



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Cost Summary Hole in the Wall Sale 341-07-12

District: Tillamook

Date: 3/6/07

	Conifer	Hardwood	Total
<b>Gross Timber Sale Value</b>	\$1,232,888.81	\$0.00	\$1,232,888.81
		<b>Project Work</b>	(\$183,705.00)
		<b>Advertised Value</b>	\$1,049,183.81



# Timber Sale Appraisal Timber Description Hole in the Wall Sale 341-07-12

"STEWARDSHIP IN FORESTRY"

**District:** Tillamook

**Location:** Portions of Sections 19 and 30, T2N, R7W, and Sections 22, 23, 24, 25, 26, and 27, T2N, R8W, W.M., Tillamook County, Oregon.

**Date:** 3/6/07

**Stand Stocking:** 80%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	13	0	95
Western Hemlock / Fir	12	0	95

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Total
2S	38	0	38
3S	3,362	6	3,368
4S	2,271	46	2,317
<b>Total</b>	<b>5,671</b>	<b>52</b>	<b>5,723</b>

**Comments:** Pond Values Used: 4th Quarter Calendar Year 2006.

Western Red Cedar Stumpage Price = Pond Value minus Douglas-fir Logging Cost  
\$696/MBF = \$960/MBF - \$264/MBF

Red Alder Stumpage Price = Pond Value minus Western Hemlock Logging Cost  
\$387/MBF = \$650/MBF - \$263/MBF

**HAULING:**

Hauling costs adjusted to make equivalent to \$700 daily truck cost.

\$700 - % Profit & Risk ( $\$700 / 1.15$ ) = \$608 Daily Truck Cost.

Hauling Cost Calculation Douglas-fir:

\$608 Daily Truck Cost / (2 trips per day x 3.5 MBF per load) = \$86.86/MBF Hauling Cost.

Hauling Cost Calculation Western Hemlock:

\$608 Daily Truck Cost / (3 trips per day x 3.5 MBF per load) = \$57.90/MBF Hauling Cost.

**OTHER COSTS (Profit and Risk to be added):**

Brand and Paint: \$2/MBF x 5,723 MBF = \$ 11,446

Swing Roads: (Seeding included):

A (Area 2) 22acres x \$25.00/mbf x 12/mbf = \$ 6,600

B (Area 2) 18acres x \$25.00/mbf x 12/mbf = \$ 5,400

Sorting Tops and Slash at landings: 392 cc cable yarding acres

392 ac. x \$2.20/ac = \$ 862

**TOTAL OTHER COSTS (P&R to be added): \$ 24,308**

**ROAD MAINTENANCE**

GRADING: Move-In cost: (2 times x \$270 each)/5723 mbf = \$ 0.90/mbf

North Fork Wilson & West Fork Wilson

Interim-(\$500/mi x 6.5 miles /5723 mbf = \$ .57mbf

REPROCESS W/Final Maintenance (\$800/mi x 6.5 miles /5723 mbf = \$ .91mbf

Roller with rain water: \$280 move-in + \$11/sta x 350/sta / 5723mbf = \$ 0.72/MBF

MAINTENANCE ROCK: Move-In cost (2 dump trucks and one backhoe):

(2 times x \$ 490 each time)/5723mbf = \$ 0.17/mbf

Crushed Rock: (6.5mi x 20cy/mmbf/mile x \$4.5/cy x 5.7mmbf /5723= \$ 0.58/MBF

Pit Run Rock: (3mi x 20cy/mmbf/mile x \$8.3/cy x 5.7mmbf)/5723mbf = \$ 0.50/MBF

**ENDHAUL DITCH and BACKSLOPE FAILURE material to waste area:**

Move-In cost (2 dump trucks and one backhoe):

(2 times x \$ 490 each time)/5723mbf = \$ 0.17/mbf

(100cy x \$5.15/cy)/5723= \$ 0.09/MBF

**TOTAL ROAD MAINTENANCE COST: \$ 4.61/MBF**



# Timber Sale Appraisal Logging Conditions Hole in the Wall Sale 341-07-12

"STEWARDSHIP IN FORESTRY"

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**Combination#: 1** Douglas - Fir 76.32%

**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:** 8 **Bd. Ft./Load:** 3,500  
**Cost/MBF:** \$117.24

**Machines:**  
Log Loader (A)  
Stroke Delimber (A)  
Tower Yarder (Medium)

**Combination#: 2** Douglas - Fir 23.68%  
Western Hemlock / Fir 100.00%

**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:** 6 **Bd. Ft./Load:** 3,500  
**Cost/MBF:** \$156.32

**Machines:**  
Log Loader (A)  
Stroke Delimber (A)  
Tower Yarder (Medium)



# Timber Sale Appraisal Logging Costs Hole in the Wall Sale 341-07-12

"STEWARDSHIP IN FORESTRY"

Date: 3/6/07

Operating Seasons: 2.0

Profit & Risk: 15%

Project Costs: \$183,705

Other Costs (P/R): \$24,308

Slash Disposal: \$0

Other Costs: \$0

Road Maintenance: \$4.61

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

### Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$86.86	2.0	3.5
Western Hemlock / Fir	\$57.90	3.0	3.5

### Local Pond Values

Date	Species	Grade	Value
2/27/07	Western Hemlock / Fir	3S	\$400.00
2/27/07	Western Hemlock / Fir	4S	\$400.00



# Timber Sale Appraisal Logging Costs Breakdown Hole in the Wall Sale 341-07-12

"STEWARDSHIP IN FORESTRY"

Costs	Douglas - Fir	Western Hemlock / Fir
<b>Logging</b>	126.49	156.32
<b>Road Maintenance</b>	4.85	4.85
<b>Fire Protection</b>	0.95	0.95
<b>Hauling</b>	91.43	60.95
<b>Other (P/R appl.)</b>	4.25	4.25
<b>Profit &amp; Risk</b>	34.20	34.10
<b>Slash Disposal</b>	0.00	0.00
<b>Scaling</b>	2.00	2.00
<b>Other</b>	0.00	0.00
<b>Total</b>	264.17	263.42

<b>Amortization</b>	0.00	0.00
<b>Pond Value</b>	480.32	400.00
<b>Stumpage</b>	216.15	136.58
<b>Amortized</b>	0.00	0.00



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Summary Hole in the Wall Sale 341-07-12

## Amortized

	Douglas - Fir	Western Hemlock / Fir
MBF	0.00	0.00
Value	0.00	0.00
Total	0.00	0.00

## Unamortized

	Douglas - Fir	Western Hemlock / Fir
MBF	5,671.00	52.00
Value	216.15	136.58
Total	1,225,786.65	7,102.16

## Gross Timber Sale Value

**Recovery \$1,232,888.81**

Prepared by: Anderson / Teran

Date: 3/6/07

District: Tillamook

Phone: (503) 842-2545



## PROJECT SUMMARY SHEET

Sale: HOLE IN THE WALL

### CONSTRUCTION

Point	C to D	3+00	stations =	\$2,685.98
Point	E to F	21+50	stations =	\$18,193.34
Point	M to N	3+85	stations =	\$2,931.58
<b>SUBTOTAL CONSTRUCTION</b>				<b>\$23,810.90</b>

### IMPROVEMENT

Point	A to B	44+00	stations =	\$45,201.69
Point	C to D	5+00	stations =	\$4,476.64
Point	I to J	62+80	stations =	\$60,611.27
Point	K to L	10+00	stations =	\$4,080.30
Point	M to N	8+90	stations =	\$6,776.90
<b>SUBTOTAL IMPROVEMENT</b>				<b>\$121,146.80</b>

### RECONSTRUCTION

Point	G to H	40+00	stations =	\$31,669.38
Point	O to P	5+50	stations =	\$5,151.86
<b>SUBTOTAL IMPROVEMENT</b>				<b>\$31,669.38</b>

### MOVE IN

**\$7,077.92**

**GRAND TOTAL**

**\$183,705.00**



**SUMMARY OF CONSTRUCTION COST**

Sale:	<u><b>HOLE IN THE WALL</b></u>		Road: <u><b>A to B</b></u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles		Improvement - <u>44+00</u> stations <u>0.83</u> miles
<b>CLEARING AND GRUBBING -</b>			
Roadside Brushing	0.83 miles @		\$600.00 per mile = \$498.00
Widening	0.294 acres @		\$660.00 per acre = \$194.04
Scattering	2.020 acres @		\$980.00 per acre = \$1,979.60
			<b>TOTAL CLEARING AND GRUBBING</b>
			<b>\$2,671.64</b>
<b>EXCAVATION -</b>			
Road Earthwork	44.00 sta. @		\$130.00 per sta. = \$5,720.00
Widening	569 cy. @		\$2.20 per c.y. = \$1,251.80
Remove outside berm	440 cy. @		\$1.00 per c.y. = \$440.00
			<b>TOTAL EXCAVATION</b>
			<b>\$7,411.80</b>
<b>ENDHAUL -</b>			
Widening	0+00 to 32+00	569 cy. @	\$2.10 per c.y. = \$1,194.90
Remove outside berm	0+00 to 0+00	440 cy. @	\$2.10 per c.y. = \$924.00
Spread & compact		1009 cy. @	\$0.25 per c.y. = \$252.25
			<b>TOTAL ENDHAUL</b>
			<b>\$2,371.15</b>
<b>CULVERTS - MATERIALS &amp; INSTALLATION</b>			
	<u>Culverts</u>		
	30 LF of 18"	\$510.00	36 LF of 24" \$864.00
	0 LF of 30"	<u>\$0.00</u>	48 LF of 36" <u>\$3,084.00</u>
		\$510.00	\$3,948.00
	<u>Culvert Stakes &amp; Markers</u>		
	3 markers	<u>\$24.00</u>	
		\$24.00	<b>TOTAL CULVERTS</b>
			<b>\$4,482.00</b>
<b>ROCK</b>			
0+00 to 44+00	3,240 cy. of Pit-Run		\$7.88 per c.y. = \$25,531.20
			<b>TOTAL ROCK</b>
			<b>\$25,531.20</b>
<b>SPECIAL PROJECTS</b>			
Construct waste areas -	1.00 hours @		\$130.00 per hour \$130.00
Grade and shape road -	44.00 stations @		\$19.00 per station \$836.00
Proof-Roll subgrade prior to rocking	44.00 stations @		\$4.70 per station \$206.80
Roll subgrade w/ vibratory roller prior to rocking -	44.00 stations @		\$13.20 per station \$580.80
Remove culverts from state lands	1.00 @		\$472.10 total \$472.10
Grass seed and fertilize -	2.31 acres @		\$220.00 per acre \$508.20
			<b>TOTAL SPECIAL PROJECTS</b>
			<b>\$2,733.90</b>
			<b>GRAND TOTAL</b>
			<b>\$45,201.69</b>

## SUMMARY OF CONSTRUCTION COST

Sale:	<u>HOLE IN THE WALL</u>		Road: <u>C to D</u>
Construction -	<u>3+00</u> stations <u>0.06</u> miles		Improvement - <u>5+00</u> stations <u>0.09</u> miles
CLEARING AND GRUBBING -			
Roadside Brushing	0.09 miles @	\$1,200.00 per mile =	\$108.00
Widening	0.052 acres @	\$660.00 per acre =	\$34.32
Scattering	0.520 acres @	\$980.00 per acre =	\$509.60
		TOTAL CLEARING AND GRUBBING	<b>\$651.92</b>
EXCAVATION -			
Road Earthwork	8.00 sta. @	\$250.00 per sta. =	\$2,000.00
Widening	150 cy. @	\$3.75 per c.y. =	\$562.50
Remove outside berm	50 cy. @	\$1.00 per c.y. =	\$50.00
		TOTAL EXCAVATION	<b>\$2,612.50</b>
ROCK			
0+00 to 8+00	450 cy. of Pit-Run	@ \$7.88 per c.y. =	<u>\$3,546.00</u>
		TOTAL ROCK	<b>\$3,546.00</b>
SPECIAL PROJECTS			
Grade and shape road -	8.00 stations @	\$19.00 per station	\$152.00
Roll subgrade w/ vibratory roller prior to rocking -	8.00 stations @	\$13.20 per station	\$105.60
Grass seed and fertilize -	0.43 acres @	\$220.00 per acre	\$94.60
		TOTAL SPECIAL PROJECTS	<b>\$352.20</b>
<b>GRAND TOTAL</b>			<b>\$7,162.62</b>

## SUMMARY OF CONSTRUCTION COST

Sale:	<u>HOLE IN THE WALL</u>	Road:	<u>E to F</u>
Construction -	$\frac{21+50}{0.41}$ stations miles	Improvement -	$\frac{0+00}{0.00}$ stations miles
CLEARING AND GRUBBING - Scattering	2.960 acres @	\$980.00 per acre =	$\frac{\$2,900.80}{\text{TOTAL CLEARING AND GRUBBING}}$ <b>\$2,900.80</b>
EXCAVATION - Road Earthwork	21.50 sta. @	\$170.00 per sta. =	$\frac{\$3,655.00}{\text{TOTAL EXCAVATION}}$ <b>\$3,655.00</b>
ROCK 0+00 to 21+50	1,103 cy. of Pit-Run @	\$7.88 per c.y. =	$\frac{\$8,691.64}{\text{TOTAL ROCK}}$ <b>\$8,691.64</b>
<b>SPECIAL PROJECTS</b>			
Grade and shape road -	21.50 stations @	\$19.00 per station	\$408.50
Roll subgrade w/ vibratory roller prior to rocking -	21.50 stations @	\$13.20 per station	\$283.80
Remove large stumps -	1.00 lump sum @	\$1,950.00	\$1,950.00
Grass seed and fertiilize -	1.38 acres @	\$220.00 per acre	\$303.60
		<b>TOTAL SPECIAL PROJECTS</b>	<b>\$2,945.90</b>
<b>GRAND TOTAL</b>			<b>\$18,193.34</b>

## SUMMARY OF CONSTRUCTION COST

Sale:	<b>HOLE IN THE WALL</b>		Road: <b>G to H</b>
Construction -	<u>0+00</u> stations <u>0.00</u> miles		Reconstruction - <u>40+00</u> stations <u>0.76</u> miles
CLEARING AND GRUBBING -			
Roadside Brushing		0.76 miles @	\$1,200.00 per mile = \$912.00
Widening		0.069 acres @	\$660.00 per acre = \$45.54
Scattering		4.130 acres @	\$980.00 per acre = \$4,047.40
			<b>TOTAL CLEARING AND GRUBBING</b>
			<b>\$5,004.94</b>
EXCAVATION -			
Road Earthwork		40.00 sta. @	\$140.00 per sta. = \$5,600.00
Widening		200 cy. @	\$2.00 per c.y. = \$400.00
Remove outside berm		400 cy. @	\$1.00 per c.y. = \$400.00
			<b>TOTAL EXCAVATION</b>
			<b>\$6,400.00</b>
ENDHAUL -			
Widening	0+00 to 5+00	200 cy. @	\$1.46 per c.y. = \$292.00
Remove outside berm	0+00 to 0+00	400 cy. @	\$1.46 per c.y. = \$584.00
Spread & compact		600 cy. @	\$0.25 per c.y. = \$150.00
			<b>TOTAL ENDHAUL</b>
			<b>\$1,026.00</b>
ROCK			
0+00 to 40+00	2,103 cy. of Pit-Run	@	\$7.88 per c.y. = \$16,571.64
			<b>TOTAL ROCK</b>
			<b>\$16,571.64</b>
SPECIAL PROJECTS			
Grade and shape road -		40.00 stations @	\$19.00 per station \$760.00
Roll subgrade w/ vibratory roller prior to rocking -		40.00 stations @	\$13.20 per station \$528.00
Remove large stumps -		1.00 lump sum @	\$1,040.00 \$1,040.00
Grass seed and fertilize -		1.54 acres @	\$220.00 per acre \$338.80
			<b>TOTAL SPECIAL PROJECTS</b>
			<b>\$2,666.80</b>
<b>GRAND TOTAL</b>			<b>\$31,669.38</b>

## SUMMARY OF CONSTRUCTION COST

Sale:	<u>HOLE IN THE WALL</u>		Road: <u>I to J</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles		Improvement - <u>62+80</u> stations <u>1.19</u> miles
<b>CLEARING AND GRUBBING -</b>			
Roadside Brushing		1.19 miles @	\$1,200.00 per mile = \$1,428.00
Widening		0.721 acres @	\$660.00 per acre = \$475.86
Scattering		2.310 acres @	\$980.00 per acre = \$2,263.80
			<u>TOTAL CLEARING AND GRUBBING</u>
			<b>\$2,739.66</b>
<b>EXCAVATION -</b>			
Road Earthwork		62.80 sta. @	\$175.00 per sta. = \$10,990.00
Widening		2792 cy. @	\$6.50 per c.y. = \$18,148.00
Remove outside berm		628 cy. @	\$1.00 per c.y. = \$628.00
			<u>TOTAL EXCAVATION</u>
			<b>\$29,766.00</b>
<b>ROCK</b>			
0+00 to 62+80	2,885 cy. of	Pit-Run	@ \$8.81 per c.y. = \$25,416.85
			<u>TOTAL ROCK</u>
			<b>\$25,416.85</b>
<b>SPECIAL PROJECTS</b>			
Grade and shape road -		62.80 stations @	\$19.00 per station \$1,193.20
Roll subgrade w/ vibratory roller prior to rocking -		62.80 stations @	\$13.20 per station \$828.96
Grass seed and fertilize -		3.03 acres @	\$220.00 per acre \$666.60
			<u>TOTAL SPECIAL PROJECTS</u>
			<b>\$2,688.76</b>
			<b>GRAND TOTAL</b>
			<b>\$60,611.27</b>

## SUMMARY OF CONSTRUCTION COST

Sale:	<u>HOLE IN THE WALL</u>				Road: <u>K to L</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles				Improvement - <u>10+00</u> stations <u>0.19</u> miles
CLEARING AND GRUBBING -					
Roadside Brushing		0.19 miles @	\$1,200.00 per mile =	\$228.00	
Widening		0.069 acres @	\$660.00 per acre =	\$45.54	
Scattering		0.230 acres @	\$980.00 per acre =	\$225.40	
			TOTAL CLEARING AND GRUBBING		<b>\$270.94</b>
EXCAVATION -					
Road Earthwork		10.00 sta. @	\$175.00 per sta. =	\$1,750.00	
Widening		134 cy. @	\$6.50 per c.y. =	\$871.00	
Remove outside berm		100 cy. @	\$1.00 per c.y. =	\$100.00	
			TOTAL EXCAVATION		<b>\$2,721.00</b>
ROCK					
1+60 to 2+65	76 cy. of	Pit-Run	@	\$8.81 per c.y. =	\$669.56
				TOTAL ROCK	<b>\$669.56</b>
SPECIAL PROJECTS					
Grade and shape road -		10.00 stations @	\$19.00 per station	\$190.00	
Roll subgrade w/ vibratory roller prior to rocking -		10.00 stations @	\$13.20 per station	\$132.00	
Grass seed and fertilize -		0.44 acres @	\$220.00 per acre	\$96.80	
			TOTAL SPECIAL PROJECTS		<b>\$418.80</b>
<b>GRAND TOTAL</b>					<b>\$4,080.30</b>

## SUMMARY OF CONSTRUCTION COST

Sale:	<b>HOLE IN THE WALL</b>	Road:	<b>M to N</b>
Construction -	$\frac{3+85}{0.07}$ stations miles	Improvement -	$\frac{8+90}{0.17}$ stations miles
CLEARING AND GRUBBING -			
Roadside Brushing	0.17 miles @	\$1,200.00 per mile =	\$204.00
Widening	0.069 acres @	\$660.00 per acre =	\$45.54
Scattering	1.170 acres @	\$980.00 per acre =	\$1,146.60
		<b>TOTAL CLEARING AND GRUBBING</b>	<b>\$1,192.14</b>
EXCAVATION -			
Road Earthwork	12.75 sta. @	\$140.00 per sta. =	\$1,785.00
Widening	356 cy. @	\$3.00 per c.y. =	\$1,068.00
		<b>TOTAL EXCAVATION</b>	<b>\$2,853.00</b>
ROCK			
0+00 to 12+75	579 cy. of Pit-Run	@ \$8.81 per c.y. =	\$5,100.99
		<b>TOTAL ROCK</b>	<b>\$5,100.99</b>
SPECIAL PROJECTS			
Grade and shape road -	12.75 stations @	\$19.00 per station	\$242.25
Roll subgrade w/ vibratory roller prior to rocking -	12.75 stations @	\$13.20 per station	\$168.30
Grass seed and fertilize -	0.69 acres @	\$220.00 per acre	\$151.80
		<b>TOTAL SPECIAL PROJECTS</b>	<b>\$562.35</b>
<b>GRAND TOTAL</b>			<b>\$9,708.48</b>

## SUMMARY OF CONSTRUCTION COST

Sale:	<u>HOLE IN THE WALL</u>				Road: <u>O to P</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles				Reconstruction - <u>5+50</u> stations <u>0.10</u> miles
CLEARING AND GRUBBING -					
Roadside Brushing		0.10 miles @		\$1,200.00 per mile =	\$120.00
Widening		0.069 acres @		\$660.00 per acre =	\$45.54
Scattering		0.630 acres @		\$980.00 per acre =	\$617.40
				TOTAL CLEARING AND GRUBBING	<b>\$662.94</b>
EXCAVATION -					
Road Earthwork		5.50 sta. @		\$160.00 per sta. =	\$880.00
Widening		220 cy. @		\$4.00 per c.y. =	\$880.00
				TOTAL EXCAVATION	<b>\$1,760.00</b>
ROCK					
Backfill	1+00	30 cy. of	Clean Pit-Run	@	\$8.71 per c.y. = \$261.30
0+00 to	5+50	252 cy. of	Pit-Run	@	\$8.81 per c.y. = \$2,220.12
				TOTAL ROCK	<b>\$2,481.42</b>
SPECIAL PROJECTS					
Grade and shape road -		5.50 stations @		\$19.00 per station	\$104.50
Roll subgrade w/ vibratory roller prior to rocking -		5.50 stations @		\$13.20 per station	\$72.60
Grass seed and fertilize -		0.32 acres @		\$220.00 per acre	\$70.40
				TOTAL SPECIAL PROJECTS	<b>\$247.50</b>
<b>GRAND TOTAL</b>					<b>\$5,151.86</b>



## ROCK DEVELOPMENT COST SUMMARY

Pit:	Pit-Run pits (3)	Location:	Sec. 30, T2N, R7W, Sec. 25, T2N, R8W, Sec. 23, T2N, R8W
Sale:	<b>HOLE IN THE WALL</b>	Road:	6896 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage:	1.16	Total Truck Loads:	6896 c.y.
Drill Pct.:	80%	In Place Total:	4926 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$7,021.16

Drill & Shoot:	\$2.50	/cu.yd.	x	3941 cu.yds.	=	\$9,852.50
Rip Rock	\$1.90	/cu.yd.	x	985 cu.yds.	=	\$1,871.50
Load Dump Truck:	\$0.70	/cu.yd.	x	6896 cu.yds.	=	\$4,827.20

Subtotal \$23,572.36

Move In and set up Drill and Compressor	1	@	\$554.68	=	\$554.68
Move in Roller and Compactor	1	@	\$554.68	=	\$554.68
Move in D-8	1	@	\$1,252.21	=	\$1,252.21
Move in Excavator	2	@	\$1,409.57	=	\$2,819.14
Move in Trucks	3	@	\$182.13	=	\$546.39
Move in Water Truck	1	@	\$214.08	=	\$214.08
					Subtotal <span style="border-bottom: 1px solid black;">\$5,941.18</span>

TOTAL PRODUCTION COSTS \$29,513.54

Base Cost= \$4.28 Per Cu.Yd.

Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST
A to B	\$1.90	\$1.70	\$4.28	\$7.88	3240	\$25,531.20
C to D	\$1.90	\$1.70	\$4.28	\$7.88	450	\$3,546.00
E to F	\$1.90	\$1.70	\$4.28	\$7.88	1103	\$8,691.64
G to H	\$1.90	\$1.70	\$4.28	\$7.88	2103	\$16,571.64
				Total C.Y.	6896	Sub Total <span style="border-bottom: 1px solid black;">\$54,340.48</span>

	TOTAL ROCKING COSTS <span style="border-bottom: 1px solid black;">\$54,340.48</span>
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## ROCK DEVELOPMENT COST SUMMARY

Pit:	Pit-Run pits (3)	Location:	Sec. 23, 26 & 27, T2N, R8W
Sale:	<b>HOLE IN THE WALL</b>	Road:	3822 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage:	1.16	Total Truck Loads:	3822 c.y.
Drill Pct.:	80%	In Place Total:	2730 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact.	\$4,808.64
Drill & Shoot:	\$2.50 /cu.yd. x 2184 cu.yds. = \$5,460.00
Rip Rock	\$1.90 /cu.yd. x 546 cu.yds. = \$1,037.40
Load Dump Truck:	\$0.70 /cu.yd. x 3822 cu.yds. = \$2,675.40
Sort or Screen OB from Pit-Run:	\$1.00 /cu.yd. x 30 cu.yds. = \$30.00

Subtotal \$14,011.44

Move In and set up Drill and Compressor	1	@	\$554.68	=	\$554.68
Move in Roller and Compactor	1	@	\$554.68	=	\$554.68
Move in D-8	1	@	\$1,252.21	=	\$1,252.21
Move in Excavator	2	@	\$1,409.57	=	\$2,819.14
Move in Trucks	3	@	\$182.13	=	\$546.39
Move in Water Truck	1	@	\$214.08	=	\$214.08
					Subtotal <span style="border-bottom: 1px solid black;">\$5,941.18</span>

TOTAL PRODUCTION COSTS \$19,952.62

Base Cost=	\$5.21	Per Cu.Yd.
Clean Pit-Run Base Cost=	\$6.21	Per Cu.Yd.

Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST
I to J	\$1.90	\$1.70	\$5.21	\$8.81	2885	\$25,416.85
K to L	\$1.90	\$1.70	\$5.21	\$8.81	76	\$669.56
M to N	\$1.90	\$1.70	\$5.21	\$8.81	579	\$5,100.99
O to P	\$1.90	\$1.70	\$5.21	\$8.81	252	\$2,220.12
O to P Backfill	\$1.90	\$0.60	\$6.21	\$8.71	30	\$261.30
				Total C.Y.	3822	Sub Total <span style="border-bottom: 1px solid black;">\$33,668.82</span>

TOTAL ROCKING COSTS \$33,668.82

## Move-In Calculations

Sale: HOLE IN THE WALL

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
23.0	Pavement	30
2.0	Main Lines	7
15.0	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	\$988.35		\$46.00	0.00	0.00	0	\$0.00	\$988.35
1	Brush Cutter	\$945.68		\$4.00	0.00	0.00	0	\$0.00	\$945.68
0	Graders	\$0.00		\$3.65	0.00	0.00	0	\$0.00	\$0.00
0	Loader (Small)	\$0.00	1	\$3.55	0.00	0.00	0	\$0.00	\$0.00
0	Loader (Med. & Large)	\$0.00	1	\$9.00	0.00	0.00	0	\$0.00	\$0.00
1	Rollers (smooth/grid) & Compactors	\$554.68		\$5.00	0.00	0.00	0	\$0.00	\$554.68
0	Excavators (Small)	\$0.00		\$22.00	0.00	0.00	0	\$0.00	\$0.00
0	Excavators (Med.)	\$0.00		\$35.50	0.00	0.00	0	\$0.00	\$0.00
2	Excavators (Large)	\$2,854.41	1	\$44.80	0.00	0.00	0	\$0.00	\$2,854.41
0	Tired Backhoes/Skidders	\$0.00		\$3.00	0.00	0.00	0	\$0.00	\$0.00
0	Tractors (D6)	\$0.00	2	\$7.10	0.00	0.00	0	\$0.00	\$0.00
0	Tractors (D7)	\$0.00	2	\$11.30	0.00	0.00	0	\$0.00	\$0.00
1	Tractor (D8)	\$1,287.47	2	\$15.10	0.00	0.00	0	\$0.00	\$1,287.47
2	Dump Truck (10 cy +)	\$447.33		\$2.85	0.00	0.00	0	\$0.00	\$447.33
0	Dump Truck (Off Hiway)	\$0.00	1	\$4.75	0.00	0.00	0	\$0.00	\$0.00
0	Water Truck (1500 Gal)	\$0.00		\$2.85	0.00	0.00	0	\$0.00	\$0.00
0	Water Truck (2500 Gal)	\$0.00		\$2.85	0.00	0.00	0	\$0.00	\$0.00
0	Jaw	\$1,066.00							
0	2-Stage Crusher	\$1,597.00							
0	3-Stage Crusher	\$2,489.00							

<b>TOTAL MOVE-IN COSTS:</b>	<b>\$7,077.92</b>
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## CRUISE REPORT

### *Hole In The Wall*

"STEWARDSHIP IN FORESTRY"

1. **Type of Sale:** Regeneration Harvest (Modified Clear-cut and Retention Cut), Partial cut; Recovery.
2. **Legal Description:** Portions of sections 19 and 30, T2N, R7W and sections 22, 23, 24, 25, 26 and 27, T2N, R8W, W.M., Tillamook County, Oregon.
3. **Sale Acreage:** The sale boundaries were plotted on a digital ortho photograph and the acreage was calculated with GIS.

ACRES		
Area	Sale	Net
1 Modified Clear-cut	87	73
2 Retention Harvest	66	60
3 Modified Clear-cut	33	28
4 Modified Clear-cut	114	109
5 Modified clear cut	106	98
8 Partial Cut	27	24
<b>Total</b>	<b>433</b>	<b>392</b>

Sale Acres: Area within the Timber Sale Boundary signs.

Net Acres: Sale acres less roads and buffers.

### 3. **Cruising Procedures:**

A. **Cruise Method:** A total of 64 variable radius full point plots were established on the sale areas. A ratio of one count plot per one measured plot was established for Areas 1, 2, 3, 4, and 5 and all plots were measured in Area 6. Conifer with less than 7" DBH and alder with less than 10" DBH were not recorded. On the count plots, the species, tree count and DBH were recorded. On the measure plots, the species, DBH, height to a 6" outside diameter merchantable top for Douglas-fir, 7" OSB diameter for other conifer and 9" OSB for alder, form factor at 16', and grades, lengths and defect of each segment were recorded.

B. **Plot size:** 20 BAF. A 40 BAF was used in portions of Areas 4 and 5 where commercial thinning had recently been completed in the last few years.

C. **Point of observation:** 4.5 feet

January 24, 2007

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- D. **Grading System:** Columbia River Official Log Scaling and Grading Bureau rules.
- E. **Diameter Standards:** 4.5 feet (DBH) to the nearest inch.
- F. **Form Point:** 16 feet for conifers.
- G. **Form Factor:** A form factor was recorded for all trees on measure plots. The average form factor for Douglas-fir was 85, western hemlock, 87 and red alder, 80.
5. **Computation Procedure:** The volumes and statistics for the timber cruise were computed using Atterbury Consultants, Inc. SUPER A.C.E. 98 program. The coefficient of variations and standard errors are as follows: **Area 1 and 3:** 26.6 and 7.4; **Area 2:** 35.7 and 12.6; **Area 4:** 40.0 and 10.0; **Area 5:** 36.8 and 9.5; and **Area 6:** 29.4 and 11.1. The logging combinations in the appraisal were divided into two combinations due to the differences in the residual tree requirements. Areas 1, 3, 4 and 5 are in combination 1 and Areas 2 and 6 are in combination 2.
6. **Hidden Defect and Breakage:** 5% for Douglas-fir and Western Hemlock and 10% for red alder.
7. **Timber Description:** The sale areas burned in the 1933 Tillamook Fire and the 1945 Wilson River Fire and were planted in 1962. Areas 1, 2, and portions of Areas 3, 4, and 5 were pre-commercially thinned in 1988. Portions of Areas 4 and 5 were commercially thinned in 2002/2003. The sale areas have been visually affected by SNC, which was rated at moderate to severe. The Douglas-fir seed stock is from an off-site seed source of unknown origin.
8. **Cruiser Names/Dates:** Jay Anderson and Jason Lee.  
September/October 2005.
9. **Revenue Distribution:**  
100 % FDF  
Tax Code: 56  
Deed Numbers: 84, 85, 86, 91, 428, 430, 431, 459, 460, 461, and 462
10. **Attachments:** Volume Summary, Logging Plan, Stand Summary Tables and Log Stock Tables



"STEWARDSHIP IN FORESTRY"

# Hole In The Wall

## Volume Summary

Area 1 & 3 Modified Clear-cut							
101 acres							
SPECIES	QMD	Basal Area Per Acre	V:BAR	Vol/Acre MBF	Volume MBF	D:B	Net Vol MBF
Douglas-fir	13	182	70	12.7	1283	5%	1219
Hemlock				0.0	0	5%	0
Spruce				0.0	0	5%	0
Alder				0.0	0	10%	0
<b>TOTAL</b>					1283		1219

Area 2 Retention Cut							
60 acres							
SPECIES	QMD	Basal Area Per Acre	V:BAR	Vol/Acre MBF	Volume MBF	D:B	Net Vol MBF
Douglas-fir	13	187	64	12.0	1212	5%	1151
Hemlock				0.0	0	5%	0
Spruce				0.0	0	5%	0
Alder				0.0	0	10%	0
<b>TOTAL</b>					1212		1151

Area 4 Modified Clear-cut							
109 acres							
SPECIES	QMD	Basal Area Per Acre	V:BAR	Vol/Acre MBF	Volume MBF	D:B	Net Vol MBF
Douglas-fir	13	148	78	11.5	1254	5%	1191
Hemlock				0.0	0	5%	0
Spruce				0.0	0	5%	0
Alder				0.0	0	10%	0
<b>TOTAL</b>					1254		1191

Area 5 Modified Clear-cut							
98 acres							
SPECIES	QMD	Basal Area Per Acre	V:BAR	Vol/Acre MBF	Volume MBF	D:B	Net Vol MBF
Douglas-fir	14	215	96	20.6	2019	5%	1918
Hemlock				0.0	0	5%	0
Spruce				0.0	0	5%	0
Alder				0.0	0	10%	0
<b>TOTAL</b>					2019		1918

Area 6 Partial cut							
24 acres							
SPECIES	QMD	Basal Area Per Acre	V:BAR	Vol/Acre MBF	Volume MBF	D:B	Net Vol MBF
Douglas-fir	11	135	62	8.4	202	5%	192
Hemlock	12	45	50	2.3	55	5%	52
Spruce				0.0	0	5%	0
Alder				0.0	0	10%	0
<b>TOTAL</b>					257		244

TOTAL SALE VOLUME			392 acres
SPECIES	Gross (MBF)	Net Vol (MBF)	
Douglas-fir	5970	5671	
Hemlock	55	52	
Spruce	0	0	
Alder	0	0	
<b>TOTAL</b>	6025	5723	

TC TSTNDSUM

**Stand Table Summary**

Jay

Project **HOLEWALL**

**T02N R07W S26 T0001**

**T02N R07W S26 T0001**

Twp Rge Sec Tract  
02N 07W 26 AREA 13

Type Acres Plots Sample Trees  
0001 101.00 14 71

Page: 1  
Date: 10/17/201  
Time: 2:15:39PM

Spc	S T	Sample		Av		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
		DBH	Trees	FF 16'	Ht Tot				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF		10	1	80	20	10.159	5.54	10.16	4.9	20.0	1.42	50	203	144	50	21
DF		11	2	81	28	16.793	11.08	16.79	7.3	25.0	3.51	123	420	354	124	42
DF		12	5	83	63	35.276	27.71	56.44	10.1	37.5	16.11	569	2,117	1,627	575	214
DF		13	6	83	66	36.069	33.25	60.12	12.9	47.0	22.12	776	2,825	2,234	784	285
DF		14	8	82	58	41.467	44.33	57.02	16.4	45.5	26.64	935	2,592	2,690	944	262
DF		15	4	84	67	18.061	22.16	31.61	16.6	60.0	15.00	526	1,896	1,515	531	192
DF		16	2	83	71	7.937	11.08	15.87	17.8	62.5	8.07	283	992	815	286	100
DF		17	3	80	56	10.546	16.62	14.06	26.4	57.5	10.58	371	809	1,068	375	82
DF		20	1	80	70	2.540	5.54	5.08	30.0	85.0	4.34	152	432	439	154	44
DF		21	1	79	69	2.304	5.54	4.61	32.2	85.0	4.23	149	392	428	150	40
DF		Totals	33	82	57	181.152	182.86	271.76	14.5	46.6	112.02	3,934	12,677	11,314	3,974	1,280
NF		17	1	83	79	5.438	8.57	10.88	22.7	70.0	5.93	247	761	599	250	77
NF		21	1	86	92	3.564	8.57	7.13	40.3	140.0	6.89	287	998	696	290	101
NF		Totals	2	84	84	9.001	17.14	18.00	29.7	97.7	12.83	534	1,759	1,295	540	178
Totals			35	82	59	190.154	200.00	289.76	15.4	49.8	124.85	4,469	14,436	12,609	4,513	1,458

TC TSTNDSUM		Stand Table Summary														
Jay		Project HOLEWALL														
T02N R07W S26 T0002										T02N R07W S26 T0002						
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:								
02N	07W	26	AREA 2	0002	60.00	9	51	1	Date:	10/17/201						
								Time:	2:16:00PM							
Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF		8	1	78	21	26.738	9.33	26.74	3.2	20.0	2.46	86	535	148	52	32
DF		9	1	78	23	21.126	9.33	21.13	4.1	20.0	2.48	87	423	149	52	25
DF		10	1	80	45	17.112	9.33	17.11	7.8	30.0	3.81	134	513	228	80	31
DF		12	2	83	59	23.767	18.67	23.77	15.9	40.0	10.79	379	951	647	227	57
DF		13	5	80	59	50.628	46.67	50.63	18.9	50.0	27.28	957	2,531	1,637	574	152
DF		14	1	81	34	8.731	9.33	8.73	14.3	30.0	3.55	125	262	213	75	16
DF		15	1	82	64	7.605	9.33	15.21	14.4	45.0	6.26	219	684	375	132	41
DF		16	3	85	77	20.054	28.00	40.11	19.1	71.7	21.83	766	2,874	1,310	460	172
DF		17	1	84	79	5.921	9.33	11.84	23.0	85.0	7.76	272	1,007	466	163	60
DF		18	3	81	57	15.845	28.00	21.13	29.7	67.5	17.87	627	1,426	1,072	376	86
DF		19	1	83	75	4.740	9.33	9.48	28.4	85.0	7.67	269	806	460	161	48
DF	Totals		20	81	51	202.268	186.67	245.87	15.9	48.9	111.75	3,921	12,012	6,705	2,353	721
WH		13	1	87	59	6.750	6.22	6.75	19.6	60.0	4.24	133	405	254	80	24
WH		16	1	88	65	4.456	6.22	8.91	17.1	70.0	4.89	153	624	293	92	37
WH		17	1	87	44	3.947	6.22	3.95	27.9	50.0	3.52	110	197	211	66	12
WH		18	1	87	39	3.521	6.22	3.52	28.4	50.0	3.20	100	176	192	60	11
WH		20	1	87	48	2.852	6.22	2.85	43.3	60.0	3.95	124	171	237	74	10
WH	Totals		5	87	53	21.527	31.11	25.98	23.8	60.6	19.80	619	1,573	1,188	371	94
NF		13	1	88	68	4.822	4.44	4.82	21.1	70.0	2.44	102	338	146	61	20
NF		24	1	88	77	1.415	4.44	2.83	46.8	160.0	3.18	132	453	191	79	27
NF	Totals		2	88	70	6.236	8.89	7.65	30.6	103.3	5.62	234	790	337	140	47
Totals			27	82	52	230.032	226.67	279.51	17.1	51.4	137.17	4774	14,376	8,230	2,864	863



**T02N R07W S2 T0004** **T02N R07W S2 T0004**  
**Twp Rge Sec Tract Type Acres Plots Sample Trees**  
**02N 07W 2 AREA 4 0004 109.00 17 98**  
**Page: 1**  
**Date: 10/17/201**  
**Time: 2:14:50PM**

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF		9	1	84	39	5.008	2.21	5.01	5.6	20.0	.80	28	100	87	30	11
DF		10	1	80	38	8.113	4.42	8.11	6.9	30.0	1.60	56	243	175	61	27
DF		11	4	81	55	23.467	15.49	23.47	13.0	37.1	8.69	305	872	947	332	95
DF		12	5	83	63	22.536	17.70	28.17	13.4	44.0	10.78	378	1,239	1,175	412	135
DF		13	7	84	70	28.803	26.55	50.41	12.9	47.1	18.53	650	2,376	2,020	709	259
DF		14	10	83	67	33.114	35.40	51.74	15.9	50.8	23.42	822	2,628	2,553	896	286
DF		15	7	82	67	19.832	24.34	36.06	17.0	53.5	17.42	611	1,929	1,899	666	210
DF		16	5	83	71	9.507	13.27	19.01	18.0	65.0	9.76	343	1,236	1,064	373	135
DF		17	3	84	77	4.211	6.64	8.42	21.4	76.7	5.13	180	646	560	196	70
DF		18	1	84	91	1.252	2.21	2.50	28.5	105.0	2.04	71	263	222	78	29
DF	Totals		44	83	64	155.844	148.24	232.90	14.8	49.5	98.18	3,445	11,533	10,702	3,755	1,257
DL		23	1	85	96	1.903	5.49	3.81	51.6	165.0	5.40	196	628	589	214	68
DL		30	1	81	78	1.118	5.49	2.24	73.8	215.0	4.54	165	481	495	180	52
DL		31	1	83	98	1.047	5.49	2.09	95.3	345.0	5.49	200	723	598	218	79
DL	Totals		3	83	92	4.069	16.47	8.14	68.9	225.1	15.43	561	1,832	1,682	611	200
Totals			47	83	64	159.913	164.71	241.04	16.6	55.4	113.61	4006	13,365	12,384	4,367	1,457

TC TSTNDSUM		Stand Table Summary														
Jay		Project HOLEWALL														
T02N R07W S24 T0005										T02N R07W S24 T0005						
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1							
02N	07W	24	AREA 5	0005	98.00	16	106	Date:	10/17/201							
								Time:	2:15:14PM							
Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF		9	2	82	47	23.415	10.34	23.41	6.2	25.0	4.13	145	585	405	142	57
DF		10	1	84	36	9.483	5.17	9.48	6.9	30.0	1.88	66	284	184	64	28
DF		11	3	84	60	21.117	13.94	21.12	13.1	45.2	7.86	276	954	770	270	93
DF		13	7	84	76	37.564	34.62	63.91	13.8	50.6	25.16	883	3,234	2,466	865	317
DF		14	8	84	81	35.750	38.22	71.50	15.5	54.1	31.57	1,108	3,869	3,094	1,085	379
DF		15	6	83	78	25.288	31.03	46.36	19.0	64.5	25.11	881	2,992	2,461	863	293
DF		16	5	84	85	18.521	25.86	37.04	22.1	79.0	23.31	818	2,926	2,284	801	287
DF		17	6	83	83	17.683	27.87	35.37	24.2	76.9	24.37	855	2,721	2,388	838	267
DF		18	2	83	90	4.960	8.76	9.92	29.1	98.2	8.24	289	974	808	283	95
DF		19	4	86	89	9.705	19.11	19.41	31.6	109.1	17.50	614	2,117	1,715	602	207
DF	Totals		44	84	73	203.486	214.93	337.52	17.6	61.2	169.12	5,934	20,657	16,574	5,815	2,024
DL		20	2	82	64	2.571	5.61	3.86	34.8	90.0	3.68	134	347	360	131	34
DL		21	3	84	92	3.142	7.56	6.28	41.0	125.6	7.08	257	789	694	252	77
DL		22	1	82	84	1.063	2.80	2.13	43.3	135.0	2.53	92	287	248	90	28
DL	Totals		6	83	80	6.776	15.97	12.27	39.4	116.0	13.28	483	1,423	1,302	474	139
Totals			50	84	73	210.262	230.91	349.79	18.3	63.1	182.40	6417	22,081	17,875	6,289	2,164

TC TSTNDSUM  
Jay

**Stand Table Summary**

Project **HOLEWALL**

**T02N R07W S10 T0006**

**T02N R07W S10 T0006**

Twp Rge Sec Tract  
**02N 07W 10 AREA 6**

Type Acres Plots Sample Trees  
**0006 24.00 8 54**

Page: 1  
Date: 10/17/201  
Time: 2:14:25PM

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF		7	3	84	25	58.285	15.58	58.29	2.6	20.0	4.33	152	1,166	104	36	28
DF		8	2	84	23	29.750	10.38	29.75	3.3	20.0	2.82	99	595	68	24	14
DF		9	2	84	36	23.506	10.38	23.51	5.3	25.0	3.58	126	588	86	30	14
DF		10	1	84	44	9.520	5.19	9.52	8.1	30.0	2.20	77	286	53	18	7
DF		11	4	85	46	31.471	20.77	31.47	10.7	32.5	9.63	338	1,023	231	81	25
DF		12	4	84	44	26.444	20.77	26.44	12.4	32.5	9.38	329	859	225	79	21
DF		13	3	84	62	16.899	15.58	22.53	14.7	47.5	9.46	332	1,070	227	80	26
DF		14	3	84	69	14.571	15.58	29.14	12.3	45.0	10.22	359	1,311	245	86	31
DF		15	2	85	67	8.462	10.38	12.69	19.2	56.7	6.94	244	719	167	58	17
DF		16	1	84	53	3.719	5.19	3.72	28.5	60.0	3.02	106	223	72	25	5
DF		17	1	85	74	3.294	5.19	6.59	20.8	70.0	3.91	137	461	94	33	11
DF	Totals		26	84	40	225.921	135.00	253.65	9.1	32.7	65.49	2,298	8,301	1,572	552	199
WL		10	2	88	42	18.335	10.00	18.33	8.1	30.0	4.75	148	550	114	36	13
WL		11	1	88	38	7.576	5.00	7.58	9.5	30.0	2.31	72	227	56	17	5
WL		12	3	87	47	19.099	15.00	19.10	13.7	43.3	8.36	261	828	201	63	20
WL		13	2	87	56	10.849	10.00	10.85	19.0	50.0	6.61	207	542	159	50	13
WL		14	1	87	37	4.677	5.00	4.68	15.9	30.0	2.38	74	140	57	18	3
WL		16	1	87	76	3.581	5.00	7.16	21.0	85.0	4.80	150	609	115	36	15
WL	Totals		10	87	47	64.117	50.00	67.70	13.5	42.8	29.21	913	2,896	701	219	70
NF		15	1	87	75	4.074	5.00	8.15	16.1	55.0	3.15	131	448	76	32	11
NF		16	1	87	71	3.581	5.00	7.16	17.9	70.0	3.08	128	501	74	31	12
NF		17	2	86	84	6.344	10.00	12.69	24.5	90.0	7.46	311	1,142	179	75	27
NF		20	1	88	85	2.292	5.00	4.58	34.2	115.0	3.77	157	527	90	38	13
NF	Totals		5	87	79	16.291	25.00	32.58	22.3	80.4	17.46	727	2,619	419	175	63
WH		9	1	88	23	11.318	5.00	11.32	4.4	20.0	1.58	49	226	38	12	5
WH		10	2	88	42	18.335	10.00	18.33	8.1	30.0	4.75	148	550	114	36	13
WH		11	1	88	49	7.576	5.00	7.58	11.6	40.0	2.81	88	303	67	21	7
WH		12	2	88	56	12.732	10.00	12.73	15.9	50.0	6.49	203	637	156	49	15
WH		14	1	88	39	4.677	5.00	4.68	16.4	30.0	2.45	77	140	59	18	3
WH		15	1	87	50	4.074	5.00	4.07	24.1	40.0	3.14	98	163	75	24	4
WH		16	1	87	57	3.581	5.00	3.58	29.9	70.0	3.43	107	251	82	26	6
WH	Totals		9	88	43	62.294	45.00	62.29	12.4	36.4	24.65	770	2,270	592	185	54
DL		16	1	85	50	3.581	5.00	3.58	27.3	40.0	2.69	98	143	64	23	3
DL		17	1	84	84	3.172	5.00	6.34	23.7	90.0	4.13	150	571	99	36	14
DL		18	1	85	71	2.829	5.00	5.66	23.9	85.0	3.73	135	481	89	33	12
DL	Totals		3	85	67	9.582	15.00	15.58	24.6	76.7	10.54	383	1,195	253	92	29
Totals			53	85	44	378.206	270.00	431.81	11.8	40.0	147.35	5092	17,282	3,536	1,222	415

**Log Stock Table - MBF**  
**Project: HOLEWALL**

**T02N R07W S26 T0001**

**T02N R07W S26 T0001**

**Twp Rge Sec Tract Type Acres Plots Sample Trees**  
**02N 07W 26 AREA 13 0001 101.00 14 71**

**Page 1**  
**Date 1/24/2007**  
**Time 3:05:23PM**

S SPP	So rt	Gr de	Log 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
DF	DO	3M	32	473		473	37.0			61	365	48					
DF	DO	3M	40	188		188	14.7			31	84	73					
DF	DO	4M	15	46		46	3.6		46								
DF	DO	4M	16	29		29	2.3		29								
DF	DO	4M	17	30		30	2.3		30								
DF	DO	4M	18	14		14	1.1		14								
DF	DO	4M	19	53		53	4.1		53								
DF	DO	4M	21	29		29	2.3		29								
DF	DO	4M	22	34		34	2.7		34								
DF	DO	4M	24	25		25	2.0		25								
DF	DO	4M	32	217		217	16.9		16	116	85						
DF	DO	4M	33	21		21	1.6		21								
DF	DO	4M	34	29		29	2.2		29								
DF	DO	4M	37	21		21	1.6		21								
DF	DO	4M	40	72		72	5.6		35	36							
DF	Totals			1,280		1,280	87.8		381	244	533	121					
NF	DO	2M	40	86		86	48.6					86					
NF	DO	3M	40	66		66	37.1			66							
NF	DO	4M	16	11		11	6.2			11							
NF	DO	4M	35	14		14	8.1		14								
NF	Totals			178		178	12.2		14	11	66	86					
Total All Species				1,458		1,458	100.0		396	255	599	121	86				

TC TLOGSTVB

## Log Stock Table - MBF

Project: HOLEWALL

T02N R07W S26 T0002

T02N R07W S26 T0002

Twp Rge Sec Tract Type Acres Plots Sample Trees  
 02N 07W 26 AREA 2 0002 60.00 9 51

Page 1  
 Date 1/24/2007  
 Time 3:05:45PM

SPP	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches									
									MBF	MBF	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19
DF	DO	3M	32		118		118	16.4				32	86					
DF	DO	3M	40		294		294	40.7			73	125	96					
DF	DO	4M	15		15		15	2.1		15								
DF	DO	4M	16		32		32	4.5		32								
DF	DO	4M	17		25		25	3.5		25								
DF	DO	4M	18		8		8	1.1		8								
DF	DO	4M	19		6		6	.8		6								
DF	DO	4M	21		15		15	2.1		15								
DF	DO	4M	24		12		12	1.7		12								
DF	DO	4M	27		47		47	6.5		47								
DF	DO	4M	29		18		18	2.5		18								
DF	DO	4M	36		24		24	3.4		24								
DF	DO	4M	40		106		106	14.7		70	36							
DF	Totals				721		721	83.6		273	109	157	182					
WH	DO	3M	32		43		43	45.2			11	32						
WH	DO	3M	35		12		12	12.5			12							
WH	DO	3M	40		35		35	36.6			35							
WH	DO	4M	16		5		5	5.7			5							
WH	Totals				94		94	10.9			62	32						
NF	DO	2M	40		25		25	51.9					25					
NF	DO	3M	40		20		20	42.7			20							
NF	DO	4M	23		3		3	5.4			3							
NF	Totals				47		47	5.5			23			25				
Total All Species					863		863	100.0		273	194	157	214	25				

TC		TLOGSTVB		Log Stock Table - MBF																	
Project:										HOLEWALL											
T02N R07W S2 T0004										T02N R07W S2 T0004											
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	1												
02N	07W	2	AREA 4	0004	109.00	17	98	Date	1/24/2007												
									Time	3:04:24PM											
Spp	T	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches											
										MBF	MBF	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29
DF		DO	3M	32		375		375	29.8					294	81						
DF		DO	3M	40		250		250	19.9					41	162	48					
DF		DO	4M	15		18		18	1.5				18								
DF		DO	4M	16		53		53	4.2				53								
DF		DO	4M	17		14		14	1.1				14								
DF		DO	4M	18		12		12	.9				12								
DF		DO	4M	19		34		34	2.7				34								
DF		DO	4M	20		7		7	.6				7								
DF		DO	4M	21		10		10	.8				10								
DF		DO	4M	22		10		10	.8				10								
DF		DO	4M	23		14		14	1.1				14								
DF		DO	4M	24		27		27	2.1				27								
DF		DO	4M	27		22		22	1.7				22								
DF		DO	4M	28		5		5	.4				5								
DF		DO	4M	31		4		4	.3				4								
DF		DO	4M	32		110		110	8.8				37	73							
DF		DO	4M	34		54		54	4.3				54								
DF		DO	4M	37		21		21	1.7				21								
DF		DO	4M	40		217		217	17.3				68	149							
DF		Totals				1,257		1,257	86.3				373	226	530	128					
DL		DO	2M	40		177		177	88.9							60	117				
DL		DO	3M	40		10		10	5.1				10								
DL		DO	4M	28		4		4	1.8				4								
DL		DO	4M	40		8		8	4.2				8								
DL		Totals				200		200	13.7				12	10		60	117				
Total All Species						1,457		1,457	100.0				385	226	540	128	60	117			

**Log Stock Table - MBF**  
**Project: HOLEWALL**

T02N R07W S24 T0005

T02N R07W S24 T0005

Twp Rge Sec Tract Type Acres Plots Sample Trees  
 02N 07W 24 AREA 5 0005 98.00 16 106

Page 1  
 Date 1/24/2007  
 Time 3:04:54PM

Spp	T	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches										
										MBF	MBF	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23
DF		DO	2M	40		51		51	2.5					51						
DF		DO	3M	32		144		144	7.1				101	44						
DF		DO	3M	40		1,370		1,370	67.7			204	772	394						
DF		DO	4M	16		37		37	1.8		37									
DF		DO	4M	17		26		26	1.3		26									
DF		DO	4M	18		38		38	1.9		38									
DF		DO	4M	19		39		39	1.9		39									
DF		DO	4M	20		19		19	.9		19									
DF		DO	4M	21		25		25	1.2		25									
DF		DO	4M	22		23		23	1.1		23									
DF		DO	4M	23		7		7	.4		7									
DF		DO	4M	24		38		38	1.9		38									
DF		DO	4M	25		12		12	.6		12									
DF		DO	4M	26		9		9	.4		9									
DF		DO	4M	28		12		12	.6		12									
DF		DO	4M	29		34		34	1.7		34									
DF		DO	4M	30		15		15	.7		15									
DF		DO	4M	32		11		11	.5		11									
DF		DO	4M	33		9		9	.4		9									
DF		DO	4M	34		25		25	1.2		25									
DF		DO	4M	36		39		39	1.9		39									
DF		DO	4M	37		31		31	1.5		31									
DF		DO	4M	40		10		10	.5		10									
DF		Totals				2,024		2,024	93.6		458	204	873	438	51					
DL		DO	2M	40		116		116	83.4					116						
DL		DO	4M	29		3		3	2.2		3									
DL		DO	4M	31		3		3	2.5		3									
DL		DO	4M	32		4		4	2.7		4									
DL		DO	4M	33		8		8	5.9		8									
DL		DO	4M	40		5		5	3.3		5									
DL		Totals				139		139	6.4		23			116						
Total All Species						2,164		2,164	100.0		482	204	873	438	168					





TC TLOGSTVB

**Log Stock Table - MBF**

**Project: HOLEWALL**

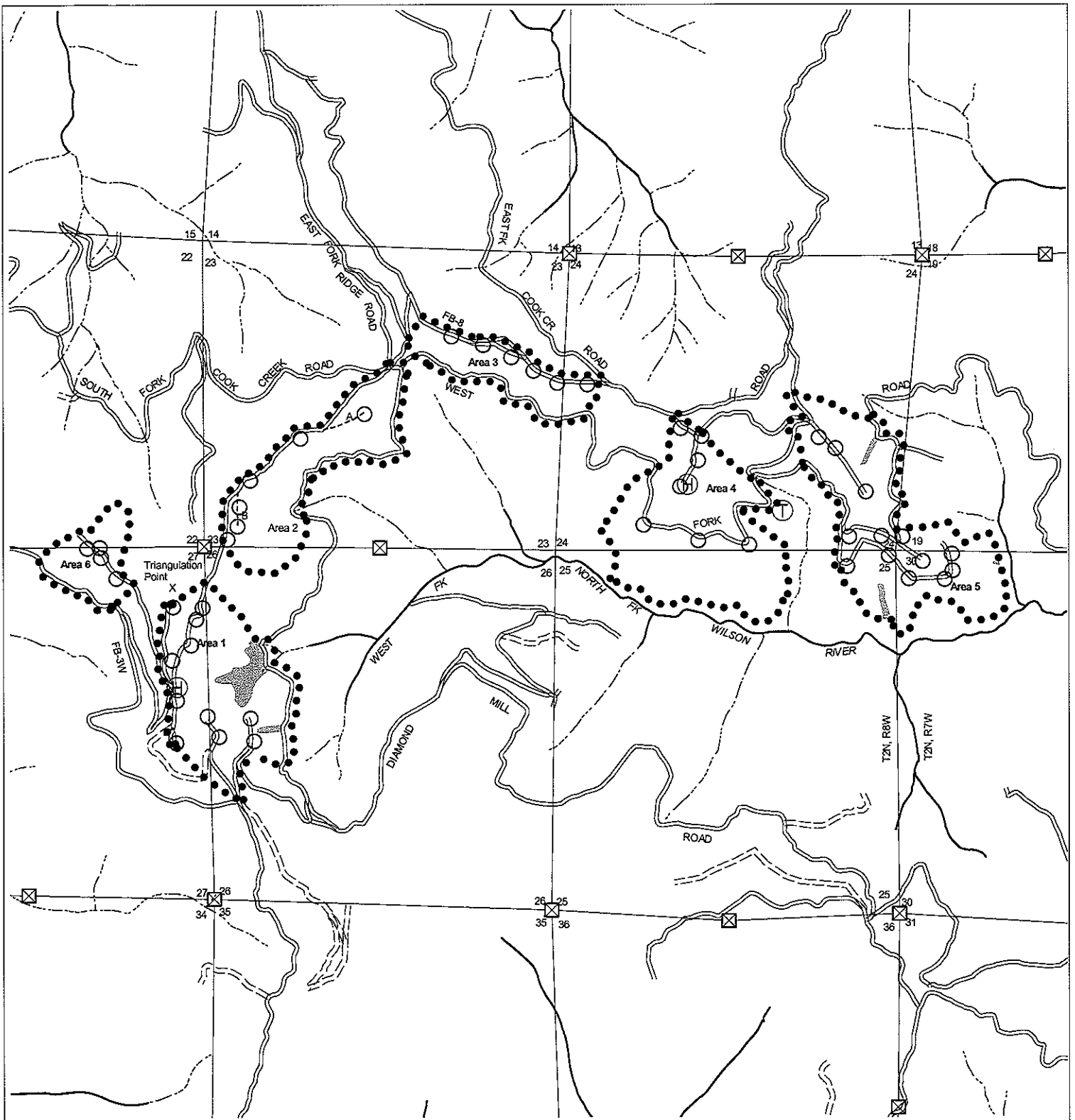
**T02N R07W S10 T0006**

**T02N R07W S10 T0006**

**Twp Rge Sec Tract Type Acres Plots Sample Trees**  
**02N 07W 10 AREA 6 0006 24.00 8 54**

**Page 2**  
**Date 1/24/2007**  
**Time 3:03:41PM**

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+
DL			Totals	29		29	6.9		7			22							
Total All Species				415		415	100.0		223	52	61	68	11						



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

**LOGGING PLAN**  
 Timber Sale Contract No. 341-07-12  
 Hole in the Wall  
 Portions of Sections 19 and 30, T2N, R7W  
 and portions of sections 22, 23, 24, 25,  
 26 and 27 of T2N, R8W, W. M.  
 Tillamook County, Oregon

Area	Type of Operation	Acres	
		Gross	Net
1	Modified Clearcut	87	73
2	Retention Cut	66	60
3	Modified Clearcut	33	28
4	Modified Clearcut	114	109
5	Modified Clearcut	106	98
6	Partial Cut	27	24
<b>Total</b>		<b>433</b>	<b>392</b>



Tillamook District GIS  
 October 9, 2006

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