



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
South Ginger  
Sale 341-09-40

District: Tillamook

Date: October 01, 2008

---

**cost summary**

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$132,970.73	\$0.00	\$132,970.73
		Project Work:	\$(20,800.00)
		Advertised Value:	\$112,170.73



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
South Ginger  
Sale 341-09-40

District: Tillamook

Date: October 01, 2008

**timber description**

Location: Portions of Section 12, T3S, R7W, W.M., Tillamook County, Oregon.

Stand Stocking: 60%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	14	0	95
Western Hemlock / Fir	13	0	95

Volume by Grade	2S	3S	4S	Total
Douglas - Fir	118	705	446	1,269
Western Hemlock / Fir	13	55	29	97
Total	131	760	475	1,366

**comments:** Pond Values Used: 3rd Quarter Calendar Year 2008.

Western Red Cedar Stumpage Price = Pond Value minus Logging Cost  
\$655/MBF = \$955/MBF - \$300/MBF

Red Alder Stumpage Price = Pond Value minus Logging Cost  
\$335/MBF = \$635/MBF - \$300/MBF

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

Brand and Paint: \$2/MBF x 1,366/MBF = \$2,732

TOTAL Other Costs (with Profit and Risk to be added) = \$2,732

Other Costs (No Profit and Risk added):

BLM Maintenance Fees: \$14,432.40

TOTAL Other Costs (No Profit and Risk added) = \$14,432.40

ROAD MAINTENANCE:

Surfacing: 118/cy @ \$6.60/cy / 1366/MBF = \$0.57/MBF

Grading Final Maintenance: \$500/mile x 6 miles x 1  
grading/1366/MBF = \$ 2.20/MBF

TOTAL ROAD MAINTENANCE COST: \$ 2.77/MBF



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
South Ginger  
Sale 341-09-40

District: Tillamook

Date: October 01, 2008

---

**logging conditions**

**combination#: 1**      Douglas - Fir      35.05%  
                                 Western Hemlock / Fir      25.00%

**yarding distance:** Medium (800 ft)      **downhill yarding:** No  
**logging system:** Cable: Small Tower <=40      **Process:** Stroke Delimber  
**tree size:** Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF  
**loads / day:** 5.0      **bd. ft / load:** 3,200  
**cost / mbf:** \$177.14

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

**combination#: 2**      Douglas - Fir      29.52%  
                                 Western Hemlock / Fir      35.00%

**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:** 3.5      **bd. ft / load:** 3,400  
**cost / mbf:** \$120.86

**machines:** Stroke Delimber (B)

**combination#: 3**      Douglas - Fir      35.43%  
                                 Western Hemlock / Fir      40.00%

**yarding distance:** Medium (800 ft)      **downhill yarding:** No  
**logging system:** Track Skidder      **Process:** Stroke Delimber  
**tree size:** Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF  
**loads / day:** 4.0      **bd. ft / load:** 3,300  
**cost / mbf:** \$108.96

**machines:** Stroke Delimber (B)



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
South Ginger  
Sale 341-09-40

District: Tillamook

Date: October 01, 2008

**logging costs**

Operating Seasons:	2.00	Profit Risk:	20.00%
Project Costs:	\$20,800.00	Other Costs (P/R):	\$2,732.00
Slash Disposal:	\$0.00	Other Costs:	\$14,432.40

**Miles of Road**

Road Maintenance: \$2.77

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	3.3
Western Hemlock / Fir	\$0.00	2.0	3.5



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
South Ginger  
Sale 341-09-40

District: Tillamook

Date: October 01, 2008

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
<b>Douglas - Fir</b>									
\$136.37	\$2.91	\$6.42	\$92.80	\$2.00	\$48.10	\$0.00	\$5.00	\$10.57	\$304.17
<b>Western Hemlock / Fir</b>									
\$130.17	\$2.91	\$6.42	\$87.50	\$2.00	\$45.80	\$0.00	\$5.00	\$10.57	\$290.37

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$407.26	\$103.09	\$0.00
Western Hemlock / Fir	\$0.00	\$312.53	\$22.16	\$0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
South Ginger  
Sale 341-09-40

District: Tillamook

Date: October 01, 2008

**summary**

**Amortized**

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Western Hemlock / Fir	0	\$0.00	\$0.00

**Unamortized**

Specie	MBF	Value	Total
Douglas - Fir	1,269	\$103.09	\$130,821.21
Western Hemlock / Fir	97	\$22.16	\$2,149.52

**Gross Timber Sale Value**

Recovery: \$132,970.73

Prepared by: David Luttrell

Phone: 503-815-7025



# PROJECT SUMMARY SHEET

Sale: South Ginger

## CONSTRUCTION

Point	G to H	0+90	stations =	\$164.36
<b>SUBTOTAL CONSTRUCTION</b>				<b>\$164.36</b>

## IMPROVEMENT

Point	A to B	1+50	stations =	\$520.45
Point	C to D	9+15	stations =	\$2,947.02
Point	E to F	5+10	stations =	\$872.95
Point	G to H	29+20	stations =	\$6,153.91
Point	I to J	11+40	stations =	\$4,217.98
<b>SUBTOTAL IMPROVEMENT</b>				<b>\$14,712.31</b>

## RECONSTRUCTION

Point	C to D	4+45	stations =	\$1,774.73
Point	K to L	6+70	stations =	\$1,541.29
<b>SUBTOTAL RECONSTRUCTION</b>				<b>\$3,316.02</b>

<b>MOVE IN</b>	<b>\$2,607.31</b>
----------------	-------------------

<b>GRAND TOTAL</b>	<b>\$20,800.00</b>
--------------------	--------------------

# SUMMARY OF CONSTRUCTION COST

Sale:

South Ginger

Road:

A to B

Construction -	0+00	stations	Improvement -	1+50	stations	Reconstruction -	0+00	stations
	0.00	miles		0.03	miles		0.00	miles

**IMPROVEMENT:** EXCAVATION -  
Road Earthwork

1.50 sta. @ \$50.00 per sta. = \$75.00  
**TOTAL EXCAVATION \$75.00**

**ROCK**  
0+00 to 1+50 70 cy. of 3" Crushed @ \$5.22 per c.y. = \$365.40  
**TOTAL ROCK \$365.40**

## SPECIAL PROJECTS

Grade and shape road - 1.50 stations @ \$15.50 per station \$23.25  
Grass seed and fertilize - 0.07 acres @ \$220.00 per acre \$15.40  
Mulching - 0.069 acres @ \$600.00 per acre \$41.40  
**TOTAL SPECIAL PROJECTS \$80.05**

**GRAND TOTAL \$520.45**



## SUMMARY OF CONSTRUCTION COST

Sale:

South Ginger

Road:

C to D

Construction -	0+00	stations	Improvement -	9+15	stations	Reconstruction -	4+45	stations
	0.00	miles		0.17	miles		0.08	miles

**IMPROVEMENT:** CLEARING AND GRUBBING -

Scattering	0.420	acres @	\$980.00	per acre =	\$411.60	
			<b>TOTAL CLEARING AND GRUBBING</b>			<b>\$411.60</b>

**IMPROVEMENT:** EXCAVATION -

Road Earthwork	9.15	sta. @	\$10.00	per sta. =	\$91.50	
			<b>TOTAL EXCAVATION</b>			<b>\$91.50</b>

**RECONSTRUCTION:** CLEARING AND GRUBBING -

Scattering	0.530	acres @	\$980.00	per acre =	\$519.40	
			<b>TOTAL CLEARING AND GRUBBING</b>			<b>\$519.40</b>

**RECONSTRUCTION:** EXCAVATION -

Road Earthwork	4.45	sta. @	\$15.00	per sta. =	\$66.75	
			<b>TOTAL EXCAVATION</b>			<b>\$66.75</b>

**ROCK**

0+00 to 13+60	410	cy. of	3" Crushed	@	\$6.47	per c.y. =	\$2,652.70	
							<b>TOTAL ROCK</b>	<b>\$2,652.70</b>

**SPECIAL PROJECTS**

Grade and shape road -	13.60	stations @	\$15.50	per station	\$210.80	
Grass seed and fertilize -	0.94	acres @	\$220.00	per acre	\$206.80	
Mulching -	0.937	acres @	\$600.00	per acre	\$562.20	
			<b>TOTAL SPECIAL PROJECTS</b>			<b>\$979.80</b>

**GRAND TOTAL**

**\$4,721.75**

## SUMMARY OF CONSTRUCTION COST

Sale:

South Ginger

Road:

E to F

Construction -	0+00	stations	Improvement -	5+10	stations	Reconstruction -	0+00	stations
	0.00	miles		0.10	miles		0.00	miles

**IMPROVEMENT:** CLEARING AND GRUBBING -  
Scattering

0.230 acres @ \$980.00 per acre = \$225.40  
**TOTAL CLEARING AND GRUBBING \$225.40**

**IMPROVEMENT:** EXCAVATION -  
Road Earthwork

5.10 sta. @ \$10.00 per sta. = \$51.00  
**TOTAL EXCAVATION \$51.00**

**ROCK**

0+00 to 1+00 50 cy. of 3" Crushed @ \$6.53 per c.y. = \$326.50  
**TOTAL ROCK \$326.50**

**SPECIAL PROJECTS**

Grade and shape road - 5.10 stations @ \$15.50 per station \$79.05  
Grass seed and fertilize - 0.23 acres @ \$220.00 per acre \$50.60  
Mulching - 0.234 acres @ \$600.00 per acre \$140.40  
**TOTAL SPECIAL PROJECTS \$270.05**

**GRAND TOTAL \$872.95**

## SUMMARY OF CONSTRUCTION COST

Sale:

**South Ginger**

Road:

**G to H**

Construction -	0+90	stations	Improvement -	29+20	stations	Reconstruction -	0+00	stations
	0.02	miles		0.55	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			
29+20		29+80	5%		Outslope	\$74	=	\$44.40	
								<b>TOTAL</b>	<b>\$44.40</b>

**IMPROVEMENT:** CLEARING AND GRUBBING -

Scattering	2.010	acres @	\$980.00	per acre =	\$1,969.80	
					<b>TOTAL CLEARING AND GRUBBING</b>	<b>\$1,969.80</b>

**IMPROVEMENT:** EXCAVATION -

Road Earthwork	29.20	sta. @	\$10.00	per sta. =	\$292.00	
					<b>TOTAL EXCAVATION</b>	<b>\$292.00</b>

### ROCK

0+75	to	4+00	70	cy. of	3" Crushed	@	\$6.91 per c.y.=	\$483.70	
18+80	to	26+00	210	cy. of	3" Crushed	@	\$5.87 per c.y.=	\$1,232.70	
29+20	to	30+10	50	cy. of	3" Crushed	@	\$5.98 per c.y.=	\$299.00	
								<b>TOTAL ROCK</b>	<b>\$2,015.40</b>

### SPECIAL PROJECTS

Grade and shape road -	30.10	stations @	\$15.50	per station	\$466.55	
Roll subgrade w/ vibratory roller prior to rocking -	30.10	stations @	\$13.20	per station	\$397.32	
Grass seed and fertilize -	1.38	acres @	\$220.00	per acre	\$303.60	
Mulching -	1.382	acres @	\$600.00	per acre	\$829.20	
					<b>TOTAL SPECIAL PROJECTS</b>	<b>\$1,996.67</b>

**GRAND TOTAL** **\$6,318.27**

## SUMMARY OF CONSTRUCTION COST

Sale:

**South Ginger**

Road:

**I to J**

Construction -	0+00	stations	Improvement -	11+40	stations	Reconstruction -	0+00	stations
	0.00	miles		0.22	miles		0.00	miles

**IMPROVEMENT: CLEARING AND GRUBBING -**

Scattering	0.790	acres @	\$980.00	per acre =	\$774.20	
<b>TOTAL CLEARING AND GRUBBING</b>						<b>\$774.20</b>

**IMPROVEMENT: EXCAVATION -**

Road Earthwork	11.40	sta. @	\$15.00	per sta. =	\$171.00	
<b>TOTAL EXCAVATION</b>						<b>\$171.00</b>

**CULVERTS - MATERIALS & INSTALLATION**

Culverts

35	LF of 18"	\$612.50
		\$612.50

Culvert Stakes & Markers

1	markers	\$8.00
		\$8.00

**TOTAL CULVERTS      \$620.50**

**ROCK**

0+00 to	8+00	240	cy. of	3" Crushed	@	\$7.23	per c.y. =	\$1,735.20
Culvert Backfill	4+75	30	cy. of	Crushed	@	\$5.39	per c.y. =	\$161.70
<b>TOTAL ROCK</b>								<b>\$1,896.90</b>

**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	
Grass seed and fertilize -	0.52	acres @	\$220.00	per acre	\$114.40	
Mulching -	0.523	acres @	\$600.00	per acre	\$313.80	
<b>TOTAL SPECIAL PROJECTS</b>						<b>\$755.38</b>

**GRAND TOTAL      \$4,217.98**

## SUMMARY OF CONSTRUCTION COST

Sale:

**South Ginger**

Road:

**K to L**

Construction -	0+00	stations	Improvement -	0+00	stations	Reconstruction -	6+70	stations
	0.00	miles		0.00	miles		0.13	miles

**RECONSTRUCTION: CLEARING AND GRUBBING -**

Scattering	0.650	acres @	\$980.00	per acre =	\$637.00	
				<b>TOTAL CLEARING AND GRUBBING</b>		<b>\$637.00</b>

**RECONSTRUCTION: EXCAVATION -**

Road Earthwork	6.70	sta. @	\$15.00	per sta. =	\$100.50	
				<b>TOTAL EXCAVATION</b>		<b>\$100.50</b>

**ROCK**

0+00	to	1+00	50	cy. of	3" Crushed	@	\$7.17	per c.y. =	\$358.50	
									<b>TOTAL ROCK</b>	<b>\$358.50</b>

**SPECIAL PROJECTS**

Grade and shape road -	6.70	stations @	\$15.50	per station	\$103.85	
Roll subgrade w/ vibratory roller prior to rocking -	6.70	stations @	\$13.20	per station	\$88.44	
Grass seed and fertilize -	0.31	acres @	\$220.00	per acre	\$68.20	
Mulching -	0.308	acres @	\$600.00	per acre	\$184.80	
				<b>TOTAL SPECIAL PROJECTS</b>		<b>\$445.29</b>

**GRAND TOTAL**

**\$1,541.29**

## ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Crushed_Pile	Location:	SW 1/4 Sec.1 , T3S, R7W, W.M.
Sale:	<b>South Ginger</b>	Road:	1180 c.y.
Swell:	0.00	Stockpile:	c.y.
Shrinkage	0.00	Total Truck Loads:	1180 c.y.
Drill Pct.:	0%	In Place Total:	c.y.

Pit Development & Cleanup including Clearing and grubbing of  
Waste Area @ adjacent to pit, place overburden  
in Waste Area, spread and compact. \$0.00  
Load Dump Truck: \$0.70 /cu.yd. x 1180 cu.yds. = \$826.00

Subtotal \$826.00

Move in Excavator 1 @ \$574.67 = \$574.67  
Move in Water Truck 1 @ \$144.85 = \$144.85  
Change Gradation

Subtotal \$719.52

Base Cost= \$1.31 Per Cu.Yd. TOTAL PRODUCTION COSTS \$1,545.52

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 0 150 (3" Crushed)	1.46	2.45	1.31	5.22	70	\$365.40
C to D 0 1360 (3" Crushed)	2.71	2.45	1.31	6.47	410	\$2,652.70
E to F 0 100 (3" Crushed)	2.77	2.45	1.31	6.53	50	\$326.50
G to H 75 400 (3" Crushed)	3.15	2.45	1.31	6.91	70	\$483.70
G to H 1880 2600 (3" Crushed)	3.46	1.10	1.31	5.87	210	\$1,232.70
G to H 2920 3010 (3" Crushed)	3.57	1.10	1.31	5.98	50	\$299.00
I to J 0 800 (3" Crushed)	3.47	2.45	1.31	7.23	240	\$1,735.20
I to J Culvert Backfill (Crushed)	3.48	0.60	1.31	5.39	30	\$161.70
K to L 0 100 (3" Crushed)	3.41	2.45	1.31	7.17	50	\$358.50
				Total C.Y.	1180	Sub Total \$7,615.40

TOTAL ROCKING COSTS \$7,615.40

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

**Sale: South Ginger**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
52.0	Pavement	30
2.0	Main Lines	7
1.0	Steep Grades	2

No.	EQUIPMENT DESCRIPTION	Move in Cost	Pilot Cars	Within Area Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Within	Total Cost
								Area Cost	
1	Graders	\$421.29		\$3.65	0.00	0.00	0	\$0.00	\$421.29
1	Rollers (smooth/grid) & Compactors	\$388.32		\$5.00	0.00	0.00	0	\$0.00	\$388.32
1	Excavators (Large)	\$614.54	1	\$44.80	0.00	0.00	0	\$0.00	\$614.54
1	Tractors (D7)	\$576.19	2	\$11.30	0.00	0.00	0	\$0.00	\$576.19
3	Dump Truck (10 cy +)	\$462.12		\$2.85	0.00	0.00	0	\$0.00	\$462.12
1	Water Truck (2500 Gal)	\$144.85		\$2.85	0.00	0.00	0	\$0.00	\$144.85
					TOTAL MOVE-IN COSTS:				\$2,607.31



# OREGON DEPARTMENT OF FORESTRY

## CRUISE REPORT

### *South Ginger*

1. **Type of Sale**

Partial Cut and Clearcut, Conifer / Recovery

2. **Legal Description**

Portions of Sections 12 T3S, R7W, W.M. Tillamook County, Oregon

3. **Sale Acreage**

	ACRES	
	<u>Sale</u>	<u>Net</u>
Partial Cut	118	88
Clearcut	34	32
<b>Total Acres</b>	<b>152</b>	<b>120</b>

Sale Acres

Area within the Timber Sale Boundary signs.

Net acres

*Used for calculating the advertised volume.*

Sale acres, less green tree retention, roads, utility, right-of-way, and less riparian areas inside the sale boundary.

4. **Cruising Procedures**

**A. Cruise Method**

A total of 56 variable radius plots were taken on the sale area, spaced on a square grid of 350' x 350'. All plots were full cruise plots. All conifers 8 inches DBH and greater containing 20 net board feet and all hardwoods 9 inches DBH and greater containing 30 net board feet were recorded on all plots. Species were recorded on all trees, and they were graded and measured for merchantable height, diameter, and form factor.

**B. Plot size**

A basal area factor of 40 was used for the Timber Sale Area. The point of observation is 4.5 feet.

**C. Grading System**

All trees were graded according to Columbia River Log Scaling and



Grading Rules. Tree heights were recorded to a 6 inch top outside bark for all conifers and 7 inches top outside bark for hardwoods; or three tenths (0.3) of DBH for all species, whichever was greater. Log lengths all favored 40 feet for all species. Height and diameter measurement standards were to the nearest foot or inch respectively. All diameters were taken at a height of 4.5 feet on the uphill side.

5. **Computation Procedure**

Plot data was entered into SuperAce for computation of basal area, stand tables, and volume for each species and type. This data was then entered into the Volume Summary table to compute sale volumes. The standard error for the cruise was 10.0% and the coefficient of variation was 49.2% based on 18 mbf per acre.

6. **Hidden Defect and Breakage**

No hidden defect and breakage was taken for the timber in this sale.

7. **Timber Description**

The Sale area was logged in the late 1950's. Areas in the sale were either planted or seeded in the 1960's. The northern portion of the sale was pre-commercially thinned. Area 2 is a Douglas-fir dominated stand with alder along the major draws. Areas 1 and 3 are Douglas-fir dominated as well, but have pockets of root rot throughout. The alder was sprayed in the late 1970's.

8. **Cruiser Names/Dates**

Luttrell/Wells/Stumpf/Yau, June 2008

Interns: Wyatt, Humphreys, Coons, Johnson

9. **Revenue Distribution**

FDF: 100%

Tax Code: 8

Deed Numbers: 186

10. **Attachments**

Volume Summary Table

Super Ace Stand Tables

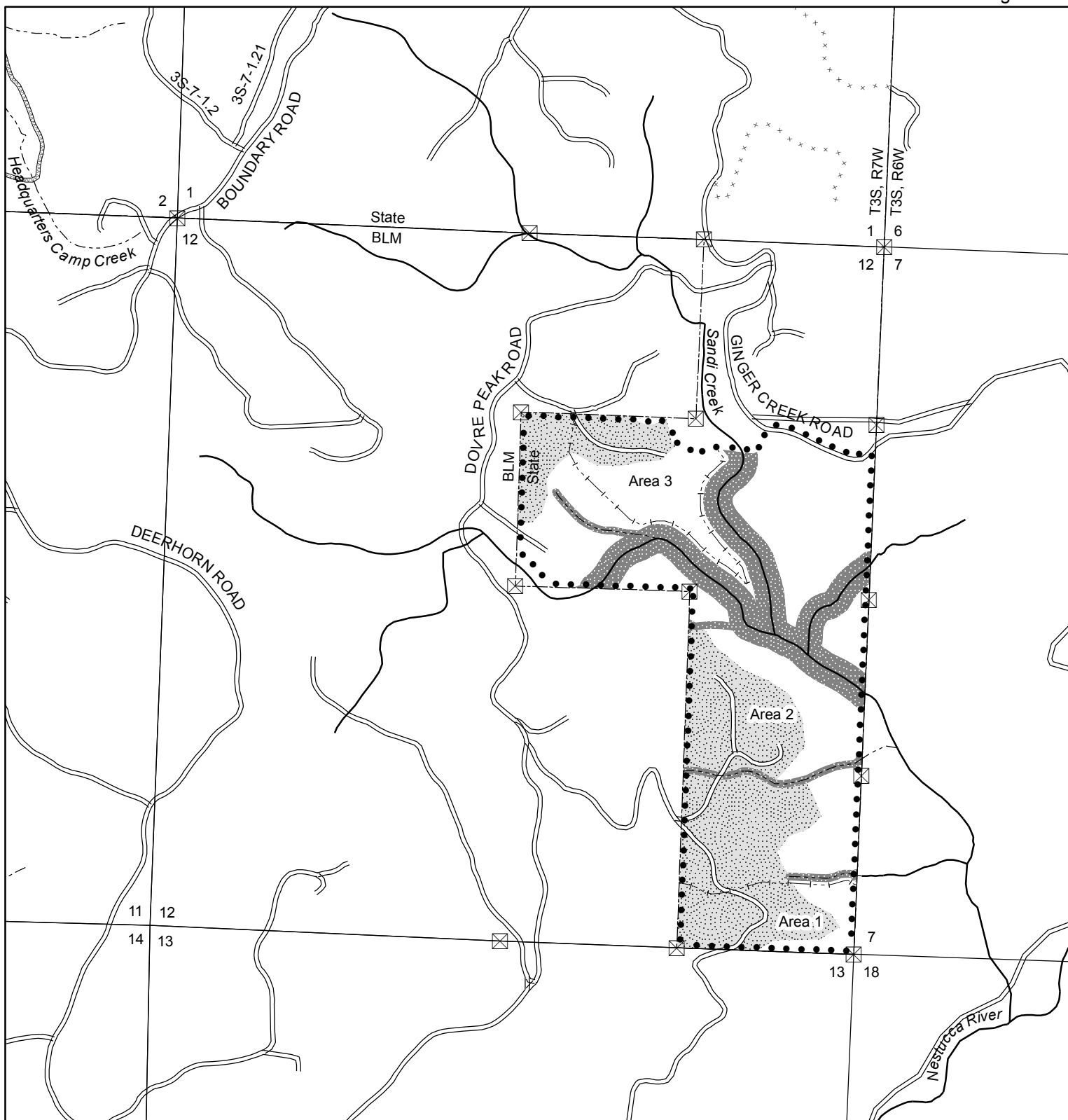
Logging Plan Exhibit

Log Stock Tables

11. **Stand and Log Stock Tables Species Key**

DL – Douglas-fir leave

DF – Douglas-fir take  
RA – Red alder reserved  
RC – Western red cedar reserved  
SL – Sitka spruce reserved  
WL– Western hemlock leave  
WH– Western hemlock take



- |                                |                             |
|--------------------------------|-----------------------------|
| ○ Landing                      | --- Area boundary           |
| ⊙ Domestic water supply intake | ••• Sale boundary           |
| ⊙ Helicopter landing zone      | --- Ownership boundary      |
| ⊙ Truck turn-around            | --- Perennial Type-F stream |
| ⊙ Survey corner                | --- Perennial Type-N stream |
| ⊙ Cable yarding                | --- Unsurfaced road         |
| ⊙ Ground yarding               | --- Surfaced road           |
| ⊙ Helicopter yarding           | --- State/Federal highway   |
| ⊙ Downhill yarding             | --- County road             |
| ⊙ Buffer                       | ⊙ Non-project road          |
| ⊙ Non-required thinning        | --- Swing road              |
|                                | --- Legacy road             |
|                                | × × × Blocked road          |
|                                | ⊙ OHV trail                 |
|                                | ⊙ Non-motorized trail       |
|                                | T T T Transmission line     |

### LOGGING PLAN

Timber Sale Contract No. 341-09-40  
 South Ginger  
 Portions of Section 12,  
 T3S, R7W, W.M.,  
 Tillamook County, Oregon

1,000 0 1,000 Feet

Tillamook District GIS  
 07/17/2008

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

Area	Type of Operation	Acres	
		Gross	Net
1	Modified Clearcut	16	15
2	Partial Cut	118	88
3	Modified Clearcut	18	17
Total		152	120

