,
 T1S, R7W, and Sections 5 and 6,
 T2S, R7W, and Sections 25 and 36,
 T1S, R8W, W. M.
 Tillamook County, Oregon



Tillamook District GIS
 01-26-2006
 This product is for informational use and
 may not have been prepared for, or suitable
 for legal, engineering, or surveying purposes.

Area	Type of Operation	Acres	
		Gross	Net
1	Modified clearcut	116	104
2	Retention cut	22	22
3	Modified clearcut	35	31
4	Modified clearcut	75	66
5	Retention cut	8	8
6	Modified clearcut	94	92
7	Retention cut	19	19
Total		369	342

