



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Clayberry
Sale 341-12-65

District: Tillamook

Date: March 06, 2012

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$413,076.45	\$105,355.25	\$518,431.70
		Project Work:	\$(45,390.00)
		Advertised Value:	\$473,041.70



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timber description

Location: Portions of Sections 25 and 36, T3N, R8W, and portions of Sections 28, 29, 31, 32, and 33, T3N, R7W, and portions of Section 6, T2N, R7W, W.M., Tillamook County, Oregon.

Stand Stocking: 80%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	18	0	95
Alder (Red)	15	0	90

Volume by Grade	2S	3S	3S 10" - 14"	4S	4S 8" - 9'	Total
Douglas - Fir	1,664	1,030	0	245	0	2,939
Alder (Red)	0	0	194	0	227	421
Total	1,664	1,030	194	245	227	3,360



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comments: Pond Values Used: 4th Quarter Calendar Year 2011.

Western Hemlock and Other Conifers Stumpage Price = Pond Value
minus Logging Costs
 $\$200/\text{MBF} = \$450/\text{MBF} - \$250/\text{MBF}$

Western redcedar and Other Cedars Stumpage Price = Pond Value
minus Logging Costs
 $\$550/\text{MBF} = \$800/\text{MBF} - \$250/\text{MBF}$

Pulp (Conifer and Hardwood) Price = $\$25/\text{MBF}$

SCALING COST ALLOWANCE = $\$5.00/\text{MBF}$

FUEL COST ALLOWANCE = $\$4.00/\text{Gallon}$

HAULING COST ALLOWANCE
Hauling cost equivalent to $\$740$ daily truck cost.

Other Costs (with Profit & Risk to be added):
Branding and Painting: $\$2/\text{MBF} \times 3,360 \text{ MBF} = \$6,720$
Snag Creation (girdling at base): $\$10/\text{snag} \times 120 \text{ snags} = \$1,200$
TOTAL Other Costs (with Profit & Risk to be added) = $\$7,920$

Other Costs (No Profit & Risk added):
Slash Piling and Sorting: $\$5/\text{acre} \times 119 \text{ (cable) acres} = \595
Cover Material for Piles: $5 \text{ piles} \times \$5/\text{pile} = \25
Block Roads and Landings with Tank Traps: $2 \times \$75/\text{each} = \150
TOTAL Other Costs (No Profit & Risk added) = $\$770$

ROAD MAINTENANCE

Road Maintenance: Buck Mountain Road
Interim Grading: $\$250/\text{mile} \times 9.6 \text{ miles} \times 1 \text{ times} / 3,360 \text{ MBF} = \$0.71/\text{MBF}$
Spot rocking: $20 \text{ cy/mile} \times \$10.00/\text{cy} \times 3.4 \text{ MMBF} \times 9.6 \text{ miles} / 3,360 \text{ MBF} = \$1.94/\text{MBF}$
Compaction of the first four miles of Buck Mountain Road: $((210 \text{ stations} \times \$18/\text{station}) + \$111 \text{ move-in}) / 3,360 \text{ MBF} = \$1.16/\text{MBF}$
Final Maintenance Grading: $\$500 \times 9.6 \text{ miles} / 3,360 \text{ MBF} = \$1.43/\text{MBF}$
Total Road Maintenance: $\$5.24/\text{MBF}$



"STEWARDSHIP IN FORESTRY"

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logging conditions

combination#: 1 Douglas - Fir 45.00%
Alder (Red) 43.43%

yarding distance: Long (1,500 ft) **downhill yarding:** No
logging system: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber
tree size: Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 4.0 **bd. ft / load:** 4,000
cost / mbf: \$209.01

machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Medium)

combination#: 2 Douglas - Fir 31.60%
Alder (Red) 30.49%

yarding distance: Long (1,500 ft) **downhill yarding:** No
logging system: Cable: Large Tower >=70 **Process:** Stroke Delimber
tree size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
loads / day: 3.0 **bd. ft / load:** 3,700
cost / mbf: \$344.75

machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Large)

combination#: 3 Douglas - Fir 19.15%
Alder (Red) 18.48%

yarding distance: Short (400 ft) **downhill yarding:** No
logging system: Cable: Small Tower <=40 **Process:** Stroke Delimber
tree size: Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 5.0 **bd. ft / load:** 4,000
cost / mbf: \$141.71

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

combination#: 4 Douglas - Fir 4.25%
Alder (Red) 7.60%

yarding distance: Short (400 ft) **downhill yarding:** No
logging system: Shovel **Process:** Stroke Delimber
tree size: Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF
loads / day: 12.0 **bd. ft / load:** 2,800
cost / mbf: \$42.80

machines: Stroke Delimber (B)



"STEWARDSHIP IN FORESTRY"

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logging costs

Operating Seasons:	2.00	Profit Risk:	10.00%
Project Costs:	\$45,390.00	Other Costs (P/R):	\$7,920.00
Slash Disposal:	\$0.00	Other Costs:	\$770.00

Miles of Road

Road Maintenance: \$5.24

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	4.4
Alder (Red)	\$0.00	3.0	3.4



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Clayberry
Sale 341-12-65

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logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$231.94	\$5.50	\$2.61	\$80.27	\$2.36	\$32.27	\$0.00	\$5.00	\$0.23	\$360.18
Alder (Red)									
\$225.33	\$5.76	\$2.61	\$72.55	\$2.36	\$30.86	\$0.00	\$5.00	\$0.23	\$344.70

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$500.73	\$140.55	\$0.00
Alder (Red)	\$0.00	\$594.95	\$250.25	\$0.00



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summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	2,939	\$140.55	\$413,076.45
Alder (Red)	421	\$250.25	\$105,355.25

Gross Timber Sale Value

Recovery: \$518,431.70

Prepared by: Nick Stumpf

Phone: 503-815-7026



PROJECT SUMMARY SHEET

Sale: Clayberry

CONSTRUCTION

Point	A to B	16+50	stations =	\$23,604.05
SUBTOTAL CONSTRUCTION				\$23,604.05

IMPROVEMENT

Point	C to D	11+90	stations =	\$8,279.83
Point	E to F	19+00	stations =	\$5,323.40
Point	G to H	3+90	stations =	\$1,986.23
SUBTOTAL IMPROVEMENT				\$15,589.46

MOVE IN	\$6,196.49
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GRAND TOTAL	\$45,390.00
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SUMMARY OF CONSTRUCTION COST

Sale: Clayberry

Road: A to B

Construction -	16+50	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.31	miles		0.00	miles		0.00	miles

CONSTRUCTION: CLEARING, GRUBBING, SCATTERING, EXCAVATION, COMPACTION, LOADING, END-HAULING AND SPREADING/COMPACTING AT WASTE AREA -

Station	to	Station	Avg. Sideslope	Outslope/Ditch	Cost per Station		
0+00		0+30	60%	Outslope	\$1,493	=	\$447.90
0+30		2+00	40%	Outslope	\$243	=	\$413.10
2+00		3+50	30%	Outslope	\$191	=	\$286.50
3+50		4+00	50%	Outslope	\$459	=	\$229.50
4+00		4+45	40%	Outslope	\$243	=	\$109.35
4+45		5+00	20%	Outslope	\$139	=	\$76.45
5+00		7+90	10%	Outslope	\$90	=	\$261.00
7+90		10+00	Cut/Fill	Outslope	\$418	=	\$877.80
10+00		10+20	30%	Outslope	\$191	=	\$38.20
10+20		10+60	40%	Outslope	\$243	=	\$97.20
10+60		11+50	55%	Outslope	\$689	=	\$620.10
11+50		11+80	40%	Outslope	\$243	=	\$72.90
11+80		12+20	55%	Outslope	\$689	=	\$275.60
12+20		13+65	Cut/Fill	Outslope	\$848	=	\$1,229.60
13+65		15+80	45%	Outslope	\$269	=	\$578.35
15+80		16+50	55%	Outslope	\$689	=	\$482.30
							TOTAL
							\$6,095.85

ROCK								
0+00 to	16+50	1,300	cy. of	Pit-run	@	\$9.54 per c.y.=	\$12,402.00	
Landing Rock	4+45, 16+50	200	cy. of	Pit-run	@	\$9.66 per c.y.=	\$1,932.00	
							TOTAL ROCK	\$14,334.00

SPECIAL PROJECTS								
construct turnaround -	2.00	@	\$75.00	each			\$150.00	
Construct landing @ 4+45 -	1.00	@	\$250.00	each			\$250.00	
Construct landing @ 16+50 -	1.00	@	\$1,200.00	each			\$1,200.00	
Grade and shape road -	16.50	stations @	\$14.00	per station			\$231.00	
Roll subgrade w/ vibratory roller prior to rocking -	16.50	stations @	\$13.20	per station			\$217.80	
Remove large stumps -	1.00	lump sum @	\$900.00				\$900.00	
Grass seed and fertilize -	0.61	acres @	\$220.00	per acre			\$134.20	
Mulching -	0.152	acres @	\$600.00	per acre			\$91.20	
							TOTAL SPECIAL PROJECTS	\$3,174.20
							GRAND TOTAL	\$23,604.05

SUMMARY OF CONSTRUCTION COST

Sale:

Clayberry

Road:

C to D

Construction -	0+00	stations	Improvement -	11+90	stations	Reconstruction -	0+00	stations
	0.00	miles		0.23	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

Side cast	0.550	acres @	\$660.00	per acre =	\$363.00	
			TOTAL CLEARING AND GRUBBING			\$363.00

ROCK

0+00 to	11+90	670	cy. of	Pit-run	@	\$8.31	per c.y. =	\$5,567.70
Landing Rock	9+40, 11+90	160	cy. of	Pit-run	@	\$8.41	per c.y. =	\$1,345.60
Junction Rock	0+00	20	cy. of	Pit-run	@	\$8.22	per c.y. =	\$164.40
								TOTAL ROCK
								\$7,077.70

SPECIAL PROJECTS

Construct landing @ 9+40	1.00	@	\$250.00	each	\$250.00	
Improve landing @ 11+90	1.00	@	\$100.00	each	\$100.00	
Construct turnaround -	1.00	@	\$75.00	each	\$75.00	
Grade and shape road -	11.90	stations @	\$15.50	per station	\$184.45	
Roll subgrade w/ vibratory roller prior to rocking -	11.90	stations @	\$13.20	per station	\$157.08	
Grass seed and fertilize -	0.33	acres @	\$220.00	per acre	\$72.60	
			TOTAL SPECIAL PROJECTS			\$839.13

GRAND TOTAL	\$8,279.83
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SUMMARY OF CONSTRUCTION COST

Sale:

Clayberry

Road:

E to F

<u>Construction -</u>	0+00	stations	<u>Improvement -</u>	19+00	stations	<u>Reconstruction -</u>	0+00	stations
	0.00	miles		0.36	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

TOTAL CLEARING AND GRUBBING \$0.00

ROCK

0+00 to	19+00	280	cy. of	Crushed	@	\$17.40 per c.y. =	\$4,872.00	
Junction Rock	0+00	20	cy. of	Crushed	@	\$17.25 per c.y. =	\$345.00	
							TOTAL ROCK	\$5,217.00

SPECIAL PROJECTS

Construct ditchout @ 14+30 -	1.00	@	\$80.00 each	\$80.00	
Mulching -	0.044	acres @	\$600.00 per acre	\$26.40	
				TOTAL SPECIAL PROJECTS	\$106.40

GRAND TOTAL \$5,323.40

SUMMARY OF CONSTRUCTION COST

Sale:

Clayberry

Road:

G to H

<u>Construction -</u>	<u>0+00</u>	<u>stations</u>	<u>Improvement -</u>	<u>3+90</u>	<u>stations</u>	<u>Reconstruction -</u>	<u>0+00</u>	<u>stations</u>
	<u>0.00</u>	<u>miles</u>		<u>0.07</u>	<u>miles</u>		<u>0.00</u>	<u>miles</u>

IMPROVEMENT: CLEARING AND GRUBBING -

TOTAL CLEARING AND GRUBBING

\$0.00

ROCK

0+00 to	3+90	90	cy. of	Crushed	@	\$16.47 per c.y.=	\$1,482.30	
Junction Rock	0+00, 3+90	20	cy. of	Crushed	@	\$16.44 per c.y.=	\$328.80	
							TOTAL ROCK	\$1,811.10

SPECIAL PROJECTS

Grade and shape road -	3.90	stations @	\$15.50	per station	\$60.45	
Roll subgrade w/ vibratory roller prior to rocking -	3.90	stations @	\$13.20	per station	\$51.48	
Grass seed and fertilize -	0.14	acres @	\$220.00	per acre	\$30.80	
Mulching -	0.054	acres @	\$600.00	per acre	\$32.40	
TOTAL SPECIAL PROJECTS						\$175.13

GRAND TOTAL

\$1,986.23

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Pit_run	Location:	NW 1/4, NE 1/4, Sec 32, T3N, R7W, W.M.
Sale:	Clayberry	Road:	2350 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	2350 c.y.
Drill Pct.:	20%	In Place Total:	1679 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact.					\$1,858.93
Drill & Shoot:	\$2.50 /cu.yd.	x	336 cu.yds.	=	\$840.00
Rip Rock:	\$1.90 /cu.yd.	x	1343 cu.yds.	=	\$2,551.70
Load Dump Truck:	\$0.70 /cu.yd.	x	2350 cu.yds.	=	\$1,645.00

Subtotal \$6,895.63

Move In and set up Drill and Compressor	1	@	\$1,152.68	=	\$1,152.68
Move in Roller and Compactor	1	@	\$1,152.68	=	\$1,152.68
Move in Grader	1	@	\$501.27	=	\$501.27
Move in Excavator	1	@	\$2,488.93	=	\$2,488.93
Move in Trucks	2	@	\$393.84	=	\$787.68
Move in Water Truck	1	@	\$462.94	=	\$462.94
				Subtotal	<u>\$6,546.18</u>

Base Cost= \$5.72 Per Cu.Yd.

TOTAL PRODUCTION COSTS \$13,441.81

Road Segment	Haul Cost \$/cu.yd.	Proc Cost \$/cu.yd.	Base Cost. \$/cu.yd.	Cost \$/cu.yd.	Number Cu. Yds	ROCK COST
A to B 0 1650 (Pit-run)	2.72	1.10	5.72	9.54	1300	\$12,402.00
A to B Landing Rock (Pit-run)	2.84	1.10	5.72	9.66	200	\$1,932.00
C to D 0 1190 (Pit-run)	1.49	1.10	5.72	8.31	670	\$5,567.70
C to D Landing Rock (Pit-run)	1.59	1.10	5.72	8.41	160	\$1,345.60
C to D Junction Rock (Pit-run)	1.40	1.10	5.72	8.22	20	\$164.40
				Total C.Y.	2350	Sub Total <u>\$21,411.70</u>

TOTAL ROCKING COSTS \$21,411.70

CRUSHED ROCK STOCKPILE COST SUMMARY

Stockpile	Crushed	Location:	NE 1/4, Sec. 21, T3N, R8W, W.M.
Sale:	Clayberry	Road:	410 c.y.
Swell:		Stockpile:	c.y.
Shrinkage		Total Truck Loads:	410 c.y.
Drill Pct.:	0%	In Place Total:	c.y.

Load Dump Truck: \$0.70 /cu.yd. x 410 cu.yds. = \$287.00

Subtotal \$287.00

Within Area Move in Roller and Compactor	12	miles @	\$55.00 per mile	=	\$660.00
Within Area Move in Grader	12	miles @	\$40.15 per mile	=	\$481.80
Move in Loader	1	@	\$1,947.62	=	\$1,947.62
Move in Trucks	2	@	\$393.84	=	\$787.68

Base Cost= \$10.16 Per Cu.Yd.

TOTAL PRODUCTION COSTS \$4,164.10

Road Segment	Haul Cost \$/cu.yd.	Proc Cost \$/cu.yd.	Base Cost. \$/cu.yd.	Cost \$/cu.yd.	Number Cu. Yds	ROCK COST
E to F 0 1900 (Crushed)	4.79	2.45	10.16	17.40	280	\$4,872.00
E to F Junction Rock (Crushed)	4.64	2.45	10.16	17.25	20	\$345.00
G to H 0 390 (Crushed)	3.86	2.45	10.16	16.47	90	\$1,482.30
G to H Junction Rock (Crushed)	3.83	2.45	10.16	16.44	20	\$328.80
				Total C.Y.	410	Sub Total <u>\$7,028.10</u>

TOTAL ROCKING COSTS \$7,028.10

Move-In Calculations for Project Work not Involving Rocking/Pit Work

Sale: **Clayberry**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
53.0	Pavement	30
14.0	Main Lines	7
22.0	Steep Grades	2

No.	EQUIPMENT DESCRIPTION	Move in Cost	Pilot Cars	Within Area Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
1	Excavators (Large)	\$2,529.56	1	\$44.80	0.00	0.00	0	\$0.00	\$2,529.56
1	Tractor (D8)	\$2,298.49	2	\$15.10	0.00	0.00	0	\$0.00	\$2,298.49
2	Dump Truck (10 cy +)	\$974.60		\$2.85	0.00	0.00	0	\$0.00	\$974.60
1	Water Truck (1500 Gal)	\$393.84		\$2.85	0.00	0.00	0	\$0.00	\$393.84
					TOTAL MOVE-IN COSTS:				\$6,196.49



"STEWARDSHIP IN FORESTRY"

Clayberry

Volume Summary

Area 1-Modified Clear Cut					
119 acres					
		Cruised Net	Cruised Net	Hidden	Net Sale
SPECIES		MBF/Acre	MBF	D&B	MBF
Douglas-fir	24.9		2962	5%	2814
Hemlock			0	5%	0
Spruce			0	5%	0
Noble Fir			0	5%	0
Alder	3.6		432	10%	389
TOTAL		28.5	3394		3203

Area 2-Road Daylighting					
22 acres					
		Cruised Net	Cruised Net	Hidden	Net Sale
SPECIES		MBF/Acre	MBF	D&B	MBF
Douglas-fir	6.0		132	5%	125
Hemlock			0	5%	0
Spruce			0	5%	0
Noble Fir			0	5%	0
Alder	1.6		35	10%	32
TOTAL		7.6	167		157

TOTAL SALE VOLUME			141	acres
SPECIES	Cruised Net (MBF)		Net Sale (MBF)	
Douglas-fir	3094		2939	
Hemlock	0		0	
Spruce	0		0	
Noble Fir	0		0	
Red Alder	467		421	
TOTAL	3561		3360	

TC TLOGSTVB				Log Stock Table - MBF																							
				Project: CLAYBRY1																							
T03N R07W S28 TWOR												T03N R07W S28 TWOR															
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	2																		
03N	07W	28	WORKING CO	WOR	119.00	21	126	Date	11/14/2011																		
									Time	10:03:12AM																	
S Spp	So	Gr	Log	T	rt	de	Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches															
												2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+				
RA	H	4M	23					13			13	2.9			13												
RA	H	4M	24					6			6	1.4			6												
RA	H	4M	26					7			7	1.5			7												
RA	H	4M	28					6			6	1.5			6												
RA	H	4M	29					3	50.0		1	.3			1												
RA	H	4M	32					35	4.5		33	7.6			9	24											
RA	H	4M	35					4			4	1.0			4												
RA	H	4M	36					11			11	2.6			11												
RA	H	4M	37					17			17	4.0			17												
RA	H	4M	40					113	6.2		106	24.5			37	53		16									
RA Totals								454	4.8		432	12.5			124	77	88	88	32	22							
SS	CO	D	8																								
SS	CO	D	21																								
SS	CO	D	22																								
SS	CO	D	40																								
SS Totals																											
DL	CO	2M	40					20	15.2		17	43.9							17								
DL	CO	3M	40					23	15.8		19	47.9					3	16									
DL	CO	4M	15					1			1	2.3			1												
DL	CO	4M	31					3	25.0		2	6.0			2												
DL Totals								47	15.9		40	1.1			3		3	16		17							
BM	H	2M	16					5			5	28.2						5									
BM	H	2M	19					13			13	71.8							13								
BM Totals								19			19	.5						5	13								
WH	CO	4M	33					14			14	100.0			14												
WH Totals								14			14	.4			14												
Total All Species								3,524	1.6		3,467	100.0		151	405	320	343	450	430	907	293	168					

TC TLOGSTVB				Log Stock Table - MBF															
				Project: CLAYBRY1															
T001 R002 S03 T0004										T001 R002 S03 T0004									
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		Page		1	
001		002		03		DAYLIGHT		0004		22.00		26		122		Date		11/14/2011	
																Time		10:16:15AM	
Spp	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches										
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39
DF		CO	D	19															
DF		CO	D	24															
DF		CO	2M	40	7		7	5.5						7					
DF		CO	3M	26	2		2	1.4				2							
DF		CO	3M	28	1		1	.5		1									
DF		CO	3M	37	1		1	.9			1								
DF		CO	3M	40	89	1.8	87	66.3			23	26	22	8	7				
DF		CO	4M	13	0		0	.3		0									
DF		CO	4M	14	1		1	.5		1									
DF		CO	4M	16	1		1	.6		1									
DF		CO	4M	18	1		1	.6		1									
DF		CO	4M	19	1		1	.6		1									
DF		CO	4M	20	4		4	3.0		1	0			2					
DF		CO	4M	21	1		1	.6		1									
DF		CO	4M	22	2	18.2	2	1.4		1		1							
DF		CO	4M	23	2		2	1.2		2									
DF		CO	4M	24	1		1	.5		1									
DF		CO	4M	25	1		1	.9		1									
DF		CO	4M	26	2	8.3	2	1.7		2									
DF		CO	4M	27	2		2	1.8		2									
DF		CO	4M	28	2		2	1.4		2									
DF		CO	4M	29	1		1	.9		1									
DF		CO	4M	32	1		1	.5		1									
DF		CO	4M	33	1		1	.6		1									
DF		CO	4M	35	1		1	.6		1									
DF		CO	4M	36	1		1	.6		1									
DF		CO	4M	37	2		2	1.2		2									
DF		CO	4M	38	1		1	.6		1									
DF		CO	4M	39	1		1	.6		1									
DF		CO	4M	40	8	15.8	6	4.9		5	2								
DF		Totals			135	2.5	132	78.9		29	26	27	24	10	14				
RA		H	D	15															
RA		H	D	16															
RA		H	4M	15	0		0	1.1				0							
RA		H	4M	16	1		1	2.3			1								
RA		H	4M	17	0		0	1.1			0								
RA		H	4M	18	0		0	1.1			0								
RA		H	4M	20	0		0	1.1			0								
RA		H	4M	21	1		1	1.7			1								
RA		H	4M	22	1		1	3.4			1								
RA		H	4M	23	2		2	5.7			1	1							
RA		H	4M	24	2		2	6.3			1	1							
RA		H	4M	25	2		2	6.8			2								
RA		H	4M	27	1		1	3.4			1								
RA		H	4M	28	1		1	3.4			1								
RA		H	4M	29	2		2	4.5			2								
RA		H	4M	31	2		2	4.5			2								
RA		H	4M	33	3	6.3	3	8.5			3								
RA		H	4M	34	1		1	2.8			1								
RA		H	4M	35	3		3	7.4			1	2							

TC TLOGSTVB				Log Stock Table - MBF																					
				Project: CLAYBRY1																					
T001 R002 S03 T0004														T001 R002 S03 T0004											
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		Page		2							
001		002		03		DAYLIGHT		0004		22.00		26		122		Date		11/14/2011							
																Time		10:16:15AM							
S So Gr Log Spp T rt de Len				Gross % Net MBF Def MBF		% Spc		Net Volume by Scaling Diameter in Inches																	
								2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+						
RA H 4M 36				1		1		3.4				1													
RA H 4M 38				4 5.6		3		9.7				3													
RA H 4M 39				1		1		3.4				1													
RA H 4M 40				6		6		18.2				3 4													
RA Totals				36 1.1		35		21.1				28 7													
Total All Species				171 2.2		167		100.0		29		54 34		24 10		14									

T	TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)												Page		1				
			Project: CLAYBRY1												Date	11/14/2011					
															Time	10:03:13AM					
T03N R07W S28 TWORK												T03N R07W S28 TWORK									
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt												
03N	07W	28	WORKING COPY	WORK	119.00	21	126	S	W												
S So Gr T rt ad Spp			% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre		
			Def%	Gross	Net	Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf					
DF	CO	2M	58	.4	14,713	14,658	1,744				42	58		2	1	97	40	430	2.39	34.1	
DF	CO	3M	34	1.8	8,503	8,351	994				70	23	6		7	15	78	37	114	0.77	73.3
DF	CO	4M	8	1.4	1,912	1,885	224			67	27		5	38	17	5	40	25	31	0.33	60.7
DF	Totals		85	.9	25,128	24,894	2,962			5	26	33	37	3	5	6	86	33	148	1.04	168.1
RA	HW	3M	49	4.6	1,898	1,810	215			41	49	10		4	6	7	82	36	179	1.47	10.1
RA	HW	4M	51	5.0	1,915	1,819	216			93	7			4	17	17	62	30	52	0.56	35.0
RA	Totals		12	4.8	3,813	3,628	432			67	28	5		4	11	12	72	32	80	0.79	45.2
SS	CO	DW																23		0.00	4.1
SS	Totals																	23		0.00	4.1
DL	CO	2M	43	15.2	172	146	17					100					100	40	390	2.63	.4
DL	CO	3M	48	15.8	189	159	19			16	84						100	40	153	1.26	1.0
DL	CO	4M	9	19.5	34	27	3			100				27		73		25	26	0.41	1.0
DL	Totals		1	15.9	395	333	40			16	40	44		2		6	92	34	136	1.24	2.5
BM	HW	2M	100		157	157	19				28	72		100				18	195	2.32	.8
BM	Totals		1		157	157	19				28	72		100				18	195	2.32	.8
WH	CO	4M	100		121	121	14			100						100		33	50	0.49	2.4
WH	Totals		0		121	121	14			100						100		33	50	0.49	2.4
Type Totals				1.6	29,615	29,133	3,467			4	31	32	33	4	5	7	84	33	131	0.98	223.0

T	Species, Sort Grade - Board Foot Volumes (Type)														Page 1				
Project: CLAYBRY1																Date	11/14/2011		
																Time	10:16:13AM		
T001 R002 S03 T0004																T001 R002 S03 T0004			
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt										
001	002	03	DAYLIGHT	0004	22.00	26	122	S	W										
S So Gr T rt ad Spp			% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre
			Def%	Gross	Net	Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf			
DF	CO	DW													22		0.00	1.8	
DF	CO	2M	5		328	328	7			100					40	360	2.91	.9	
DF	CO	3M	69	1.7	4,204	4,131	91	1	83	17			3	97	39	101	0.91	41.0	
DF	CO	4M	26	5.1	1,611	1,529	34	85	8	7	22	40	7	31	26	29	0.43	52.8	
DF	Totals		79	2.5	6,143	5,988	132	22	59	19	6	12	2	81	32	62	0.70	96.5	
RA	HW	DW													16		0.00	2.7	
RA	HW	4M	100	1.1	1,620	1,602	35		100		7	35	23	35	28	42	0.56	38.2	
RA	Totals		21	1.1	1,620	1,602	35		100		7	35	23	35	27	39	0.54	41.0	
Type Totals				2.2	7,762	7,589	167	18	68	15	6	17	6	71	31	55	0.66	137.4	

TC		Stand Table Summary															
Project															CLAYBRY1		
T03N R07W S28 TWOR															T03N R07W S28 TWOR		
Twp	Rge	Sec	Tract		Type			Acres		Plots	Sample Trees			Page:	1		
03N	07W	28	WORKING COPY		WOR			119.00		21	126			Date:	11/14/2011		
															Time:	10:03:14AM	
S Spc	T	Sample		Av		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	T o t a l s			
		DBH	Trees	FF 16'	Ht Tot				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF	
DF		8	1	74	21	4.585	1.60	4.59	3.0	20.0	.40	14	92	47	17	11	
DF		9	3	78	104	10.868	4.80	18.11	7.4	36.0	4.17	134	652	496	160	78	
DF		11	1	80	84	2.425	1.60	4.85	9.0	40.0	1.25	44	194	149	52	23	
DF		12	3	80	103	6.113	4.80	10.19	14.6	48.0	4.23	148	489	503	177	58	
DF		13	4	81	103	6.945	6.40	15.63	13.7	54.4	6.08	213	851	724	254	101	
DF		14	1	87	131	1.497	1.60	4.49	14.1	66.7	1.81	64	299	216	76	36	
DF		15	3	85	115	3.913	4.80	9.13	19.9	84.3	5.31	182	769	632	217	92	
DF		16	2	81	92	2.293	3.20	4.59	20.6	72.5	2.89	94	332	344	112	40	
DF		17	3	83	119	3.046	4.80	8.12	19.2	80.0	4.43	156	650	528	185	77	
DF		18	3	84	122	2.717	4.80	7.25	27.3	105.0	5.69	198	761	677	235	91	
DF		19	2	82	136	1.626	3.20	4.88	29.4	116.7	4.09	144	569	487	171	68	
DF		20	5	82	128	3.668	8.00	9.54	34.8	131.5	9.45	332	1,254	1,124	394	149	
DF		21	1	83	112	.665	1.60	2.00	30.8	116.7	1.75	61	233	208	73	28	
DF		22	6	81	117	3.638	9.60	8.49	41.8	162.1	10.23	355	1,376	1,218	422	164	
DF		23	6	84	117	3.328	9.60	9.43	40.8	163.5	11.24	385	1,542	1,337	458	184	
DF		24	1	78	118	.509	1.60	1.02	45.9	180.0	1.33	47	183	159	56	22	
DF		25	6	83	129	2.817	9.60	8.45	49.4	204.4	11.95	417	1,728	1,422	497	206	
DF		26	5	81	128	2.170	8.00	5.64	60.2	263.1	9.72	340	1,485	1,157	404	177	
DF		27	7	82	150	2.188	11.20	8.45	64.7	288.6	15.66	547	2,439	1,864	651	290	
DF		28	3	82	153	1.123	4.80	3.37	70.0	317.8	6.78	236	1,070	807	281	127	
DF		29	4	82	154	1.396	6.40	4.19	75.7	346.7	9.15	317	1,452	1,089	377	173	
DF		30	1	80	137	.326	1.60	.98	74.1	316.7	2.07	72	310	246	86	37	
DF		31	3	80	129	.916	4.80	2.75	72.1	300.0	5.89	198	824	701	236	98	
DF		32	2	82	161	.573	3.20	1.72	69.5	340.0	3.40	119	585	405	142	70	
DF		33	3	80	139	.808	4.80	2.43	83.6	380.0	6.07	203	922	722	241	110	
DF		34	5	80	136	1.269	8.00	3.81	92.9	406.7	10.10	354	1,548	1,202	421	184	
DF		38	3	84	136	.610	4.80	2.24	96.3	501.8	6.28	215	1,122	748	256	133	
DF		39	1	84	152	.193	1.60	.58	124.3	676.7	2.05	72	392	244	86	47	
DF		40	1	81	138	.183	1.60	.55	132.2	626.7	2.07	73	345	247	87	41	
DF		42	1	82	160	.166	1.60	.67	125.9	640.0	2.39	84	426	285	100	51	
DF		Totals	90	81	111	73.206	144.04	168.10	34.6	148.1	167.96	5,817	24,894	19,987	6,922	2,962	
RA		10	1	84	94	2.934	1.60	2.93	13.0	50.0	1.20	38	147	142	45	17	
RA		11	1	77	76	2.425	1.60	2.43	18.2	60.0	1.21	44	146	144	52	17	
RA		12	3	86	46	6.113	4.80	6.11	9.9	30.0	1.83	61	183	218	72	22	
RA		13	3	81	56	5.209	4.80	3.47	14.6	50.0	1.40	51	174	166	60	21	
RA		15	3	79	118	3.913	4.80	9.13	19.0	71.4	4.84	173	652	576	206	78	
RA		16	2	79	106	2.293	3.20	4.59	24.2	87.5	3.05	111	401	362	132	48	
RA		17	2	81	78	2.031	3.20	3.05	27.4	100.0	2.40	84	305	286	99	36	
RA		19	1	77	51	.813	1.60	1.63	17.9	65.0	.84	29	106	100	35	13	
RA		20	2	79	90	1.467	3.20	2.93	36.0	115.0	3.04	106	337	362	126	40	
RA		21	2	80	84	1.331	3.20	2.66	39.4	120.0	3.05	105	319	363	125	38	
RA		22	1	79	49	.606	1.60	.61	63.1	70.0	1.05	38	42	125	45	5	
RA		23	3	80	87	1.664	4.80	3.33	47.3	140.0	4.66	158	466	554	187	55	
RA		24	1	77	68	.509	1.60	1.02	48.2	110.0	1.36	49	112	161	58	13	
RA		25	1	80	49	.470	1.60	.47	60.0	70.0	.97	28	33	115	34	4	
RA		27	1	82	88	.403	1.60	.81	71.3	255.0	1.58	57	205	188	68	24	
RA		Totals	27	81	76	32.181	43.21	45.16	25.1	80.4	32.47	1,132	3,628	3,864	1,347	432	
DL		21	1	79	93	.665	1.60	1.33	38.4	115.0	1.45	51	153	172	61	18	
DL		28	1	76	117	.374	1.60	1.12	45.8	160.0	1.76	51	180	210	61	21	
DL		Totals	2	78	102	1.040	3.20	2.45	41.8	135.6	3.21	102	333	382	122	40	

TC		TSTNDSUM												Stand Table Summary																
														Project		CLAYBRY1														
T03N R07W S28 TWOR														T03N R07W S28 TWOR																
Twp		Rge		Sec		Tract				Type		Acres		Plots		Sample Trees		Page:		2										
03N		07W		28		WORKING COPY				WOR		119.00		21		126		Date:		11/14/2011										
																Time: 10:03:14AM														
S Spc		T		Sample DBH		FF Trees		Av Ht 16' Tot		Trees/ Acre		BA/ Acre		Logs Acre		Average Log Net Cu.Ft.		Net Cu.Ft.		Net Bd.Ft.		Tons/ Acre		Cu.Ft.		Bd.Ft.		T o t a l s		
																												Tons		
BM				27		1		80 64		.403		1.60		.81		40.7		195.0		1.06		33		157		126 39 19				
BM		Totals		1		80 64		.403		1.60		.81		40.7		195.0		1.06		33		157		126 39 19						
WH		11		1		72 68		2.425		1.60		2.43		16.2		50.0		1.26		39		121		150 47 14						
WH		Totals		1		72 68		2.425		1.60		2.43		16.2		50.0		1.26		39		121		150 47 14						
OC		17		1		37 20		1.015		1.60																				
OC		22		1		56 17		.606		1.60																				
OC		27		1		67 30		.403		1.60																				
OC		Totals		3		49 21		2.024		4.80																				
SS		23		1		66 127		.555		1.60																				
SS		25		1		69 120		.470		1.60																				
SS		Totals		2		67 124		1.024		3.20																				
Totals				126		80 98		112.302		201.66		218.94		32.5		133.1		205.95		7123		29,133		24,508 8,476 3,467						

TC		TSTNDSUM														Stand Table Summary																	
Project														CLAYBRY1																			
T001 R002 S03 T0004														T001 R002 S03 T0004																			
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		Page:		1															
001		002		03		DAYLIGHT		0004		22.00		26		122		Date:		11/14/2011															
														Time:		10:16:14AM																	
S		Av							Average Log		Net		Net		T o t a l s																		
Spc		T		DBH		Trees		FF		Ht		Trees/		BA/		Logs		Net		Net		Tons/		Cu.Ft.		Bd.Ft.		Tons		Cunits		MBF	
				16'		Tot		Acre		Acre		Acre		Cu.Ft.		Bd.Ft.		Acre		Acre		Acre		Cu.Ft.		Bd.Ft.		Acre		Cunits		MBF	
DF				8		3		82		31		2.730		.95		2.73		4.2		23.3		.32		11		64		7		3		1	
DF				9		7		83		52		6.370		2.81		5.46		6.3		25.0		.98		34		137		22		8		3	
DF				10		5		82		44		4.550		2.48		4.55		7.8		28.0		1.03		36		127		23		8		3	
DF				11		5		82		52		4.550		3.00		4.55		11.9		38.0		1.54		54		173		34		12		4	
DF				12		5		83		61		4.550		3.57		4.55		16.9		48.0		2.19		77		218		48		17		5	
DF				13		10		82		61		9.100		8.39		10.92		16.8		43.3		5.24		184		473		115		40		10	
DF				14		10		83		74		9.100		9.73		12.74		19.6		57.1		7.15		250		728		157		55		16	
DF				15		11		82		68		10.010		12.28		14.56		20.7		53.8		8.59		302		783		189		66		17	
DF				16		5		82		69		4.550		6.35		6.37		25.8		67.1		4.69		164		428		103		36		9	
DF				17		4		82		73		3.640		5.74		6.37		25.2		70.0		4.57		161		446		100		35		10	
DF				18		4		82		66		3.640		6.43		5.46		30.3		78.3		4.72		166		428		104		36		9	
DF				19		3		82		50		2.730		5.38		3.64		29.0		60.0		3.00		105		218		66		23		5	
DF				20		2		82		75		1.820		3.97		2.73		39.0		126.7		3.03		106		346		67		23		8	
DF				21		2		82		79		1.820		4.38		3.64		36.3		102.5		3.77		132		373		83		29		8	
DF				22		2		82		74		1.820		4.80		2.73		48.4		126.7		3.76		132		346		83		29		8	
DF				29		1		80		75		.910		4.17		1.82		66.7		195.0		3.46		121		355		76		27		8	
DF				30		1		78		73		.910		4.47		1.82		72.5		190.0		3.76		132		346		83		29		8	
DF		Totals		80		82		62		72.800		88.92		94.64				22.9		63.3		61.81		2,168		5,988		1,360		477		132	
RA		10		13		83		49		11.830		6.45		11.83				9.0		32.3		2.94		107		382		65		23		8	
RA		11		8		83		39		7.280		4.80		6.37				11.0		34.3		1.92		70		218		42		15		5	
RA		12		5		83		60		4.550		3.57		5.46				13.9		41.7		2.09		76		228		46		17		5	
RA		13		5		83		63		4.550		4.19		5.46				18.0		56.7		2.70		98		309		59		22		7	
RA		14		4		82		45		3.640		3.89		2.73				23.4		53.3		1.76		64		146		39		14		3	
RA		15		1		78		39		.910		1.12		.91				20.6		40.0		.52		19		36		11		4		1	
RA		16		3		81		46		2.730		3.81		2.73				27.2		56.7		2.04		74		155		45		16		3	
RA		17		1		82		44		.910		1.43		.91				30.0		50.0		.76		27		46		17		6		1	
RA		21		1		80		39		.910		2.19		.91				42.9		50.0		1.07		39		46		24		9		1	
RA		22		1		80		27		.910		2.40		.91				34.4		40.0		.86		31		36		19		7		1	
RA		Totals		42		82		48		38.220		33.87		38.22				15.8		41.9		16.66		605		1,602		367		133		35	
Totals				122		82		58		111.020		122.79		132.86				20.9		57.1		78.47		2773		7,589		1,726		610		167	



OREGON DEPARTMENT OF FORESTRY CRUISE REPORT *Clayberry*

1. Type of Sale

Regeneration harvest, Recovery

Sections 28, 29, 31, 32, and 33, T3N, R7W, and Sections 25 & 36, T3N, R8W, and Section 6, T2N, R7W, W.M., Tillamook County, Oregon.

2. Sale Acreage

Sale acreage was determined by GPS and orthophotographs along with GIS.

	ACRES	
	<u>Gross</u>	<u>Net</u>
Area 1 (Clearcut)	132	119
Area 2 (Daylighting)	22	22

Gross Acres

Area within the Timber Sale Boundary signs.

Net acres

Used for calculating the advertised volume.

Gross acres, less green tree retention, roads, Non-required thinning areas, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

3. Cruising Procedures

A. Cruise Method

Area 1 - A total of 21 variable plots were measured. This area was cruised on a rectangular grid, 350' between plots and 700' between lines. Point of observation was 4.5 feet and all conifers 8 inches DBH and greater containing 20 net board feet and all hardwoods 10 inches DBH and greater containing 30 net board feet were recorded by species and measured for merchantable height, diameter and form factor. Merchantable heights were recorded to 6" and 7" outside bark for conifers and hardwoods respectively.

Area 2 – 26 plots were measured in a 1300 foot strip; sample areas were 50 foot plots on both sides of the road, throughout Area 2. Point of observation was 4.5 feet and all conifers 8 inches DBH and greater containing 20 net board feet and all hardwoods 10 inches DBH and greater containing 30 net board feet were recorded by species and measured for merchantable height, diameter and form factor. Merchantable heights were recorded to 6" and 7" outside bark for conifers and hardwoods respectively.

B. Plot size

Variable radius plots with 40 BAF and point of tree observation was 4.5 feet.

C. Grading System

All trees were graded according to Columbia River Log Scaling Rules. Log lengths favored 40' lengths. Height and diameter measurement standards were to the nearest foot or nearest inch respectively.

4. Computation Procedure

Plot data was entered into SuperAce for computation of basal area, stand tables, and volume for each species and type.

Cruise Statistics (Board Foot Volumes)			
Area	Number of plots	SE (%)	CV (%)
Clearcut	21	10.5	47
Daylighting	26	13.7	68.7

5. Hidden Defect and Breakage

A hidden defect and breakage of 5% was applied to conifers and 10% to hardwoods. This is in addition to the visual defect deducted during the cruise.

6. Timber Description

The majority of the sale area was burned in the 1945 Wilson River/Salmon berry Fires. Approximately fifteen acres in the northeast portion of the sale did not burn. Approximately 50 acres of the sale was seeded in 1961-1962 and the remainder of the sale naturally regenerated.

The sale area is dominated by Douglas-fir on the upper slopes with a red alder Douglas-fir mix dominating the lower slopes.

Area 2 is dominated by small saw log, and pulp sized alder, and smaller Douglas-fir.

Sale Area	DBH	Merchantable Bole Height	Merchantable Top
Area 1:			
Douglas fir	19	92	5"
Alder	16	60	6"
Area 2:			
Douglas fir	15	44	5"
Alder	12	28	6"

7. Cruiser Names/Dates

Area 1- cruised by contractor 2010.

Area 2- cruised by District Contracts Unit, spring 2009.

8. Revenue Distribution

FDF 100%

Tax Code: 56-1

Deed Numbers: 35, 70

9. Attachments

Volume Summaries

Log Stock Tables

Logging Plan

10. Stand and Log Stock Tables Species Key

DL – Douglas-fir leave

DF – Douglas-fir take

RA – Red alder take

SS – Sitka spruce leave

WH – Western hemlock leave

BM—Big leaf maple leave

OC--- conifer snag

