



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Mill Bound
Sale 341-15-34

District: Tillamook

Date: July 30, 2014

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,279,244.28	\$158,070.30	\$1,437,314.58
		Project Work:	\$(414,780.00)
		Advertised Value:	\$1,022,534.58



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Mill Bound Sale 341-15-34

District: Tillamook

Date: July 30, 2014

timber description

Location: Portions of Sections 32, 33, and 34, T2S, R7W and Sections 3, 4, and 5, T3S, R7W, W.M., Tillamook County, Oregon.

Stand Stocking: 20%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	16	0	95
Western Hemlock / Fir	25	0	95
Alder (Red)	13	0	90
Maple	14	0	90

Volume by Grade	10" - 11"	12"+	2S	3S	4S	6" - 7"	8" - 9"	Total
Douglas - Fir	0	0	1,587	2,126	585	0	0	4,298
Western Hemlock / Fir	0	0	11	0	0	0	0	11
Alder (Red)	113	61	0	0	0	274	232	680
Maple	0	0	0	0	0	23	8	31
Total	113	61	1,598	2,126	585	297	240	5,020



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Mill Bound Sale 341-15-34

District: Tillamook

Date: July 30, 2014

comments: Pond Values Used: 2nd Quarter Calendar Year 2014.

Western redcedar and Other Cedars Stumpage Price = Pond Value
minus Logging Cost:
 $\$750/\text{MBF} = \$1,050/\text{MBF} - \$300/\text{MBF}$

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 costs equivalent to $\$780$ daily truck cost.

Other Costs (with Profit & Risk to be added):

Brand and Paint: $5,020 \text{ MBF} \times \$2/\text{MBF} = \$10,040$

Machine Cleaning: $4 \text{ machines} \times \$1,000/\text{machine} = \$4,000$

Wood Placement with Machine: $16 \text{ hours} \times \$140/\text{hour} = \$2,240$

Wood Placement with Yarder: $5 \text{ Sites} \times \$1,500/\text{site} = \$7,500$

Snags Creation: $446 \text{ Snags} \times \$8/\text{Snag} = \$3,568$

TOTAL Other Costs (with Profit & Risk to be added) = $\$27,348$

Other Costs (No Profit & Risk added):

Cover Materials for Piles: $30 \text{ piles} \times \$5/\text{pile} = \$150$

Non-project Spur construction: $30+00 \text{ stations} \times \$200/\text{station} = \$6,000$

Approach Rock for Non-project Spurs (3, 4, 5, 7): $4 \text{ approaches} \times 40 \text{ yds/approach} \times \$6.55/\text{yd} = \$1,048$

Non-Project Spurs (1, 2, 7) Rock: $8+50 \text{ stations} \times 40 \text{ yds/station} \times \$6.55/\text{yd} = \$2,227$

OHV Trail Filters: $2 \text{ filters} \times \$75/\text{filter} = \$150$

Slash Piling and Sorting (Cable Ground): $\$5/\text{acre} \times 267 \text{ acre} = \$1,335$

Heliport Slash Sorting: $2 \text{ heliports} \times \$500/\text{heliport} = \$1,000$

Construct Road Block at Point E: $1 \text{ road block} \times \$75 = \$75$

TOTAL Other Costs (No Profit & Risk added) = $\$11,985$

ROAD MAINTENANCE:

Spot rocking: $20 \text{ cy/mmfbf/mile} \times \$7.43/\text{cy} \times 5.020 \text{ MMBF} \times 12 \text{ miles} / 5,020 \text{ MBF} = \$1.78/\text{MBF}$

Interim Maintenance Grading: $\$250 \times 12 \text{ miles} / 5,020 \text{ MBF} \times 4 \text{ times} = \$2.39/\text{MBF}$

Final Maintenance Grading: $\$500 \times 12 \text{ miles} / 5,020 \text{ MBF} = \$1.20/\text{MBF}$

Final Maintenance Compaction: $\$950/\text{mile} \times 2 \text{ miles} / 5,020 \text{ MBF} = \$0.38/\text{MBF}$

TOTAL Road Maintenance = $\$5.75/\text{MBF}$



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Mill Bound Sale 341-15-34

District: Tillamook

Date: July 30, 2014

logging conditions

combination#:	1	Douglas - Fir	80.60%
		Alder (Red)	83.52%
		Maple	100.00%
yarding distance:	Medium (800 ft)	downhill yarding:	No
logging system:	Cable: Medium Tower >40 - <70	Process:	Stroke Delimber
tree size:	Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF		
loads / day:	7.0	bd. ft / load:	2,900
cost / mbf:	\$164.73		
machines:	Log Loader (A) Stroke Delimber (A) Tower Yarder (Medium)		
combination#:	2	Douglas - Fir	12.66%
		Alder (Red)	0.30%
yarding distance:	Short (400 ft)	downhill yarding:	No
logging system:	Shovel	Process:	Stroke Delimber
tree size:	Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF		
loads / day:	8.0	bd. ft / load:	3,000
cost / mbf:	\$59.93		
machines:	Stroke Delimber (B)		
combination#:	3	Douglas - Fir	6.34%
		Western Hemlock / Fir	94.00%
		Alder (Red)	15.21%
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:	5.0	bd. ft / load:	3,000
cost / mbf:	\$222.94		
machines:	Log Loader (A) Stroke Delimber (A) Tower Yarder (Medium)		
combination#:	4	Douglas - Fir	0.40%
		Western Hemlock / Fir	6.00%
		Alder (Red)	0.97%



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Mill Bound
Sale 341-15-34

District: Tillamook

Date: July 30, 2014

yarding distance: Short (400 ft)

downhill yarding: No

logging system: Shovel

Process: Stroke Delimber

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

loads / day: 7.0

bd. ft / load: 3,000

cost / mbf: \$68.49

machines: Stroke Delimber (B)



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Mill Bound Sale 341-15-34

District: Tillamook

Date: July 30, 2014

logging costs

Operating Seasons:	1.00	Profit Risk:	10.00%
Project Costs:	\$414,780.00	Other Costs (P/R):	\$27,348.00
Slash Disposal:	\$0.00	Other Costs:	\$11,985.00

Miles of Road

Road Maintenance: \$5.75

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	3.0
Western Hemlock / Fir	\$0.00	3.0	3.6
Alder (Red)	\$0.00	2.0	2.6
Maple	\$0.00	2.0	2.6



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Mill Bound
Sale 341-15-34

District: Tillamook

Date: July 30, 2014

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$154.77	\$6.04	\$0.87	\$124.09	\$5.45	\$29.12	\$0.00	\$5.00	\$2.39	\$327.73
Western Hemlock / Fir									
\$213.67	\$6.04	\$0.87	\$68.94	\$5.45	\$29.50	\$0.00	\$5.00	\$2.39	\$331.86
Alder (Red)									
\$172.33	\$6.32	\$0.87	\$150.00	\$5.45	\$33.50	\$0.00	\$5.00	\$2.39	\$375.86
Maple									
\$164.73	\$6.32	\$0.87	\$150.00	\$5.45	\$32.74	\$0.00	\$5.00	\$2.39	\$367.50

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$624.86	\$297.13	\$0.00
Western Hemlock / Fir	\$0.00	\$530.00	\$198.14	\$0.00
Alder (Red)	\$0.00	\$601.82	\$225.96	\$0.00
Maple	\$0.00	\$510.00	\$142.50	\$0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Mill Bound
Sale 341-15-34

District: Tillamook

Date: July 30, 2014

summary

Amortized

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
Maple	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	4,298	\$297.13	\$1,277,064.74
Western Hemlock / Fir	11	\$198.14	\$2,179.54
Alder (Red)	680	\$225.96	\$153,652.80
Maple	31	\$142.50	\$4,417.50

Gross Timber Sale Value

Recovery: \$1,437,314.58

Prepared by: Bryan Huck

Phone: 503-842-2545



PROJECT SUMMARY SHEET

Sale: Mill Bound

CONSTRUCTION

Point	C to D	18+09	stations =	\$19,720.09
Point	G to H	40+78	stations =	\$65,494.49
Point	I to J	11+40	stations =	\$13,610.68
SUBTOTAL CONSTRUCTION				<u>\$98,825.26</u>

IMPROVEMENT

Point	A to B	573+49	stations =	\$235,588.07
Point	C to D	4+10	stations =	\$2,281.64
SUBTOTAL IMPROVEMENT				<u>\$238,636.39</u>

RECONSTRUCTION

Point	E to F	9+46	stations =	\$1,205.72
Point	G to H	22+63	stations =	\$15,400.49
SUBTOTAL RECONSTRUCTION				<u>\$16,606.21</u>

SPECIAL PROJECTS

Project 5, Crush and Stockpile 1,000 c.y. of 1 1/2"-0" rock			39,825.00
Project 6, Rock Quarry Test Drilling			5,688.00
Brush	11.5	miles of road	\$6,900.00
Project 7. Culvert removal			\$4,000.00
SUBTOTAL SPECIAL PROJECTS			<u>\$56,413.00</u>

MOVE IN \$4,299.14

GRAND TOTAL \$414,780.00

SUMMARY OF CONSTRUCTION COST

Sale:		Mill Bound			Road:		A to B				
Construction -		0+00	stations	Improvement -		573+49	stations	Reconstruction -		0+00	stations
		0.00	miles			10.86	miles			0.00	miles
CULVERTS - MATERIALS & INSTALLATION											
Culverts											
		360	LF of 18"	\$6,300.00			40	LF of 24"	\$1,080.00		
				\$6,300.00					\$1,080.00		
Culvert Stakes & Markers											
		11	markers	\$88.00							
				\$88.00							
										TOTAL CULVERTS	\$7,468.00
ROCK											
0+00 to	573+49	12,800	cy. of	Crushed	@	\$15.70	per c.y.=	\$200,960.00			
Junction Rock	1+10, 272+30, 4	110	cy. of	Crushed	@	\$15.70	per c.y.=	\$1,727.00			
French Drain Rock	61+70	50	cy. of	Drain Rock	@	\$26.79	per c.y.=	\$1,339.50			
Base Rock	61+70	20	cy. of	Jaw-Run	@	\$2.93	per c.y.=	\$58.60			
Surface Rock	61+70	30	cy. of	Crushed	@	\$15.70	per c.y.=	\$471.00			
Levelling Rock	30, 129+50, 312	130	cy. of	Crushed	@	\$15.70	per c.y.=	\$2,041.00			
Culvert Backfill	*	100	cy. of	Crushed	@	\$15.70	per c.y.=	\$1,570.00			
Widening Rock	190+70	40	cy. of	Crushed	@	\$15.70	per c.y.=	\$628.00			
										TOTAL ROCK	\$208,795.10
SPECIAL PROJECTS											
Construct ditchouts -		64.00	square yards @	\$0.95	square yd	\$60.80					
Machine Hours for bridge drainage and french drain		14.00	hours @	\$160.00	per hour	\$2,240.00					
Grade and shape road -		573.49	stations @	\$15.50	per station	\$8,889.10					
Roll subgrade w/ vibratory roller prior to rocking -		573.49	stations @	\$13.20	per station	\$7,570.07					
Remove culverts from state lands		2.00	@	\$282.50	total	\$565.00					
										TOTAL SPECIAL PROJECTS	\$19,324.97
										GRAND TOTAL	\$235,588.07

SUMMARY OF CONSTRUCTION COST

Sale:

Mill Bound

Road:

C to D

Construction -	18+09	stations	Improvement -	4+10	stations	Reconstruction -	0+00	stations
	0.34	miles		0.08	miles		0.00	miles

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

Station	to	Station	Avg. Sideslope	Avg. Dist. To W.A. (mi.)	Outslope/Ditch	Cost per Station		
4+10		7+30	30%	0.1	Outslope	\$191	=	\$611.20
7+30		8+43	40%	0.1	Outslope	\$243	=	\$274.59
8+43		9+10	50%	0.1	Outslope	\$459	=	\$307.53
9+10		11+21	60%	0.2	Outslope	\$1,576	=	\$3,325.36
11+21		11+53	40%	0.2	Outslope	\$243	=	\$77.76
11+53		13+22	60%	0.2	Outslope	\$1,576	=	\$2,663.44
13+22		13+62	55%	0.2	Outslope	\$689	=	\$275.60
13+62		15+60	50%	0.3	Outslope	\$459	=	\$908.82
15+60		16+77	40%	0.3	Outslope	\$243	=	\$284.31
16+77		18+90	20%	0.3	Outslope	\$139	=	\$296.07
18+90		21+08	35%	0.4	Outslope	\$191	=	\$416.38
21+08		22+19	35%	0.4	Outslope	\$191	=	\$212.01
TOTAL								\$9,653.07

ROCK

4+10 to	22+19	860	cy. of	Jaw-Run	@	\$12.21 per c.y.=	\$10,500.60
Turnaround Rock	16+77	40	cy. of	Pit-Run	@	\$15.14 per c.y.=	\$605.60
Landing Rock	22+19	40	cy. of	Pit-Run	@	\$15.14 per c.y.=	\$605.60
TOTAL ROCK							\$11,711.80

SPECIAL PROJECTS

Grade and shape road -	22.19	stations @	\$15.50	per station	\$343.95
Roll subgrade w/ vibratory roller prior to rocking -	22.19	stations @	\$13.20	per station	\$292.91
TOTAL SPECIAL PROJECTS					\$636.86

GRAND TOTAL **\$22,001.73**

SUMMARY OF CONSTRUCTION COST

Sale:

Mill Bound

Road:

E to F

Construction -	0+00	stations	Improvement -	0+00	stations	Reconstruction -	9+46	stations
	0.00	miles		0.00	miles		0.18	miles

IMPROVEMENT: CLEARING AND GRUBBING -

RECONSTRUCTION: CLEARING AND GRUBBING -

Side cast	0.015	acres	@	\$660.00	per acre =	\$9.90
Widening	0.010	acres	@	\$660.00	per acre =	\$6.60
Scattering	0.260	acres	@	\$980.00	per acre =	\$254.80
TOTAL CLEARING AND GRUBBING						\$271.30

RECONSTRUCTION: EXCAVATION -

Road Earthwork	9.46	sta. @	\$10.00	per sta. =	\$94.60	
Pullback	49	cy. @	\$1.40	per c.y.=	\$68.60	
Widening	55	cy. @	\$1.40	per c.y.=	\$77.00	
				TOTAL EXCAVATION		\$240.20

ROCK

Junction Rock	0+00	20	cy. of	Crushed	@	\$15.00 per c.y.=	\$300.00	
							TOTAL ROCK	\$300.00

SPECIAL PROJECTS

Grade and shape road -	9.46	stations @	\$15.50	per station	\$146.63
Roll subgrade w/ vibratory roller prior to rocking -	9.46	stations @	\$13.20	per station	\$124.87
TOTAL SPECIAL PROJECTS					\$271.50

GRAND TOTAL

\$1,205.72

SUMMARY OF CONSTRUCTION COST

Sale:

Mill Bound

Road:

G to H

Construction -	40+78	stations	Improvement -	0+00	stations	Reconstruction -	22+63	stations
	0.77	miles		0.00	miles		0.43	miles

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

Station	to	Station	Avg. Sideslope	Avg. Dist. To W.A. (mi.)	Outslope/Ditch	Cost per Station		
22+63		40+73	10%	0.5	Outslope	\$200	=	\$3,620.00
40+73		43+59	50%	0.5	Outslope	\$459	=	\$1,312.74
43+59		49+81	70%	0.5	Outslope	\$2,671	=	\$16,613.62
49+81		52+60	55%	0.5	Outslope	\$689	=	\$1,922.31
52+60		53+91	80%	0.5	Outslope	\$3,848	=	\$5,040.88
53+91		55+84	60%	0.5	Outslope	\$1,738	=	\$3,354.34
55+84		57+06	75%	0.5	Outslope	\$3,138	=	\$3,828.36
57+06		59+75	60%	0.5	Outslope	\$1,738	=	\$4,675.22
59+75		63+41	20%	0.5	Outslope	\$139	=	\$508.74
								TOTAL
								\$40,876.21

IMPROVEMENT: CLEARING AND GRUBBING -

Widening	0.028	acres @	\$660.00	per acre =	\$18.48	
					TOTAL CLEARING AND GRUBBING	\$18.48

IMPROVEMENT: EXCAVATION -

Widening	290	cy. @	\$1.40	per c.y. =	\$406.00	
					TOTAL EXCAVATION	\$406.00

IMPROVEMENT: ENDHAUL -

Widening	13+14	to	14+34	290	cy. @	\$0.93	per c.y. =	\$269.70
Spread & compact				290	cy. @	\$0.25	per c.y. =	\$72.50
								TOTAL ENDHAUL
								\$342.20

RECONSTRUCTION: CLEARING AND GRUBBING -

Scattering	0.620	acres @	\$980.00	per acre =	\$607.60	
					TOTAL CLEARING AND GRUBBING	\$607.60

RECONSTRUCTION: EXCAVATION -

Road Earthwork	22.63	sta. @	\$50.00	per sta. =	\$1,131.50	
					TOTAL EXCAVATION	\$1,131.50

ROCK

40+73 to	63+41	1,080	cy. of	Jaw-Run	@	\$11.46	per c.y. =	\$12,376.80
0+00 to	40+73	1,900	cy. of	Jaw-Run	@	\$11.46	per c.y. =	\$21,774.00
Turnaround Rock	62+00	40	cy. of	Pit-Run	@	\$14.39	per c.y. =	\$575.60
Landing Rock	63+41	120	cy. of	Pit-Run	@	\$14.39	per c.y. =	\$1,726.80
								TOTAL ROCK
								\$36,453.20

SPECIAL PROJECTS

Grade and shape road -	63.41	stations @	\$15.50	per station	\$982.86	
Roll subgrade w/ vibratory roller prior to rocking -	63.41	stations @	\$13.20	per station	\$837.01	
					TOTAL SPECIAL PROJECTS	\$1,826.47

GRAND TOTAL

\$81,661.66

SUMMARY OF CONSTRUCTION COST

Sale:	Mill Bound			Road:	I to J		
Construction -	11+40	stations	Improvement -	0+00	stations	Reconstruction -	0+00
	0.22	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	Avg. Dist. To W.A. (mi.)	Outslope/Ditch	Cost per Station		
	0+00		11+40	30%			\$191	=	\$2,177.40
									TOTAL
									\$2,177.40
ROCK									
0+00	to	11+40	850	cy. of	Jaw-Run	@	\$11.69 per c.y.=		\$9,936.50
Turnaround Rock		9+00	40	cy. of	Pit-Run	@	\$14.62 per c.y.=		\$584.80
Landing Rock		11+40	40	cy. of	Pit-Run	@	\$14.62 per c.y.=		\$584.80
									TOTAL ROCK
									\$11,106.10
SPECIAL PROJECTS									
Grade and shape road -			11.40	stations @	\$15.50	per station	\$176.70		
Roll subgrade w/ vibratory roller prior to rocking -			11.40	stations @	\$13.20	per station	\$150.48		
							TOTAL SPECIAL PROJECTS		\$327.18
							GRAND TOTAL		\$13,610.68

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	High Face Pit	Location:	Sec.4 , T3S, R7W, W.M.
Sale:	Mill Bound	Road:	320 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	320 c.y.
Drill Pct.:	0%	In Place Total:	229 c.y.

Rip Rock:	\$1.90 /cu.yd.	x	229 cu.yds.	=	\$435.10
Load Dump Truck:	\$0.70 /cu.yd.	x	320 cu.yds.	=	\$224.00

Subtotal \$659.10

Move in D-8	1	@	\$763.69	=	\$763.69
Move in Loader	1	@	\$631.25	=	\$631.25
Move in Excavator	1	@	\$835.89	=	\$835.89
Move in Trucks	4	@	\$182.94	=	\$731.76
				Subtotal	<u>\$2,962.59</u>

Base Cost= \$11.32 Per Cu.Yd.

TOTAL PRODUCTION COSTS \$3,621.69

Road Segment	Haul Cost \$/cu.yd.	Proc Cost \$/cu.yd.	Base Cost. \$/cu.yd.	Cost \$/cu.yd.	Number Cu. Yds	ROCK COST
C to D Turnaround Rock (Pit-Run)	2.72	1.10	11.32	15.14	40	\$605.60
C to D Landing Rock (Pit-Run)	2.72	1.10	11.32	15.14	40	\$605.60
G to H Turnaround Rock (Pit-Run)	1.97	1.10	11.32	14.39	40	\$575.60
G to H Landing Rock (Pit-Run)	1.97	1.10	11.32	14.39	120	\$1,726.80
I to J Turnaround Rock (Pit-Run)	2.20	1.10	11.32	14.62	40	\$584.80
I to J Landing Rock (Pit-Run)	2.20	1.10	11.32	14.62	40	\$584.80
				Total C.Y.	320	Sub Total \$4,683.20

TOTAL ROCKING COSTS \$4,683.20

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	High Face Pit	Location:	Sec. 4, T3S, R7W, W.M.
Sale:	Mill Bound	Road:	4710 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	4710 c.y.
Drill Pct.:	0%	In Place Total:	3364 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$4,000.00

Rip Rock:	\$1.90 /cu.yd.	x	3364 cu.yds.	=	\$6,391.60
Push Rock:	\$0.70 /cu.yd.	x	4710 cu.yds.	=	\$3,297.00
Load Crusher:	\$0.70 /cu.yd.	x	4710 cu.yds.	=	\$3,297.00
Crush Rock:	\$2.35 /cu.yd.	x	4710 cu.yds.	=	\$11,068.50
Load Dump Truck:	\$0.70 /cu.yd.	x	4710 cu.yds.	=	\$3,297.00

Subtotal \$31,351.10

Move In/Set-up Crusher	1	@	\$1,799		\$1,799.00
				Subtotal	\$1,799.00

				TOTAL PRODUCTION COSTS	\$33,150.10
Base Cost=	\$7.04	Per Cu.Yd.			

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 Base Rock (Jaw-Run)	0.93	1.40	0.60	2.93	20	\$58.60
C to D 410 2219 (Jaw-Run)	2.72	2.45	7.04	12.21	860	\$10,500.60
G to H 4073 6341 (Jaw-Run)	1.97	2.45	7.04	11.46	1080	\$12,376.80
G to H 0 4073 (Jaw-Run)	1.97	2.45	7.04	11.46	1900	\$21,774.00
I to J 0 1140 (Jaw-Run)	2.20	2.45	7.04	11.69	850	\$9,936.50
				Total C.Y.	4710	Sub Total
						\$54,646.50
						TOTAL ROCKING COSTS
						\$54,646.50

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Property Line Pit	Location:	Sec. 1, T3S, R7W, W.M.
Sale:	Mill Bound	Road:	13280 c.y.
Swell:	1.40	Stockpile:	2500 c.y.
Shrinkage	1.16	Total Truck Loads:	15780 c.y.
Drill Pct.:	100%	In Place Total:	11271 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$6,250.24

Drill & Shoot:	\$2.50 /cu.yd.	x	11271 cu.yds.	=	\$28,177.50
Load Crusher:	\$0.70 /cu.yd.	x	15780 cu.yds.	=	\$11,046.00
Crush Rock:	\$3.00 /cu.yd.	x	15780 cu.yds.	=	\$47,340.00
Load Dump Truck:	\$0.70 /cu.yd.	x	15780 cu.yds.	=	\$11,046.00
Oversize Reduction:	\$4.50 /cu.yd.	x	715 cu.yds.	=	\$3,217.50

Subtotal \$107,077.24

Move In/Set-up 3-stage Crusher	1		\$5,009		\$5,009.00
Move In and set up Drill and Compressor	1	@	\$556.98	=	\$556.98
Move in Roller and Compactor	1	@	\$556.98	=	\$556.98
Move in Grader	1	@	\$154.52	=	\$154.52
Move in D-8	1	@	\$763.69	=	\$763.69
Move in Loader	1	@	\$631.25	=	\$631.25
Move in Excavator	1	@	\$835.89	=	\$835.89
Move in Trucks	6	@	\$182.94	=	\$1,097.64
Move in Water Truck	1	@	\$215.04	=	\$215.04
Subtotal					\$9,820.99

Base Cost=	\$7.41	Per Cu.Yd.	TOTAL PRODUCTION COSTS	\$116,898.23
------------	--	------------	--	--

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 57349 (Crushed)	5.84	2.45	7.41	15.70	12800	\$200,960.00
A to B Junction Rock (Crushed)	5.84	2.45	7.41	15.70	110	\$1,727.00
A to B French Drain Rock (Drain Rock)	11.09	0.70	15.00	26.79	50	\$1,339.50
A to B Surface Rock (Crushed)	5.84	2.45	7.41	15.70	30	\$471.00
A to B Levelling Rock (Crushed)	5.84	2.45	7.41	15.70	130	\$2,041.00
A to B Culvert Backfill (Crushed)	5.84	2.45	7.41	15.70	100	\$1,570.00
A to B Widening Rock (Crushed)	5.84	2.45	7.41	15.70	40	\$628.00
E to F Junction Rock (Crushed)	5.14	2.45	7.41	15.00	20	\$300.00
Stockpile 1 1/2"-0" Project 5	7.22	1.30	7.41	15.93	2500	\$39,825.00
				Total C.Y.	15780	Sub Total
						\$248,861.50

TOTAL ROCKING COSTS \$248,861.50

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

Sale: **Mill Bound**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
32.0	Pavement	30
13.0	Main Lines	7
2.0	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	Drill & Compressor	\$590.64		\$46.00	0.00	5.30	5.3	\$243.80	\$834.44
1	Excavators (Small)	\$556.98		\$22.00	0.00	0.00	0	\$0.00	\$556.98
1	Excavators (Large)	\$860.42	1	\$44.80	0.00	1.30	1.3	\$58.24	\$918.66
1	Tractor (D8)	\$812.75	2	\$15.10	0.00	1.30	1.3	\$19.63	\$832.38
4	Dump Truck (10 cy +)	\$913.14		\$2.85	0.00	0.00	2	\$22.80	\$935.94
1	Water Truck (2500 Gal)	\$215.04		\$2.85	0.00	0.00	2	\$5.70	\$220.74
				TOTAL MOVE-IN COSTS:					\$4,299.14



OREGON DEPARTMENT OF FORESTRY CRUISE REPORT

Mill Bound

1. Type of Sale

Areas 1 & 2: Modified Clearcut, Recovery

Area 3: Partial Cut, Recovery

2. Legal Description

Portions of Sections 32, 33, and 34, T2S, R7W, and Sections 3, 4, and 5, T3S, R7W, W.M., Tillamook County, Oregon.

3. Sale Acreage

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

	ACRES	
	<u>Gross</u>	<u>Net</u>
Area 1 (Modified Clearcut)	146	110
Area 2 (Modified Clearcut)	150	113
Area 3 (Partial Cut)	275	69

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.

4. Cruising Procedures

A. Cruise Method

Area 1 has 22 plots cruised for the 110 harvest acres, Area 2 has 23 plots cruised for 113 harvest acres and Area 3 has 16 plots cruised for 69 acres of required harvest. All plots were full cruise plots at a spacing of 700' x 350'. 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 on all plots. Species were recorded on all trees and measured for merchantable bole height, diameter, and form factor. Merchantable heights were recorded to 6" and 7" outside bark for conifers and hardwoods respectively.

B. Plot size

A basal area factor of 33.61 was used for all plots. The point of observation is 4.5 feet.

C. Grading System

All species were graded using Columbia River Log Scaling and Grading Bureau rules favoring a 40' log.

5. Computation Procedure

The volumes and statistics for the timber cruise were computed using SuperACE 2008, developed by Atterbury Consultants, Inc. SuperACE has calculated basal areas, advertised volumes, volume summaries, log stock tables, and stand tables for each species and type. The standard error and the coefficient of variation for the cruise based on net board feet per acre on Area 1 is 6.2% and 28.3%, Area 2 is 8.4% and 39.4%, and Area 3 is 9.0% and 35.0% respectively.

6. Hidden Defect and Breakage

A 5% reduction was applied to conifers and a 10% reduction to hardwood volumes for hidden defect and breakage. This was in addition to visual defect deducted during the cruise.

7. Timber Description

This area was burned during the 1950-60's and planted in the mid 1960's. See attached stand tables and volume summary for a quantitative evaluation of estimated timber volumes and snag per acre.

Sale Area – Species	DBH	Merchantable Bole Height	Merchantable Top
Area 1: Douglas-fir	17	68	5"
Area 1: Alder	19	41	6"
Area 2: Douglas-fir	16	67	5"
Area 2: Alder	13	36	6"
Area 2: Maple	14	27	6"
Area 3: Douglas-fir	13	60	5"
Area 3: Alder	13	43	6"
Area 3: Western Hemlock	26	62	5"

8. Cruiser Names/Dates

Service Contract; February 2013, June 2010

9. Revenue Distribution

FDF: 100%

Tax Code: 8 (32%) & 8-1 (68%)

Deed Numbers: 169, 194, 295

10. Attachments

Volume Summaries

Stand Table Summary
Log Stock Tables
Logging Plan Map

11. Stand and Log Stock Tables Species Key

DF – Douglas-fir
RA – Red alder
AL – Red alder leave
DL – Douglas-fir leave
BM -- Maple
WH – Western hemlock
OC- Other Conifer (Snags)

TC TLOGSTVB				Log Stock Table - MBF																
				Project: DEMO																
T02S R07W S34 TSALE												T02S R07W S34 TSALE								
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	1											
02S	07W	34	AREA_1	SALE	110.00			Date	5/8/2014											
								Time	2:39:22PM											
Spp	T	So	Gr	Log	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+
DF		CO	2	16	15	5.0	15	.6						4	10					
DF		CO	2	32	18	5.0	17	.7						17						
DF		CO	2	36	16	10.3	15	.6					15							
DF		CO	2	38	18	5.0	17	.7					17							
DF		CO	2	40	1,018	6.0	957	40.5					418	349	165		24			
DF		CO	3	20	12	5.0	11	.5					11							
DF		CO	3	28	1	5.0	1	.1			1									
DF		CO	3	32	23	5.0	22	.9			9	7	6							
DF		CO	3	36	33	6.2	31	1.3			5	20	5							
DF		CO	3	40	1,016	6.5	951	40.2			122	261	567							
DF		CO	4	12	3	5.0	3	.1		2	0									
DF		CO	4	14	3	5.0	3	.1		3										
DF		CO	4	16	2	5.0	2	.1		2										
DF		CO	4	20	24	5.0	23	1.0		9	14									
DF		CO	4	22	2	5.0	2	.1		2										
DF		CO	4	24	33	5.0	31	1.3		31										
DF		CO	4	26	14	5.0	13	.6		13										
DF		CO	4	28	19	5.0	18	.8		18										
DF		CO	4	30	29	5.0	28	1.2		24	3									
DF		CO	4	32	51	5.0	49	2.1		49										
DF		CO	4	34	43	5.9	40	1.7		40										
DF		CO	4	36	32	5.0	30	1.3		30										
DF		CO	4	38	19	5.0	18	.8		18										
DF		CO	4	40	72	5.0	69	2.9		63	5									
DF		Totals			2,517	6.1	2,365	99.6		305	161	289	589	450	371	176		24		
RA		H	3	24	6	10.0	6	61.3				6								
RA		H	4	24	4	10.0	4	38.7			4									
RA		Totals			10	10.0	9	.4			4		6							
Total All Species					2,528	6.1	2,374	100.0		305	165	289	595	450	371	176		24		

TC TLOGSTVB				Log Stock Table - MBF																
				Project: DEMO																
T02S R07W S34 TSALE										T02S R07W S34 TSALE										
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	2											
02S	07W	34	AREA_2	SALE	113.00			Date	5/8/2014											
										Time	3:02:13PM									
S Spp	So T	Gr rt	Log 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	4	25	9	10.0	8	1.5			8										
RA	H	4	26	16	10.0	15	2.6			3	12									
RA	H	4	27	4	10.0	3	.6			3										
RA	H	4	28	15	10.0	13	2.4			7	6									
RA	H	4	31	5	10.0	4	.7			4										
RA	H	4	32	40	10.0	36	6.3				24		12							
RA	H	4	34	13	10.0	12	2.1			12										
RA	H	4	36	25	10.0	23	4.0			23										
RA	H	4	38	17	10.0	16	2.8			16										
RA	H	4	40	214	10.0	193	34.4			90	88	15								
RA Totals				623	10.0	561	25.1			211	220	80	49							
BM	H	4	26	8	10.0	7	22.1			7										
BM	H	4	28	18	10.0	17	54.2			8	8									
BM	H	4	30	8	10.0	7	23.6			7										
BM Totals				34	10.0	31	1.4			22	8									
Total All Species				2,387	6.4	2,234	100.0		158	475	506	294	216	133	387	65				

TC TLOGSTVB				Log Stock Table - MBF															
				Project: DEMO															
T03S R07W S34 TSALE												T03S R07W S34 TSALE							
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	2										
03S	07W	34	AREA_3	SALE	69.00			Date	5/8/2014										
								Time	3:15:52PM										
S Spp	So	Gr	Log	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	4	22	3	10.0	3	2.5			3									
RA	H	4	28	10	10.0	9	8.3			9									
RA	H	4	31	9	10.0	8	7.2			8									
RA	H	4	32	5	10.0	4	3.8			4									
RA	H	4	36	24	10.0	22	19.9			22									
RA	H	4	39	9	10.0	8	7.7			8									
RA	H	4	40	14	20.0	11	10.3				11								
RA	Totals			124	11.9	110	7.4			59	11	28	12						
AL	H	3	40	29	3.6	28	56.2					28							
AL	H	4	11																
AL	H	4	12	1		1	1.8			1									
AL	H	4	24	3		3	6.4			3									
AL	H	4	40	17		17	35.7			8	9								
AL	Totals			50	2.1	49	3.3			12	9	28							
WH	CO	2	32	11	5.0	11	100.0							11					
WH	Totals			11	5.0	11	.7							11					
Total All Species				1,614	7.9	1,487	100.0		116	236	184	208	140	125	281	122	76		

TC		TSTNDSUM														Stand Table Summary													
														Project							DEMO								
T02S R07W S34 TSALE														T02S R07W S34 TSALE															
Twp		Rge		Sec		Tract		Type				Acres		Plots		Sample Trees		Page:		1									
02S		07W		34		AREA_1		SALE				110.00						Date:		05/08/2014									
																		Time:		2:42:05PM									
S	T	Sample		FF	Ht	Av	Trees/	BA/	Logs	Average Log		Net	Net	Tons/	Cu.Ft.	Bd.Ft.	T o t a l s												
		DBH	Trees							16'	Tot						Acre	Acre	Acre	Net	Net	Cu.Ft.	Bd.Ft.	Tons	Cunits	MBF			
DF		9	1	90	54		3.458	1.53	3.46		7.8	30.0		.77	27	104	84	30	11										
DF		10	3	88	65		8.463	4.58	8.46		9.3	33.4		2.25	79	283	248	87	31										
DF		11	4	90	72		9.542	6.11	14.05		11.1	41.6		4.44	156	585	488	171	64										
DF		12	3	88	99		5.945	4.58	11.89		12.3	51.5		4.16	146	613	458	161	67										
DF		13	3	89	81		5.057	4.58	8.32		14.8	57.8		3.51	123	481	386	136	53										
DF		14	6	89	89		8.564	9.17	12.63		18.6	74.5		6.70	235	941	737	259	104										
DF		15	9	89	87		11.170	13.75	21.01		20.4	81.5		12.23	429	1,711	1,346	472	188										
DF		16	9	87	92		10.120	13.75	20.24		22.0	85.5		12.69	445	1,731	1,396	490	190										
DF		17	14	87	94		13.610	21.39	26.27		26.7	99.8		19.98	701	2,621	2,198	771	288										
DF		18	13	87	92		11.373	19.86	21.91		29.8	111.4		18.63	654	2,440	2,049	719	268										
DF		19	4	87	105		3.155	6.11	6.31		35.8	132.2		6.44	226	834	709	249	92										
DF		20	11	87	94		7.822	16.81	15.62		36.9	128.9		16.43	577	2,013	1,808	634	221										
DF		21	10	87	96		6.362	15.28	14.61		36.1	131.0		15.05	528	1,914	1,656	581	211										
DF		22	12	86	99		6.951	18.33	13.31		48.6	182.2		18.42	646	2,426	2,026	711	267										
DF		23	2	86	102		1.065	3.06	2.13		52.8	194.2		3.20	112	414	352	124	45										
DF		24	7	86	101		3.385	10.69	7.74		50.4	191.1		11.12	390	1,480	1,224	429	163										
DF		25	2	88	108		.896	3.06	2.24		54.3	228.0		3.47	122	511	381	134	56										
DF		27	2	81	107		.763	3.06	2.29		51.1	181.8		3.33	117	416	367	129	46										
DF		29	3	85	117		1.011	4.58	3.03		62.3	256.2		5.38	189	777	592	208	85										
DF		35	1	86	127		.227	1.53	.68		101.0	486.7		1.96	69	332	216	76	37										
DF		Totals		119	88	89	118.941	181.80	216.21		27.6	104.7		170.19	5,971	22,627	18,720	6,569	2,489										
RA		18	1	77	63		.915	1.53	.91		12.6	40.0		.32	12	37	35	13	4										
RA		22	1	84	32		.579	1.53	.58		39.6	100.0		.63	23	58	69	25	6										
RA		Totals		2	80	51	1.493	3.06	1.49		23.1	63.3		0.95	34	94	104	38	10										
OC		9	1	92	18		3.458	1.53																					
OC		11	1	89	54		2.194	1.53																					
OC		Totals		2	91	32	5.652	3.06																					
Totals				123	88	86	126.086	187.91	217.70		27.6	104.4		171.13	6006	22,721	18,825	6,606	2,499										

TC		TSTNDSUM														Stand Table Summary													
														Project							DEMO								
T02S R07W S34 TSALE														T02S R07W S34 TSALE															
Twp		Rge		Sec		Tract		Type				Acres		Plots		Sample Trees		Page:		1									
02S		07W		34		AREA_2		SALE				113.00						Date:		05/08/2014									
																		Time:		3:05:40PM									
S Spc	T	Sample		FF 16'	Av Ht Tot	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						Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF													
DF		8	2	89	58	9.964	3.48	9.96	5.9	30.0	1.66	58	299	188	66	34													
DF		10	2	87	98	6.377	3.48	12.75	7.5	37.5	2.73	96	478	308	108	54													
DF		11	1	86	71	2.635	1.74	2.64	14.8	60.0	1.11	39	158	126	44	18													
DF		12	6	86	79	13.286	10.43	22.14	12.1	45.0	7.62	267	996	861	302	113													
DF		13	3	83	94	5.660	5.22	11.32	14.7	53.3	4.75	167	604	537	188	68													
DF		14	9	84	96	14.642	15.65	27.66	17.4	65.9	13.70	481	1,822	1,549	543	206													
DF		15	5	83	109	7.086	8.70	14.17	22.3	87.0	9.00	316	1,233	1,017	357	139													
DF		16	3	82	113	3.737	5.22	7.47	25.8	96.7	5.49	193	722	621	218	82													
DF		18	2	80	120	1.968	3.48	5.90	22.6	83.3	3.80	133	492	429	151	56													
DF		19	1	76	112	.883	1.74	1.77	37.0	120.0	1.86	65	212	210	74	24													
DF		20	1	73	125	.797	1.74	2.39	27.6	90.0	1.88	66	215	213	75	24													
DF		22	1	83	70	.659	1.74	1.32	36.1	110.0	1.35	48	145	153	54	16													
DF		24	3	76	129	1.661	5.22	4.43	48.0	168.7	6.06	212	747	684	240	84													
DF		25	3	76	140	1.531	5.22	4.59	50.0	188.9	6.55	230	867	740	260	98													
DF		26	3	78	135	1.415	5.22	4.25	54.3	212.2	6.57	230	901	742	260	102													
DF		27	1	73	143	.437	1.74	1.31	59.5	216.7	2.23	78	284	252	88	32													
DF		28	6	74	140	2.440	10.43	7.32	62.3	230.6	12.99	456	1,688	1,468	515	191													
DF		29	1	71	141	.379	1.74	1.14	68.2	236.7	2.21	78	269	250	88	30													
DF		30	5	73	136	1.771	8.70	4.96	73.9	260.7	10.45	367	1,293	1,180	414	146													
DF		32	4	75	135	1.246	6.96	3.74	79.7	296.7	8.49	298	1,109	959	337	125													
DF		33	1	68	132	.293	1.74	.88	81.9	250.0	2.05	72	220	232	81	25													
DF		34	1	74	137	.276	1.74	.83	92.3	350.0	2.18	76	290	246	86	33													
DF		36	1	72	130	.246	1.74	.74	96.1	350.0	2.02	71	258	228	80	29													
DF		Totals	65	83	96	79.390	113.04	153.68	26.7	99.6	116.75	4,096	15,303	13,193	4,629	1,729													
RA		7	3	95	12	19.987	5.34																						
RA		9	2	82	17	8.061	3.56																						
RA		10	1	88	84	3.265	1.78	3.26	14.8	60.0	1.33	48	196	150	55	22													
RA		11	3	82	85	8.094	5.34	13.49	10.2	40.0	3.78	137	540	427	155	61													
RA		12	2	83	78	4.534	3.56	6.80	13.0	43.3	2.44	89	295	275	100	33													
RA		13	1	80	94	1.932	1.78	3.86	16.2	55.0	1.72	63	212	195	71	24													
RA		14	4	80	77	6.662	7.12	9.99	20.1	60.0	5.53	201	600	625	227	68													
RA		15	7	81	69	10.156	12.46	14.51	23.4	70.0	9.36	340	1,016	1,057	384	115													
RA		16	7	76	68	8.927	12.46	12.75	25.8	65.0	9.03	328	829	1,021	371	94													
RA		17	2	75	83	2.259	3.56	4.52	19.7	67.5	2.45	89	305	277	101	34													
RA		18	4	77	89	4.030	7.12	8.06	29.7	87.5	6.58	239	705	743	270	80													
RA		19	3	72	76	2.713	5.34	4.52	25.5	72.0	3.17	115	326	359	130	37													
RA		20	2	80	81	1.632	3.56	3.26	36.2	110.0	3.25	118	359	367	133	41													
RA		21	1	81	60	.740	1.78	1.48	29.5	90.0	1.20	44	133	136	49	15													
RA		Totals	42	84	56	82.992	74.78	86.52	21.0	63.7	49.85	1,813	5,515	5,633	2,048	623													
BM		12	1	85	35	2.214	1.74	2.21	11.1	30.0	.65	25	66	74	28	8													
BM		14	2	83	42	3.254	3.48	3.25	19.3	50.0	1.66	63	163	188	71	18													
BM		15	1	81	41	1.417	1.74	1.42	22.4	50.0	.84	32	71	95	36	8													
BM		18	1	78	23	.984	1.74																						
BM		Totals	5	83	37	7.869	8.70	6.89	17.3	43.6	3.16	119	300	357	135	34													
Totals		112		83	74	170.252	196.52	247.08	24.4	85.5	169.76	6028	21,118	19,183	6,812	2,386													

TC		TSTNDSUM															Stand Table Summary														
																	Project					DEMO									
T03S R07W S34 TSALE																	T03S R07W S34 TSALE														
Twp		Rge		Sec		Tract		Type					Acres		Plots		Sample Trees			Page:		1									
03S		07W		34		AREA_3		SALE					69.00							Date:		05/08/2014									
																	Time:		3:17:50PM												
S		Av							Average Log		Net		Net		Net		Totals														
T		Sample		FF	Ht	Trees/	BA/	Logs	Net	Net	Tons/	Cu.Ft.	Bd.Ft.	Tons	Cunits	MBF															
Sp	T	DBH	Trees	16'	Tot	Acre	Acre	Acre	Cu.Ft.	Bd.Ft.	Acre	Acre	Acre																		
DL		10	1	86	89	3.851	2.10	7.70	6.2	30.0	1.31	48	231	90	33	16															
DL		11	1	86	95	3.493	2.10	6.99	8.4	35.0	1.62	59	245	112	41	17															
DL		12	1	84	90	2.675	2.10	5.35	12.2	45.0	1.80	65	241	124	45	17															
DL		13	3	86	81	7.024	6.30	14.05	11.9	41.8	4.59	167	587	317	115	40															
DL		14	2	85	85	3.930	4.20	7.86	15.2	57.5	3.28	119	452	227	82	31															
DL		15	1	86	104	1.712	2.10	3.42	20.3	80.0	1.91	70	274	132	48	19															
DL		16	2	87	97	3.206	4.20	6.41	23.0	87.5	4.06	148	561	280	102	39															
DL		17	2	86	93	2.620	4.20	5.24	26.8	97.4	3.86	140	510	266	97	35															
DL		18	4	86	101	4.785	8.40	9.57	30.2	114.8	7.95	289	1,098	549	200	76															
DL		19	2	87	116	2.112	4.20	5.29	31.3	122.1	4.55	166	646	314	114	45															
DL		20	3	85	118	2.889	6.30	7.70	32.4	121.2	6.87	250	934	474	172	64															
DL		21	2	85	119	1.747	4.20	4.37	37.7	140.0	4.53	165	611	313	114	42															
DL		23	1	86	95	.709	2.10	1.42	48.4	155.0	2.04	69	220	141	47	15															
DL		24	4	86	120	2.703	8.40	6.74	47.1	201.4	8.73	318	1,358	603	219	94															
DL		25	3	86	114	1.849	6.30	4.93	48.6	206.2	6.59	240	1,017	454	165	70															
DL		26	3	86	113	1.709	6.30	4.56	55.1	225.0	6.91	251	1,026	476	173	71															
DL		27	3	86	120	1.625	6.30	4.88	52.8	226.6	7.07	257	1,105	488	177	76															
DL		29	4	86	116	1.848	8.40	4.61	69.5	284.9	9.00	320	1,314	621	221	91															
DL		30	1	86	141	.428	2.10	1.28	81.4	396.7	2.87	104	509	198	72	35															
DL		33	2	85	115	.703	4.20	1.76	91.9	397.7	4.59	161	698	317	111	48															
DL		36	2	85	130	.594	4.20	1.78	108.9	528.3	5.34	194	942	368	134	65															
DL		37	1	85	138	.278	2.10	.83	96.0	400.0	2.30	80	334	159	55	23															
DL		38	1	86	134	.267	2.10	.80	97.4	400.0	2.34	78	320	161	54	22															
DL		39	1	81	126	.253	2.10	.76	117.3	573.3	2.45	89	436	169	62	30															
DL		Totals	50	86	101	53.010	105.03	118.31	32.5	132.4	106.57	3,846	15,668	7,353	2,654	1,081															
DF		9	1	85	76	5.207	2.10	5.21	8.7	40.0	1.30	46	208	89	31	14															
DF		11	4	86	84	12.619	8.40	22.17	10.0	42.8	6.30	221	948	435	153	65															
DF		12	1	85	69	2.814	2.10	2.81	14.8	40.0	1.19	42	113	82	29	8															
DF		13	5	86	93	11.293	10.50	22.59	13.9	55.1	8.95	314	1,244	618	217	86															
DF		14	1	84	114	2.113	2.10	4.23	15.2	60.0	1.83	64	254	127	44	17															
DF		15	1	86	97	1.832	2.10	3.66	19.4	70.0	2.03	71	256	140	49	18															
DF		16	1	88	103	1.432	2.10	2.86	24.5	90.0	2.00	70	258	138	48	18															
DF		17	1	83	104	1.415	2.10																								
DF		25	1	86	132	.616	2.10	1.85	48.5	210.0	2.56	90	388	176	62	27															
DF		27	1	86	121	.528	2.10	1.06	76.6	290.0	2.31	81	306	159	56	21															
DF		31	1	87	149	.391	2.10	1.17	82.5	386.7	2.88	97	453	199	67	31															
DF		Totals	18	86	90	40.260	37.81	67.61	16.2	65.5	31.36	1,096	4,429	2,163	756	306															
RA		10	1	84	74	3.702	2.10	3.70	8.9	30.0	.91	33	111	63	23	8															
RA		11	2	77	68	6.366	4.20	6.37	16.0	50.0	2.79	102	318	193	70	22															
RA		12	1	73	72	2.675	2.10	2.67	20.0	60.0	1.48	53	160	102	37	11															
RA		13	2	76	84	4.558	4.20	6.84	18.0	50.0	3.37	123	342	232	85	24															
RA		15	1	79	38	1.712	2.10	1.71	11.7	30.0	.55	20	51	38	14	4															
RA		16	1	85	86	1.468	2.10	2.94	23.5	85.0	1.90	69	249	131	48	17															
RA		17	1	87	96	1.333	2.10	2.67	29.2	115.0	2.14	78	307	148	54	21															
RA		18	1	88	77	1.189	2.10	2.38	27.3	95.0	1.78	65	226	123	45	16															
RA		Totals	10	79	74	23.001	21.01	29.27	18.5	60.3	14.92	543	1,765	1,030	375	122															
AL		14	1	67	80	1.965	2.10	1.97	31.9	60.0	2.00	63	118	138	43	8															
AL		15	1	82	47	1.782	2.10																								
AL		16	2	79	84	3.009	4.20	6.02	21.6	65.0	4.15	130	391	286	90	27															
AL		18	1	86	69	1.258	2.10	2.52	23.4	80.0	1.89	59	201	130	41	14															

TC TSTNDSUM				Stand Table Summary												
				Project			DEMO									
T03S R07W S34 TSALE												T03S R07W S34 TSALE				
Twp	Rge	Sec	Tract	Type			Acres	Plots	Sample Trees			Page:	2			
03S	07W	34	AREA_3	SALE			69.00					Date:	05/08/2014			
												Time:	3:17:50PM			
S Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	T o t a l s			
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.		Net Bd.Ft.	Cu.Ft.				Bd.Ft.
														Tons	Cunits	MBF
AL		Totals	5	78	72	8.014	10.50	10.50	23.9	67.7	8.04	251	710	555	173	49
WH		26	1	84	71	.592	2.10	.59	69.9	280.0	1.32	41	166	91	29	11
WH		Totals	1	84	71	.592	2.10	.59	69.9	280.0	1.32	41	166	91	29	11
Totals			84	84	90	124.877	176.45	226.27	25.5	100.5	162.22	5778	22,738	11,193	3,987	1,569



"STEWARDSHIP IN FORESTRY"

Mill Bound

Volume Summary

Area 1-Modified Clearcut				
110 acres				
SPECIES	Cruised Net	Cruised Net	Hidden	Net Sale
	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	22.6	2489	5%	2365
Alder	0.1	10	10%	9
TOTAL	22.7	2499		2374

Area 2-Modified Clearcut				
113 acres				
SPECIES	Cruised Net	Cruised Net	Hidden	Net Sale
	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	15.3	1729	5%	1643
Alder	5.5	623	10%	561
Big Leaf Maple	0.3	34	10%	31
TOTAL	21.1	2386		2235

Area 3-Partial Cut				
69 acres				
SPECIES	Cruised Net	Cruised Net	Hidden	Net Sale
	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	4.4	306	5%	290
Hemlock	0.2	11	5%	11
Alder	1.8	122	10%	110
TOTAL	6.4	439		411

TOTAL SALE VOLUME			292	acres
SPECIES	Cruised Net (MBF)		Net Sale (MBF)	
Douglas-fir	4524		4298	
Hemlock	11		11	
Alder	755		680	
Big Leaf Maple	34		31	
TOTAL	5324		5020	

