"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Cost Summary
Two Coals
Sale 341-05-60

District: Tillamook **Date:** 4/6/05

	Conifer	Hardwood	Total
Gross Timber Sale Value	$449,125.36	$0.00	$449,125.36
		Project Work	($96,890.00)
		Advertised Value	$352,235.36

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Timber Description
Two Coals
Sale 341-05-60

District: Tillamook

Location: Portions of Sections 1, 2, and 11, T3N, R10W, W.M., Tillamook County, Oregon.

Date: 4/6/05 **Stand Stocking:** 20%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	19	0	95
Western Hemlock / Fir	14	0	95

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Total
2S	385	284	669
3S	301	660	961
4S	62	220	282
Total	748	1,164	1,912

Comments: Pond Values Used: 1st Quarter 2005.

Cedar Stumpage: $865/ MBF (pond value) - $ 267.28/MBF (logging cost) = $ 597.72/ MBF
Hardwood Stumpage: $620/MBF (pond value) - $267.28/MBF (logging cost) = $ 352.72/MBF

Additional Costs (Profit and Risk to be added)
Brand and Paint - $2/MBF x 1,912MBF =$3,824
Down wood creation - $700/one day/2 fallers =$700
Total Other Costs + P&R = $4,524

Additional Costs (No P&R)
Vacating roads in Area 1

Point G to H	11+50	stations =	$4,400.00
Point K to L	16 +50	stations =	$ 734.88
Point M to N	9 +30	stations =	$ 418.68
Point O to P	7 +00	stations =	$ 314.25

Move in = $ 967.99
Total Other Costs no P & R = $6,835.80

Road Maintenance

Grading (once per 2 MMBF)
$500/Mile x 1 Grading x 7 miles / 1,912 MBF = $ 1.83

Maintenance Rock

Area 1 haul route (Longview Fibre Company Land)
Crushed - 250 yds3 (3" minus rock) x 10.85/yard / 1,912 MBF = $1.42
Area 2 haul route (State Land)
Crushed - 130 yds3 (1 ½" rock) x $12.1/ yard / 1,912 MBF = $ 0.82

Total Maintenance Cost = $ 4.07

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Logging Conditions
Two Coals
Sale 341-05-60

Combination#: 1 Douglas - Fir 88.64%
Western Hemlock / Fir 84.30%

Yarding Distance: Medium (800 ft) **Downhill Yarding:** No
Logging System: Cable: Medium Tower >40 - <70 **Process:** Manual Delimbing
Tree Size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
Loads/Day: 5 **Bd. Ft./Load:** 3,800
Cost/MBF: $174.56
Machines:
Log Loader (A)
Tower Yarder (Medium)

Combination#: 2 Douglas - Fir 11.36%
Western Hemlock / Fir 15.70%

Yarding Distance: Medium (800 ft) **Downhill Yarding:** Yes
Logging System: Track Skidder **Process:** Manual Falling/Delimbing
Tree Size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
Loads/Day: 6 **Bd. Ft./Load:** 3,800
Cost/MBF: $143.22
Machines:
Log Loader (B)
Track Skidder

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Logging Costs
Two Coals
Sale 341-05-60

Date: 4/6/05

Operating Seasons: 1.0 **Profit & Risk:** 20%

Project Costs: $96,890 **Other Costs (P/R):** $4,524

Slash Disposal: $0 **Other Costs:** $6,836

Road Maintenance: $4.07

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	$0.00	2.0	4.0
Western Hemlock / Fir	$0.00	3.0	3.6

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Logging Costs Breakdown
Two Coals
Sale 341-05-60

Costs	Douglas - Fir	Western Hemlock / Fir
Logging	171.00	169.64
Road Maintenance	4.28	4.28
Fire Protection	1.42	1.42
Hauling	60.53	40.37
Other (P/R appl.)	2.37	2.37
Profit & Risk	47.92	43.62
Slash Disposal	0.00	0.00
Scaling	2.00	2.00
Other	3.58	3.58
Total	293.10	267.28

Amortization	0.00	0.00
Pond Value	633.16	434.60
Stumpage	340.06	167.32
Amortized	0.00	0.00

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary
Two Coals
Sale 341-05-60

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	748.00	1,164.00
Value	340.06	167.32
Total	254,364.88	194,760.48

Gross Timber Sale Value

Recovery $449,125.36

Prepared by: Amber Winslow Date: 4/6/05

District: Tillamook Phone: (503) 815-2545

"STEWARDSHIP IN FORESTRY"

PROJECT SUMMARY SHEET

Sale: **Two Coals**

CONSTRUCTION

Point	C to D	6+00	stations =	$15,975.78
Point	E to F	6+50	stations =	$17,838.86
Point	G to H	13+25	stations =	$6,642.94
Point	I to J	2+60	stations =	$5,003.05
Point	K to L	16+50	stations =	$4,359.93
Point	M to N	9+30	stations =	$1,752.73
Point	O to P	7+00	stations =	$2,367.25
			SUBTOTAL CONSTRUCTION	**$53,940.54**

IMPROVEMENT

Point	A to B	158+60	stations =	$40,442.70
			SUBTOTAL IMPROVEMENT	**$40,442.70**

MOVE IN **$2,503.78**

GRAND TOTAL **$96,887.02**

SUMMARY OF CONSTRUCTION COST

Sale: **Two Coals** Road: **A to B**

Construction - 0+00 stations, 0.00 miles

Improvement - 158+60 stations, 3.00 miles

CLEARING AND GRUBBING -

Roadside Brushing	3.00	miles @	$1,000.00	per mile =	$3,000.00
TOTAL CLEARING AND GRUBBING					**$3,000.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts						
180	LF of 18"	$2,880.00	0	LF of 24"	$0.00	
0	LF of 30"	$0.00	0	LF of 36"	$0.00	
0	LF of 42"	$0.00	0	LF of 48"	$0.00	
0	LF of 54"	$0.00	0	LF of 60"	$0.00	
0	LF of 66"	$0.00	0	LF of 72"	$0.00	
		$2,880.00			$0.00	
Half Rounds						
0	LF of 21"	$0.00	0	LF of 30"	$0.00	
0	LF of 36"	$0.00	0	LF of 42"	$0.00	
		$0.00			$0.00	
Culvert Stakes & Markers						
0	stakes	$0.00				
6	markers	$48.00				
		$48.00				
				TOTAL CULVERTS		**$2,928.00**

ROCK

60+00	to	101+05	808	cy. of	Crushed	@	$13.58	per c.y.= $10,972.64
							TOTAL ROCK	**$10,972.64**

SPECIAL PROJECTS

Re-shape dented culvert inlet -	0.50	hours @	$28.00	per hour	$14.00
Construct sediment catch basin @ station 19+90 -	0.50	hours @	$140.00	per hour	$70.00
Construct ditchout left @ station 83+15 -	1.00	@	$60.00	each	$60.00
Pull ditch and endhaul waste material (<2000') from, 61+90 to 67+50 and 90+55 to 99	14.75	stations @	$20.00	per station	$295.00
Grade and shape road (crowned w/ ditch) (60+00 to 101+05) -	41.05	stations @	$17.40	per station	$714.27
Roll subgrade w/ vibratory roller prior to rocking (60+00 to 101+05) -	41.05	stations @	$11.00	per station	$451.55
Remove culverts from state lands -	3.00	@	$337.50	total	$337.50
Grass seed and fertilize -	3.64	acres @	$220.00	per acre	$800.80
Mulching -	3.64	acres @	$600.00	per acre	$2,184.00
				TOTAL SPECIAL PROJECTS	**$23,542.06**

GRAND TOTAL **$40,442.70**

SUMMARY OF CONSTRUCTION COST

Sale: **Two Coals** Road: **C to D**

Construction - 6+00 stations, 0.11 miles

Improvement - +00 stations, 0.00 miles

CLEARING AND GRUBBING -						
Scattering	0.580	acres @	$815.00	per acre =	$472.70	
TOTAL CLEARING AND GRUBBING						**$472.70**
EXCAVATION -						
Push up to 250'	172	cy. @	$0.75	per sta. =	$129.00	
Earthwork (common, slopes < 50%)	249	cy. @	$1.15	per c.y.=	$286.35	
Full Bench	3251	cy. @	$1.40	per c.y.=	$4,551.40	
TOTAL EXCAVATION						**$4,966.75**
ENDHAUL -						
Full Bench	3251	cy. @	$1.38	per c.y.=	$4,486.38	
Spread & compact	3251	cy. @	$0.20	per c.y.=	$650.20	
TOTAL ENDHAUL						**$5,136.58**
ROCK						
0+00 to 6+00	373	cy. of Jaw-Run		@	$11.35 per c.y.=	$4,233.55
TOTAL ROCK						**$4,233.55**
SPECIAL PROJECTS						
Construct waste area -	2.00	hours @	$140.00	per hour	$280.00	
Grade and shape road -	6.00	stations @	$14.20	per station	$85.20	
Roll subgrade w/ vibratory roller prior to rocking -	6.00	stations @	$11.00	per station	$66.00	
Remove large stumps -	3.00	@	$75.00	each	$225.00	
Proof-Roll subgrade prior to rocking -	6.00	stations @	$3.00	per station	$18.00	
Grass seed and fertilize -	0.60	acres @	$220.00	per acre	$132.00	
Mulching -	0.60	acres @	$600.00	per acre	$360.00	
TOTAL SPECIAL PROJECTS						**$1,166.20**
GRAND TOTAL						**$15,975.78**

SUMMARY OF CONSTRUCTION COST

Sale: **Two Coals** Road: **E to F**

Construction - 6+50 stations, 0.12 miles

Improvement - +00 stations, 0.00 miles

CLEARING AND GRUBBING -							
Scattering	0.600	acres @	$815.00	per acre =	$489.00		
TOTAL CLEARING AND GRUBBING							**$489.00**
EXCAVATION -							
Earthwork (common, slopes < 50%)	1484	cy. @	$1.15	per sta. =	$1,706.60		
Full Bench	1979	cy. @	$1.40	per c.y.=	$2,770.60		
TOTAL EXCAVATION							**$4,477.20**
ENDHAUL -							
Full Bench	3463	cy. @	$1.60	per c.y.=	$5,540.80		
Spread & compact	3463	cy. @	$0.20	per c.y.=	$692.60		
TOTAL ENDHAUL							**$6,233.40**

CULVERTS - MATERIALS & INSTALLATION

Culverts						
40	LF of 18"	$640.00	0	LF of 24"	$0.00	
0	LF of 30"	$0.00	0	LF of 36"	$0.00	
0	LF of 42"	$0.00	0	LF of 48"	$0.00	
0	LF of 54"	$0.00	0	LF of 60"	$0.00	
0	LF of 66"	$0.00	0	LF of 72"	$0.00	
		$640.00			$0.00	
Half Rounds						
0	LF of 21"	$0.00	0	LF of 30"	$0.00	
0	LF of 36"	$0.00	0	LF of 42"	$0.00	
		$0.00			$0.00	
Culvert Stakes & Markers						
0	stakes	$0.00				
1	markers	$8.00				
		$8.00		TOTAL CULVERTS		**$648.00**

ROCK							
0+00 to 6+50	436	cy. of	Jaw-Run	@	$11.26	per c.y.=	$4,909.36
TOTAL ROCK							**$4,909.36**

SPECIAL PROJECTS						
Construct waste area -	2.00	hours @	$140.00	per hour	$280.00	
Grade and shape road -	6.50	stations @	$14.20	per station	$92.30	
Roll subgrade w/ vibratory -	6.50	stations @	$11.00	per station	$71.50	
Remove large stumps -	3.00	@	$75.00	each	$225.00	
Proof-Roll subgrade prior to rocking -	6.50	stations @	$3.00	per station	$19.50	
Grass seed and fertilize -	0.48	acres @	$220.00	per acre	$105.60	
Mulching -	0.48	acres @	$600.00	per acre	$288.00	
TOTAL SPECIAL PROJECTS						**$1,081.90**

GRAND TOTAL **$17,838.86**

SUMMARY OF CONSTRUCTION COST

Sale: **Two Coals** Road: **G to H**

Construction - 13+25 stations, 0.25 miles

Improvement - +00 stations, 0.00 miles

CLEARING AND GRUBBING -						
Scattering	1.220	acres @	$815.00	per acre =	$994.30	
				TOTAL CLEARING AND GRUBBING		**$994.30**
EXCAVATION -						
Push up to 250'	1286	cy. @	$0.75	per c.y.=	$964.50	
Earthwork (common, slopes < 50%)	2364	cy. @	$1.15	per c.y.=	$2,718.60	
Full Bench	232	cy. @	$1.40	per c.y.=	$324.80	
				TOTAL EXCAVATION		**$4,007.90**
ENDHAUL -						
Full Bench	92	cy. @	$2.00	per c.y.=	$184.00	
Spread & compact	92	cy. @	$0.20	per c.y.=	$18.40	
				TOTAL ENDHAUL		**$202.40**
SPECIAL PROJECTS						
Grade and shape road -	13.25	stations @	$9.75	per station	$129.19	
Roll subgrade w/ vibratory roller prior to rocking -	13.25	stations @	$11.00	per station	$145.75	
Remove large stumps -	6.00	@	$75.00	each	$450.00	
Grass seed and fertilize -	0.87	acres @	$220.00	per acre	$191.40	
Mulching -	0.87	acres @	$600.00	per acre	$522.00	
				TOTAL SPECIAL PROJECTS		**$1,438.34**

GRAND TOTAL **$6,642.94**

SUMMARY OF CONSTRUCTION COST

Sale: **Two Coals** Road: **I to J**

Construction - 2+60 stations, 0.05 miles

Improvement - +00 stations, 0.00 miles

CLEARING AND GRUBBING -							
Scattering			0.240 acres @	$815.00 per acre =	$195.60		
				TOTAL CLEARING AND GRUBBING			**$195.60**
EXCAVATION -							
Earthwork (common, slopes < 50%)			811 cy. @	$1.15 per c.y.=	$932.65		
				TOTAL EXCAVATION			**$932.65**
ENDHAUL -							
Full Bench			811 cy. @	$2.00 per c.y.=	$1,622.00		
Spread & compact			811 cy. @	$0.20 per c.y.=	$162.20		
				TOTAL ENDHAUL			**$1,784.20**
ROCK							
0+00 to 2+60		175 cy. of	Jaw-Run	@	$10.75 per c.y.=	$1,881.25	
				TOTAL ROCK			**$1,881.25**
SPECIAL PROJECTS							
Grade and shape road -			2.60 stations @	$9.75 per station	$25.35		
Roll subgrade w/ vibratory roller -			2.60 stations @	$11.00 per station	$28.60		
Proof-Roll subgrade prior to rocking -			2.60 stations @	$3.00 per station	$7.80		
Grass seed and fertilize -			0.18 acres @	$220.00 per acre	$39.60		
Mulching -			0.18 acres @	$600.00 per acre	$108.00		
				TOTAL SPECIAL PROJECTS			**$209.35**

GRAND TOTAL **$5,003.05**

SUMMARY OF CONSTRUCTION COST

Sale: **Two Coals** Road: **K to L**

Construction - 16+50 stations, 0.31 miles

Improvement - +00 stations, 0.00 miles

CLEARING AND GRUBBING -							
Scattering			1.590	acres @	$815.00	per acre =	$1,295.85
						TOTAL CLEARING AND GRUBBING	**$1,295.85**
EXCAVATION -							
Earthwork (common, slopes < 50%)			16.50	sta. @	$65.00	per sta. =	$1,072.50
						TOTAL EXCAVATION	**$1,072.50**

CULVERTS - MATERIALS & INSTALLATION

Culverts						
0	LF of 18"	$0.00	0	LF of 24"	$0.00	
0	LF of 30"	$0.00	0	LF of 36"	$0.00	
0	LF of 42"	$0.00	0	LF of 48"	$0.00	
0	LF of 54"	$0.00	0	LF of 60"	$0.00	
0	LF of 66"	$0.00	0	LF of 72"	$0.00	
		$0.00			$0.00	
Hagf Rounds						
0	LF of 21"	$0.00	0	LF of 30"	$0.00	
0	LF of 36"	$0.00	0	LF of 42"	$0.00	
		$0.00			$0.00	
Culvert Stakes & Markers						
0	stakes	$0.00				
0	markers	$0.00				
		$0.00		TOTAL CULVERTS		**$0.00**

SPECIAL PROJECTS					
Grade and shape road -	16.50	stations @	$9.75	per station	$160.88
Roll subgrade w/ vibratory roller -	16.50	stations @	$11.00	per station	$181.50
Remove large stumps -	4.00	@	$75.00	each	$300.00
Construct waste area -	3.00	hours @	$140.00	per hour	$420.00
Construct turn out @ sta. 8+05 -	1.00	@	$60.00	each	$60.00
Grass seed and fertilize -	1.06	acres @	$220.00	per acre	$233.20
Mulching -	1.06	acres @	$600.00	per acre	$636.00
				TOTAL SPECIAL PROJECTS	**$1,991.58**

GRAND TOTAL **$4,359.93**

SUMMARY OF CONSTRUCTION COST

Sale: **Two Coals** Road: **M to N**

Construction - 9+30 stations, 0.18 miles Improvement - +00 stations, 0.00 miles

CLEARING AND GRUBBING -							
Scattering	0.850	acres	@	$815.00	per acre =	$692.75	
TOTAL CLEARING AND GRUBBING							**$692.75**
EXCAVATION -							
Earthwork (common, slopes < 50%)	9.30	sta.	@	$65.00	per sta. =	$604.50	
TOTAL EXCAVATION							**$604.50**
SPECIAL PROJECTS							
Grade and shape road -	9.30	stations	@	$9.75	per station	$90.68	
Roll subgrade w/ vibratory roller -	9.30	stations	@	$11.00	per station	$102.30	
Remove large stumps -	5.00		@	$75.00	each	$375.00	
Grass seed and fertilize -	0.60	acres	@	$220.00	per acre	$132.00	
Mulching -	0.60	acres	@	$600.00	per acre	$360.00	
TOTAL SPECIAL PROJECTS							**$1,059.98**
GRAND TOTAL							**$1,752.73**

SUMMARY OF CONSTRUCTION COST

Sale: **Two Coals** Road: **O to P**

Construction -	7+00	stations	Improvement -	+00	stations
	0.13	miles		0.00	miles

CLEARING AND GRUBBING -						
Scattering	0.640	acres @	$815.00	per acre =	$521.60	
				TOTAL CLEARING AND GRUBBING		**$521.60**
EXCAVATION -						
Earthwork (common, slopes < 50%)	7.00	sta. @	$65.00	per sta. =	$455.00	
				TOTAL EXCAVATION		**$455.00**
SPECIAL PROJECTS						
Grade and shape road -	7.00	stations @	$9.75	per station	$68.25	
Roll subgrade w/ vibratory roller -	7.00	stations @	$11.00	per station	$77.00	
Remove large stumps -	4.00	@	$75.00	each	$300.00	
Remove slash pile -	4.00	hours @	$140.00	per hour	$560.00	
Grass seed and fertilize -	0.47	acres @	$220.00	per acre	$103.40	
Mulching -	0.47	acres @	$600.00	per acre	$282.00	
				TOTAL SPECIAL PROJECTS		**$1,390.65**

GRAND TOTAL **$2,367.25**

CRUSHED ROCK COST SUMMARY

Pit:	Crushing Pit	Location:	Commercial Source		
Sale:	**Two Coals**		Road:	808 c.y.	
Swell:	1.40		Stockpile:	c.y.	
Shirinkage	1.16		Total Truck Loads:	808 c.y.	
Drill Pct.:	0%		In Place Total:	577 c.y.	

Base Cost= $8.60 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	3.68	1.30	8.60	13.58	808		10,972.64
				Total C.Y.	808	Sub Total	10,972.64

TOTAL ROCKING COST	10,972.64

JAW-RUN ROCK COST SUMMARY

Pit:	Jaw Run	Location:	Commercial Source
Sale:	**Two Coals**	Road:	984 c.y.
Swell:	1.40	Stockpile:	c.y.
Shirinkage	1.16	Total Truck Loads:	984 c.y.
Drill Pct.:	0%	In Place Total:	703 c.y.

Base Cost= $6.35 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
C to D	$4.10	$0.90	$6.35	$11.35	373		$4,233.55
E to F	$4.01	$0.90	$6.35	$11.26	436		$4,909.36
I to J	$3.50	$0.90	$6.35	$10.75	175		$1,881.25
				Total C.Y.	984	Sub Total	$11,024.16

TOTAL ROCKING COSTS	$11,024.16

"STEWARDSHIP IN FORESTRY"

OREGON DEPARTMENT OF FORESTRY
CRUISE REPORT
Two Coals

1. Type of Sale
Partial cut, Recovery

2. Legal Description
Sections 1, 2, 11, T3N, R10W, WM, Tillamook County, Oregon.

3. Sale Acreage

		ACRES	
	Sale	**Total**	**Net**
Area 1	56	49	49
Area 2	35	30	30
Total	91	79	79

Sale Acres: *Area within the Timber Sale Boundary signs.*
Total Acres: *Sale acres, plus green tree retention areas outside the timber sale boundary; less roads and riparian areas classified as Special Stewardship in LMCS inside the sale boundary. For accomplishment reporting – clearcut (regeneration) harvest.*
Net acres: *Used for calculating the advertised volume.*
Clearcut - Sale acres, less green tree retention, roads, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.
Partial Cut - Sale acres minus areas of low stocking, hardwoods, roads, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

4. Cruising Procedures

A. Cruise Method
A total of 45 variable radius plots were taken across the sale areas; 21 in Area 1 and 24 in Area 2. Plots were spaced on a square grid pattern 250' apart in Area 1 and 150' apart in Area 2. All conifers 8 inches DBH and greater and all hardwoods 10 inches DBH and greater 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 in all sale areas. The point of observation was at 4.5 feet.

C. Grading System
All trees were graded according to Columbia River Log Scaling and Grading Rules. Conifer trees were measured to a top outside bark of 0.4 DBH or 6-inches,

whichever was greater. Hardwood trees were measured to an 9-inch top outside bark. 40-foot lengths were favored for both species. All heights were measured to the nearest foot. All diameters were measured at a height of 4.5 feet to the nearest 1-inch. Conifers less than 20 board feet and hardwoods less than 30 board feet were not recorded.

5. Computation Procedure

Plot data was entered into SuperAce for computation of basal area, stand tables, diameters, and volume to basal area ratio for each species and area. This data was then entered into the Volume Summary Worksheet to compute sale volumes.

6. Hidden Defect and Breakage

A 5% deduction was applied to the volume to account for hidden defect and breakage.

7. Timber Description

The current stand condition in Area 1 is understory and Area 2 is closed-single canopy. These areas were logged in the 1900's and naturally regenerated. The timber is approximately 70-80 years old and is a mix of Douglas-fir and hemlock with scattered spruce, cedar and alder throughout the sale area. The Douglas-fir has low Swiss needle cast (SNC) symptoms.

8. Cruiser Names/Dates

Winslow / Wilson / Phillips, October, 2004.

9. Revenue Distribution

FDF: 100%
Tax Code: 56-1
Deed Number: 35, 146
0% - Rehabilitation Obligated

10. Attachments

Stand Tables
Volume Summary
Logging Plan

"STEWARDSHIP IN FORESTRY"

Two Coals

Volume Summary

Area 1						
			49 acres			
SPECIES	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	32	229	7.3	358	5%	340
Hemlock	86	182	15.7	769	5%	731
TOTAL				1127		1071

Area 2						
			30 acres			
SPECIES	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	67	214	14.3	429	5%	408
Hemlock	73	208	15.2	456	5%	433
TOTAL				885		841

TOTAL SALE VOLUME		
SPECIES	Gross (MBF)	Net Vol (MBF)
Douglas-fir	787	748
Hemlock	1225	1164
TOTAL	2012	**1912**

TOTAL ACRES	**79**

TC TSTNDSUM

Stand Table Summary

Project 2COALS

T03N R10W S01 TA1

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
03N	10W	01	AREA 1/220	A1	49.00	21	174

T03N R10W S01 TA1

Date: 1/20/05

Time: 10:54:02AM

Spc	S T	Sample DBH	Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft Acre	Totals Tons	Totals Cunits	Totals MBF
DL		15	1	88	112	1.661	1.90	3.32	23.0	95.0	2.10	76	316	103	37	15
DL		16	1	89	112	1.298	1.90	2.60	29.8	115.0	2.13	77	299	104	38	15
DL		17	2	90	123	2.476	3.81	6.22	27.1	115.6	4.64	169	719	227	83	35
DL		19	2	90	134	1.895	3.81	4.72	35.9	160.1	4.66	169	755	228	83	37
DL		20	1	90	141	.864	1.90	2.59	36.8	166.7	2.62	95	432	128	47	21
DL		21	1	90	134	.792	1.90	2.38	38.0	180.0	2.48	90	428	121	44	21
DL		25	2	90	156	1.136	3.81	3.41	56.6	270.0	5.30	193	920	260	94	45
DL		26	3	90	144	1.555	5.71	4.66	61.9	301.5	7.95	289	1,406	389	142	69
DL		27	2	90	155	.958	3.81	3.36	60.0	305.8	5.54	201	1,027	271	99	50
DL		28	3	89	144	1.343	5.71	4.47	66.0	341.2	8.11	295	1,526	398	145	75
DL		29	3	89	163	1.255	5.71	4.17	72.9	379.2	8.35	304	1,581	409	149	77
DL		30	2	90	139	.781	3.81	2.73	72.5	371.7	5.44	198	1,015	267	97	50
DL		31	2	90	163	.727	3.81	2.18	95.5	517.1	5.73	208	1,128	281	102	55
DL		32	2	89	150	.674	3.81	2.02	95.7	486.5	5.32	194	983	261	95	48
DL		33	5	89	159	1.604	9.52	6.09	88.2	483.0	14.77	537	2,944	724	263	144
DL		34	2	89	165	.602	3.81	1.81	117.2	658.6	5.82	212	1,190	285	104	58
DL		35	3	90	167	.854	5.71	2.56	123.0	688.9	8.66	315	1,764	424	154	86
DL		36	4	90	170	1.075	7.62	3.23	134.0	784.1	11.88	432	2,529	582	212	124
DL		37	4	90	166	1.032	7.62	3.62	121.2	702.4	12.05	438	2,540	590	215	124
DL		40	1	89	159	.218	1.90	.65	123.8	700.0	2.23	81	458	109	40	22
DL		41	1	90	154	.204	1.90	.61	157.0	820.0	2.64	96	501	129	47	25
DL		42	1	89	168	.197	1.90	.59	185.8	1110.0	3.02	110	656	148	54	32
DL		43	1	90	150	.189	1.90	.57	171.8	936.7	2.68	97	531	131	48	26
DL		44	1	90	144	.177	1.90	.71	145.1	815.0	2.83	103	578	139	50	28
DL		Totals	50	90	144	23.567	95.24	69.27	71.9	378.6	136.95	4,980	26,226	6,711	2,440	1,285
WL		15	1	92	126	1.473	1.90	4.42	19.2	86.7	2.71	85	383	133	42	19
WL		16	1	94	140	1.381	1.90	4.14	24.8	120.0	3.29	103	497	161	50	24
WL		21	3	94	141	2.446	5.71	7.34	42.1	203.1	9.90	309	1,491	485	151	73
WL		23	5	93	133	3.251	9.52	9.13	54.7	280.2	15.98	499	2,559	783	245	125
WL		24	1	93	133	.587	1.90	1.76	57.8	293.3	3.26	102	516	160	50	25
WL		25	9	93	139	5.058	17.14	16.85	54.7	277.9	29.52	922	4,682	1,447	452	229
WL		26	7	93	142	3.625	13.33	11.89	61.2	323.9	23.28	727	3,850	1,141	356	189
WL		27	3	92	137	1.463	5.71	3.42	85.0	466.3	9.32	291	1,597	456	143	78
WL		28	3	93	144	1.362	5.71	4.54	72.8	392.6	10.58	331	1,783	518	162	87
WL		29	3	94	135	1.246	5.71	4.57	69.1	371.7	10.11	316	1,698	495	155	83
WL		30	2	91	150	.803	3.81	3.21	71.0	396.2	7.29	228	1,272	357	112	62
WL		31	1	94	140	.363	1.90	1.09	100.0	536.7	3.49	109	585	171	53	29
WL		32	3	90	155	1.027	5.71	3.42	99.4	546.1	10.88	340	1,869	533	167	92
WL		33	3	93	140	.966	5.71	2.90	106.8	561.1	9.91	310	1,626	486	152	80
WL		34	2	93	153	.601	3.81	1.80	116.4	629.8	6.72	210	1,135	329	103	56
WL		38	1	94	96	.242	1.90	.48	163.0	655.0	2.52	79	317	123	39	16
WL		Totals	48	93	139	25.894	91.43	80.96	61.3	319.4	158.75	4,960	25,859	7,779	2,430	1,267
WH		8	1	91	74	4.949	1.90	4.95	9.7	40.0	1.54	48	198	75	24	10
WH		9	3	89	87	13.184	5.71	22.42	6.7	31.8	4.84	151	712	237	74	35
WH		10	5	90	79	16.789	9.52	20.21	13.6	61.9	8.82	276	1,250	432	135	61
WH		11	2	91	91	5.934	3.81	8.93	12.2	53.4	3.49	109	477	171	53	23
WH		12	3	92	91	7.621	5.71	15.45	12.3	53.3	6.10	191	823	299	93	40
WH		13	4	92	106	8.503	7.62	21.27	12.3	51.7	8.30	261	1,099	407	128	54
WH		14	5	93	110	8.890	9.52	23.03	15.4	70.2	11.35	355	1,616	556	174	79
WH		15	3	92	94	4.742	5.71	7.95	24.8	113.7	6.31	197	905	309	97	44
WH		16	3	92	103	4.061	5.71	6.72	32.3	135.8	6.93	217	913	339	106	45

TC TSTNDSUM

Stand Table Summary

Project 2COALS

T03N R10W S01 TA1

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
03N	10W	01	AREA 1/220	A1	49.00	21	174

Date: 1/20/05
Time: 10:54:02AM

Spc	ST	Sample DBH	Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft Acre	Totals Tons	Totals Cunits	Totals MBF
WH		17	3	92	133	3.583	5.71	8.37	32.3	148.3	8.66	271	1,242	425	133	61
WH		18	1	93	127	1.066	1.90	3.20	32.0	156.7	3.28	102	501	161	50	25
WH		19	3	94	140	2.842	5.71	11.37	27.0	140.8	9.82	307	1,601	481	150	78
WH		20	2	91	128	1.774	3.81	4.40	42.6	206.0	6.00	188	907	294	92	44
WH		21	3	93	133	2.399	5.71	6.40	35.7	166.5	7.32	229	1,066	359	112	52
WH		23	1	94	134	.666	1.90	2.00	53.5	270.0	3.42	107	539	168	52	26
WH		24	1	93	136	.591	1.90	2.37	44.1	242.5	3.34	104	574	164	51	28
WH		25	1	93	130	.550	1.90	2.20	44.6	240.0	3.14	98	528	154	48	26
WH		26	1	94	138	.529	1.90	2.11	49.3	285.0	3.34	104	603	164	51	30
WH		Totals	45	91	98	88.674	85.71	173.36	19.1	89.7	106.00	3,315	15,554	5,194	1,624	762
DF		12	1	87	80	2.425	1.90	2.43	18.5	70.0	1.28	45	170	63	22	8
DF		16	1	93	126	1.381	1.90	2.76	29.0	125.0	2.28	80	345	112	39	17
DF		17	2	89	145	2.391	3.81	8.33	23.6	108.4	5.60	197	903	275	96	44
DF		18	1	90	130	1.054	1.90	3.16	26.5	116.7	2.39	84	369	117	41	18
DF		19	2	90	139	1.905	3.81	5.71	31.8	146.2	5.18	182	835	254	89	41
DF		20	1	90	117	.847	1.90	2.54	32.0	143.3	2.32	81	364	113	40	18
DF		23	1	94	151	.678	1.90	2.71	38.8	205.0	3.00	105	556	147	52	27
DF		24	2	89	142	1.208	3.81	3.62	45.7	219.9	4.72	166	797	231	81	39
DF		25	2	89	140	1.109	3.81	3.88	50.3	251.4	5.55	195	974	272	95	48
DF		27	1	90	150	.476	1.90	1.90	53.6	292.5	2.90	102	556	142	50	27
DF		30	1	89	137	.396	1.90	1.19	76.9	386.7	2.60	91	459	128	45	23
DF		31	1	90	133	.363	1.90	1.09	86.4	426.7	2.69	94	465	132	46	23
DF		32	1	90	179	.339	1.90	1.02	109.2	616.7	3.17	111	627	155	54	31
DF		Totals	17	90	129	14.572	32.38	40.34	38.0	184.0	43.69	1,533	7,421	2,141	751	364
RC		10	1	80	44	3.636	1.90	3.64	9.9	30.0	.84	36	109	41	18	5
RC		14	1	81	90	1.916	1.90	1.92	26.7	70.0	1.20	51	134	59	25	7
RC		15	1	80	97	1.573	1.90	1.57	33.4	120.0	1.23	53	189	60	26	9
RC		18	1	80	89	1.140	1.90	2.28	28.2	90.0	1.51	64	205	74	32	10
RC		20	1	81	132	.882	1.90	2.65	32.2	116.7	2.00	85	309	98	42	15
RC		35	1	80	127	.292	1.90	.88	94.8	366.7	1.95	83	321	96	41	16
RC		Totals	6	80	78	9.440	11.43	12.93	28.8	98.0	8.75	372	1,267	429	182	62
SS		11	1	80	52	2.939	1.90	2.94	14.3	40.0	1.10	42	118	54	21	6
SS		20	1	89	108	.839	1.90	2.52	31.4	136.7	2.05	79	344	101	39	17
SS		21	1	88	98	.815	1.90	1.63	45.0	165.0	1.91	73	269	93	36	13
SS		32	1	89	118	.341	1.90	.68	110.6	485.0	1.96	75	331	96	37	16
SS		Totals	4	83	74	4.935	7.62	7.77	34.7	136.6	7.02	270	1,061	344	132	52
RA		11	1	86	53	2.687	1.90	2.69	13.1	50.0	.97	35	134	47	17	7
RA		17	1	93	92	1.167	1.90	2.33	23.9	105.0	1.53	56	245	75	27	12
RA		21	1	91	75	.807	1.90	1.61	33.7	150.0	1.50	54	242	73	27	12
RA		22	1	91	80	.742	1.90	.74	63.8	200.0	1.30	47	148	64	23	7
RA		Totals	4	89	68	5.403	7.62	7.38	26.1	104.4	5.30	193	770	260	94	38
Totals			174	90	110	172.485	331.43	392.01	39.9	199.4	466.46	15623	78,159	22,856	7,655	3,830

Leave Conifer = 213 BA/ACRE
= 64 trees/acre

TC TSTNDSUM

Stand Table Summary

Project 2COALS

T03N R10W S01 TA2

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
03N	10W	01	AREA 2/180	A2	30.00	24	198

T03N R10W S01 TA2

Date: 1/20/05

Time: 10:54:35AM

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft Acre	Totals Tons	Totals Cunits	Totals MBF
DL		17	1	88	103	1.021	1.67	3.06	19.7	83.3	1.66	60	255	50	18	8
DL		18	1	89	133	.986	1.67	2.96	28.6	130.0	2.33	85	385	70	25	12
DL		20	1	89	122	.734	1.67	2.20	32.3	143.3	1.96	71	316	59	21	9
DL		21	3	89	138	2.108	5.00	6.99	36.8	179.4	7.07	257	1,254	212	77	38
DL		22	5	89	135	3.090	8.33	8.66	46.3	215.0	11.03	401	1,861	331	120	56
DL		23	3	89	133	1.739	5.00	5.22	46.8	213.0	6.72	244	1,111	202	73	33
DL		24	4	90	157	2.079	6.67	6.75	53.9	276.5	10.01	364	1,867	300	109	56
DL		25	5	89	143	2.418	8.33	7.74	53.2	263.1	11.33	412	2,037	340	124	61
DL		26	1	90	171	.449	1.67	1.35	71.2	383.3	2.64	96	516	79	29	15
DL		28	9	90	152	3.494	15.00	11.66	68.5	358.2	21.95	798	4,175	659	240	125
DL		29	5	90	150	1.832	8.33	5.87	75.4	394.1	12.17	442	2,313	365	133	69
DL		30	6	90	168	2.035	10.00	6.78	82.1	437.7	15.31	556	2,967	459	167	89
DL		31	3	89	150	.946	5.00	2.84	91.9	470.8	7.17	261	1,336	215	78	40
DL		32	1	90	135	.302	1.67	.91	90.8	460.0	2.26	82	417	68	25	13
DL		33	2	89	161	.555	3.33	1.66	109.1	592.9	4.99	181	986	150	54	30
DL		34	2	90	139	.532	3.33	1.87	78.0	397.7	4.01	146	743	120	44	22
DL		35	1	89	151	.248	1.67	.74	123.9	700.0	2.54	92	521	76	28	16
DL		38	2	89	163	.423	3.33	1.27	138.2	665.0	4.83	175	844	145	53	25
DL		40	1	89	181	.192	1.67	.58	172.0	1016.7	2.72	99	585	82	30	18
DL		41	1	90	165	.182	1.67	.55	161.8	866.7	2.43	88	473	73	26	14
DL		Totals	57	89	145	25.365	95.00	79.65	61.7	313.4	135.11	4,913	24,963	4,053	1,474	749
WL		12	1	88	61	2.122	1.67	4.24	9.5	40.0	1.29	40	170	39	12	5
WL		13	1	90	69	1.781	1.67	3.56	12.0	50.0	1.37	43	178	41	13	5
WL		16	1	91	91	1.224	1.67	2.45	25.6	110.0	2.01	63	269	60	19	8
WL		17	1	91	95	1.009	1.67	2.02	32.6	120.0	2.11	66	242	63	20	7
WL		20	3	93	129	2.210	5.00	5.89	43.0	204.9	8.09	253	1,207	243	76	36
WL		21	1	93	117	.693	1.67	1.39	55.2	275.0	2.45	76	381	73	23	11
WL		22	3	93	144	1.878	5.00	5.63	50.6	256.0	9.12	285	1,442	274	85	43
WL		23	5	93	143	2.914	8.33	9.90	46.9	242.0	14.86	465	2,396	446	139	72
WL		24	4	93	136	2.141	6.67	6.97	52.0	261.9	11.60	362	1,825	348	109	55
WL		25	2	93	152	.955	3.33	2.86	68.6	361.2	6.30	197	1,035	189	59	31
WL		26	5	93	150	2.251	8.33	8.53	57.6	319.6	15.72	491	2,727	472	147	82
WL		27	5	93	131	2.106	8.33	5.48	78.0	404.9	13.68	428	2,220	411	128	67
WL		28	1	93	165	.398	1.67	1.59	60.6	342.5	3.09	97	546	93	29	16
WL		29	2	94	140	.734	3.33	2.57	73.6	391.6	6.05	189	1,005	182	57	30
WL		33	1	93	141	.286	1.67	1.14	84.6	490.0	3.09	97	560	93	29	17
WL		34	1	94	137	.266	1.67	1.06	88.3	530.0	3.00	94	564	90	28	17
WL		35	1	94	133	.257	1.67	.77	119.8	670.0	2.95	92	516	89	28	15
WL		Totals	38	92	122	23.225	63.33	66.07	50.5	261.6	106.79	3,337	17,284	3,204	1,001	519
WH		11	4	90	85	9.974	6.67	14.89	12.9	48.5	6.12	192	722	184	58	22
WH		12	2	92	84	4.040	3.33	8.08	13.5	57.5	3.50	109	465	105	33	14
WH		13	2	90	77	3.792	3.33	7.58	13.0	52.3	3.16	99	396	95	30	12
WH		14	7	93	114	10.929	11.67	26.61	18.7	87.5	15.93	498	2,327	478	149	70
WH		15	4	92	102	5.676	6.67	12.75	20.1	90.0	8.18	256	1,148	245	77	34
WH		16	3	93	114	3.736	5.00	8.74	27.5	124.0	7.69	240	1,084	231	72	33
WH		17	4	92	112	4.273	6.67	11.70	24.2	106.3	9.04	283	1,244	271	85	37
WH		18	3	92	117	2.843	5.00	8.53	29.5	143.7	8.04	251	1,226	241	75	37
WH		19	8	93	140	6.785	13.33	21.20	33.6	162.6	22.80	713	3,448	684	214	103
WH		20	1	93	118	.742	1.67	2.22	35.3	160.0	2.51	79	356	75	24	11
WH		21	3	94	154	2.087	5.00	6.98	42.4	213.9	9.46	296	1,493	284	89	45
WH		23	1	93	139	.568	1.67	1.70	50.9	253.3	2.77	87	431	83	26	13

TC TSTNDSUM

Stand Table Summary

Project 2COALS

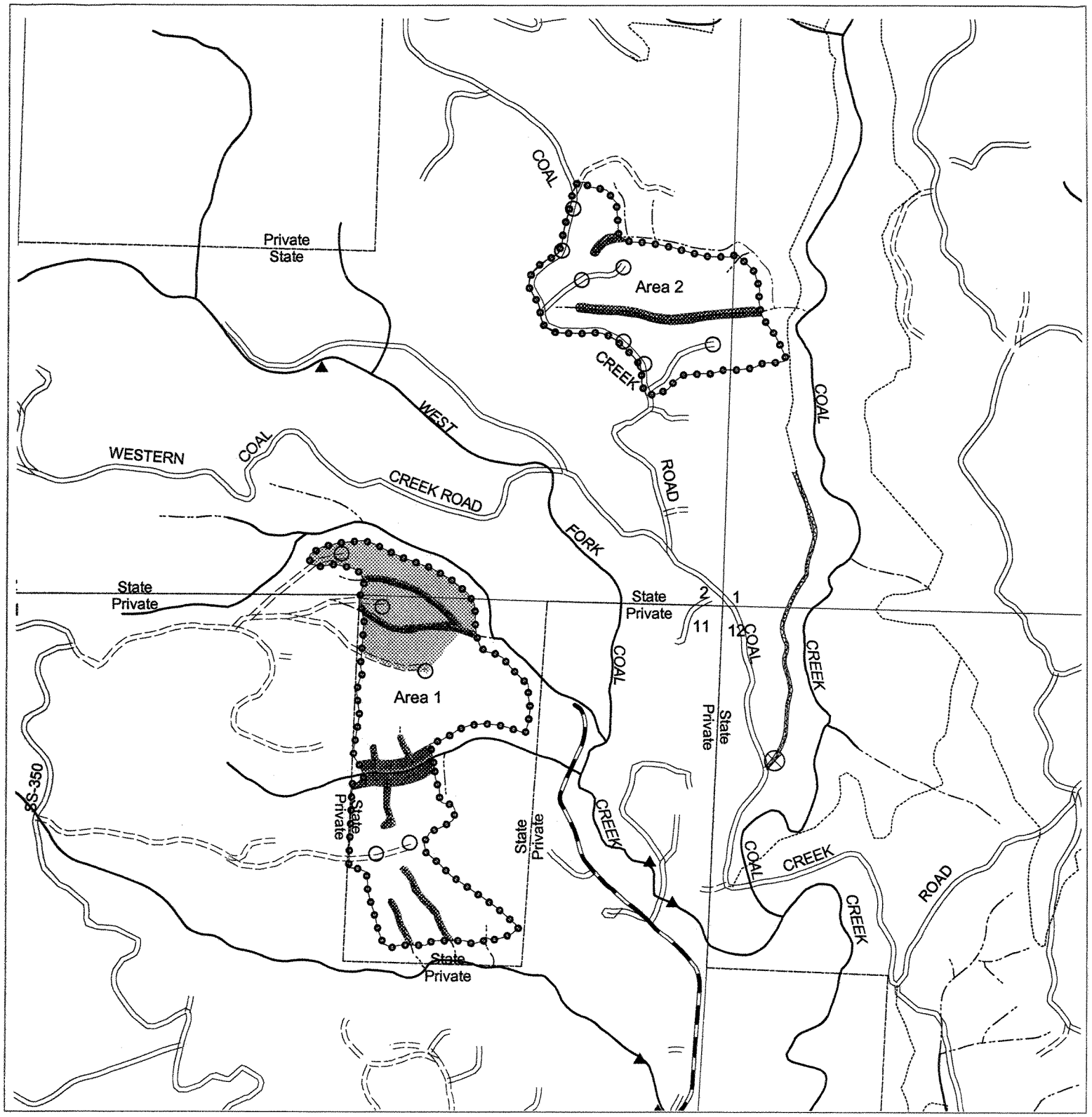
T03N R10W S01 TA2

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
03N	10W	01	AREA 2/180	A2	30.00	24	198

Date: 1/20/05
Time: 10:54:35AM

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft Acre	Totals Tons	Totals Cunits	Totals MBF
WH		27	1	93	139	.410	1.67	1.23	73.2	386.7	2.88	90	476	86	27	14
WH		28	1	94	139	.404	1.67	1.21	72.8	386.7	2.82	88	469	85	26	14
WH		Totals	44	92	108	56.258	73.33	133.44	24.6	114.5	104.91	3,280	15,284	3,147	984	459
DF		10	1	88	78	3.386	1.67	3.39	12.8	60.0	1.23	43	203	37	13	6
DF		11	1	89	99	2.393	1.67	4.79	14.9	65.0	2.04	72	311	61	21	9
DF		14	3	88	119	4.775	5.00	12.83	17.0	80.0	6.22	218	1,026	187	65	31
DF		15	4	88	98	5.415	6.67	10.83	22.3	93.7	6.89	242	1,015	207	73	30
DF		16	1	89	121	1.240	1.67	2.48	28.3	115.0	1.99	70	285	60	21	9
DF		17	2	89	121	2.067	3.33	5.19	28.6	125.9	4.23	148	654	127	45	20
DF		18	4	89	127	3.883	6.67	11.65	26.9	117.2	8.92	313	1,365	268	94	41
DF		19	4	89	129	3.444	6.67	10.33	31.1	142.6	9.17	322	1,473	275	97	44
DF		20	4	89	136	2.974	6.67	9.66	33.2	159.8	9.13	320	1,543	274	96	46
DF		21	3	90	144	2.074	5.00	6.22	40.4	195.7	7.16	251	1,218	215	75	37
DF		22	5	90	135	3.216	8.33	9.65	42.5	197.9	11.68	410	1,909	350	123	57
DF		23	2	89	142	1.150	3.33	3.45	49.6	230.0	4.89	171	794	147	51	24
DF		24	2	90	159	1.070	3.33	3.21	53.9	253.3	4.93	173	813	148	52	24
DF		25	1	90	138	.509	1.67	1.53	55.6	270.0	2.42	85	412	73	25	12
DF		27	2	89	152	.848	3.33	2.54	66.1	336.1	4.79	168	855	144	50	26
DF		30	1	90	140	.349	1.67	1.05	76.8	373.3	2.29	80	391	69	24	12
DF		Totals	40	89	120	38.793	66.67	98.79	31.3	144.4	87.98	3,087	14,268	2,639	926	428
RC		8	1	82	46	4.545	1.67	4.54	6.3	30.0	.67	29	136	20	9	4
RC		11	2	81	91	4.923	3.33	7.27	12.4	43.2	2.12	90	314	64	27	9
RC		12	3	81	70	6.267	5.00	6.27	16.2	43.8	2.38	101	274	71	30	8
RC		13	1	80	73	1.956	1.67	3.91	11.3	40.0	1.04	44	156	31	13	5
RC		15	2	81	78	2.812	3.33	4.17	22.4	66.1	2.19	93	275	66	28	8
RC		16	3	80	86	3.597	5.00	4.82	28.1	77.4	3.18	135	373	95	41	11
RC		17	1	80	78	1.122	1.67	1.12	35.5	60.0	.94	40	67	28	12	2
RC		28	1	80	115	.379	1.67	1.14	63.1	246.7	1.68	72	280	51	22	8
RC		Totals	14	81	74	25.600	23.33	33.25	18.2	56.5	14.21	605	1,878	426	181	56
RA		12	1	93	88	2.122	1.67	4.24	11.1	60.0	1.30	47	255	39	14	8
RA		15	1	93	59	1.288	1.67	1.29	22.7	70.0	.80	29	90	24	9	3
RA		16	1	94	61	1.240	1.67	1.24	33.4	120.0	1.14	41	149	34	12	4
RA		17	1	94	60	1.009	1.67	1.01	37.0	110.0	1.02	37	111	31	11	3
RA		18	1	93	89	.933	1.67	1.87	32.3	140.0	1.66	60	261	50	18	8
RA		Totals	5	93	73	6.592	8.33	9.65	22.3	89.7	5.91	215	866	177	65	26
Totals			198	89	112	175.834	330.00	420.84	36.7	177.1	454.91	15437	74,543	13,647	4,631	2,236

Leave Conifers = 74 trees/acre
= 182 BA/acre



- Landing
- Domestic water supply
- Blocked
- 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 highway
- County road
- (2) Non-project road
- Swing road
- Abandoned road
- OHV trail
- Non-motorized trail
- T T Transmission line

LOGGING PLAN
Timber Sale Contract No. 341-05-60
Two Coals
Portions of Sections 1, 2, and 11, T3N, R10W, W. M.
Tillamook County, Oregon

Area	Type of Operation	Acres Sale	Net
1	Partial Cut	56	49
2	Partial Cut	35	30
Total		91	79

1000 0 1000 Feet

N

Tillamook District GIS
1/31/05
This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.