"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Cost Summary
Berry Cobbler
Sale 341-07-30

District: Tillamook **Date:** 2/8/07

	Conifer	Hardwood	Total
Gross Timber Sale Value	$982,041.90	$33,411.56	$1,015,453.46
		Project Work	($145,310.00)
		Advertised Value	$870,143.46

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Timber Description
Berry Cobbler
Sale 341-07-30

District: Tillamook

Location: Portions of Sections 21, 22, 23, 26, and 27, T1N, R8W, W.M., Tillamook County, Oregon.

Date: 2/8/07 **Stand Stocking:** 20%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	12	0	95
Alder (Red)	14	0	90

Volume by Grade	Douglas - Fir	Alder (Red)	Total
3S	2,609	52	2,661
4S	2,237	85	2,322
Total	4,846	137	4,983

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

Western Red Cedar Stumpage Price = Pond Value minus Logging Cost
$645/MBF = $960/MBF - $315/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 / (5 trips per day x 3.2 MBF per load) = $38/MBF Hauling Cost.
Hauling Cost Calculation Red Alder:
$608 Daily Truck Cost / (5 trips per day x 2.8 MBF per load) = $43.43/MBF Hauling Cost.

Other Costs (Profit & Risk to be added):
Brand and Paint: $2/MBF x 4,983 MBF = $ 9,966
Snag Creation-Girdling at base: $5/tree x 94 trees = $470
TOTAL Other Costs + (P&R to be added): $10,436

Other Costs (Profit and Risk Included):
Slash piling and sorting: 247 acres clear-cut cable harvest
1 hour/ 50 acres x $110/hour = $ 543

Non-Project Roads - (Seeding included):
Non-Project Road #1 2 Stations x $65 = $130
Non-Project Road #2 9 Stations x $65 = $585
Non-Project Road #3 4 Stations x $65 = $260
Non-Project Road #4 24 Stations x $65 = $1,560

Other:
Approach Rock Pit Run: 3 Stations x 50 yds3 x $7 = $1,050
Landing Rock Pit Run: 27 landings x 20 yds3 x $7/cyd = $3,780

OHV Block: 2 Block x $75 = $ 150
OHV Filters: 4 filters x $75 = $300
OHV Trail clearing: 17 stations x $40 = $680
OHV Dips: 9 dips x $75 = $675

TOTAL Other Costs (Profit and Risk Included): $ 9,713

ROAD MAINTENANCE
Grading -
Interim Maintenance $250/Mile x 6.3 miles x 4 gradings / (4,983) = $1.25
Final Maintenance $500/Mile x 6.3 miles x 1 gradings / (4,983) = $0.63

Reprocess w/final maintenance
$17.75 per Sta. x 174Sta. / (4,983) = $0.62

Maintenance rock (Includes move in)
($6.62/yard3 x 6.3 miles x 25 yards3/MMBF/mile x 5.0MMBF)/4,983 = $1.05

TOTAL MAINTENANCE COST = $3.55/MBF

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Logging Conditions
Berry Cobbler
Sale 341-07-30

Combination#: 1 Douglas - Fir 92.16%
Alder (Red) 99.72%

Yarding Distance: Medium (800 ft) **Downhill Yarding:** No
Logging System: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber
Tree Size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
Loads/Day: 5 **Bd. Ft./Load:** 3,400
Cost/MBF: $193.10
Machines:
Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Medium)

Combination#: 2 Douglas - Fir 7.84%
Alder (Red) 0.28%

Yarding Distance: Medium (800 ft) **Downhill Yarding:** Yes
Logging System: Wheel Skidder **Process:** Manual Falling/Delimbing
Tree Size: Small / Thinning 9in (70 Bft/tree), 20+ logs/MBF
Loads/Day: 6 **Bd. Ft./Load:** 3,400
Cost/MBF: $147.10
Machines:
Log Loader (B)
Tire Skidder

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Logging Costs
Berry Cobbler
Sale 341-07-30

Date: 2/8/07

Operating Seasons: 2.0 **Profit & Risk:** 15%

Project Costs: $145,310 **Other Costs (P/R):** $10,436

Slash Disposal: $0 **Other Costs:** $9,713

Road Maintenance: $3.54

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	$38.00	2.0	3.2
Alder (Red)	$43.43	3.0	2.8

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Logging Costs Breakdown
Berry Cobbler
Sale 341-07-30

Costs	Douglas - Fir	Alder (Red)
Logging	189.49	192.97
Road Maintenance	3.73	3.93
Fire Protection	1.09	1.09
Hauling	40.00	48.26
Other (P/R appl.)	2.09	2.09
Profit & Risk	35.46	37.25
Slash Disposal	0.00	0.00
Scaling	2.00	0.00
Other	1.95	1.95
Total	275.81	287.54

Amortization	0.00	0.00
Pond Value	478.46	531.42
Stumpage	202.65	243.88
Amortized	0.00	0.00

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary
Berry Cobbler
Sale 341-07-30

Amortized

	Douglas - Fir	Alder (Red)
MBF	0.00	0.00
Value	0.00	0.00
Total	0.00	0.00

Unamortized

	Douglas - Fir	Alder (Red)
MBF	4,846.00	137.00
Value	202.65	243.88
Total	982,041.90	33,411.56

Gross Timber Sale Value

Recovery $1,015,453.46

Prepared by: Jason Lee Date: 2/8/07

District: Tillamook Phone: (503) 842-2545

"STEWARDSHIP IN FORESTRY"

PROJECT SUMMARY SHEET

Sale: **Berry Cobbler**

CONSTRUCTION

Point	E to F	9+50	stations =	$9,670.73
			SUBTOTAL CONSTRUCTION	**$9,670.73**

IMPROVEMENT

Point	A to B	5+00	stations =	$48,882.34
Point	I to J	13+00	stations =	$28,331.34
Point	K to L	18+80	stations =	$13,199.14
Point	M to N	5+00	stations =	$3,533.41
			SUBTOTAL IMPROVEMENT	**$93,946.23**

RECONSTRUCTION

Point	C to D	26+00	stations =	$29,204.15
Point	G to H	7+60	stations =	$7,287.29
			SUBTOTAL IMPROVEMENT	**$36,491.44**

MOVE IN **$5,201.60**

GRAND TOTAL **$145,310.00**

SUMMARY OF CONSTRUCTION COST

Sale: **Berry Cobbler** Road: **A to B**

Construction - 0+00 stations, 0.00 miles

Improvement - 5+00 stations, 0.09 miles

CLEARING AND GRUBBING -

Scattering	0.110	acres @	$980.00	per acre =	$107.80
				TOTAL CLEARING AND GRUBBING	**$107.80**

EXCAVATION -

Road Earthwork	5.00	sta. @	$100.00	per sta. =	$500.00
				TOTAL EXCAVATION	**$500.00**

ENDHAUL -

TOTAL ENDHAUL	**$0.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts							
0	LF of 18"	$0.00		80	171" x 110"	$26,615.20	
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				$26,615.20	
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					
0	markers	$0.00					
		$0.00				TOTAL CULVERTS	**$26,615.20**

ROCK

0+00 to	5+00	153	cy. of	Crushed	@	$9.74	per c.y.=	$1,490.22
Culvert Backfill	1+00	200	cy. of	Crushed	@	$7.89	per c.y.=	$1,578.00
Camp Ground Protection	4+00	100	cy. of	Riprap	@	$8.69	per c.y.=	$869.00
Camp Ground Protection	5+00	100	cy. of	Riprap	@	$8.69	per c.y.=	$869.00
Fill Armor	1+00	100	cy. of	Riprap	@	$8.19	per c.y.=	$819.00
Camp Ground Rock	4+50	100	cy. of	Crushed	@	$9.29	per c.y.=	$929.00
0+00 to	5+00	363	cy. of	Pit-Run	@	$8.99	per c.y.=	$3,263.37
Camp Ground Rock	4+50	100	cy. of	Pit-Run	@	$7.89	per c.y.=	$789.00
Backfill	1+00	300	cy. of	Pit-Run	@	$7.89	per c.y.=	$2,367.00
							TOTAL ROCK	**$12,973.59**

SPECIAL PROJECTS

Install culvert @ station 1+00					$7,345.00
Hand tamper					$861.15
Grade and shape road -	5.00	stations @	$15.50	per station	$77.50
Roll subgrade w/ vibratory roller prior to rocking -	5.00	stations @	$13.20	per station	$66.00
Remove culverts from state lands	1.00	@	$242.90	total	$242.90
Grass seed and fertilize -	0.11	acres @	$220.00	per acre	$24.20
Mulching -	0.115	acres @	$600.00	per acre	$69.00
				TOTAL SPECIAL PROJECTS	**$8,685.75**

GRAND TOTAL **$48,882.34**

SUMMARY OF CONSTRUCTION COST

Sale: **Berry Cobbler** Road: **C to D**

Construction - 0+00 stations, 0.00 miles

Reconstruction - 26+00 stations, 0.49 miles

CLEARING AND GRUBBING -										
Side cast					0.030	acres @	$660.00	per acre =	$19.80	
Widening					0.096	acres @	$660.00	per acre =	$63.36	
Scattering					0.840	acres @	$980.00	per acre =	$823.20	
								TOTAL CLEARING AND GRUBBING		**$906.36**
EXCAVATION -										
Road Earthwork					26.00	sta. @	$120.00	per sta. =	$3,120.00	
Pullback					87	cy. @	$1.40	per c.y.=	$121.80	
Widening					187	cy. @	$1.40	per c.y.=	$261.80	
								TOTAL EXCAVATION		**$3,503.60**
ENDHAUL -										
Pullback	4+10	to	4+75		87	cy. @	$1.12	per c.y.=	$97.44	
Widening	10+75	to	12+85		187	cy. @	$1.25	per c.y.=	$233.75	
Spread & compact					274	cy. @	$0.25	per c.y.=	$68.50	
								TOTAL ENDHAUL		**$399.69**

CULVERTS - MATERIALS & INSTALLATION

Culverts							
0	LF of 18"	$0.00		38	LF of 24"	$912.00	
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				$912.00	
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		**$920.00**

ROCK									
Culvert Backfill	10+00	60	cy. of	Crushed	@	$9.75	per c.y.=	$585.00	
Fill Armor	10+00	100	cy. of	Riprap	@	$10.55	per c.y.=	$1,055.00	
Fill Armor	10+00	300	cy. of	Riprap	@	$10.55	per c.y.=	$3,165.00	
Energy Dissipator	0+50	60	cy. of	Riprap	@	$10.55	per c.y.=	$633.00	
0+00 to	26+00	1,390	cy. of	Pit-Run	@	$10.85	per c.y.=	$15,081.50	
Roadway Fill	0+50	60	cy. of	Pit-Run	@	$9.75	per c.y.=	$585.00	
Backfill	10+00	100	cy. of	Pit-Run	@	$9.75	per c.y.=	$975.00	
							TOTAL ROCK		**$22,079.50**

SPECIAL PROJECTS						
Grade and shape road -	26.00	stations @	$15.50	per station	$403.00	
Roll subgrade w/ vibratory roller prior to rocking -	26.00	stations @	$13.20	per station	$343.20	
Remove log culvert	1.00	hours @	$130.00	per hour	$130.00	
Grass seed and fertilize -	0.73	acres @	$220.00	per acre	$160.60	
Mulching -	0.597	acres @	$600.00	per acre	$358.20	
				TOTAL SPECIAL PROJECTS		**$1,395.00**

GRAND TOTAL **$29,204.15**

SUMMARY OF CONSTRUCTION COST

Sale: **Berry Cobbler** Road: **E to F**

Construction - 9+50 stations, 0.18 miles

Improvement - 0+00 stations, 0.00 miles

CLEARING AND GRUBBING -										
Scattering					0.870	acres @	$980.00	per acre =	$852.60	
								TOTAL CLEARING AND GRUBBING		**$852.60**
EXCAVATION -										
Road Earthwork					9.50	sta. @	$140.00	per sta. =	$1,330.00	
								TOTAL EXCAVATION		**$1,330.00**
ROCK										
Jct rock		0+00	40	cy. of Crushed		@	$11.07	per c.y.=	$442.80	
0+00	to	9+50	524	cy. of Pit-Run		@	$10.32	per c.y.=	$5,407.68	
								TOTAL ROCK		**$5,850.48**
SPECIAL PROJECTS										
Cut and Drift station 3+00 to 4+50					6.00	hours @	$140.00	per hour	$840.00	
Grade and shape road -					9.50	stations @	$15.50	per station	$147.25	
Roll subgrade w/ vibratory roller prior to rocking -					9.50	stations @	$13.20	per station	$125.40	
Remove large stumps -					2.00	lump sum @	$130.00		$260.00	
Grass seed and fertilize -					0.61	acres @	$220.00	per acre	$134.20	
Mulching -					0.218	acres @	$600.00	per acre	$130.80	
								TOTAL SPECIAL PROJECTS		**$1,637.65**
								GRAND TOTAL		**$9,670.73**

SUMMARY OF CONSTRUCTION COST

Sale: **Berry Cobbler** Road: **G to H**

Construction - 0+00 stations, 0.00 miles

Reconstruction - 7+60 stations, 0.14 miles

CLEARING AND GRUBBING -										
Scattering					0.070	acres @	$980.00	per acre =	$68.60	
								TOTAL CLEARING AND GRUBBING		**$68.60**
EXCAVATION -										
Road Earthwork					7.60	sta. @	$140.00	per sta. =	$1,064.00	
								TOTAL EXCAVATION		**$1,064.00**
ROCK										
Jct rock		0+00	80	cy. of	Crushed		@	$9.82	per c.y.=	$785.60	
0+00	to	7+60	431	cy. of	Pit-Run		@	$9.07	per c.y.=	$3,909.17	
									TOTAL ROCK	**$4,694.77**
SPECIAL PROJECTS										
Cut and Drift					6.00	hours @	$140.00	per hour	$840.00	
Grade and shape road -					7.60	stations @	$15.50	per station	$117.80	
Roll subgrade w/ vibratory roller prior to rocking -					7.60	stations @	$13.20	per station	$100.32	
Remove large stumps -					2.00	lump sum @	$130.00		$260.00	
Grass seed and fertilize -					0.17	acres @	$220.00	per acre	$37.40	
Mulching -					0.174	acres @	$600.00	per acre	$104.40	
								TOTAL SPECIAL PROJECTS		**$1,459.92**
								GRAND TOTAL		**$7,287.29**

SUMMARY OF CONSTRUCTION COST

Sale: **Berry Cobbler** Road: **I to J**

Construction - 0+00 stations, 0.00 miles Improvement - 13+00 stations, 0.25 miles

CLEARING AND GRUBBING -									
Widening					0.152	acres @	$660.00	per acre =	$100.32
Scattering					0.120	acres @	$980.00	per acre =	$117.60
								TOTAL CLEARING AND GRUBBING	**$217.92**
EXCAVATION -									
Road Earthwork					13.00	sta. @	$140.00	per sta. =	$1,820.00
Widening					880	cy. @	$1.40	per c.y.=	$1,232.00
								TOTAL EXCAVATION	**$3,052.00**
ENDHAUL -									
Widening	22+50	to	25+80		880	cy. @	$1.46	per c.y.=	$1,284.80
Spread & compact					880	cy. @	$0.25	per c.y.=	$220.00
								TOTAL ENDHAUL	**$1,504.80**

CULVERTS - MATERIALS & INSTALLATION

Culverts							
0	LF of 18"	$0.00		0	LF of 24"	$0.00	
60	LF of 30"	$1,980.00		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	
		$1,980.00				$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	**$1,988.00**

ROCK									
Culvert Backfill	21+80	200	cy. of	Crushed	@	$7.97	per c.y.=	$1,594.00	
Fill Armor	21+80	450	cy. of	Riprap	@	$8.77	per c.y.=	$3,946.50	
Slope Stabilization	21+80	450	cy. of	Riprap	@	$9.37	per c.y.=	$4,216.50	
0+00 to	13+00	696	cy. of	Pit-Run	@	$9.07	per c.y.=	$6,312.72	
Bedding/Backfill	21+80	400	cy. of	Pit-Run	@	$7.97	per c.y.=	$3,188.00	
								TOTAL ROCK	**$19,257.72**

SPECIAL PROJECTS						
Grade and shape road -	13.00	stations @	$15.50	per station	$201.50	
Roll subgrade w/ vibratory roller	13.00	stations @	$13.20	per station	$171.60	
Remove log Fill @ stations: 21+80	10.00	hours @	$140.00	per hour	$1,400.00	
Remove large stumps -	2.00	lump sum @	$130.00		$260.00	
Grass seed and fertilize -	0.45	acres @	$220.00	per acre	$99.00	
Mulching -	0.298	acres @	$600.00	per acre	$178.80	
				TOTAL SPECIAL PROJECTS		**$2,310.90**

GRAND TOTAL **$28,331.34**

SUMMARY OF CONSTRUCTION COST

Sale: **Berry Cobbler** Road: **K to L**

Construction - 0+00 stations, 0.00 miles Improvement - 18+80 stations, 0.36 miles

CLEARING AND GRUBBING -										
Scattering					1.210	acres @	$980.00	per acre =	$1,185.80	
								TOTAL CLEARING AND GRUBBING		**$1,185.80**
EXCAVATION -										
Road Earthwork					18.80	sta. @	$100.00	per sta. =	$1,880.00	
								TOTAL EXCAVATION		**$1,880.00**
ROCK										
Jct rock	0+00	50	cy. of	Crushed		@	$8.83	per c.y.=	$441.50	
0+00 to	18+80	1,021	cy. of	Pit-Run		@	$8.08	per c.y.=	$8,249.68	
Landing rock	5+00	60	cy. of	Pit-Run		@	$6.98	per c.y.=	$418.80	
								TOTAL ROCK		**$9,109.98**
SPECIAL PROJECTS										
Grade and shape road -					18.80	stations @	$15.50	per station	$291.40	
Roll subgrade w/ vibratory roller prior to rocking -					18.80	stations @	$13.20	per station	$248.16	
Remove large stumps -					1.00	lump sum @	$130.00		$130.00	
Grass seed and fertilize -					0.43	acres @	$220.00	per acre	$94.60	
Mulching -					0.432	acres @	$600.00	per acre	$259.20	
								TOTAL SPECIAL PROJECTS		**$1,023.36**
								GRAND TOTAL		**$13,199.14**

SUMMARY OF CONSTRUCTION COST

Sale: **Berry Cobbler** Road: **M to N**

Construction - 0+00 stations, 0.00 miles

Improvement - 5+00 stations, 0.09 miles

CLEARING AND GRUBBING -							
Scattering			0.180	acres @	$980.00	per acre = $176.40	
						TOTAL CLEARING AND GRUBBING	**$176.40**
EXCAVATION -							
Road Earthwork			5.00	sta. @	$100.00	per sta. = $500.00	
						TOTAL EXCAVATION	**$500.00**
ROCK							
0+00 to	5+00	287 cy. of	Pit-Run		@	$9.13 per c.y.= $2,620.31	
						TOTAL ROCK	**$2,620.31**
SPECIAL PROJECTS							
Grade and shape road -			5.00	stations @	$15.50	per station $77.50	
Roll subgrade w/ vibratory roller prior to rocking -			5.00	stations @	$13.20	per station $66.00	
Grass seed and fertilize -			0.11	acres @	$220.00	per acre $24.20	
Mulching -			0.115	acres @	$600.00	per acre $69.00	
						TOTAL SPECIAL PROJECTS	**$236.70**
						GRAND TOTAL	**$3,533.41**

ROCK DEVELOPMENT COST SUMMARY

Pit:	**Feldshaw Quarry**	Location:	Sec.16, T1N R8W W.M.		
Sale:	**Berry Cobbler**		Road:		8275 c.y.
Swell:	1.40		Stockpile:		c.y.
Shirinkage	1.16		Total Truck Loads:		8275 c.y.
Drill Pct.:	75%		In Place Total:		5911 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact.							$14,692.62
Drill & Shoot:	$2.50	/cu.yd.	x	4433	cu.yds.	=	$11,082.50
Rip Rock	$1.90	/cu.yd.	x	1478	cu.yds.	=	$2,808.20
Load Dump Truck:	$0.70	/cu.yd.	x	8275	cu.yds.	=	$5,792.50
					Subtotal		$34,375.82

Move In and set up Drill and Compressor	1	@	$440.45	=	$440.45
Move in Vibratory Grid Compactor	1	@	$440.45	=	$440.45
Move in Grader	1	@	$164.25	=	$164.25
Move in D-8	1	@	$702.75	=	$702.75
Move in Excavator	1	@	$774.77	=	$774.77
Move in Trucks	6	@	$141.69	=	$850.14
Move in Water Truck	1	@	$166.54	=	$166.54
				Subtotal	$3,539.35
			TOTAL PRODUCTION COSTS		$37,915.17

Base Cost= $4.58 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	$2.71	2.45	$4.58	9.74	153		$1,490.22
A to B Culvert Backfill	$2.71	0.60	$4.58	7.89	200		$1,578.00
A to B Camp Ground Protection	$2.71	1.40	$4.58	8.69	100		$869.00
A to B Camp Ground Protection	$2.71	1.40	$4.58	8.69	100		$869.00
A to B Fill Armor	$2.71	0.90	$4.58	8.19	100		$819.00
A to B Camp Ground Rock	$2.71	2.00	$4.58	9.29	100		$929.00
A to B	$2.71	$1.70	$4.58	$8.99	363		$3,263.37
A to B Camp Ground Rock	$2.71	$0.60	$4.58	$7.89	100		$789.00
A to B Backfill	$2.71	$0.60	$4.58	$7.89	300		$2,367.00
C to D Culvert Backfill	$4.57	0.60	$4.58	9.75	60		$585.00
C to D Fill Armor	$4.57	1.40	$4.58	10.55	100		$1,055.00
C to D Fill Armor	$4.57	1.40	$4.58	10.55	300		$3,165.00
C to D Energy Dissipator	$4.57	1.40	$4.58	10.55	60		$633.00
C to D	$4.57	$1.70	$4.58	$10.85	1390		$15,081.50
C to D Roadway Fill	$4.57	$0.60	$4.58	$9.75	60		$585.00
C to D Backfill	$4.57	$0.60	$4.58	$9.75	100		$975.00
E to F Jct rock	$4.04	2.45	$4.58	11.07	40		$442.80
E to F	$4.04	$1.70	$4.58	$10.32	524		$5,407.68
G to H Jct rock	$2.79	2.45	$4.58	9.82	80		$785.60
G to H	$2.79	$1.70	$4.58	$9.07	431		$3,909.17
I to J Culvert Backfill	$2.79	0.60	$4.58	7.97	200		$1,594.00
I to J Fill Armor	$2.79	1.40	$4.58	8.77	450		$3,946.50
I to J Slope Stabilization	$2.79	2.00	$4.58	9.37	450		$4,216.50
I to J	$2.79	$1.70	$4.58	$9.07	696		$6,312.72
I to J Bedding/Backfill	$2.79	$0.60	$4.58	$7.97	400		$3,188.00
K to L Jct rock	$1.80	2.45	$4.58	8.83	50		$441.50
K to L	$1.80	$1.70	$4.58	$8.08	1021		$8,249.68
K to L Landing rock	$1.80	$0.60	$4.58	$6.98	60		$418.80
M to N	$2.85	$1.70	$4.58	$9.13	287		$2,620.31
				Total C.Y.	8275	Sub Total	$76,586.35

TOTAL ROCKING COSTS	$76,586.35

Move-In Calculations

Sale: **Berry Cobbler**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
36.0	Pavement	30
5.0	Main Lines	7
4.0	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	$531.64		$46.00	0.00	4.00	4	$184.00	$715.64
1	Sheepsfoot Roller or Skidder	$440.45		$5.00	0.00	4.00	4	$20.00	$460.45
1	Excavators (Large)	$802.37	1	$44.80	0.00	4.00	4	$179.20	$981.57
1	Tractor (D8)	$757.95	2	$15.10	0.00	4.00	4	$60.40	$818.35
4	Dump Truck (10 cy +)	$696.00		$2.85	0.00	4.00	4	$45.60	$741.60
2	Dump Truck (Off Hiway)	$1,265.07	1	$4.75	0.00	4.00	4	$38.00	$1,303.07
1	Water Truck (2500 Gal)	$166.54		$2.85	0.00	4.00	4	$11.40	$177.94

	TOTAL MOVE-IN COSTS:	$5,201.60

"STEWARDSHIP IN FORESTRY"

Berry Cobbler Cruise Report

1. **Type of Sale**: Regeneration Harvest (Modified Clearcut, Partial cut); Conifer recovery and hardwood cash

2. **Legal Description**: Portions of sections 21, 22, 23, 26, & 27, T1N, R8W, W.M., Tillamook County, Oregon.

3. **Sale Acreage**: The sale boundaries were plotted on a digital orthophotograph and the acreage was calculated with GIS.

Area	Sale Acres	Net Acres
1 Partial cut	97	94
2A Modified clear-cut	57	54
2B Modified clear-cut	20	18
3 Modified clear-cut	37	33
4 Modified clear-cut	67	66
5 Modified clear-cut	32	23
6 Modified clear-cut	73	70
7 Modified clear-cut	1	1
Total	384	359

Sale Acres:

Area within the Timber Sale Boundary signs.

Net Acres:

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 67 variable radius full point measured plots were established on the sale area. Conifer with less than 7" DBH and alder with less than 10" DBH were not recorded. On the measured plots the species, diameter at breast height, height to a 6" outside bark merchantable top for conifer and 8" for alder, form factor at 16', and grades, lengths and defect of each segment were recorded. Heights were measured to the nearest foot.

B. **Plot size**: 40 BAF.

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

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 for Douglas-fir was 84 and the average form factor for red alder was 80.

5. **Computation Procedure:** The volumes and statistics for the timber cruised were computed using Atterbury Consultants, Inc. SuperACE 2004 program. The coefficients of variation and sampling errors for net MBF/acre are as follows:

Area	C.V (%)	S.E. (%)
1	32.9	8.2
2 A/B	39.2	10.9
3/4	37.8	10.1
5	15.2	7.6
6	38.0	9.8
7	N/A*	N/A*

**Area 7 was not cruise because it is being developed as a heliport location..*

The volume for each area was generated individually and the areas were summed for the total sale volume. Take and leave trees in Area 1 were determined by leaving the largest trees on each plot for the target residual basal area. For all other areas a diameter limit was used to determine take and leave trees.

6. **Defect and Breakage**: A 5% reduction for defect and breakage was applied to the volume for Douglas-fir and 10% defect and breakage was applied to red alder.

7. **Timber Description:** The sale area is predominately composed of 45 year old Douglas-fir with scattered alder, hemlock, and spruce. The entire sale area burned in the 1933 Tillamook Fire and the 1939 Saddle Mountain Fire. Area 4 burned during the Wilson River/Salmonberry Fires in 1945.

All areas were aerially seeded or planted in 1955-1957. Areas 1, 2, 5, and 6 were replanted in the early 1960's and Areas 3 and 4 were replanted in the late 1960's.

Area 1 was commercially thinned in 1991. Portions of Areas 2 and 6 were commercially thinned in 2001. The remainder of the timber sale has had no prior stand management.

Alder naturally regenerated and was sprayed with herbicides in the 1970's, resulting in short boles with multiple tops.

The Douglas-fir in Area 1 has moderate impacts from Swiss Needle Cast. This area was previously commercially thinned therefore maintained deep crowns and increased height and diameter growth. All other areas of the timber sale are severely impacted by Swiss Needle Cast (SNC) resulting in poor live crown and slowed diameter and/or height growth.

8. **Cruiser Names/Dates**: Jason Lee, Nick Stumpf, Jay Anderson, May 2006.

9. **Revenue Distribution**:
100 % FDF
100% Tax Code 56
Deed Numbers: 161, 162

10. **Attachments**:
Volume Summary
Log Stock Tables by Area
Statistics Report
Stand Table
Logging Plan

"STEWARDSHIP IN FORESTRY"

Berry Cobbler

Volume Summary

Area 1 -Partial Cut

94 acres

SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	12.6	56	104	5.8	545	5%	518
TOTAL					545		518

Area 2A / 2B -Modified Clearcut

72 acres

SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	13.2	151	103	15.6	1123	5%	1067
Alder	14	3	66	0.2	14	10%	13
TOTAL					1137		1080

Area 3 / 4 -Modified Clearcut

99 acres

SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	12.3	144	93	13.4	1327	5%	1261
Alder	13.7	21	61	1.3	129	10%	116
TOTAL					1456		1377

Area 5 -Modified Clearcut

23 acres

SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	11	256	102	26.1	600	5%	570
Alder	12	8	51	0.4	9	10%	8
TOTAL					609		578

Area 6 - Modified Clearcut

70 acres

SPECIES	QMD	Basal Area Per Acre	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	11.6	217	99	21.5	1505	5%	1430
Alder	0	0	0	0.0	0	10%	0
TOTAL					1505		1430

Area 7-Modified Clearcut — Heliport Development

1.0 acre

TOTAL SALE VOLUME	359.0 acres	
SPECIES	Gross (MBF)	Net Vol (MBF)
Douglas-fir	5100	4846
Alder	152	137
TOTAL	5252	4983

TC TLOGSTVB

Log Stock Table - MBF

Project: BC

T01N R08W S22 T0001

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01N	08W	22	AREA 1	0001	94.00	17	77

T01N R08W S22 T0001

Date 10/10/2006

Time 8:42:07AM

Spp	S T	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	30-39	40+
DL		DO	2M	40	107		107	8.7						83		23				
DL		DO	3M	27	6		6	.5				6								
DL		DO	3M	32	65		65	5.4			21	26	19							
DL		DO	3M	40	701	.1	700	57.5			17	286	350	47						
DL		DO	4M	17	6		6	.5		6										
DL		DO	4M	18	19		19	1.6		19										
DL		DO	4M	19	6		6	.5		6										
DL		DO	4M	20	7		7	.5		7										
DL		DO	4M	21	17		17	1.4		17										
DL		DO	4M	22	3		3	.2		3										
DL		DO	4M	23	10		10	.9		10										
DL		DO	4M	25	7		7	.6		7										
DL		DO	4M	26	25		25	2.0		11		14								
DL		DO	4M	27	8		8	.7		8										
DL		DO	4M	28	18		18	1.5		18										
DL		DO	4M	29	8		8	.7		8										
DL		DO	4M	31	6		6	.5		6										
DL		DO	4M	32	64		64	5.3		8	20	37								
DL		DO	4M	33	19		19	1.5		19										
DL		DO	4M	36	20		20	1.6		20										
DL		DO	4M	40	98		98	8.0		32	66									
DL		Totals			1,220		1,219	66.8		204	124	368	369	131	23					
DF		DO	3M	30	20		20	3.6					20							
DF		DO	3M	32	37		37	6.6				37								
DF		DO	3M	40	273		273	49.3			20	230		22						
DF		DO	4M	16	5		5	.9		5										
DF		DO	4M	18	7		7	1.3		7										
DF		DO	4M	19	5		5	.9		5										
DF		DO	4M	20	4		4	.7		4										
DF		DO	4M	21	10		10	1.9		10										
DF		DO	4M	23	8		8	1.5		8										
DF		DO	4M	24	39		39	7.1		39										
DF		DO	4M	25	8		8	1.5		8										
DF		DO	4M	28	22		22	4.1		22										
DF		DO	4M	29	5		5	1.0		5										
DF		DO	4M	31	6		6	1.1		6										
DF		DO	4M	32	17		17	3.0				17								
DF		DO	4M	34	13		13	2.4		13										
DF		DO	4M	40	72		72	13.0		30	24	19								
DF		Totals			553		553	30.3		165	43	302	20	22						
RA		DO	3M	36	14		14	26.7				14								
RA		DO	3M	40	16		16	30.0				16								
RA		DO	4M	18	10		10	18.6				10								
RA		DO	4M	19	13		13	24.8				13								
RA		Totals			54		54	3.0				54								
Total All Species					1,827		1,826	100.0		369	167	725	388	153	23					

TC TLOGSTVB

Log Stock Table - MBF

Project: BC

T01N R08W S22 T0002

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01N	08W	22	AREA 2A/2B	0002	72.00	14	61

T01N R08W S22 T0002

Date 10/10/2006

Time 8:42:26AM

Spp	S T	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	30-39	40+
DF		DO	3M	32	104		104	9.3			19	85								
DF		DO	3M	37	16		16	1.4			16									
DF		DO	3M	40	663		663	59.3			80	394	189							
DF		DO	4M	16	34		34	3.1		34										
DF		DO	4M	17	7		7	.7		7										
DF		DO	4M	18	15		15	1.3		15										
DF		DO	4M	19	7		7	.6		7										
DF		DO	4M	20	21		21	1.8		21										
DF		DO	4M	21	33		33	3.0		33										
DF		DO	4M	22	9		9	.8		9										
DF		DO	4M	23	18		18	1.6		18										
DF		DO	4M	24	18		18	1.6		18										
DF		DO	4M	26	6		6	.5		6										
DF		DO	4M	28	18		18	1.6		18										
DF		DO	4M	29	15		15	1.3		15										
DF		DO	4M	31	3		3	.3		3										
DF		DO	4M	32	45		45	4.0		11	19	15								
DF		DO	4M	34	12		12	1.1		12										
DF		DO	4M	35	7		7	.6		7										
DF		DO	4M	36	6		6	.5		6										
DF		DO	4M	38	6		6	.5		6										
DF		DO	4M	39	5		5	.5		5										
DF		DO	4M	40	52		52	4.7		5	48									
DF		Totals			1,119		1,119	86.0		255	181	494	189							
DL		DO	2M	40	66		66	39.1						66						
DL		DO	3M	40	91		91	54.3			16			53	22					
DL		DO	4M	20	2		2	.9		2										
DL		DO	4M	30	3		3	1.7		3										
DL		DO	4M	32	4		4	2.2			4									
DL		DO	4M	33	3		3	1.9		3										
DL		Totals			168		168	12.9		8	20			119	22					
RA		DO	3M	34	13		13	100.0				13								
RA		Totals			13		13	1.0				13								
Total All Species					1,301		1,301	100.0		262	201	508	189	119	22					

TC TLOGSTVB

Log Stock Table - MBF

Project: BC

T01N R08W S22 T0034

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01N	08W	22	AREA 3/4	0034	98.00	15	70

T01N R08W S22 T0034

Page 1
Date 10/10/2006
Time 8:42:45AM

Spp	S T	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	30-39	40+
DF		DO	3M	27	16		16	1.2					16							
DF		DO	3M	32	59		59	4.5				59								
DF		DO	3M	40	521		521	39.7				290	174	56						
DF		DO	4M	15	22		22	1.7	22											
DF		DO	4M	16	10		10	.7	10											
DF		DO	4M	17	15		15	1.1	15											
DF		DO	4M	20	24		24	1.8	24											
DF		DO	4M	21	51		51	3.9	38			13								
DF		DO	4M	22	11		11	.8	11											
DF		DO	4M	23	8		8	.6	8											
DF		DO	4M	24	154		154	11.8	35		35	84								
DF		DO	4M	25	50		50	3.8	50											
DF		DO	4M	26	37		37	2.8	22			15								
DF		DO	4M	27	7		7	.6	7											
DF		DO	4M	28	47		47	3.6	47											
DF		DO	4M	29	7		7	.6	7											
DF		DO	4M	30	34		34	2.6	34											
DF		DO	4M	31	30		30	2.3	30											
DF		DO	4M	32	72		72	5.5	32		40									
DF		DO	4M	33	20		20	1.5	20											
DF		DO	4M	39	16		16	1.2	16											
DF		DO	4M	40	100		100	7.6	24		75									
DF		Totals			1,310		1,310	80.3	452		150	461	191	56						
DL		DO	2M	40	26		26	13.4						26						
DL		DO	3M	40	141		141	72.6					43	72	26					
DL		DO	4M	24	4		4	1.8	4											
DL		DO	4M	26	9		9	4.4	4			5								
DL		DO	4M	29	4		4	1.8	4											
DL		DO	4M	31	4		4	1.8	4											
DL		DO	4M	36	4		4	2.2	4											
DL		DO	4M	38	4		4	1.9	4											
DL		Totals			194		194	11.9	22			5	43	98	26					
RA		DO	3M	30	9		9	7.0				9								
RA		DO	3M	33	15		15	11.8				15								
RA		DO	3M	40	20		20	15.7				20								
RA		DO	4M	28	14		14	11.2				14								
RA		DO	4M	29	29		29	22.8				29								
RA		DO	4M	30	20		20	15.8				20								
RA		DO	4M	31	20		20	15.8				20								
RA		Totals			127		127	7.8				127								
Total All Species					1,631		1,631	100.0	474		150	593	234	154	26					

TC TLOGSTVB

Log Stock Table - MBF

Project: BC

T01N R08W S22 T00MC

T01N R08W S22 T00M

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01N	08W	22	AREA 5	00MC	23.00	5	34

Page 1
Date 10/10/2006
Time 8:43:07AM

Spp	S T	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	30-39	40+
DF		DO	3M	32	61		61	10.2			31	30								
DF		DO	3M	40	213		213	35.5			52	141	20							
DF		DO	4M	19	14		14	2.3		14										
DF		DO	4M	20	4		4	.7		4										
DF		DO	4M	21	16		16	2.7		16										
DF		DO	4M	23	32		32	5.3		32										
DF		DO	4M	24	61		61	10.1		26	13	21								
DF		DO	4M	25	25		25	4.2			13	12								
DF		DO	4M	26	30		30	5.0		30										
DF		DO	4M	28	6		6	1.0		6										
DF		DO	4M	29	37		37	6.2		37										
DF		DO	4M	30	12		12	2.1		12										
DF		DO	4M	31	6		6	1.0		6										
DF		DO	4M	33	5		5	.9		5										
DF		DO	4M	34	13		13	2.2		13										
DF		DO	4M	40	64		64	10.6		27	37									
DF			Totals		601		601	95.0		230	147	205	20							
RA		DO	4M	19	9		9	100.0				9								
RA			Totals		9		9	1.5				9								
DL		DO	2M	40	20		20	90.9								20				
DL		DO	4M	36	2		2	9.1		2										
DL			Totals		22		22	3.5		2						20				
Total All Species					633		633	100.0		232	147	214	20			20				

TC TLOGSTVB

Log Stock Table - MBF

Project: BC

T01N R08W S21 T00MC

T01N R08W S21 T00M

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01N	08W	21	AREA 6	00MC	70.00	16	85

Page 1
Date 10/10/2006
Time 8:23:45AM

Spp	S T	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	30-39	40+
DF		DO	3M	32	199		199	13.5			77	122								
DF		DO	3M	40	572		572	38.9			133	317	121							
DF		DO	4M	15	20		20	1.4		20										
DF		DO	4M	16	36		36	2.4		36										
DF		DO	4M	17	15		15	1.0		6			9							
DF		DO	4M	18	34		34	2.3		34										
DF		DO	4M	19	25		25	1.7		25										
DF		DO	4M	20	27		27	1.8		27										
DF		DO	4M	21	22		22	1.5		22										
DF		DO	4M	22	8		8	.5		8										
DF		DO	4M	23	28		28	1.9		28										
DF		DO	4M	24	70		70	4.8		52	18									
DF		DO	4M	25	12		12	.8		12										
DF		DO	4M	26	39		39	2.6		39										
DF		DO	4M	27	35		35	2.4		35										
DF		DO	4M	28	12		12	.8		12										
DF		DO	4M	29	25		25	1.7		25										
DF		DO	4M	30	10		10	.7		5	5									
DF		DO	4M	32	98		98	6.7		24	38	36								
DF		DO	4M	33	20		20	1.4		20										
DF		DO	4M	36	13		13	.9		13										
DF		DO	4M	40	151		151	10.3		41	110									
DF		Totals			1,469		1,469	91.7		482	382	475	130							
DL		DO	2M	40	46		46	34.9						16	30					
DL		DO	3M	40	71		71	53.4			6		65							
DL		DO	4M	17	2		2	1.3		2										
DL		DO	4M	28	3		3	2.0		3										
DL		DO	4M	33	8		8	6.0		8										
DL		DO	4M	40	3		3	2.4		3										
DL		Totals			133		133	8.3		16	6		65	16	30					
Total All Species					1,602		1,602	100.0		497	387	475	195	16	30					

TC TSTATS

STATISTICS

PROJECT C

DATE 11/14/2006

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
01N	08W	22	AREA 1	0001	94.00	17	77	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	17	77	4.5		
CRUISE	17	77	4.5	15,821	.5
DBH COUNT					
REFOREST COUNT					
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DF-LEAVE	49	92.3	15.1	63		115.3	12,977	12,967	3,514	3,513
DOUG FIR	24	65.1	12.6	52	16	56.5	5,879	5,879	1,519	1,519
R ALDER	4	11.0	12.5	30		9.4	576	576	188	188
TOTAL	*77*	*168.3*	*14.0*	*57*		*181.2*	*19,432*	*19,422*	*5,221*	*5,221*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

CL: 68.1 %	COEFF		**SAMPLE TREES - BF**			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF-LEAVE	44.0	6.3	154	165	175			
DOUG FIR	48.3	10.1	98	109	120			
R ALDER	49.1	28.0	43	60	77			
TOTAL	*50.9*	*5.8*	*134*	*142*	*150*	*104*	*26*	*12*

CL: 68.1 %	COEFF		**SAMPLE TREES - CF**			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF-LEAVE	47.3	6.7	43	46	49			
DOUG FIR	49.5	10.3	26	28	31			
R ALDER	64.2	36.7	13	20	28			
TOTAL	*54.0*	*6.1*	*37*	*39*	*41*	*116*	*29*	*13*

CL: 68.1 %	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF-LEAVE	35.8	8.9	84	92	101			
DOUG FIR	100.9	25.2	49	65	81			
R ALDER	243.2	60.7	4	11	18			
TOTAL	*44.3*	*11.1*	*150*	*168*	*187*	*83*	*21*	*9*

CL: 68.1 %	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF-LEAVE	11.5	2.9	112	115	119			
DOUG FIR	100.4	25.1	42	56	71			
R ALDER	239.0	59.7	4	9	15			
TOTAL	*32.3*	*8.1*	*167*	*181*	*196*	*44*	*11*	*5*

CL: 68.1 %	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF-LEAVE	18.2	4.5	12,378	12,967	13,556			
DOUG FIR	99.2	24.8	4,423	5,879	7,336			
R ALDER	250.2	62.5	216	576	935			
TOTAL	*32.9*	*8.2*	*17,826*	*19,422*	*21,018*	*46*	*11*	*5*

CL: 68.1 %	COEFF		**NET CUFT FT/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF-LEAVE	17.3	4.3	3,362	3,513	3,665			
DOUG FIR	102.3	25.6	1,131	1,519	1,908			
R ALDER	249.4	62.3	71	188	305			

STATISTICS

PROJECT C

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
01N	08W	22	AREA 1	0001	94.00	17	77	S	W

CL: 68.1%	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
TOTAL	*32.7*	*8.2*	*4,795*	*5,221*	*5,647*	*45*	*11*	*5*

TC TSTATS

STATISTICS

PROJECT C

DATE 11/14/2006

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
01N	08W	22	AREA 2A/2B	0002	72.00	14	61	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	14	61	4.4		
CRUISE	14	61	4.4	12,178	.5
DBH COUNT					
REFOREST COUNT					
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	53	158.3	13.2	53	41	151.4	15,542	15,542	4,262	4,262
DF-LEAVE	7	8.1	21.3	78		20.0	2,337	2,337	684	684
R ALDER	1	2.7	14.0	35		2.9	187	187	64	64
TOTAL	*61*	*169.1*	*13.7*	*54*		*174.3*	*18,065*	*18,065*	*5,011*	*5,011*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

CL: 68.1 %	COEFF		**SAMPLE TREES - BF**			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	43.4	6.0	111	118	125			
DF-LEAVE	22.4	9.1	266	293	320			
R ALDER								
TOTAL	*56.1*	*7.2*	*128*	*137*	*147*	*125*	*31*	*14*

CL: 68.1 %	COEFF		**SAMPLE TREES - CF**			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	44.9	6.2	31	33	35			
DF-LEAVE	16.8	6.8	80	86	92			
R ALDER								
TOTAL	*57.4*	*7.3*	*36*	*39*	*42*	*132*	*33*	*15*

CL: 68.1 %	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	76.8	21.3	125	158	192			
DF-LEAVE	135.3	37.5	5	8	11			
R ALDER	374.2	103.6		3	5			
TOTAL	*70.8*	*19.6*	*136*	*169*	*202*	*215*	*54*	*24*

CL: 68.1 %	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	49.9	13.8	131	151	172			
DF-LEAVE	130.1	36.0	13	20	27			
R ALDER	374.2	103.6		3	6			
TOTAL	*41.8*	*11.6*	*154*	*174*	*194*	*75*	*19*	*8*

CL: 68.1 %	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	47.4	13.1	13,503	15,542	17,581			
DF-LEAVE	131.2	36.4	1,487	2,337	3,186			
R ALDER	374.2	103.6		187	381			
TOTAL	*39.2*	*10.9*	*16,104*	*18,065*	*20,027*	*66*	*17*	*7*

CL: 68.1 %	COEFF		**NET CUFT FT/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	44.9	12.4	3,732	4,262	4,792			
DF-LEAVE	132.0	36.6	434	684	934			
R ALDER	374.2	103.6		64	131			

STATISTICS

PROJECT C

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
01N	08W	22	AREA 2A/2B	0002	72.00	14	61	S	W

CL: 68.1%	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
TOTAL	*38.0*	*10.5*	*4,483*	*5,011*	*5,539*	*62*	*16*	*7*

TC TSTATS

STATISTICS

PROJECT C

DATE 11/14/2006

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
01N	08W	22	AREA 3/4	0034	98.00	15	70	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	15	70	4.7		
CRUISE	15	70	4.7	19,878	.4
DBH COUNT					
REFOREST					
COUNT					
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	54	173.4	12.3	47	40	144.0	13,371	13,371	3,691	3,691
DF-LEAVE	8	8.5	21.5	72		21.3	1,984	1,984	620	620
R ALDER	8	20.9	13.7	32		21.3	1,292	1,292	450	449
TOTAL	*70*	*202.8*	*13.0*	*46*		*186.7*	*16,647*	*16,647*	*4,761*	*4,760*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

CL: 68.1 %	COEFF		**SAMPLE TREES - BF**			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	59.8	8.1	93	101	110			
DF-LEAVE	44.7	16.9	185	223	260			
R ALDER	35.8	13.5	56	65	74			
TOTAL	*67.6*	*8.1*	*102*	*111*	*120*	*183*	*46*	*20*

CL: 68.1 %	COEFF		**SAMPLE TREES - CF**			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	61.2	8.3	26	28	31			
DF-LEAVE	44.0	16.6	58	69	81			
R ALDER	42.1	15.9	20	24	27			
TOTAL	*69.9*	*8.3*	*30*	*33*	*35*	*195*	*49*	*22*

CL: 68.1 %	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	64.1	17.1	144	173	203			
DF-LEAVE	131.9	35.2	5	8	11			
R ALDER	246.8	65.9	7	21	35			
TOTAL	*42.3*	*11.3*	*180*	*203*	*226*	*77*	*19*	*9*

CL: 68.1 %	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	61.0	16.3	121	144	167			
DF-LEAVE	139.4	37.2	13	21	29			
R ALDER	211.0	56.4	9	21	33			
TOTAL	*31.0*	*8.3*	*171*	*187*	*202*	*41*	*10*	*5*

CL: 68.1 %	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	61.3	16.4	11,180	13,371	15,562			
DF-LEAVE	140.2	37.4	1,241	1,984	2,727			
R ALDER	229.8	61.4	499	1,292	2,085			
TOTAL	*37.8*	*10.1*	*14,966*	*16,647*	*18,329*	*61*	*15*	*7*

CL: 68.1 %	COEFF		**NET CUFT FT/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	63.5	17.0	3,065	3,691	4,318			
DF-LEAVE	138.9	37.1	390	620	850			
R ALDER	213.1	56.9	193	449	704			

STATISTICS

PROJECT C

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
01N	08W	22	AREA 3/4	0034	98.00	15	70	S	W

CL: 68.1%
SD: 1.0

	COEFF VAR.	S.E.%	NET CUFT FT/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
TOTAL	*37.1*	*9.9*	*4,289*	*4,760*	*5,232*	*59*	*15*	*7*

TC TSTATS

STATISTICS

PROJECT C

DATE 11/14/2006

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
01N	08W	22	AREA 5	00MC	23.00	5	34	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	5	34	6.8		
CRUISE	5	34	6.8	9,272	.4
DBH COUNT					
REFOREST					
COUNT					
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	32	390.8	11.0	47	75	256.0	26,140	26,140	6,439	6,439
R ALDER	1	10.2	12.0	20		8.0	407	407	110	110
DF-LEAVE	1	2.2	26.0	78		8.0	955	955	268	269
TOTAL	*34*	*403.1*	*11.1*	*46*		*272.0*	*27,502*	*27,502*	*6,817*	*6,818*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

CL: 68.1 %	COEFF		SAMPLE TREES - BF			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	49.7	8.8	73	80	87			
R ALDER								
DF-LEAVE								
TOTAL	*82.2*	*14.1*	*77*	*89*	*102*	*270*	*67*	*30*

CL: 68.1 %	COEFF		SAMPLE TREES - CF			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	54.3	9.6	18	20	22			
R ALDER								
DF-LEAVE								
TOTAL	*91.3*	*15.6*	*19*	*23*	*26*	*333*	*83*	*37*

CL: 68.1 %	COEFF		TREES/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	23.6	11.7	345	391	437			
R ALDER	223.6	111.1		10	22			
DF-LEAVE	223.6	111.1		2	5			
TOTAL	*23.4*	*11.6*	*356*	*403*	*450*	*27*	*7*	*3*

CL: 68.1 %	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	17.8	8.9	233	256	279			
R ALDER	223.6	111.1		8	17			
DF-LEAVE	223.6	111.1		8	17			
TOTAL	*16.1*	*8.0*	*250*	*272*	*294*	*13*	*3*	*1*

CL: 68.1 %	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	16.8	8.3	23,958	26,140	28,322			
R ALDER	223.6	111.1		407	860			
DF-LEAVE	223.6	111.1		955	2,016			
TOTAL	*15.2*	*7.6*	*25,425*	*27,502*	*29,580*	*11*	*3*	*1*

CL: 68.1 %	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	17.4	8.7	5,881	6,439	6,996			
R ALDER	223.6	111.1		110	232			
DF-LEAVE	223.6	111.1		269	568			

STATISTICS

PROJECT C

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
01N	**08W**	**22**	**AREA 5**	**00MC**	23.00	5	34	S	W

CL: 68.1%	COEFF		**NET CUFT FT/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
TOTAL	*15.4*	*7.7*	*6,295*	*6,818*	*7,340*	*12*	*3*	*1*

TC TSTATS

STATISTICS

PROJECT C

DATE 11/14/2006

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
01N	**08W**	**21**	**AREA 6**	**00MC**	70.00	16	85	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	16	85	5.3		
CRUISE	16	85	5.3	21,383	.4
DBH COUNT					
REFOREST COUNT					
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	79	297.8	11.6	45	63	216.9	20,984	20,984	5,385	5,385
DF-LEAVE	6	7.7	19.5	75		16.0	1,896	1,896	545	545
TOTAL	*85*	*305.5*	*11.8*	*46*		*232.8*	*22,879*	*22,879*	*5,930*	*5,930*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

CL: 68.1 %	COEFF		**SAMPLE TREES - BF**			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	53.2	6.0	79	84	89			
DF-LEAVE	37.0	16.5	207	248	289			
TOTAL	*67.6*	*7.3*	*88*	*95*	*102*	*183*	*46*	*20*

CL: 68.1 %	COEFF		**SAMPLE TREES - CF**			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	58.8	6.6	21	22	24			
DF-LEAVE	29.7	13.2	62	72	81			
TOTAL	*72.6*	*7.9*	*24*	*26*	*28*	*211*	*53*	*23*

CL: 68.1 %	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	55.3	14.3	255	298	340			
DF-LEAVE	223.7	57.7	3	8	12			
TOTAL	*52.9*	*13.7*	*264*	*305*	*347*	*119*	*30*	*13*

CL: 68.1 %	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	41.3	10.6	194	217	240			
DF-LEAVE	208.4	53.8	7	16	25			
TOTAL	*37.4*	*9.7*	*210*	*233*	*255*	*60*	*15*	*7*

CL: 68.1 %	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	39.3	10.2	18,854	20,984	23,114			
DF-LEAVE	212.9	54.9	855	1,896	2,937			
TOTAL	*38.0*	*9.8*	*20,636*	*22,879*	*25,123*	*62*	*15*	*7*

CL: 68.1 %	COEFF		**NET CUFT FT/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	38.7	10.0	4,846	5,385	5,923			
DF-LEAVE	207.7	53.6	253	545	838			
TOTAL	*37.2*	*9.6*	*5,361*	*5,930*	*6,499*	*59*	*15*	*7*

Area(s) _____1____

Take / Leave Stand Table

DBH	Total Tk trs/acre	Total Lv trs/acre	Hemlock Tk tr/acre	Hemlock Lv tr/acre	Spruce Tk trs/acre	Spruce Lv trs/acre	Cedar Lv trs/acre	Douglas-fir Tk tr/acre	Douglas-fir Lv tr/acre	Alder Tk tr/acre
8"	6.7	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0
9"	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0
10"	4.3	4.3	0.0	0.0	0.0	0.0	0.0	4.3	4.3	0.0
11"	7.1	7.1	0.0	0.0	0.0	0.0	0.0	7.1	7.1	3.6
12"	6.0	15.0	0.0	0.0	0.0	0.0	0.0	6.0	15.0	0.0
13"	10.2	7.7	0.0	0.0	0.0	0.0	0.0	10.2	7.7	0.0
14"	8.8	4.4	0.0	0.0	0.0	0.0	0.0	8.8	4.4	0.0
15"	15.3	15.3	0.0	0.0	0.0	0.0	0.0	15.3	15.3	1.9
16"	0.0	23.6	0.0	0.0	0.0	0.0	0.0	0.0	23.59	0.0
18"	1.3	12.0	0.0	0.0	0.0	0.0	0.0	1.3	12.0	0.0
20"	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0
22"	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
24"	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
26"	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28"	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30"	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32"	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34"	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	65	94	0	0	0	0	0	65	94	5

TOTAL STAND

BA/acre	172
Lv BA/ac	115
Tk BA/ac	61

Current Ave Stand Diameter	14.1
Leave Stand - QM Diameter	15.0
Take trees - QM Diameter	13.1

Hemlock	BA	QMD
Total	0	#DIV/0!
Leave	0	#DIV/0!
Take	0	#DIV/0!

Douglas-fir	BA	QMD
Total	172	14.1
Leave	115	15.0
Take	56	12.6

Trees/acre	Douglas-fir	Hemlock	Spruce	alder
Total	159	0	0	5
Lv trs/ac	94	0	0	0
Tk trs/ac	65	0	0	5

Cedar	BA	QMD
Total	0	#DIV/0!

alder	BA	QMD
Total	4.705882	12.5

Relative Density	46
RD - Expected	30

Stand Density Index	46
SDI - Expected	30

TC TSTNDSUM

Stand Table Summary

Project BC

T01N R08W S22 T0001

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01N	08W	22	AREA 1	0001	94.00	17	77

T01N R08W S22 T0001

Date: 10/10/20(

Time: 7:35:48AM

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		10	1	85	61	4.314	2.35	4.31	10.4	40.0	1.23	45	173	116	42	16
DL		11	2	85	81	7.131	4.71	10.70	10.6	46.7	3.13	114	499	294	107	47
DL		12	5	85	80	14.979	11.76	26.96	11.0	44.4	8.13	296	1,198	764	278	113
DL		13	3	85	80	7.658	7.06	12.76	14.5	54.0	5.10	185	689	479	174	65
DL		14	2	86	103	4.402	4.71	8.80	18.3	77.5	4.42	161	682	416	151	64
DL		15	8	84	87	15.339	18.82	30.68	18.4	68.7	15.49	563	2,109	1,456	530	198
DL		16	9	84	92	15.167	21.18	30.33	22.1	82.8	18.40	669	2,511	1,730	629	236
DL		17	5	85	93	7.464	11.76	13.43	27.8	101.1	10.26	373	1,358	964	351	128
DL		18	4	84	97	5.326	9.41	11.98	27.0	97.8	8.91	324	1,172	838	305	110
DL		19	5	84	91	5.975	11.76	11.95	33.0	112.0	10.85	395	1,338	1,020	371	126
DL		20	1	83	101	1.079	2.35	2.16	38.9	120.0	2.31	84	259	217	79	24
DL		21	2	83	84	1.956	4.71	3.91	38.7	117.5	4.18	152	460	393	142	43
DL		23	1	80	88	.816	2.35	1.63	46.8	140.0	2.10	76	228	197	72	21
DL		25	1	84	91	.690	2.35	1.38	55.6	210.0	2.11	77	290	199	72	27
DL		Totals	49	84	87	92.295	115.29	171.00	20.5	75.8	96.63	3,513	12,967	9,083	3,303	1,219
DF		8	1	85	50	6.741	2.35	6.74	4.8	30.0	.93	33	202	87	31	19
DF		9	1	84	42	5.326	2.35	5.33	5.8	30.0	.88	31	160	83	29	15
DF		10	1	86	68	4.314	2.35	4.31	11.6	40.0	1.42	50	173	134	47	16
DF		11	2	84	59	7.131	4.71	7.13	12.6	40.0	2.56	90	285	241	85	27
DF		12	2	85	92	5.992	4.71	11.98	11.2	47.5	3.83	134	569	360	126	54
DF		13	4	85	82	10.211	9.41	20.42	12.3	47.5	7.17	252	970	674	237	91
DF		14	4	85	89	8.804	9.41	15.41	18.2	71.4	7.98	280	1,101	751	263	103
DF		15	8	85	86	15.339	18.82	30.68	18.4	68.7	16.11	565	2,109	1,514	531	198
DF		19	1	86	107	1.195	2.35	2.39	35.3	130.0	2.41	84	311	226	79	29
DF		Totals	24	85	75	65.052	56.47	104.39	14.6	56.3	43.30	1,519	5,879	4,070	1,428	553
RA		11	2	80	49	7.131	4.71	7.13	9.3	35.0	1.83	67	250	172	63	23
RA		15	2	80	71	3.835	4.71	3.83	31.6	85.0	3.34	121	326	314	114	31
RA		Totals	4	80	57	10.965	9.41	10.97	17.1	52.5	5.17	188	576	486	177	54
Totals			77	84	80	168.312	181.18	286.36	18.2	67.8	145.09	5221	19,422	13,639	4,907	1,826

TC PSTNDSUM

Stand Table Summary

Page 1
Date: 10/10/2006

T01N R08W S22 Ty0002 72.00

Project BC

Plots 14 Sample 61

AREA 2A/2B

Acres 72.00

Time: 7:47:45AM

Grown Year:

Spc	S T	DBH	Sample Trees	FF 16'	Tot Av Ht	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
DF		8	3	85	44	24.555	8.57	24.56	4.4	23.3	3.06	107	573	220	77	41
DF		10	1	85	46	5.238	2.86	5.24	8.4	30.0	1.25	44	157	90	32	11
DF		11	5	85	83	21.647	14.29	38.96	9.4	42.2	10.47	367	1,645	754	264	118
DF		12	3	84	77	10.913	8.57	18.19	12.5	48.0	6.47	227	873	466	163	63
DF		13	7	83	82	21.698	20.00	40.30	13.7	48.5	15.71	551	1,953	1,131	397	141
DF		14	9	84	83	24.054	25.71	45.44	16.4	58.2	21.27	746	2,646	1,532	537	191
DF		15	9	84	84	20.954	25.71	39.58	19.5	68.8	22.01	772	2,724	1,585	556	196
DF		16	6	84	89	12.278	17.14	24.56	22.4	79.2	15.65	549	1,944	1,127	395	140
DF		17	6	83	83	10.876	17.14	21.75	24.2	79.2	15.03	527	1,722	1,082	380	124
DF		18	2	85	96	3.234	5.71	6.47	30.2	107.5	5.56	195	695	401	141	50
DF		19	2	84	87	2.902	5.71	5.80	30.1	105.0	4.99	175	609	359	126	44
DF		Totals	53	84	76	158.349	151.43	270.84	15.7	57.4	121.47	4,262	15,542	8,746	3,069	1,119
DL		20	3	84	98	3.929	8.57	7.86	38.9	138.3	8.41	306	1,087	606	220	78
DL		21	1	83	106	1.188	2.86	2.38	44.5	150.0	2.90	106	356	209	76	26
DL		22	2	83	81	2.165	5.71	4.33	40.4	125.0	4.81	175	541	347	126	39
DL		25	1	84	92	.838	2.86	1.68	58.3	210.0	2.69	98	352	194	70	25
DL		Totals	7	84	94	8.120	20.00	16.24	42.1	143.9	18.82	684	2,337	1,355	493	168
RA		14	1	80	70	2.673	2.86	2.67	24.1	70.0	1.77	64	187	128	46	13
RA		Totals	1	80	70	2.673	2.86	2.67	24.1	70.0	1.77	64	187	128	46	13
Totals			61	84	77	169.141	174.29	289.75	17.3	62.3	142.05	5,011	18,065	10,228	3,608	1,301

TC TSTNDSUM

Stand Table Summary

Project BC

T01N R08W S22 T0034

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01N	08W	22	AREA 3/4	0034	98.00	15	70

T01N R08W S22 T0034
Page: 1
Date: 10/10/20(
Time: 7:56:07AM

Spc	ST	DBH	Sample 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
DF		8	2	85	48	15.279	5.33	15.28	4.6	25.0	2.02	71	382	198	69	37
DF		9	4	83	53	24.144	10.67	24.14	7.1	27.5	4.89	172	664	479	168	65
DF		10	6	84	61	29.335	16.00	34.22	8.5	32.9	8.31	291	1,125	814	286	110
DF		11	3	83	64	12.122	8.00	16.16	10.5	35.0	4.84	170	566	475	167	55
DF		12	7	83	81	23.767	18.67	47.53	10.3	38.6	13.89	487	1,833	1,361	478	180
DF		13	4	83	74	11.572	10.67	23.14	11.7	42.5	7.71	270	984	755	265	96
DF		14	10	84	79	24.945	26.67	49.89	14.6	53.0	20.82	731	2,644	2,041	716	259
DF		15	6	83	86	13.038	16.00	26.08	19.1	62.5	14.16	497	1,630	1,387	487	160
DF		16	3	83	89	5.730	8.00	11.46	22.2	78.3	7.24	254	898	709	249	88
DF		17	2	82	86	3.384	5.33	6.77	24.7	87.5	4.76	167	592	466	164	58
DF		18	4	85	82	6.036	10.67	10.56	29.6	108.6	8.90	312	1,147	872	306	112
DF		19	3	84	94	4.063	8.00	8.13	33.2	111.7	7.68	269	907	752	264	89
DF		Totals	54	84	70	173.416	144.00	273.37	13.5	48.9	105.21	3,691	13,371	10,310	3,618	1,310
DL		20	4	82	85	4.889	10.67	9.78	35.0	110.0	9.41	342	1,076	922	335	105
DL		21	1	83	93	1.109	2.67	2.22	42.8	140.0	2.61	95	310	256	93	30
DL		22	1	85	91	1.010	2.67	2.02	43.9	145.0	2.44	89	293	239	87	29
DL		23	1	85	94	.924	2.67	1.85	51.0	165.0	2.59	94	305	254	92	30
DL		30	1	82	84	.543	2.67									
DL		Totals	8	83	87	8.476	21.33	15.86	39.1	125.1	17.05	620	1,984	1,671	608	194
RA		12	3	79	62	10.186	8.00	10.19	17.0	56.7	4.77	173	577	467	170	57
RA		13	1	80	58	2.893	2.67	2.89	17.8	50.0	1.42	51	145	139	50	14
RA		14	1	87	47	2.495	2.67	2.49	18.0	50.0	1.26	45	125	124	44	12
RA		15	1	80	58	2.173	2.67	2.17	26.0	70.0	1.55	57	152	152	55	15
RA		17	1	80	74	1.692	2.67	1.69	44.2	120.0	2.06	75	203	201	73	20
RA		18	1	79	42	1.509	2.67	1.51	31.7	60.0	1.32	48	91	129	47	9
RA		Totals	8	80	59	20.947	21.33	20.95	21.4	61.7	12.37	449	1,292	1,213	440	127
Totals			70	83	70	202.838	186.67	310.18	15.3	53.7	134.63	4760	16,647	13,194	4,665	1,631

TC TSTNDSUM

Stand Table Summary

Project BC

T01N R08W S22 T00MC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01N	08W	22	AREA 5	00MC	23.00	5	34

T01N R08W S22 T00MC

Page: 1
Date: 10/10/20(
Time: 7:59:41AM

Spc	ST	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
DF		8	2	84	49	45.837	16.00	45.84	4.7	25.0	6.20	217	1,146	142	50	26
DF		9	4	85	54	72.433	32.00	72.43	7.1	30.0	14.66	514	2,173	337	118	50
DF		10	6	85	78	88.006	48.00	117.34	9.3	40.0	31.13	1,092	4,694	716	251	108
DF		11	3	87	86	36.366	24.00	60.61	10.5	46.0	18.16	637	2,788	418	147	64
DF		12	6	85	86	61.116	48.00	122.23	10.7	41.7	37.34	1,310	5,093	859	301	117
DF		13	7	85	88	60.754	56.00	121.51	13.6	53.6	47.01	1,650	6,509	1,081	379	150
DF		14	1	84	90	7.484	8.00	14.97	17.0	55.0	7.24	254	823	167	58	19
DF		15	2	84	84	13.038	16.00	26.08	18.3	70.0	13.59	477	1,825	313	110	42
DF		16	1	84	98	5.730	8.00	11.46	25.0	95.0	8.18	287	1,089	188	66	25
DF		Totals	32	85	75	390.763	256.00	592.46	10.9	44.1	183.50	6,439	26,140	4,221	1,481	601
DL		26	1	85	89	2.170	8.00	4.34	62.1	220.0	7.38	269	955	170	62	22
DL		Totals	1	85	89	2.170	8.00	4.34	62.1	220.0	7.38	269	955	170	62	22
RA		12	1	80	36	10.186	8.00	10.19	10.8	40.0	3.02	110	407	69	25	9
RA		Totals	1	80	36	10.186	8.00	10.19	10.8	40.0	3.02	110	407	69	25	9
Totals			34	85	74	403.119	272.00	606.99	11.2	45.3	193.90	6818	27,502	4,460	1,568	633

TC TSTNDSUM

Stand Table Summary

Project BC

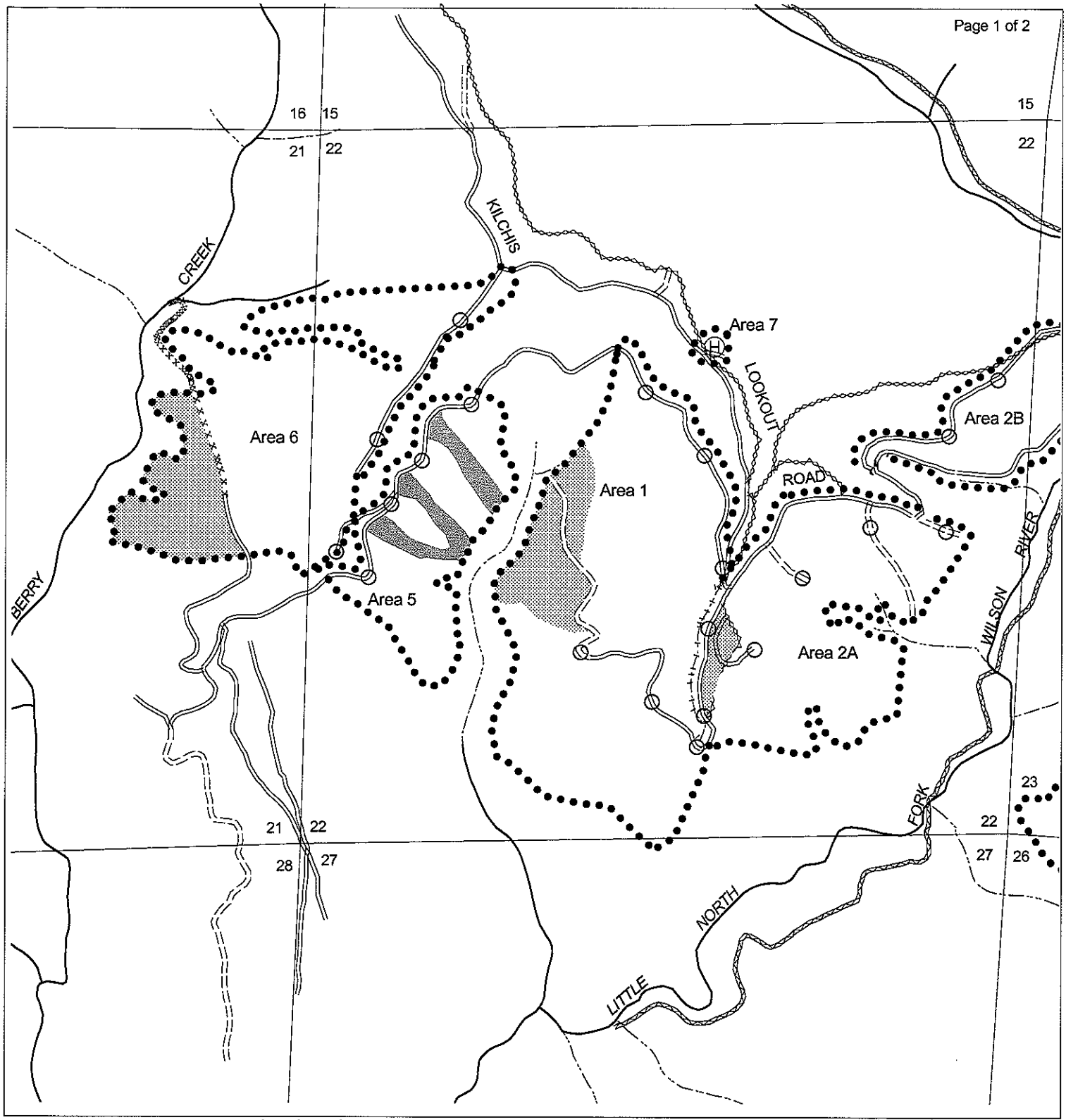
T01N R08W S21 T00MC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01N	08W	21	AREA 6	00MC	70.00	16	85

T01N R08W S21 T00MC

Page: 1
Date: 10/10/20(
Time: 8:00:05AM

Spc	ST	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
DF		8	6	84	48	42.972	15.00	42.97	4.9	25.0	6.01	211	1,074	421	148	75
DF		9	7	84	46	39.612	17.50	39.61	6.2	30.0	7.01	246	1,188	490	172	83
DF		10	7	84	57	33.846	18.46	40.19	8.1	33.9	9.26	325	1,361	648	227	95
DF		11	12	84	77	48.368	31.92	72.55	10.7	44.1	22.20	779	3,196	1,554	545	224
DF		12	13	85	81	47.493	37.30	85.44	11.4	45.6	27.74	973	3,892	1,942	681	272
DF		13	11	84	79	29.835	27.50	56.96	12.8	48.1	20.79	730	2,739	1,456	511	192
DF		14	8	84	82	20.505	21.92	41.01	15.2	55.0	17.75	623	2,256	1,242	436	158
DF		15	7	84	87	17.528	21.51	35.06	19.1	66.6	19.10	670	2,333	1,337	469	163
DF		16	5	84	87	11.016	15.38	22.03	21.7	78.8	13.62	478	1,736	953	335	122
DF		17	3	85	93	6.586	10.38	13.17	26.6	91.7	9.99	351	1,207	699	245	85
DF		Totals	79	84	69	297.760	216.87	448.99	12.0	46.7	153.46	5,385	20,984	10,742	3,769	1,469
DL		18	2	85	93	2.829	5.00	5.66	30.8	110.0	4.80	175	622	336	122	44
DL		19	2	84	80	2.539	5.00	5.08	29.0	95.0	4.04	147	482	283	103	34
DL		20	1	85	101	1.146	2.50	2.29	38.9	120.0	2.45	89	275	172	62	19
DL		23	1	84	103	1.199	3.46	2.40	56.1	215.0	3.70	134	516	259	94	36
DL		Totals	6	85	91	7.714	15.96	15.43	35.4	122.9	14.99	545	1,896	1,049	382	133
Totals			85	84	70	305.474	232.83	464.42	12.8	49.3	168.45	5930	22,879	11,792	4,151	1,602



- 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
- Blocked road
- OHV trail
- Non-motorized trail
- Transmission line

LOGGING PLAN

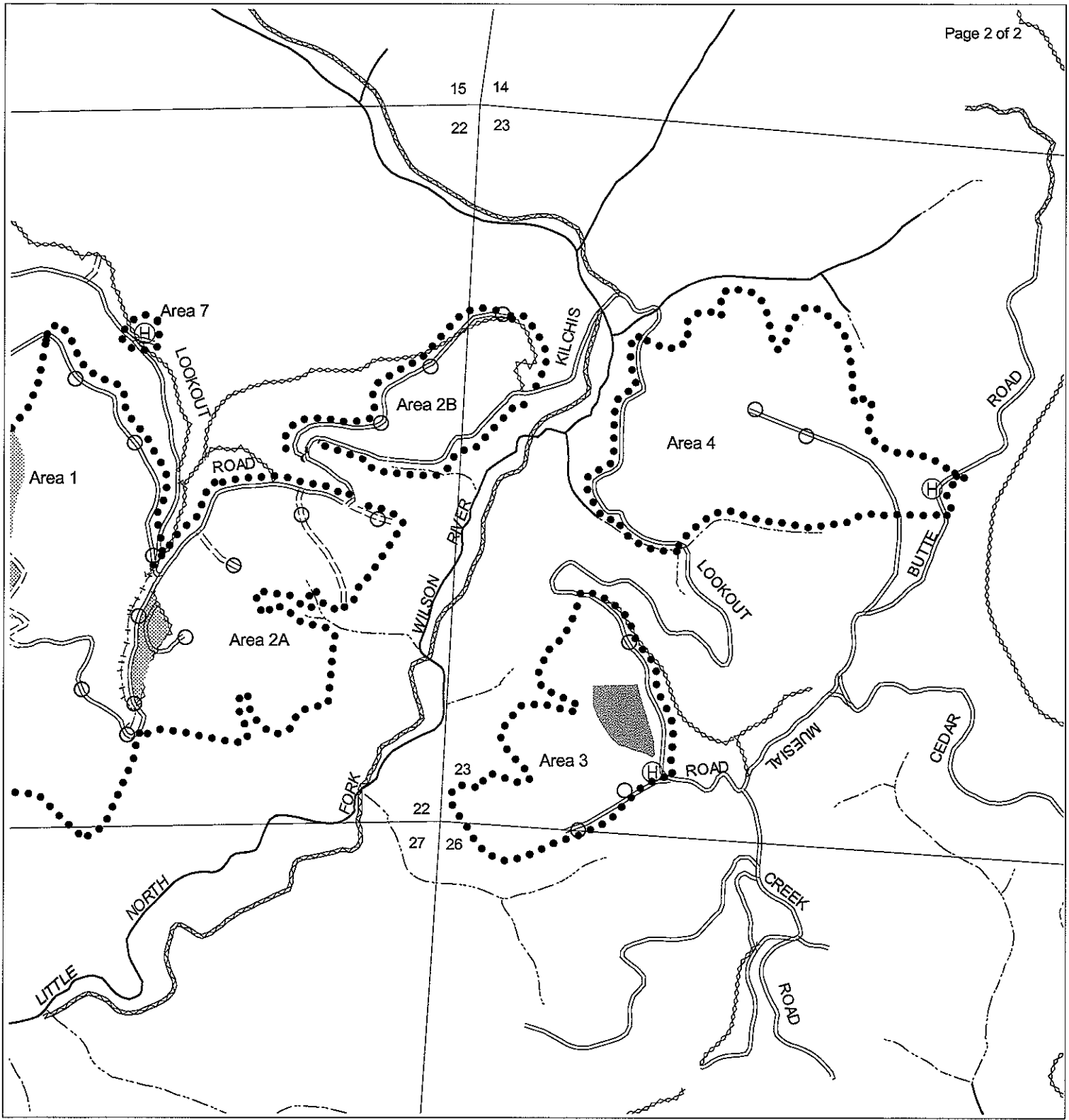
Timber Sale Contract No. 341-07-30
Berry Cobbler
Portions of Sections 21,22,23,
26 and 27 T1N, R8W, W. M.
Tillamook County, Oregon

1000 0 1000 Feet

Area	Type of Operation	Acres Gross	Net
1	Partial Cut	97	94
2a	Modified Clearcut	57	54
2b	Modified Clearcut	20	18
3	Modified Clearcut	37	33
4	Modified Clearcut	67	66
5	Modified Clearcut	32	23
6	Modified Clearcut	73	70
7	Modified Clearcut	1	1
Total		384	359

N

Tillamook District GIS
January 5, 2007
This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.



- 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
- Blocked road
- OHV trail
- Non-motorized trail
- Transmission line

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