



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Diamond Jones Sale 341-03-89

District: Tillamook

Date: 5/9/03

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,006,244.41	\$0.00	\$1,006,244.41
		Project Work	(\$24,160.00)
		Advertised Value	\$982,084.41



Timber Sale Appraisal Timber Description Diamond Jones Sale 341-03-89

"STEWARDSHIP IN FORESTRY"

District: Tillamook

Location: Portions of Sections 32, 33 T2N R7W and Section 4 and 5 T1N R7W

Date: 5/9/03

Stand Stocking: 40%

Species	Avg. DBH	Amortized %	Recovery %
Douglas - Fir	14	0	95

Volume by Grade	Douglas - Fir	Total
2S	484	484
3S	3,293	3,293
4S	530	530
Total	4,307	4,307

Comments: Pond Values Used: 1st Quarter 2003 + Local Pond Values

Hardwood stumpage value was determined by using the first quarter 2003 hardwood pond value of \$515, less the logging cost of Douglas-fir.



Timber Sale Appraisal

Logging Conditions

Diamond Jones

Sale 341-03-89

"STEWARDSHIP IN FORESTRY"

Combination#: 1 Douglas - Fir 91.21%

Yarding Distance: Medium (800 ft) **Downhill Yarding:** No

Logging System: Cable: Medium Tower >40 - <70 **Process:** Manual Delimiting

Tree Size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

Loads/Day: 6 **Bd. Ft./Load:** 3,500

Cost/MBF: \$157.93

Machines:

 Log Loader (A)

 Tower Yarder (Medium)

Combination#: 2 Douglas - Fir 8.79%

Yarding Distance: Short (400 ft) **Downhill Yarding:** Yes

Logging System: Track Skidder **Process:** Manual Falling/Delimiting

Tree Size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF

Loads/Day: 8 **Bd. Ft./Load:** 3,500

Cost/MBF: \$116.62

Machines:

 Log Loader (B)

 Track Skidder



Timber Sale Appraisal Logging Costs Diamond Jones Sale 341-03-89

"STEWARDSHIP IN FORESTRY"

Date: 5/9/03

Operating Seasons: 1.6

Profit & Risk: 15%

Project Costs: \$24,160

Other Costs (P/R): \$8,614

Slash Disposal: \$0

Other Costs: \$8,823

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

Road Maintenance: \$2.93

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	2.0	3.5

Local Pond Values

Date	Species	Grade	Value
5/9/03	Douglas - Fir	2S	\$530.00
5/9/03	Douglas - Fir	3S	\$505.00
5/9/03	Douglas - Fir	4S	\$455.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Diamond Jones Sale 341-03-89

Costs	Douglas - Fir
Logging	154.30
Road Maintenance	3.08
Fire Protection	1.01
Hauling	69.16
Other (P/R appl.)	2.00
Profit & Risk	34.43
Slash Disposal	0.00
Scaling	2.00
Other	2.05
Total	268.03

Amortization	0.00
Pond Value	501.66
Stumpage	233.63
Amortized	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary Diamond Jones Sale 341-03-89

Amortized

	Douglas - Fir
MBF	0.00
Value	0.00
Total	0.00

Unamortized

	Douglas - Fir
MBF	4,307.00
Value	233.63
Total	1,006,244.41

Gross Timber Sale Value

Recovery \$1,006,244.41

Prepared by: Chris Woodward

Date: 5/9/03

District: Tillamook

Phone: (503) 842-2545



STEWARDSHIP IN FORESTRY

**Timber Sale Appraisal
Additional Cost Worksheet
Diamond Jones
Sale 341-03-089**

Cable Yarding Vol. (MBF):	3929
Ground Yarding Vol. (MBF):	378
Total Sale Volume:	4307

ADDITIONAL COSTS - PROFIT & RISK TO BE ADDED						
Yarding & Loading:	Cost / MBF			Volume (MBF)		
Brand & Paint:	\$ 2	x	4307	=		\$8,614
	Cost / Each	OTHER COSTS TOTAL				\$8,614
ADDITIONAL COSTS - PROFIT & RISK INCLUDED						
Non-Project Roads (See Logging Plan in Cruise Report)						
Non-Proj. Rd. 1 (const.)	5	Stations	x	\$ 250	=	\$1,250
Non-Proj. Rd. 2 (const.)	4	Stations	x	\$ 110	=	\$440
Non-Proj. Rd. 3 (const.)	4	Stations	x	\$ 110	=	\$440
Non-Proj. Rd. 4 (improv.)	7	Stations	x	\$ 110	=	\$770
Non-Proj. Rd. 5 (const.)	5	Stations	x	\$ 200	=	\$1,000
Totals	25					\$3,900
		Stations	x	cys/sta	x	\$/cy
Approach Rock: Pit-Run	5			50	x	\$6.00
		stations		acres		\$/ac
Grass Seeding	25			1.1	x	\$180.00
Mulching	25			1.1	x	\$500.00
Ditch Pulling and End Haul (per CY) ¹				\$ 28	x	50
OHV Barrier construction				\$ 75	x	1
Dust Abatement (per season) ²				\$ 1,200	x	1
		OTHER COSTS TOTAL				\$8,823

ROAD MAINTENANCE						
		\$/Cu.Yd	MMBF	Miles	cu.yds/mile	\$/MBF
Surfacing ³ :	Pit-Run	\$6.00	4.3	2.0	25	\$0.30
	Crushed	\$8.00	4.3	5	25	\$1.00
		\$/Mile	MMBF	Miles		
Grading ⁴		\$ 500	4.3	7		\$1.63
	TOTAL ROAD MAINTENANCE COST / MBF:					\$2.93

¹Includes cost for excavating, hauling, compaction, and sediment control devices @ \$400/move in + \$3.50/cy

²Cost for lignin sulfonate application as dust abatement material.

³Assumes 25 cys crushed rock per MMBF per mile, 25 cys pit-run rock per MMBF per mile.

⁴Grading two times (assumes grading portions of roads)

PROJECT SUMMARY SHEET

Sale: DIAMOND JONES

CONSTRUCTION

Point	A to B	0+00	stations =	\$0.00
Point	C to D	0+00	stations =	\$0.00
SUBTOTAL CONSTRUCTION				\$0.00

IMPROVEMENT

Point	A to B	24+00	stations =	\$13,798.88
Point	C to D	15+10	stations =	\$8,944.51
SUBTOTAL IMPROVEMENT				\$22,743.39

SPECIAL PROJECTS

				\$0.00
SUBTOTAL SPECIAL PROJECTS				\$0.00

MOVE IN

\$1,416.43

GRAND TOTAL

\$24,159.82

SUMMARY OF CONSTRUCTION COST

Sale:	<u>DIAMOND JONES</u>		Road: <u>A to B</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles		Improvement - <u>24+00</u> stations <u>0.45</u> miles
CLEARING AND GRUBBING -			
Roadside Brushing	0.00 miles @		\$800.00 per mile = \$0.00
Side cast	0.000 acres @		\$540.00 per acre = \$0.00
Widening	0.000 acres @		\$540.00 per acre = \$0.00
Scattering	0.550 acres @		\$815.00 per acre = \$448.25
Piling	0.000 acres @		\$905.00 per acre = \$0.00
Endhaul	0.000 acres @		\$1,500.00 per acre = \$0.00
			TOTAL CLEARING AND GRUBBING
			\$448.25
EXCAVATION -			
Road Earthwork	24.00 sta. @		\$65.00 per sta. = \$1,560.00
Pullback	0 cy. @		\$1.40 per c.y. = \$0.00
Widening	0 cy. @		\$1.40 per c.y. = \$0.00
Remove outside berm	0 cy. @		\$1.40 per c.y. = \$0.00
Slope Stabilization Prep.	0 cy. @		\$1.40 per c.y. = \$0.00
Full Bench	cy. @		\$1.40 per c.y. = \$0.00
Widening/Full Bench	cy. @		\$1.40 per c.y. = \$0.00
			TOTAL EXCAVATION
			\$1,560.00
ENDHAUL -			TOTAL ENDHAUL
			\$0.00
CULVERTS - MATERIALS & INSTALLATION			
	<u>Culverts</u>		
	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
		<u>\$0.00</u>	<u>\$0.00</u>
	<u>Half Rounds</u>		
	0 LF of 21"	\$0.00	0 LF of 30" \$0.00
	0 LF of 36"	\$0.00	0 LF of 42" \$0.00
		<u>\$0.00</u>	<u>\$0.00</u>
	<u>Culvert Stakes & Markers</u>		
	0 stakes	\$0.00	
	0 markers	\$0.00	
		<u>\$0.00</u>	
			TOTAL CULVERTS
			\$0.00
SURFACING-			
0+00 to 24+00	1,774 cy. of Pit-Run		\$5.65 per c.y. = \$10,015.86
			TOTAL SURFACING
			\$10,015.86
SPECIAL PROJECTS			
Grade and shape road -	24.00 stations @		\$14.20 per station \$340.80
Roll subgrade w/ vibratory roller prior to rocking -	24.00 stations @		\$11.00 per station \$264.00
Remove large stumps -	1.00 lump sum @		\$520.00 \$520.00
Grass seed and fertilize -	0.55 acres @		\$180.00 per acre \$99.00
Mulching -	0.551 acres @		\$1,000.00 per acre \$550.96
			TOTAL SPECIAL PROJECTS
			\$1,774.76
GRAND TOTAL			\$13,798.88

SUMMARY OF CONSTRUCTION COST

Sale:	<u>DIAMOND JONES</u>					Road:	<u>C to D</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles					Improvement -	<u>15+10</u> stations <u>0.29</u> miles
CLEARING AND GRUBBING -							
Roadside Brushing		0.00 miles @		\$1,000.00 per mile =			\$0.00
Side cast		0.000 acres @		\$540.00 per acre =			\$0.00
Widening		0.000 acres @		\$540.00 per acre =			\$0.00
Scattering		0.490 acres @		\$815.00 per acre =			\$399.35
Piling		0.00 acres @		\$905.00 per acre =			\$0.00
Endhaul		0.00 acres @		\$1,500.00 per acre =			\$0.00
				TOTAL CLEARING AND GRUBBING			\$399.35
EXCAVATION -							
Road Earthwork		15.10 sta. @		\$65.00 per sta. =			\$981.50
Pullback		0 cy. @		\$1.40 per c.y.=			\$0.00
Widening		0 cy. @		\$1.40 per c.y.=			\$0.00
Remove outside berm		0 cy. @		\$1.40 per c.y.=			\$0.00
Slope Stabilization Prep.		0 cy. @		\$1.40 per c.y.=			\$0.00
Full Bench		cy. @		\$1.40 per c.y.=			\$0.00
Widening/Full Bench		cy. @		\$1.40 per c.y.=			\$0.00
				TOTAL EXCAVATION			\$981.50
ENDHAUL -							
						TOTAL ENDHAUL	\$0.00
CULVERTS - MATERIALS & INSTALLATION							
		<u>Culverts</u>					
		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"	<u>\$0.00</u>	0 LF of 72"	<u>\$0.00</u>		
			\$0.00		\$0.00		
		<u>Half Rounds</u>					
		0 LF of 21"	\$0.00	0 LF of 30"	\$0.00		
		0 LF of 36"	<u>\$0.00</u>	0 LF of 42"	<u>\$0.00</u>		
			\$0.00		\$0.00		
		<u>Culvert Stakes & Markers</u>					
		0 stakes	\$0.00				
		0 markers	<u>\$0.00</u>				
			\$0.00			TOTAL CULVERTS	\$0.00
SURFACING-							
0+00 to	15+10	1,135 cy. of	Pit-Run	@	\$5.74 per c.y.=		<u>\$6,513.49</u>
						TOTAL SURFACING	\$6,513.49
SPECIAL PROJECTS							
Grade and shape road -		15.10 stations @		\$14.20 per station			\$214.42
Roll subgrade w/ vibratory roller prior to rocking -		15.10 stations @		\$11.00 per station			\$166.10
Remove large stumps -		1.00 lump sum @		\$260.00			\$260.00
Grass seed and fertilize -		0.35 acres @		\$180.00 per acre			\$63.00
Mulching -		0.347 acres @		\$1,000.00 per acre			\$346.65
				TOTAL SPECIAL PROJECTS			\$1,050.17
				GRAND TOTAL			\$8,944.51

ROCK DEVELOPMENT COST SUMMARY

Pit:	Pit Run	Location:	SW 1/4 SE 1/4 Section 30 T2N, R7W W.M.
Sale:	DIAMOND JONES	Road:	2909 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	2909 c.y.
Drill Pct.:	0%	In Place Total:	2078 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact.	\$295.17
Rip Rock	\$1.75 /cu.yd. x 2078 cu.yds. = \$3,636.25
Load Dump Truck:	\$0.60 /cu.yd. x 2909 cu.yds. = \$1,745.40

Subtotal \$5,676.82

Move in Excavator	1	@	\$471.11	=	\$471.11
Move in Trucks	2	@	\$98.18	=	\$196.37
					Subtotal \$667.48

TOTAL PRODUCTION COSTS \$6,344.29

Base Cost= \$2.18 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	\$2.57	\$0.90	\$2.18	\$5.65	1774	\$10,015.86
C to D	\$2.66	\$0.90	\$2.18	\$5.74	1135	\$6,513.49
				Total C.Y.	2909	Sub Total \$16,529.35

TOTAL ROCKING COSTS \$16,529.35



OREGON DEPARTMENT OF FORESTRY

CRUISE REPORT

Diamond Jones

1. **Type of Sale:** Clearcut / Recovery
2. **Legal Description:** Portions of Sections 4 and 5, T1N, R7W, and Sections 32 and 33, T2N, R7W, W.M., Tillamook County, Oregon.
3. **Sale Acreage:** Sale acreage was determined by plotting posted boundaries in ArcView GIS, using digital orthophotos and planimetric themes.

	ACRES		
	<u>Sale</u>	<u>Total</u>	<u>Net</u>
Area 1 (clearcut)	94	105	89
Area 2 (clearcut)	140	130	117
Total	234	235	206

Sale Acres

Area within the Timber Sale Boundary signs.

Total acres

For accomplishment reporting

Clearcut harvest - Sale acres; plus green tree retention acres outside the sale boundary; less roads and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

Net acres

Used for calculating the advertised volume.

Clearcut - Sale acres, less green tree retention, unstocked acres, roads, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

4. **Cruising Procedures:**

A. Cruise Method: Cruise lines were established throughout the sale areas. A rectangular grid system was used with lines and plots being approximately 500 and 150 feet apart respectively. A total of 30 and 35 variable radius full point plots were established in Areas 1 and 2 respectively. Count and measure plots were established on a one to one ratio. Conifer, with less than 8" DBH, and alder, with less than 10" DBH, were not cruised because they were considered non-merchantable. Measure plots recorded the following: species, DBH, height to a 6" merchantable top or 4/10 of DBH (whichever was greater) for conifer and 8" merchantable top for alder, form factor at 16' for conifer, and log grades, lengths and defect of each log segment were estimated. Count plots recorded number of trees by species. A form factor of 80 was used for hardwoods.

B. Plot size: A 20 BAF was used for tree selection. Point of observation was at 4.5 feet.

C. Grading System: Trees were graded following the Columbia River Official Log Scaling and Grading Bureau rules.

5. **Computation Procedure:** The volumes and statistics were computed using Atterbury Consultants Inc. SuperAce 98. The coefficient of variation and the standard error for Area 1 was 32.6% and 5.7% and for Area 2 was 36.6% and 6.8% respectively.

6. Timber Description

Both of the sale areas were burned in the 1933 Tillamook Fire. Area 1 and the western half of Area 2 were reburned in the 1939 Saddle Mountain Fire. The northern tip of Area 1 and eastern portion of Area 2 were also burned in the 1945 Wilson River Fire. The current stands are all CSC and have severe levels of Swiss needle cast infection. There are some hard snags created from wind, snow, and bear damage. Down wood consists of scattered large old logs (36"+) from the salvage in decay class 3 and 4 and some windthrow in decay class 1 and 2. Understory vegetation consists of sword fern, salmonberry, Oregon grape, and vine maple.

7. Cruiser Names/Dates

Woodward/Ausland/Bond/Frison; April 2003

8. Revenue Distribution

100% FDF

Tax Code: 9-2, 56

Deed Numbers: 35, 96, 138

100% Rehabilitation Obligated

9. Attachments

Volume Summary

Logging Plan



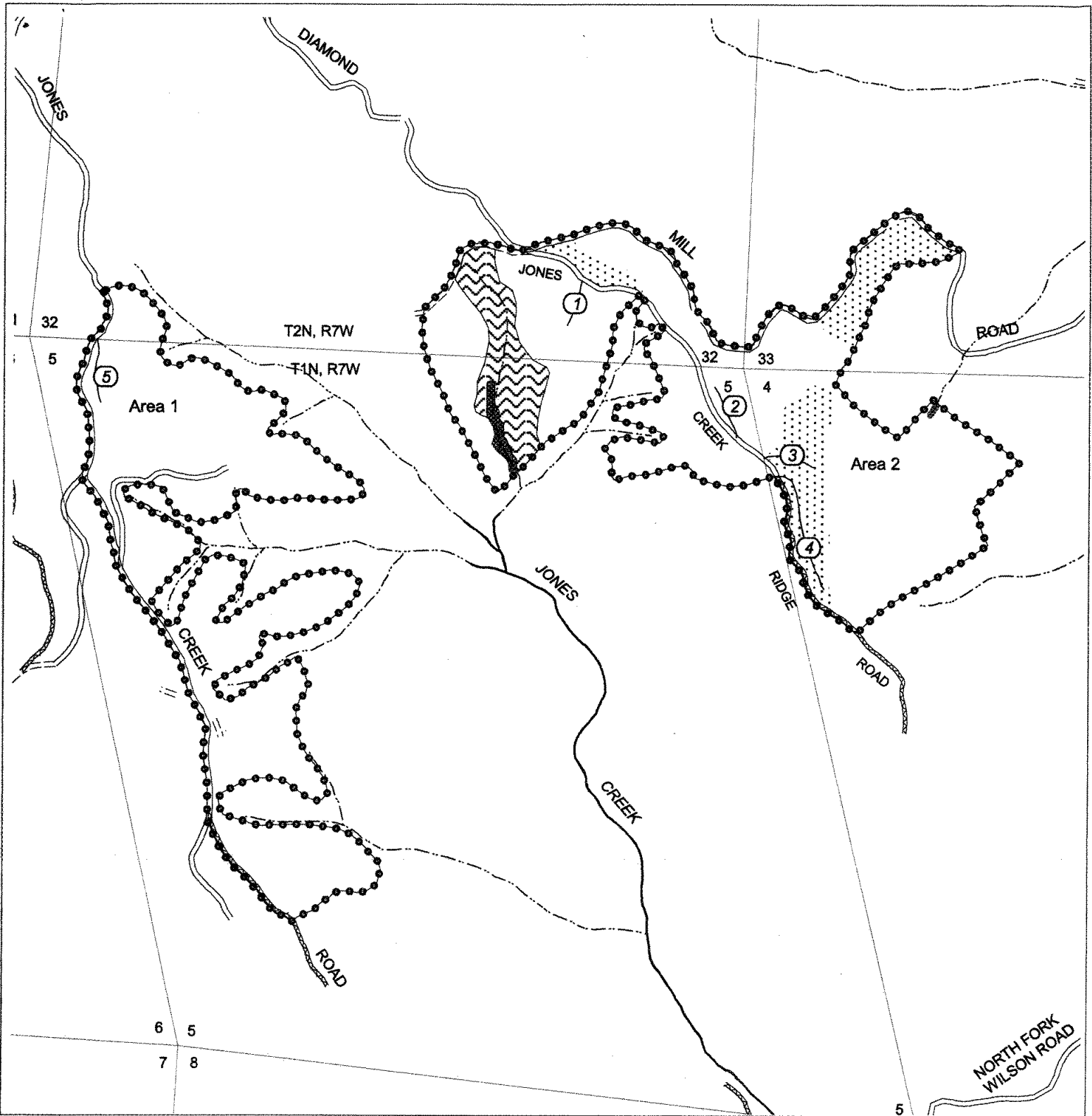
**Timber Sale Appraisal
Volume Summary
Diamond Jones
Sale # 341-03-089**

STEWARDSHIP IN FORESTRY

Area 1						
89 acres						
SPECIES	Basal Area Per Ac	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	182	116.2	21.1	1878	5%	1784
TOTAL	182		21.1	1878		1784

Area 2						
117 acres						
SPECIES	Basal Area Per Ac	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	180	126.1	22.7	2656	5%	2523
TOTAL	180		22.7	2656		2523

TOTAL SALE VOLUME		
206 acres		
SPECIES	MBF	MBF NET
Douglas-fir	4534	4307
TOTAL	4534	4307



- Tractor landing
- Cable landing
- ▲ Domestic water supply
- ⊗ Block
- Cable yarding
- ▤ Ground yarding
- ▥ Helicopter yarding
- ▧ Buffer
- ▨ Non-required thinning
- ▩ Green tree retention area
- Setting boundary
- - - Area boundary
- Sale boundary
- Ownership boundary
- Type-F stream
- - - Type-N stream
- ==== Surfaced road
- Unsurfaced road
- == State highway
- County road
- ② Non-project road
- - - Swing road
- - - Abandoned road
- ○ ○ OHV trail
- ⋯ Non-motorized trail

LOGGING PLAN
 Timber Sale Contract No. 341-03-89
 Diamond Jones
 Portions of sections 32 and 33 T2N, R7W,
 and sections 4 and 5, T1N, R7W, W. M.
 Tillamook County, Oregon

Area	Type of Operation	Acres	
		Sale	Net
1	Clearcut	94	89
2	Clearcut	140	117
Total		234	206

