



"STAND FOR THE FOREST"

Timber Sale Appraisal The Gilmore

Sale TL-341-2016-35-

District: Tillamook

Date: June 02, 2015

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$350,255.26	\$31,479.80	\$381,735.06
		Project Work:	(\$130,420.00)
		Advertised Value:	\$251,315.06



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Timber Description

Location: Portions of Sections 21, 22, 23, 26, 27, and 28, T2N, R7W, W.M., Tillamook County, Oregon.

Stand Stocking: 60%

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

Volume by Grade	2S	3S	4S	8" - 9"	10" - 11"	6" - 7"	Total
Douglas - Fir	460	923	414	0	0	0	1,797
Western Hemlock / Fir	28	28	54	0	0	0	110
Alder (Red)	0	0	0	46	29	145	220
Total	488	951	468	46	29	145	2,127

Comments: Pond Values Used: 1st Quarter Calendar Year 2015.

Western redcedar and Other Cedars Stumpage Price = Pond Value minus Logging Cost:
 $\$800/\text{MBF} = \$1,160/\text{MBF} - \$360/\text{MBF}$

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

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

FUEL COST ALLOWANCE = $\$3.00/\text{Gallon}$

HAULING COST ALLOWANCE

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

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

Brand and Paint: $\$2/\text{MBF} \times 2,127 \text{ MBF} = \$4,254$

TOTAL Other Costs (with Profit & Risk to be added) = $\$4,254$

Other Costs (No Profit & Risk added):

Machine Cleaning: $\$1,000/\text{machine} \times 3 = \$3,000$

Flaggers on West Fork North Fork Wilson Road: not anticipated

TOTAL Other Costs (No Profit & Risk added) = $\$3,000$

ROAD MAINTENANCE:

Spot Rocking:

Gilmore Road: $2.6 \text{ miles} \times 30 \text{ cy/mmmbf/mile} \times 2.1 \text{ MMBF} \times \$30/\text{cy}$ (purchased rock)/ $2,127 \text{ MBF} = \$2.31/\text{MBF}$

North Fork and West Fork Roads: $2.4 \text{ miles} \times 30 \text{ cy/mmmbf/mile} \times 2.1 \text{ MMBF} \times \$6/\text{cy}$ (Morris Stockpile)/ $2,127 \text{ MBF} = 0.43/\text{MBF}$

North Fork Road: $1.8 \text{ miles} \times 30 \text{ cy/mmmbf/mile} \times 2.1 \text{ MMBF} \times \$12/\text{cy}$ (Jordan Stockpile)/ $2,127 \text{ MBF} = 0.64/\text{MBF}$

Total Spot Rocking: $3.38/\text{MBF}$

Grading:

Interim Grading: $\$250/\text{mile} \times 6.8 \text{ miles} \times 1 \text{ time}/ 2,127 \text{ MBF} = \$0.80/\text{MBF}$

Final Maintenance Grading: $\$500 \times 6.8 \text{ miles}/2,127 \text{ MBF} = \$1.60/\text{MBF}$

Total Grading: $\$2.40/\text{MBF}$

Compaction:

North Fork Road from bridge to Jones Creek Campground entrance: $0.2 \text{ miles} \times \$950/\text{mile}/ 2,127 \text{ MBF} = \$0.09/\text{MBF}$

Gilmore Road: $2.0 \text{ miles} \times \$950/\text{mile}/ 2,127 \text{ MBF} = \$0.89/\text{MBF}$

Total Compaction: $\$0.98/\text{MBF}$

Total Road Maintenance: $\$6.76/\text{MBF}$



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Logging Conditions

Combination#:	1	Douglas - Fir	86.00%
Logging System:	Cable: Medium Tower >40 - <70	Process:	Stroke Delimber
yarding distance:	Medium (800 ft)	downhill yarding:	No
tree size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
loads / day:	7.6	bd. ft / load:	3700
cost / mbf:	\$213.37		
machines:	Log Loader (A) Stroke Delimber (A) Tower Yarder (Medium)		
Combination#:	2	Western Hemlock / Fir	86.00%
Logging System:	Cable: Medium Tower >40 - <70	Process:	Stroke Delimber
yarding distance:	Medium (800 ft)	downhill yarding:	No
tree size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
loads / day:	9	bd. ft / load:	3700
cost / mbf:	\$180.18		
machines:	Log Loader (A) Stroke Delimber (A) Tower Yarder (Medium)		
Combination#:	3	Alder (Red)	86.00%
Logging System:	Cable: Medium Tower >40 - <70	Process:	Stroke Delimber
yarding distance:	Medium (800 ft)	downhill yarding:	No
tree size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
loads / day:	9.8	bd. ft / load:	3700
cost / mbf:	\$165.47		
machines:	Log Loader (A) Stroke Delimber (A) Tower Yarder (Medium)		
Combination#:	4	Douglas - Fir Western Hemlock / Fir Alder (Red)	14.00% 14.00% 14.00%
Logging System:	Shovel	Process:	Stroke Delimber
yarding distance:	Short (400 ft)	downhill yarding:	No
tree size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
loads / day:	13	bd. ft / load:	3700
cost / mbf:	\$65.95		
machines:	Stroke Delimber (B)		



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Logging Costs

Operating Seasons: 1.00	Profit Risk: 20%
Project Costs: \$130,420.00	Other Costs (P/R): \$4,254.00
Slash Disposal: \$0.00	Other Costs: \$3,000.00

Miles of Road

Road Maintenance: \$6.76

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	4.2
Western Hemlock / Fir	\$0.00	2.0	4.0
Alder (Red)	\$0.00	2.0	3.2



Timber Sale Appraisal The Gilmore

Sale TL-341-2016-35-

District: Tillamook

Date: June 02, 2015

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$192.73	\$7.10	\$2.06	\$97.50	\$2.00	\$60.28	\$0.00	\$5.00	\$1.41	\$368.08
Western Hemlock / Fir									
\$164.19	\$7.10	\$2.06	\$102.38	\$2.00	\$55.55	\$0.00	\$5.00	\$1.41	\$339.69
Alder (Red)									
\$151.54	\$7.44	\$2.06	\$134.06	\$2.00	\$59.42	\$0.00	\$5.00	\$1.41	\$362.93

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$555.76	\$187.68	\$0.00
Western Hemlock / Fir	\$0.00	\$457.82	\$118.13	\$0.00
Alder (Red)	\$0.00	\$506.02	\$143.09	\$0.00



"SUSTAINABLE FORESTRY"

Timber Sale Appraisal The Gilmore

Sale TL-341-2016-35-

District: Tillamook

Date: June 02, 2015

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	1,797	\$187.68	\$337,260.96
Western Hemlock / Fir	110	\$118.13	\$12,994.30
Alder (Red)	220	\$143.09	\$31,479.80

Gross Timber Sale Value

Recovery: \$381,735.06

Prepared By: David Wells

Phone: 503-842-2545



"STEWARDSHIP IN FORESTRY"

PROJECT SUMMARY SHEET

Sale: The Gilmore

CONSTRUCTION

Point	K to L	5+90	stations =	\$8,219.80
SUBTOTAL CONSTRUCTION				\$8,219.80

IMPROVEMENT

Point	A to B	10+15	stations =	\$10,261.51
Point	C to D	2+25	stations =	\$3,799.48
Point	E to F	2+00	stations =	\$5,429.80
Point	G to H	11+10	stations =	\$12,320.43
Point	I to J	12+00	stations =	\$29,946.66
Point	K to L	19+25	stations =	\$15,380.51
Point	M to N	106+25	stations =	\$8,159.38
Point	O to P	51+60	stations =	\$31,648.92
SUBTOTAL IMPROVEMENT				\$116,946.69

MOVE IN	\$5,253.51
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GRAND TOTAL	\$130,420.00
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SUMMARY OF CONSTRUCTION COST

Sale: The Gilmore				Road: A to B				
<u>Construction -</u>	0+00	stations	<u>Improvement -</u>	10+15	stations	<u>Reconstruction -</u>	0+00	stations
	0.00	miles		0.19	miles		0.00	miles
IMPROVEMENT: CLEARING AND GRUBBING -								
Scattering			0.470	acres	@	\$980.00	per acre =	\$460.60
							TOTAL CLEARING AND GRUBBING	\$460.60
IMPROVEMENT: EXCAVATION -								
Road Earthwork			10.15	sta.	@	\$80.00	per sta. =	\$812.00
							TOTAL EXCAVATION	\$812.00
CULVERTS - MATERIALS & INSTALLATION								
<u>Culverts</u>								
						30	LF of 24"	\$810.00
								\$810.00
<u>Culvert Stakes & Markers</u>								
1 markers						\$8.00		
						\$8.00		
						TOTAL CULVERTS	\$818.00	
ROCK								
0+00 to	10+15	380	cy. of	Crushed	@	\$18.42	per c.y.=	\$6,999.60
Culvert Backfill	5+40	20	cy. of	Crushed	@	\$17.47	per c.y.=	\$349.40
Junction Rock	0+00	20	cy. of	Crushed	@	\$18.42	per c.y.=	\$368.40
							TOTAL ROCK	\$7,717.40
SPECIAL PROJECTS								
Grade and shape road -			10.15	stations	@	\$15.50	per station	\$157.33
Roll subgrade w/ vibratory roller prior to rocking -			10.15	stations	@	\$13.20	per station	\$133.98
Grass seed and fertilize -			0.23	acres	@	\$220.00	per acre	\$50.60
Mulching -			0.186	acres	@	\$600.00	per acre	\$111.60
							TOTAL SPECIAL PROJECTS	\$453.51
							GRAND TOTAL	\$10,261.51

SUMMARY OF CONSTRUCTION COST

Sale:	<u>The Gilmore</u>				Road:	<u>C to D</u>				
<u>Construction -</u>		<u>0+00</u>	stations	<u>Improvement -</u>		<u>2+25</u>	stations	<u>Reconstruction -</u>		stations
		0.00	miles			0.04	miles			0.00 miles
<u>CONSTRUCTION:</u> CLEARING, GRUBBING, SCATTERING, EXCAVATION, COMPACTION, LOADING, END-HAULING AND SPREADING/COMPACTING AT WASTE AREA - <u>Avg. Dist.</u>										
<u>IMPROVEMENT:</u> CLEARING AND GRUBBING -										
Scattering				0.100	acres @	\$980.00	per acre =	\$98.00		
						TOTAL CLEARING AND GRUBBING		\$98.00		
<u>IMPROVEMENT:</u> EXCAVATION -										
Road Earthwork				2.25	sta. @	\$80.00	per sta. =	\$180.00		
						TOTAL EXCAVATION		\$180.00		
ROCK										
0+00 to		2+25	100	cy. of	Crushed	@	\$18.03	per c.y.=	\$1,803.00	
Landing Rock		1+90	70	cy. of	Crushed	@	\$18.03	per c.y.=	\$1,262.10	
Junction Rock		0+00	20	cy. of	Crushed	@	\$18.03	per c.y.=	\$360.60	
						TOTAL ROCK		\$3,425.70		
SPECIAL PROJECTS										
Grade and shape road -				2.25	stations @	\$15.50	per station	\$34.88		
Roll subgrade w/ vibratory roller prior to rocking -				2.25	stations @	\$13.20	per station	\$29.70		
Mulching -				0.052	acres @	\$600.00	per acre	\$31.20		
						TOTAL SPECIAL PROJECTS		\$95.78		
						GRAND TOTAL		\$3,799.48		

SUMMARY OF CONSTRUCTION COST

Sale:

The Gilmore

Road:

G to H

Construction -	0+00	stations	Improvement -	11+10	stations	Reconstruction -	0+00	stations
	0.00	miles		0.21	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

Widening	0.076	acres	@	\$660.00	per acre =	\$50.16
Scattering	0.510	acres	@	\$980.00	per acre =	\$499.80
TOTAL CLEARING AND GRUBBING						\$549.96

IMPROVEMENT: EXCAVATION -

Road Earthwork				11.10	sta. @	\$50.00	per sta. =	\$555.00	
Widening	6+70	to	8+90	398	cy. @	\$1.40	per c.y.=	\$557.20	
								TOTAL EXCAVATION	\$1,112.20

IMPROVEMENT: ENDHAUL -

Widening	6+70	to	8+90	398	cy. @	\$2.55	per c.y.=	\$1,014.90	
Spread & compact				398	cy. @	\$0.25	per c.y.=	\$99.50	
							TOTAL ENDHAUL		\$1,114.40

ROCK

0+00 to	11+10	410	cy. of	Crushed	@	\$17.52 per c.y.=	\$7,183.20	
Landing Rock	10+80	70	cy. of	Crushed	@	\$17.55 per c.y.=	\$1,228.50	
Junction Rock	0+00	20	cy. of	Crushed	@	\$17.55 per c.y.=	\$351.00	
							TOTAL ROCK	\$8,762.70

SPECIAL PROJECTS

Construct waste areas near Point A-	3.00	hours @	\$130.00	per hour	\$390.00
Grade and shape road -	11.10	stations @	\$15.50	per station	\$172.05
Roll subgrade w/ vibratory roller prior to rocking -	11.10	stations @	\$13.20	per station	\$146.52
Grass seed and fertilize -	0.33	acres @	\$220.00	per acre	\$72.60
					\$781.17

GRAND TOTAL

\$12,320.43

SUMMARY OF CONSTRUCTION COST

Sale: The Gilmore

Road: I to J

Construction -	0+00	stations	Improvement -	12+00	stations	Reconstruction -	0+00	stations
	0.00	miles		0.23	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

Side cast	0.129	acres	@	\$660.00	per acre =	\$85.14	
Widening	0.342	acres	@	\$660.00	per acre =	\$225.72	
Scattering	0.550	acres	@	\$980.00	per acre =	\$539.00	
TOTAL CLEARING AND GRUBBING							\$849.86

IMPROVEMENT: EXCAVATION -

Road Earthwork	12.00	sta.	@	\$150.00	per sta. =	\$1,800.00	
Pullback	543	cy.	@	\$1.40	per c.y. =	\$760.20	
Widening	4161	cy.	@	\$2.50	per c.y. =	\$10,402.50	
TOTAL EXCAVATION							\$12,962.70

IMPROVEMENT: ENDHAUL -

Pullback	0+00	to	9+40	543	cy.	@	\$3.05	per c.y. =	\$1,656.15	
Widening	0+00	to	9+10	2630	cy.	@	\$3.05	per c.y. =	\$8,021.50	
Widening	9+10	to	10+00	1049	cy.	@	\$3.11	per c.y. =	\$3,262.39	
Widening	10+00	to	12+00	482	cy.	@	\$3.13	per c.y. =	\$1,508.66	
Spread & compact				4704	cy.	@	\$0.25	per c.y. =	\$1,176.00	
TOTAL ENDHAUL										\$15,624.70

SPECIAL PROJECTS

Grade and shape road -	12.00	stations	@	\$15.50	per station	\$186.00	
Roll subgrade w/ vibratory roller prior to rocking -	12.00	stations	@	\$13.20	per station	\$158.40	
Grass seed and fertilize -	0.75	acres	@	\$220.00	per acre	\$165.00	
TOTAL SPECIAL PROJECTS							\$509.40

GRAND TOTAL **\$29,946.66**

SUMMARY OF CONSTRUCTION COST

Sale:		The Gilmore				Road:		K to L			
Construction -		5+90	stations	Improvement -		19+25	stations	Reconstruction -		0+00	stations
		0.11	miles			0.36	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				
19+25			25+15	55%		Outslope	\$689	=		\$4,065.10	
										TOTAL	\$4,065.10
IMPROVEMENT: CLEARING AND GRUBBING -											
Scattering						0.880	acres @	\$980.00	per acre =	\$862.40	
										TOTAL CLEARING AND GRUBBING	\$862.40
IMPROVEMENT: EXCAVATION -											
Road Earthwork						19.25	sta. @	\$50.00	per sta. =	\$962.50	
										TOTAL EXCAVATION	\$962.50
ROCK											
0+00 to		25+15	900	cy. of	Crushed	@	\$17.35	per c.y.=	\$15,615.00		
Landing Rock		24+85	70	cy. of	Crushed	@	\$17.39	per c.y.=	\$1,217.30		
										TOTAL ROCK	\$16,832.30
SPECIAL PROJECTS											
Grade and shape road -						25.15	stations @	\$15.50	per station	\$389.83	
Roll subgrade w/ vibratory roller prior to rocking -						25.15	stations @	\$13.20	per station	\$331.98	
Grass seed and fertilize -						0.71	acres @	\$220.00	per acre	\$156.20	
										TOTAL SPECIAL PROJECTS	\$878.01
										GRAND TOTAL	\$23,600.31

SUMMARY OF CONSTRUCTION COST

Sale:		<u>The Gilmore</u>		Road:		<u>M to N</u>	
<u>Construction -</u>		<u>0+00</u>	stations	<u>Improvement -</u>		<u>106+25</u>	stations
		0.00	miles			2.01	miles
<u>Reconstruction -</u>		<u>0+00</u>	stations				miles
		0.00	miles				
ROCK							
Spot Rocking	Directed By St:	1,000	cy. of	Jaw-Run	@	\$5.11 per c.y.=	\$5,110.00
							TOTAL ROCK
							\$5,110.00
SPECIAL PROJECTS							
Grade and shape road -				106.25	stations @	\$15.50 per station	\$1,646.88
Roll subgrade w/ vibratory roller prior to rocking -				106.25	stations @	\$13.20 per station	\$1,402.50
							TOTAL SPECIAL PROJECTS
							\$3,049.38
GRAND TOTAL							\$8,159.38

SUMMARY OF CONSTRUCTION COST

Sale:		<u>The Gilmore</u>		Road:		<u>O to P</u>			
<u>Construction -</u>	0+00 0.00	stations miles	<u>Improvement -</u>	51+60 0.98	stations miles	<u>Reconstruction -</u>	0+00 0.00	stations miles	
ROCK									
0+00	to	51+60	2,400	cy. of	Crushed	@	\$12.57 per c.y.=	\$30,168.00	
								TOTAL ROCK	\$30,168.00
SPECIAL PROJECTS									
Grade and shape road -				51.60	stations @	\$15.50	per station	\$799.80	
Roll subgrade w/ vibratory roller prior to rocking -				51.60	stations @	\$13.20	per station	\$681.12	
								TOTAL SPECIAL PROJECTS	\$1,480.92
								GRAND TOTAL	\$31,648.92

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Stockpile	Location:	NE1/4 NW1/4 Sec. 33, T2N, R7W, W.M.
Sale:	The Gilmore	Road:	1000 c.y.
Swell:	1.00		c.y.
Shrinkage	1.00	Total Truck Loads:	1000 c.y.

Load Dump Truck: \$0.70 /cu.yd. x 1000 cu.yds. = \$700.00

Subtotal \$700.00

Within Area Move Loader 1 @ \$200.00 = \$200.00

Subtotal \$200.00

Base Cost= \$0.90 Per Cu.Yd.

TOTAL PRODUCTION COSTS \$900.00

Road Segment	Haul Cost \$/cu.yd.	Proc Cost \$/cu.yd.	Base Cost. \$/cu.yd.	Cost \$/cu.yd.	Number Cu. Yds	ROCK COST
M to N Spot Rocking (Jaw-Run)	1.76	2.45	0.90	5.11	1000	\$5,110.00
				Total C.Y.	1000	Sub Total
						TOTAL ROCKING COSTS \$5,110.00

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Crushed	Location:	NE1/4 SE 1/4 Sec. 12, T2N, R8W, W.M.
Sale:	The Gilmore	Road:	4670 c.y.
Swell:	1.40		
Shrinkage	1.16	Total Truck Loads:	4670 c.y.
Drill Pct.:	90%	In Place Total:	3336 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

Drill & Shoot:	\$2.50 /cu.yd.	x	3002 cu.yds.	=	\$7,505.00
Rip Rock:	\$1.90 /cu.yd.	x	334 cu.yds.	=	\$634.60
Push Rock:	\$0.70 /cu.yd.	x	4670 cu.yds.	=	\$3,269.00
Load Crusher:	\$0.70 /cu.yd.	x	4670 cu.yds.	=	\$3,269.00
Crush Rock:	\$2.50 /cu.yd.	x	4670 cu.yds.	=	\$11,675.00
Load Dump Truck:	\$0.70 /cu.yd.	x	4670 cu.yds.	=	\$3,269.00

Subtotal \$33,621.60

Move In/Set-up Crusher					\$2,000.00
Move In and set up Drill and Compressor	1	@	\$603.75	=	\$603.75
Move in Roller and Compactor	1	@	\$603.75	=	\$603.75
Move in Grader	1	@	\$226.30	=	\$226.30
Move in D-8	1	@	\$969.61	=	\$969.61
Move in Excavator	1	@	\$1,073.44	=	\$1,073.44
Move in Trucks	3	@	\$199.50	=	\$598.50
Move in Water Truck	1	@	\$234.50	=	\$234.50
Change Gradation					

Subtotal \$6,309.85

Base Cost=	\$8.55	Per Cu.Yd.	TOTAL PRODUCTION COSTS	\$39,931.45
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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 1015 (Crushed)	7.42	2.45	8.55	18.42	380	\$6,999.60
A to B Culvert Backfill (Crushed)	7.42	1.50	8.55	17.47	20	\$349.40
A to B Junction Rock (Crushed)	7.42	2.45	8.55	18.42	20	\$368.40
C to D 0 225 (Crushed)	7.03	2.45	8.55	18.03	100	\$1,803.00
C to D Landing Rock (Crushed)	7.03	2.45	8.55	18.03	70	\$1,262.10
C to D Junction Rock (Crushed)	7.03	2.45	8.55	18.03	20	\$360.60
E to F 0 200 (Crushed)	6.56	2.45	8.55	17.56	100	\$1,756.00
E to F Landing Rock (Crushed)	6.56	2.45	8.55	17.56	70	\$1,229.20
E to F Junction Rock (Crushed)	6.56	2.45	8.55	17.56	20	\$351.20
G to H 0 1110 (Crushed)	6.52	2.45	8.55	17.52	410	\$7,183.20
G to H Landing Rock (Crushed)	6.55	2.45	8.55	17.55	70	\$1,228.50
G to H Junction Rock (Crushed)	6.55	2.45	8.55	17.55	20	\$351.00
K to L 0 2515 (Crushed)	6.35	2.45	8.55	17.35	900	\$15,615.00
K to L Landing Rock (Crushed)	6.39	2.45	8.55	17.39	70	\$1,217.30
O to P 0 5160 (Crushed)	1.57	2.45	8.55	12.57	2400	\$30,168.00
				Total C.Y.	4670	Sub Total
						\$70,242.50

TOTAL ROCKING COSTS \$70,242.50

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

Sale: **The Gilmore**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
45.0	Pavement	30
8.0	Main Lines	7
6.0	Steep Grades	2

								Within	
No.	EQUIPMENT DESCRIPTION	Move in Cost	Pilot Cars	Within Area Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Area Cost	Total Cost
1	Drill & Compressor	\$757.03		\$46.00	0.00	0.00	0	\$0.00	\$757.03
1	Excavators (Small)	\$603.75		\$22.00	0.00	4.00	4	\$88.00	\$691.75
1	Excavators (Large)	\$1,107.94	1	\$44.80	0.00	4.00	4	\$179.20	\$1,287.14
1	Tractor (D8)	\$1,038.61	2	\$15.10	0.00	4.00	4	\$60.40	\$1,099.01
2	Dump Truck (10 cy +)	\$499.25		\$2.85	0.00	4.00	4	\$22.80	\$522.05
1	Dump Truck (Off Hiway)	\$877.53	1	\$4.75	0.00	4.00	4	\$19.00	\$896.53
				TOTAL MOVE-IN COSTS:					\$5,253.51



OREGON DEPARTMENT OF FORESTRY CRUISE REPORT

The Gilmore

1. Type of Sale

Partial Cut, Recovery

2. Legal Description

Portions of Sections 21, 22, 23, 26, 27, and 28, T2N, R7W, W.M. Tillamook County, Oregon

3. Sale Acreage

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

	<u>ACRES</u>	
	<u>Gross</u>	<u>Net</u>
Area 1 (Partial Cut)	812	359

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

The timber sale area was cruised with variable plot sampling. Four timber types were identified during the planning process and the cruise was located (different azimuths) within each type to provide the uniform coverage. The four timber types received the same plot and line spacing of 350' and 700' respectively. All conifers 8" DBH and greater containing 20 board feet and all hardwoods 10" DBH and greater containing 30 board feet were recorded. Species, DBH (to the nearest inch), merchantable bole length (to the nearest foot), form factor, and defect were recorded for all measured trees. Merchantable heights were recorded to 6" and 7" outside bark for conifers and hardwoods respectively.

B. Plot size

A BAF of 27.78 was used. Point of tree observation was 04'.

C. Grading System

All trees were graded according to Columbia River Log Scaling and Grading Rules. Log lengths favored 40' lengths.

5. Computation Procedure

Plot data was entered into SuperAce for computation of basal area, advertised volume, volume summary, log stock table, and stand table for each species and type. Take and leave trees were determined on a plot by plot basis to meet the Stand Density Index target.

Net sale acreage was used for volume calculation. Net acreage is the gross acreage (the area within the sale boundary) minus the non-required thinning areas, buffer areas, and roads.

Cruise Statistics (Board Foot Volumes)			
Area	Number of Plots	SE (%)	CV (%)
1	63	5.5	43.9

6. Hidden Defect and Breakage

A reduction for hidden defect and breakage of 1% and 2% was applied to conifers and hardwoods respectively.

7. Timber Description

The entire sale area was burned in the 1933 Tillamook and 1945 Wilson River Fires.

Most of the area was seeded between 1959 and 1961 and about 20 acres in the western corner was planted in 1959-60. No portion of the area was sprayed to control red alder in the 1970's or 80's

About 80% of the area was previously thinned commercially with the Gilmore Thin which was completed in 1999. There has been no other stand management.

Sale Area	Species (take)	DBH	Merchantable Bole Height (feet)	Merchantable top (inches inside bark)
1	Douglas-fir	13.6	47	5
	Hemlock	12.1	30	5
	Red alder	12.7	39	6

8. Cruiser Names/Dates

55 plots Cruised by contractor in 2013 and 8 additional plots by District personnel in 2015.

9. Revenue Distribution

FDF 100%

Tax Code: 56

Deed Numbers: 35 and 70

10. Attachments

Volume Summary

Stand Tables

Log Stock Tables

Logging Plan

11. Stand and Log Stock Tables Species Key

DF – Douglas-fir take

DL – Douglas-fir leave

WH – Western hemlock take

WL – Western hemlock leave

RA – Red alder take

AL – Red alder leave

SS – Sitka spruce leave

BM – Big leaf maple leave

OC – Existing snag, class 1 or 2 leave

TC TLOGSTVB				Log Stock Table - MBF															
				Project: DEMO															
T02N R07W S21 TSALE										T02N R07W S21 TSAL									
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	1										
02N	07W	21	GILMORE	SALE	359.00			Date	4/23/2015										
								Time	9:15:32AM										
Spp	S	So	Gr	Log	Gross	%	Net	%	Net Volume by Scaling Diameter in Inches										
									MBF	Def	MBF	Spc	2-3	4-5	6-7	8-9	10-11	12-13	14-15
DL	CO	2	16		4	1.0	4	.1						4					
DL	CO	2	18		19	6.0	18	.4							18				
DL	CO	2	20		13	1.0	13	.3							13				
DL	CO	2	23		11	1.0	10	.2						10					
DL	CO	2	24		30	1.0	30	.7						14		16			
DL	CO	2	26		15	1.0	15	.3								15			
DL	CO	2	30		34	6.9	32	.7						16		16			
DL	CO	2	32		155	2.5	151	3.3					76	58	17				
DL	CO	2	40		2,827	1.5	2,786	61.0					716	1033	880	156			
DL	CO	3	16		4	1.0	4	.1					4						
DL	CO	3	18		10	1.0	10	.2							10				
DL	CO	3	21		2	1.0	2	.1				2							
DL	CO	3	22		1	1.0	1	.0				1							
DL	CO	3	23		2	1.0	1	.0				1							
DL	CO	3	24		4	1.0	4	.1				4							
DL	CO	3	28		2	1.0	2	.1			2								
DL	CO	3	29		2	1.0	2	.0			2								
DL	CO	3	30		5	1.0	5	.1			5								
DL	CO	3	32		305	1.1	302	6.6			22	106	167	7					
DL	CO	3	33		13	1.0	13	.3			13								
DL	CO	3	34		5	1.0	5	.1			3	2							
DL	CO	3	35		8	1.0	8	.2			8								
DL	CO	3	36		18	1.0	18	.4			16	2							
DL	CO	3	38		9	1.0	9	.2			9								
DL	CO	3	39		6	1.0	6	.1			3	3							
DL	CO	3	40		744	1.2	735	16.1			157	159	401	18					
DL	CO	4	15		3	1.0	3	.1		3									
DL	CO	4	16		21	1.0	21	.5		13	5	3							
DL	CO	4	17		10	1.0	10	.2		5	2	2							
DL	CO	4	18		25	1.0	25	.5		24		1							
DL	CO	4	19		10	1.0	10	.2		8	1	1							
DL	CO	4	20		28	1.0	28	.6		23	4								
DL	CO	4	21		15	1.0	15	.3		12	3								
DL	CO	4	22		13	1.0	13	.3		13									
DL	CO	4	23		18	1.0	18	.4		9	10								
DL	CO	4	24		18	1.0	17	.4		14	2	1							
DL	CO	4	25		7	1.0	7	.2		4	3								
DL	CO	4	26		10	1.0	10	.2		8	2								
DL	CO	4	27		16	1.0	16	.4		8	8								
DL	CO	4	28		7	1.0	7	.1		7									
DL	CO	4	29		2	1.0	2	.0		2									
DL	CO	4	30		7	1.0	7	.2		7									
DL	CO	4	31		2	1.0	2	.0		2									
DL	CO	4	32		26	1.0	26	.6		26									
DL	CO	4	33		26	1.0	26	.6		26									
DL	CO	4	34		9	1.0	9	.2		9									
DL	CO	4	35		12	1.0	12	.3		12									
DL	CO	4	36		9	1.0	9	.2		9									
DL	CO	4	37		16	1.0	16	.4		16									
DL	CO	4	38		6	1.0	6	.1		6									
DL	CO	4	39		5	1.0	5	.1		5									
DL	CO	4	40		43	1.0	42	.9		38		4							

TC TLOGSTVB				Log Stock Table - MBF																							
				Project:				DEMO																			
T02N R07W S21 TSALE												T02N R07W S21 TSAL															
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		Page		3									
02N		07W		21		GILMORE		SALE		359.00						Date		4/23/2015									
																Time		9:15:32AM									
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	
RA Totals				256 14.0 220		3.1				145 46		29															
AL H 2 40				16 10.0 14		11.3				145 46		29		14													
AL H 3 32				25 14.7 22		16.7				9		12															
AL H 3 40				15 6.7 14		10.9						14															
AL H 4 16				2		1.6				2																	
AL H 4 18				3		2.0				3																	
AL H 4 22				3		2.6				3																	
AL H 4 23				2		1.9				2																	
AL H 4 27				2		1.9				2																	
AL H 4 28				9		6.8		9		9																	
AL H 4 36				18 16.7 15		11.7				15																	
AL H 4 37				12 33.3 8		6.3				8																	
AL H 4 40				35 4.2 34		26.4				34																	
AL Totals				143 10.3 129		1.8		9		70 9		27 14															
WH CO 2 40				29 3.2 28		25.8						28															
WH CO 3 32				14 1.0 13		12.3						13															
WH CO 3 40				15 1.0 15		14.0				15																	
WH CO 4 15				6 1.0 6		5.2		6																			
WH CO 4 18				3 1.0 3		2.3		3																			
WH CO 4 19				12 1.0 12		10.8		12																			
WH CO 4 20				1 1.0 1		1.2		1																			
WH CO 4 22				2 1.0 2		2.0		2																			
WH CO 4 24				7 34.0 5		4.3		5																			
WH CO 4 26				13 1.0 13		11.9		13																			
WH CO 4 30				4 1.0 4		4.0		4																			
WH CO 4 36				7 1.0 7		6.2		7																			
WH Totals				114 3.7 110		1.6		53		15		13 28															
WL CO 2 32				13 1.0 13		7.9								13													
WL CO 2 40				79 1.0 78		47.6						25		16 37													
WL CO 3 40				55 1.0 54		33.2						54															
WL CO 4 17				1 1.0 1		.7		1																			
WL CO 4 20				1 1.0 1		.8				1																	
WL CO 4 21				3 1.0 3		1.6		3				2															
WL CO 4 23				2 1.0 2		1.0				2																	
WL CO 4 25				2 1.0 2		1.1		2																			
WL CO 4 28				3 1.0 3		1.6		3																			
WL CO 4 30				2 1.0 2		1.2				2																	
WL CO 4 31				6 1.0 5		3.3		5																			
WL Totals				165 164		2.3		14		5		54 25		29 37													
SS CO 4 17				2 1.0 2		100.0		2																			
SS Totals				2 1.0 2		.0		2																			
BM H 4 20				6 2.0 6		100.0				6																	
BM Totals				6 2.0 6		.1				6																	
Total All Species				7,148 2.2 6,993		100.0		785		656 674		1172 1126		1345 1045		189											

TC		TSTNDSUM													Stand Table Summary														
Project															DEMO														
T02N R07W S21 TSALE															T02N R07W S21 TSALE														
Twp	Rge	Sec	Tract	Type					Acres		Plots	Sample Trees			Page:	1													
02N	07W	21	GILMORE	SALE					359.00						Date:	04/23/2015													
															Time:	9:13:45AM													
Spc	T	Sample		FF	Ht	Trees/ Acre	BA/	Logs	Average Log		Tons/ Acre	Net	Net	Tons	Totals														
		DBH	Trees	16'	Tot		Acre	Acre	Acre	Net		Net	Cu.Ft.		Bd.Ft.	Cu.Ft.	Bd.Ft.	Tons	Cunits	MBF									
DL		8	2	83	49	2.537	.89	2.54	5.0	25.0	.35	13	63	126	46	23													
DL		10	1	86	80	.812	.44	.81	12.8	60.0	.28	10	49	102	37	17													
DL		11	2	82	53	1.342	.89	2.01	7.9	33.3	.44	16	67	157	57	24													
DL		12	4	84	74	2.255	1.77	3.38	13.0	46.7	1.21	44	158	434	158	57													
DL		13	3	88	69	1.441	1.33	2.40	13.2	48.0	.88	32	115	314	114	41													
DL		14	6	77	53	2.486	2.66	3.31	13.0	42.5	1.19	43	141	426	155	51													
DL		15	2	87	79	.722	.89	1.44	17.6	70.0	.70	25	101	250	91	36													
DL		16	7	85	90	2.220	3.10	4.44	21.9	83.6	2.67	97	371	959	349	133													
DL		17	8	86	79	2.248	3.54	3.93	22.7	80.7	2.45	89	317	880	320	114													
DL		18	15	87	92	3.759	6.64	7.52	28.4	102.3	5.87	213	769	2,106	766	276													
DL		19	12	85	85	2.699	5.31	5.40	30.9	107.1	4.59	167	578	1,648	599	208													
DL		20	29	86	94	5.887	12.84	12.59	34.1	121.9	11.79	429	1,535	4,231	1,539	551													
DL		21	17	87	95	3.130	7.53	7.00	36.0	132.4	6.93	252	926	2,488	905	332													
DL		22	19	87	102	3.187	8.41	7.55	38.8	152.7	8.05	293	1,152	2,891	1,051	414													
DL		23	24	85	99	3.684	10.63	8.29	44.5	168.1	10.13	368	1,394	3,638	1,323	500													
DL		24	19	86	97	2.678	8.41	5.78	50.2	193.9	7.98	290	1,121	2,866	1,042	402													
DL		25	16	85	96	2.079	7.09	4.42	54.6	205.9	6.63	241	909	2,379	865	326													
DL		26	15	86	105	1.802	6.64	4.08	59.7	233.2	6.70	244	952	2,405	875	342													
DL		27	9	86	110	1.002	3.99	2.34	61.2	249.5	3.94	143	584	1,413	514	210													
DL		28	5	84	111	.518	2.21	1.35	58.5	243.8	2.17	79	328	778	283	118													
DL		29	5	86	116	.483	2.21	1.16	73.8	330.0	2.35	86	382	844	307	137													
DL		30	5	85	110	.451	2.21	1.08	74.4	315.0	2.22	81	341	796	289	122													
DL		31	2	83	123	.169	.89	.34	90.0	320.0	.84	30	108	300	109	39													
DL		32	2	85	135	.159	.89	.48	77.3	350.0	1.01	37	167	363	132	60													
DL		33	1	84	77	.075	.44	.07	81.4	180.0	.17	6	13	60	22	5													
DL		34	3	86	109	.211	1.33	.49	97.0	415.7	1.31	48	204	471	171	73													
DL		Totals	233	85	87	48.034	103.18	94.20	35.8	136.4	92.83	3,376	12,847	33,326	12,119	4,612													
DF		7	1	84	17	1.650	.44	1.65	2.5	20.0	.12	4	33	42	15	12													
DF		8	4	84	50	5.053	1.76	5.05	5.0	27.5	.73	25	139	261	92	50													
DF		9	7	84	45	6.987	3.09	6.99	6.2	25.7	1.24	44	180	445	156	64													
DF		10	5	86	78	4.042	2.20	4.85	8.9	36.7	1.23	43	178	440	154	64													
DF		11	9	85	65	6.013	3.97	7.35	10.9	40.0	2.29	80	294	823	289	106													
DF		12	4	84	82	2.246	1.76	3.37	13.1	46.7	1.26	44	157	452	159	56													
DF		13	4	86	77	1.914	1.76	3.83	12.4	50.0	1.35	47	191	485	170	69													
DF		14	3	85	76	1.237	1.32	2.06	15.4	52.0	.91	32	107	325	114	39													
DF		15	13	87	97	4.671	5.73	9.34	20.4	82.3	5.44	191	769	1,953	685	276													
DF		16	4	87	91	1.263	1.76	2.84	19.3	77.8	1.56	55	221	560	197	79													
DF		17	15	87	86	4.196	6.61	8.67	23.8	88.7	5.87	206	769	2,108	740	276													
DF		18	8	85	83	1.996	3.53	3.99	26.8	95.6	3.05	107	382	1,094	384	137													
DF		19	10	87	101	2.240	4.41	4.48	32.8	118.0	4.19	147	529	1,504	528	190													
DF		20	4	85	102	.808	1.76	1.82	35.3	128.9	1.83	64	234	657	231	84													
DF		21	5	86	103	.917	2.20	2.02	40.6	151.8	2.33	82	306	838	294	110													
DF		22	2	87	88	.334	.88	.67	43.4	150.0	.83	29	100	297	104	36													
DF		23	3	87	93	.458	1.32	.92	50.7	188.3	1.33	47	173	476	167	62													
DF		24	3	88	99	.421	1.32	.84	57.5	228.3	1.38	48	192	496	174	69													
DF		26	1	81	83	.120	.44	.24	58.9	190.0	.40	14	45	144	51	16													
DF		33	1	87	141	.074	.44	.15	85.2	375.0	.36	13	56	129	45	20													
DF		Totals	106	85	72	46.641	46.74	71.13	18.6	71.1	37.69	1,322	5,056	13,529	4,747	1,815													
RA		10	4	83	62	3.234	1.76	3.23	11.2	32.5	1.00	36	105	358	130	38													
RA		11	1	79	49	.668	.44	.67	11.6	30.0	.21	8	20	76	28	7													
RA		12	3	83	50	1.684	1.32	1.68	13.7	33.3	.64	23	56	228	83	20													

TC		TSTNDSUM														Stand Table Summary													
														Project							DEMO								
T02N R07W S21 TSALE														T02N R07W S21 TSALE															
Twp		Rge		Sec		Tract		Type			Acres		Plots		Sample Trees		Page: 2												
02N		07W		21		GILMORE		SALE			359.00						Date: 04/23/2015												
																	Time: 9:13:45AM												
S		Sample		Av					Average Log		Net		Net		Totals														
T		DBH		FF		Ht			Trees/		BA/		Logs		Tons/		Cu.Ft.												
SpC		Trees		16'		Tot			Acre		Acre		Acre		Acre		Acre												
									Net		Net		Cu.Ft.		Bd.Ft.		Tons												
RA		13		4		85 66			1.914		1.76		1.91		22.8		62.5												
RA		14		6		85 63			2.475		2.65		2.89		19.7		52.9												
RA		15		2		84 77			.719		.88		1.08		21.9		63.3												
RA		17		1		83 76			.280		.44		.56		24.2		80.0												
RA		18		1		87 78			.250		.44		.50		28.6		95.0												
RA		19		1		84 43			.224		.44		.22		37.9		50.0												
RA		Totals		23		84 62			11.447		10.14		12.75		17.9		49.0												
WL		15		2		91 87			.719		.88		1.44		20.6		87.5												
WL		18		1		87 85			.250		.44		.50		29.8		105.0												
WL		22		1		85 78			.167		.44		.33		42.2		135.0												
WL		23		2		84 76			.306		.88		.61		44.8		135.0												
WL		24		1		93 83			.140		.44		.28		54.8		220.0												
WL		25		1		82 65			.129		.44		.26		44.6		155.0												
WL		26		1		87 77			.120		.44		.24		57.6		220.0												
WL		Totals		9		88 82			1.830		3.97		3.66		34.6		125.7												
AL		10		1		70 58			.808		.44		.81		11.1		30.0												
AL		12		1		83 61			.561		.44		.56		18.2		40.0												
AL		13		1		85 53			.478		.44		.48		20.1		50.0												
AL		14		3		83 70			1.237		1.32		1.24		26.7		66.7												
AL		15		2		84 63			.719		.88		1.08		18.4		46.7												
AL		16		1		83 76			.316		.44		.63		19.6		70.0												
AL		17		1		83 76			.280		.44		.56		24.2		80.0												
AL		19		2		85 65			.448		.88		.67		28.5		80.0												
AL		20		1		84 57			.202		.44		.20		39.3		60.0												
AL		Totals		13		81 64			5.050		5.73		6.23		21.6		57.5												
WH		9		2		90 33			1.996		.88		2.00		5.5		25.0												
WH		10		1		55 17			.808		.44		.81		5.1		20.0												
WH		11		2		77 29			1.336		.88		1.34		8.6		20.0												
WH		13		1		74 52			.478		.44		.48		21.7		40.0												
WH		14		1		82 38			.412		.44		.41		18.1		30.0												
WH		15		1		84 78			.359		.44		.72		19.3		70.0												
WH		16		1		85 70			.316		.44		.63		19.3		70.0												
WH		19		1		85 82			.224		.44		.45		33.5		115.0												
WH		21		1		85 113			.183		.44		.37		36.5		105.0												
WH		Totals		11		80 41			6.114		4.85		7.20		13.7		42.9												
BM		10		1		82 34			.808		.44		.81		7.4		20.0												
BM		Totals		1		82 34			.808		.44		.81		7.4		20.0												
SS		17		1		59 41			.280		.44		.28		16.2		20.0												
SS		Totals		1		59 41			.280		.44		.28		16.2		20.0												
OC		10		1		89 75			.808		.44																		
OC		16		1		87 79			.316		.44																		
OC		18		1		87 85			.250		.44																		
OC		20		1		85 32			.202		.44																		
OC		22		1		85 98			.167		.44																		
OC		Totals		5		88 74			1.743		2.20																		
Totals				402		85 75			121.947		177.70		196.25		27.0		100.3												
															148.58		5296												
															19,677														
															53,340		19,014												
																	7,064												



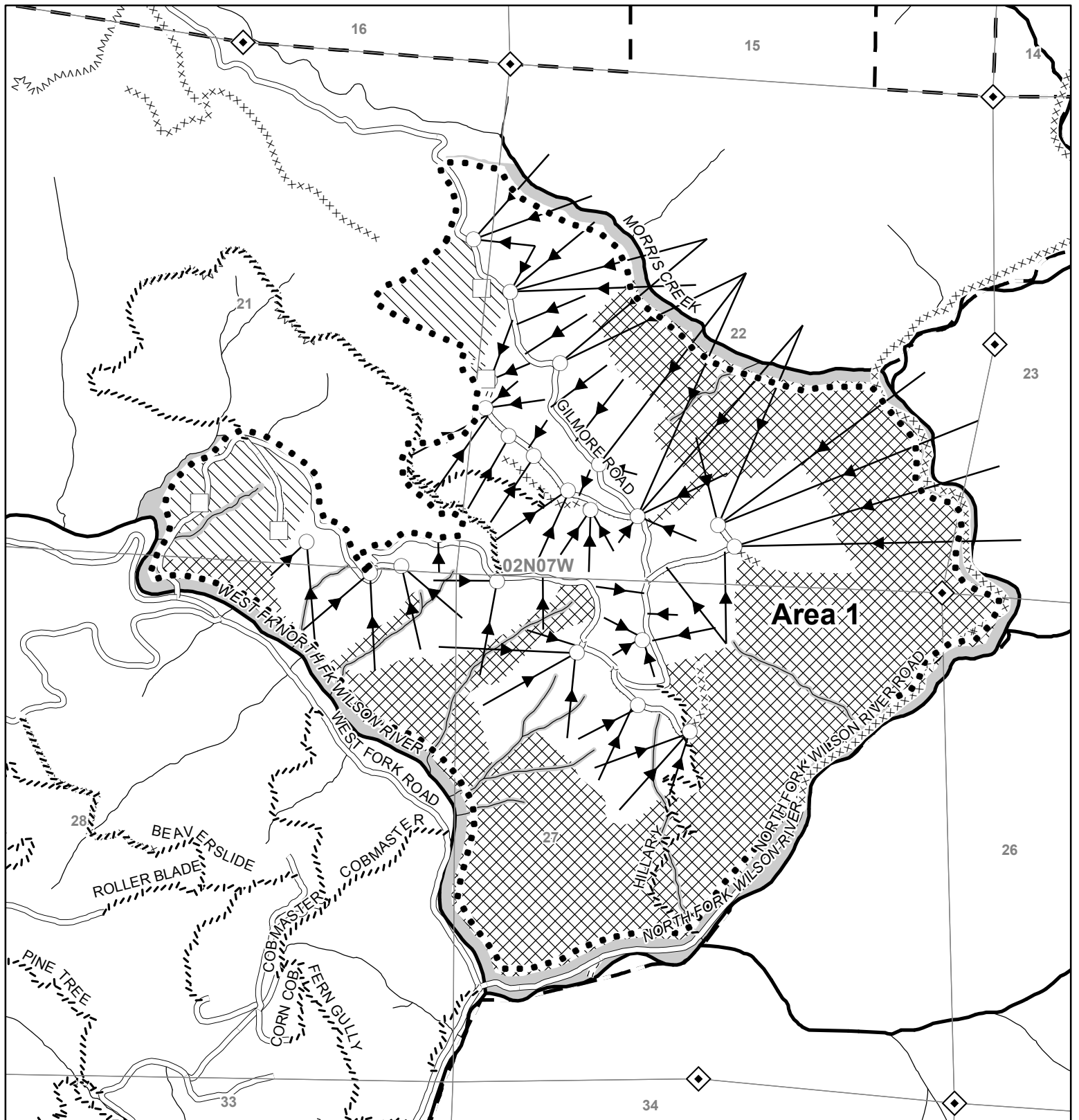
"STEWARDSHIP IN FORESTRY"

The Gilmore

Volume Summary

Area 1-Partial Cut				
359 acres				
SPECIES	Cruised Net MBF/ Acre	Cruised Net MBF	Hidden D&B	Net Sale MBF
Douglas-fir	5.1	1815	1%	1797
Hemlock	0.3	111	1%	110
Alder	0.6	224	2%	220
TOTAL	6.0	2150		2127

TOTAL SALE VOLUME		359	acres
SPECIES	Cruised Net (MBF)	Net Sale (MBF)	
Douglas-fir	1815	1797	
Hemlock	111	110	
Red alder	224	220	
TOTAL	2150	2127	



- | | | |
|--|---|--|
| <ul style="list-style-type: none"> Rock source Stock pile Waste area Bridge Gate Survey corner Domestic water supply intake Truck turn-around Helicopter landing zone Cultural site Buffer Non-required thinning | <ul style="list-style-type: none"> Cable yarding Ground yarding Helicopter yarding Downhill yarding Green tree retention area Restricted area Area boundary Sale boundary Ownership boundary Cable yarding Tractor Landing Yarder Landing | <ul style="list-style-type: none"> Fish stream Non-fish stream Unsurfaced road Surfaced road Paved road Abandoned road Swing road Non-project road Blocked road OHV trail Non-motorized trail Transmission line Railroad |
|--|---|--|

LOGGING PLAN

Timber Sale Contract No. 341-16-035

THE GILMORE

Portions of Sections 21, 22, 23, 26, 27, & 28

T2N, R7W, W.M.,

Tillamook County, Oregon

1,000 0 1,000 Feet



Tillamook District GIS
4/20/2015

This product is for informational use and may not have been prepared or suitable for legal, engineering, or surveying purposes.



Area	Type of Operation	Acres	
		Gross	Net
1	Partial Cut	812	359