



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Snark Ridge Sale 341-05-16

District: Tillamook

Date: 4/28/05

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$224,091.53	\$6,122.94	\$230,214.47
		Project Work	(\$30,565.00)
		Advertised Value	\$199,649.47



Timber Sale Appraisal Timber Description Snark Ridge Sale 341-05-16

"STEWARDSHIP IN FORESTRY"

District: Tillamook

Location: Portions of Sections 4, 5, 8, 9, 10, and 17, T3N, R8W, W.M., Tillamook County, Oregon.

Date: 4/28/05

Stand Stocking: 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	16	0	95
Alder (Red)	12	0	95

Volume by Grade	Douglas - Fir	Alder (Red)	Total
2S	1,098	0	1,098
3S	2,055	0	2,055
4S	274	0	274
Camprun	0	19	19
Total	3,427	19	3,446

Comments: Pond Values Used: 1st Quarter 2005.

Cedar Stumpage: $\$865/\text{MBF}$ (local pond value) - $\$297.74/\text{MBF}$ (logging cost) = $\$567.26/\text{MBF}$

Additional Costs (Profit and Risk to be added)

Brand and Paint - $\$2/\text{MBF} \times 3446 \text{ MBF} = \$6,892$
Logging costs increased to reflect higher fuel costs

Total Other Costs + P&R = $\$6,892$

Additional Costs (Profit and Risk Included)

Flagging on Foss Road

3 months @ 168 hours/month x $\$28/\text{hour} \times 2$ flaggers = $\$28,224$

Total Other Costs no P&R = $\$28,224$

Road Maintenance (per MBF)

Maintenance Rock - approximately 200 yds³ from commercial source
Pit run @ $7.80/\text{yard} = \$1,560/3446 \text{ MBF} = \0.45

Total Maintenance Cost/ MBF = $\$0.45$



Timber Sale Appraisal Logging Conditions Snark Ridge Sale 341-05-16

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	99.80%	
Yarding Distance:	Medium (1 mile)		Downhill Yarding: Yes
Logging System:	Helicopter		Process: Non Pre-Bunching
Tree Size:	Mature Private Forest / Regen Cut 50% (250 Bft/tree), 6-11 logs/MBF		
Loads/Day:	14		Bd. Ft./Load: 4,000
Cost/MBF:	\$399.15		
Machines:	Log Loader (A)		
Combination#: 2	Douglas - Fir	0.20%	
	Alder (Red)	100.00%	
Yarding Distance:	Short (400 ft)		Downhill Yarding: Yes
Logging System:	Track Skidder		Process: Manual Falling/Delimiting
Tree Size:	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
Loads/Day:	5		Bd. Ft./Load: 3,400
Cost/MBF:	\$192.08		
Machines:	Log Loader (B) Track Skidder		



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal

Logging Costs

Snark Ridge

Sale 341-05-16

Date: 4/28/05

Operating Seasons: 0.8

Profit & Risk: 20%

Project Costs: \$30,565

Other Costs (P/R): \$6,892

Slash Disposal: \$0

Other Costs: \$28,224

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

Road Maintenance: \$0.45

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	2.0	4.0
Alder (Red)	\$0.00	3.0	3.4



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Snark Ridge Sale 341-05-16

Costs	Douglas - Fir	Alder (Red)
Logging	398.73	192.08
Road Maintenance	0.47	0.47
Fire Protection	0.63	0.63
Hauling	60.53	46.11
Other (P/R appl.)	2.00	2.00
Profit & Risk	92.47	48.26
Slash Disposal	0.00	0.00
Scaling	2.00	0.00
Other	8.19	8.19
Total	565.02	297.74

Amortization	0.00	0.00
Pond Value	630.41	620.00
Stumpage	65.39	322.26
Amortized	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary Snark Ridge Sale 341-05-16

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	3,427.00	19.00
Value	65.39	322.26
Total	224,091.53	6,122.94

Gross Timber Sale Value

Recovery \$230,214.47

Prepared by: David Wells

Date: 4/28/05

District: Tillamook

Phone: (503) 842-2545

PROJECT SUMMARY SHEET

Site: Snark Ridge Date: Apr 07, 2005

Construction -

Point	C - D	stations =	2+40	\$3,669.96
Point		stations =		\$0.00
				SUB TOTAL \$3,669.96

Improvement -

Point	A - B	stations =	7+70	\$15,653.18
Point		stations =		\$0.00
				SUB TOTAL \$15,653.18

Special Projects - Refueling Heliport

Clearing & Grubbing: Scatter .22 acres	\$179.30
D8: 12 Hours @ \$140/hr.	\$1,680.00
Safety Barriers	\$500.00
Grade Subgrade	\$84.34
Roll Subgrade	\$66.00
Haul, Spread 563 C.Y.: 9" Depth Pit Run Base Rock @ \$9.39/cy	\$5,286.57
Haul, Spread 171 C.Y. Crushed Rock: 4" Depth @ \$5.69/cy	\$972.99
Rock Processing (Grade, Roll, Water) @ \$1.30/cy	\$686.40
	\$0.00
SUB TOTAL \$9,455.60	

Move - In -

Grader	\$166.11
Loader	\$90.00
Excavator	\$531.00
Crawler Tractor	\$415.00
4 Dump Trucks	\$402.24
Roller	\$181.06
	\$0.00
SUB TOTAL \$1,785.41	

GRAND TOTAL \$30,554.15

SUMMARY OF CONSTRUCTION COST

Sale: Snark Ridge Road: Spur A - B

Construction - 0.00 stations miles Improvement - 7+70 stations miles
0.00 miles 0.15 miles

CLEARING AND GRUBBING -

Scattering	2.50 acres @	\$815.00 per acre =	\$2,037.50	
Endhaul	0.30 acres @	\$1,500.00 per acre =	\$450.00	
TOTAL CLEARING AND GRUBBING				\$2,487.50

EXCAVATION -

0 hr.s @	\$0.00 per hr. =	\$0.00		
5.70 sta. @	\$55.00 per sta. =	\$313.50		
1500 cys. @	\$2.65 per c.y. =	\$3,975.00		
0 cys. @	\$0.00 per c.y. =	\$0.00		
TOTAL EXCAVATION				\$4,288.50

CULVERT MATERIALS & INSTALLATION -

Culverts				
60 LF of 18"	\$960.00			
	<u>\$960.00</u>			
Half Rounds				
10 LF of 21"	\$114.00			
	<u>\$114.00</u>			
Culvert Stakes				
2 1/2 round stakes @	\$8.00 per stake =	\$16.00		
2 marker stakes @	\$6.00 per stake =	\$12.00		
TOTAL CULVERT MATERIALS & INSTALLATION				\$1,102.00

SURFACING-

12" Depth	604 cy. of	Pit Run @	\$7.71 per c.y. =	\$4,656.84
CrvWiden	42 cy. of	Pit Run @	\$7.71 per c.y. =	\$323.82
Trnouts	40 cy. of	Pit Run @	\$7.71 per c.y. =	\$308.40
70'Landing	202 cy. of	Pit Run @	\$7.71 per c.y. =	\$1,557.42
TOTAL SURFACING				\$6,846.48

SPECIAL PROJECTS

Construct 70' Diameter Landing	\$250.00	
Grade Subgrade & Landing	\$200.00	
Roll Subgrade & Landing	\$150.70	
Seed, Fertilize & Mulch Disturbed Soil & Waste Areas: (.4 Acres & \$820/ac.)	\$328.00	
	\$0.00	
TOTAL SPECIAL PROJECTS		\$928.70

GRAND TOTAL \$15,653.18

SUMMARY OF CONSTRUCTION COST

Sale: Snark Ridge Road: Spur C - D

Construction - 2+40 stations
0.05 miles
Improvement - 0.00 stations
0.00 miles

CLEARING AND GRUBBING -

Side cast	0.00 acres @	\$540.00 per acre =	\$0.00	
Scattering	0.40 acres @	\$815.00 per acre =	\$326.00	
Endhaul	0.00 acres @	\$1,500.00 per acre =	\$0.00	
TOTAL CLEARING AND GRUBBING				\$326.00

EXCAVATION -

0 hr.s @	\$0.00 per hr. =	\$0.00		
2.40 sta. @	\$65.00 per sta. =	\$156.00		
0 cys. @	\$0.00 per c.y. =	\$0.00		
TOTAL EXCAVATION				\$156.00

SURFACING-

12" Depth	144 cy. of	Pit Run @	\$7.71 per c.y. =	\$1,110.24
CrvWiden	10 cy. of	Pit Run @	\$7.71 per c.y. =	\$77.10
1Tmouts	20 cy. of	Pit Run @	\$7.71 per c.y. =	\$154.20
70'Landing	202 cy. of	Pit Run @	\$7.71 per c.y. =	\$1,557.42
TOTAL SURFACING				\$2,898.96

SPECIAL PROJECTS

Construct 70' Diameter Landing	\$500.00
Grade Subgrade & Landing	\$70.00
Roll Subgrade & Landing	\$55.00
Grass Seed, Fertilize & Mulch Areas of Distrubed Soil	\$164.00
	\$0.00
TOTAL SPECIAL PROJECTS	\$289.00

GRAND TOTAL \$3,669.96

PIT RUN PIT DEVELOPMENT AND STRIPPING COST SUMMARY
SALE: SNARK RIDGE

Pit:	<u>SIBLEY</u>	Location:	<u>NW1/4 NW1/4 Sec22 T3N R8W</u>
Rock:	<u>PIT RUN</u>	Road:	<u>1827 c.y.</u>
Swell:	<u>1.30</u>	Stockpile Size:	<u>c.y.</u>
Shrinkage:	<u>1.16</u>	Total Truck Loads:	<u>1827 c.y.</u>
Drill Pct.:	<u>25%</u>	In Place Total:	<u>1405 c.y.</u>

Pit Development:					\$500.00
Drill & Shoot:	<u>\$2.10 /cu.yd.</u>	x	<u>351 cu.yds.</u>	=	<u>\$737.10</u>
Strip Rock:	<u>\$1.50 /cu.yd.</u>	x	<u>1,054 cu.yds.</u>	=	<u>\$1,581.00</u>
Push Rock:	<u>\$0.75 /cu.yd.</u>	x	<u>1827 cu.yds.</u>	=	<u>\$1,370.25</u>
Load Dump Truck:	<u>\$0.70 /cu.yd.</u>	x	<u>1827 cu.yds.</u>	=	<u>\$1,278.90</u>
			Sub Total		<u>\$5,467.25</u>

Base Cost= \$2.99 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-B	\$3.82	\$0.90	\$2.99	\$7.71	888	\$6,846.48
C-D	\$3.82	\$0.90	\$2.99	\$7.71	376	\$2,898.96
Heliport	\$5.50	\$0.90	\$2.99	\$9.39	563	\$5,286.57
	\$0.00	\$0.90	\$0.00	\$0.00	0	\$0.00
			Total C.Y.		1827	Sub Total \$15,032.01

TOTAL ROCKING COSTS = \$15,032.01



OREGON DEPARTMENT OF FORESTRY CRUISE REPORT *Snark Ridge*

1. **Type of Sale**

Partial Cut – Recovery

2. **Legal Description**

Portions of Sections 4, 5, 8, 9, 10, and 17, T3N, R8W, W.M., Tillamook County, Oregon.

3. **Sale Acreage**

	ACRES		
	<u>Sale</u>	<u>Total</u>	<u>Net</u>
Area 1	525	515	250
Total	525	515	250

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.

Net acres: Used for calculating the advertised volume.

Clearcut/Retention cut - 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

The partial cut area was sampled with a total of 17 variable radius plot. Three cruise lines were established on a transect basis to sample and plots were spaced 250 feet apart. All conifers 8 inches DBH and greater and all hardwoods 10 inches DBH and greater were recorded on all plots. All trees on all plots were measured for merchantable height and graded. Total heights were measured across the sale area.

The right-of-way for the heliport and log landing areas were 100% cruised.

B. Plot size

For the variable radius plots a basal area factor of 54.45 was used. 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 6-inch top and hardwood trees were measured to an 8-inch top, both favoring 40-foot lengths. 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 volumes were computed using the Atterbury SuperA.C.E.98 program. Partial cut take and leave trees were determined at the office on a plot by plot basis to achieve the residual basal area and take tree volume per acre was expanded by the sale acres.

6. Hidden Defect and Breakage

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

7. Timber Description

The 1932 Cochran Fire burned portions of the area. The area naturally regenerated into a Douglas-fir stand with scattered hemlock, spruce, cedar and hardwoods. The current stand condition is closed-single canopy. The Douglas-fir has low to moderate symptoms of Swiss needle cast.

8. Cruiser Names/Dates

Winslow, Phillips and Wells, Summer 2004.

9. Revenue Distribution

FDF: 100%

Tax Code: 56-1 – 100%

Deed Number: 35, 70, 166

Land Cost Retirement, project reference code 35166B29 in the amount of \$273.80

Rehab: 0% or none

10. Attachments

Stand Tables

Volume Summary

Logging Plan

Stand Table Summary

Project SNARKRDG

T03N R08W S09 T0160

T03N R08W S09 T0160

Twp Rge Sec Tract
03N 08W 09 1000Type
0160Acres
1.00Plots
17Sample Trees
81Page: 1
Date: 3/29/2004
Time: 10:52:37AM

S Spec T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
								Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DL	17	2	86	87	4.018	6.41	5.98	30.7	110.0	5.05	184	658	5	2	1
DL	18	1	89	113	1.735	3.20	3.47	34.1	135.0	3.26	118	468	3	1	0
DL	19	7	88	111	11.479	22.42	27.87	31.5	126.0	24.10	877	3,512	24	9	4
DL	20	1	88	105	1.454	3.20	4.36	26.6	123.3	3.19	116	538	3	1	1
DL	21	5	88	106	6.662	16.01	16.04	38.0	148.9	16.78	610	2,389	17	6	2
DL	22	3	87	113	3.665	9.61	8.58	44.8	188.2	10.57	384	1,614	11	4	2
DL	23	6	86	114	6.664	19.22	14.47	50.6	189.0	20.13	732	2,734	20	7	3
DL	24	2	89	130	2.039	6.41	6.12	47.4	223.3	7.98	290	1,366	8	3	1
DL	25	2	90	125	1.933	6.41	5.82	49.2	231.3	7.88	287	1,347	8	3	1
DL	26	1	86	126	.882	3.20	1.76	70.0	280.0	3.40	124	494	3	1	0
DL	27	5	89	138	4.036	16.01	12.91	62.0	305.4	22.00	800	3,944	22	8	4
DL	28	2	88	107	1.520	6.41	3.79	67.1	284.3	7.00	254	1,077	7	3	1
DL	29	5	86	127	3.497	16.01	10.49	70.0	318.4	20.19	734	3,341	20	7	3
DL	31	1	86	145	.603	3.20	1.81	90.7	380.0	4.51	164	688	5	2	1
DL	Totals	43	88	114	50.187	137.73	123.48	46.0	195.7	156.04	5,674	24,169	156	57	24
DF	11	2	87	47	10.453	6.41	10.45	10.9	35.0	3.25	114	366	3	1	0
DF	13	3	84	72	10.649	9.61	10.65	21.5	66.7	6.54	229	711	7	2	1
DF	14	3	87	103	8.868	9.61	11.86	23.4	92.0	7.92	278	1,092	8	3	1
DF	15	5	85	91	13.379	16.01	26.76	18.8	67.6	14.38	504	1,808	14	5	2
DF	16	4	88	90	8.954	12.81	15.73	25.9	104.1	11.59	406	1,637	12	4	2
DF	17	2	85	94	4.066	6.41	8.13	26.2	94.4	6.07	213	768	6	2	1
DF	18	5	87	111	8.888	16.01	17.78	33.6	127.8	17.02	598	2,272	17	6	2
DF	19	3	89	109	4.970	9.61	11.65	32.8	125.4	10.87	382	1,462	11	4	1
DF	20	4	89	93	5.978	12.81	8.90	38.5	148.3	9.77	343	1,320	10	3	1
DF	21	2	88	95	2.703	6.41	5.41	41.2	160.4	6.36	223	867	6	2	1
DF	22	2	89	124	2.483	6.41	6.19	47.3	219.9	8.35	293	1,362	8	3	1
DF	24	1	90	131	1.037	3.20	3.11	48.6	223.3	4.31	151	695	4	2	1
DF	Totals	36	87	89	82.425	115.31	136.61	27.3	105.1	106.41	3,733	14,357	106	37	14
WH	12	1	83	87	4.218	3.20	8.44	12.1	45.0	3.28	102	380	3	1	0
WH	17	1	86	94	2.157	3.20	4.31	27.1	110.0	3.75	117	475	4	1	0
WH	Totals	2	84	89	6.375	6.41	12.75	17.2	67.0	7.02	219	854	7	2	1
Totals		81	87	98	138.987	259.44	272.84	35.3	144.3	269.47	9627	39,380	269	96	39

CONIFER LEAVE - AVE 144 FT²/ACRE

CONIFER - 57 TREES PER ACRE



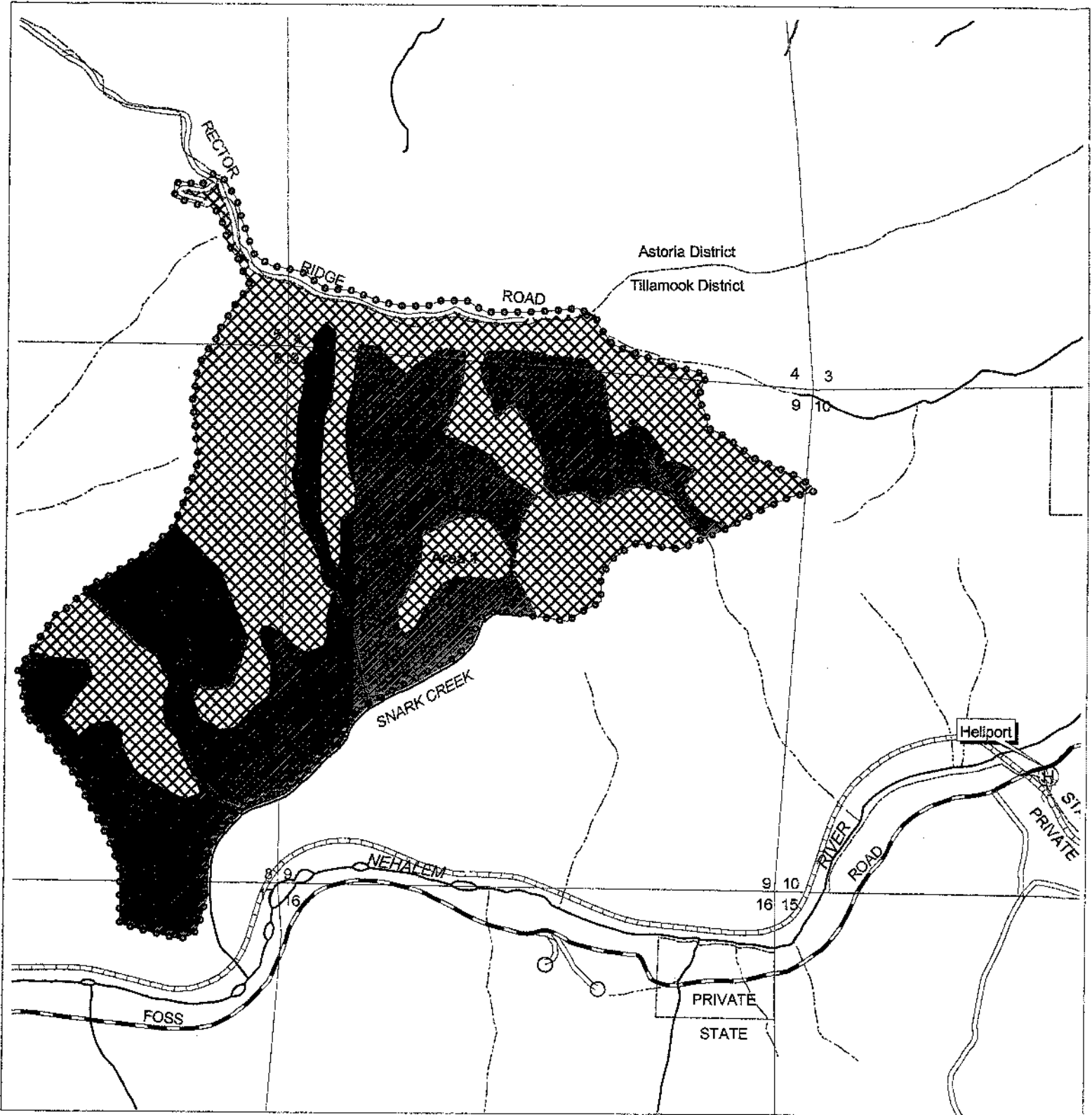
Snark Ridge

Volume Summary

Area					
250 acres					
SPECIES	Gross MBF/Acre	Net MBF/Acre	Net MBF	Hidden D&B	Adj Net Vol MBF
Douglas-fir	14.5	14.4	3600	5%	3420
TOTAL	14.5	14.4	3600	5%	3420

Area Right of Way					
1 acre					
SPECIES	Gross MBF	Net MBF		Hidden D&B	Adj Net Vol MBF
Douglas-fir	7.7	7.7		5%	7
Alder	19.9	19.7		5%	19
TOTAL	27.6	27.4			26

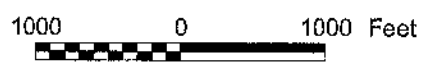
TOTAL SALE VOLUME				Total Acres:	251
SPECIES	MBF	% D&B	Net Vol. (MBF)		
Douglas-fir	3608	5%	3427		
Alder	20	5%	19		
TOTAL	3628		3446		



- Landing
- ▲ Domestic water supply
- ⊗ Blocked
- ▭ Cable yarding
- ▨ Ground yarding
- ▩ Helicopter yarding
- ▧ Downhill yarding
- Buffer
- ▩ Non-required thinning
- ▬ Railroad
- 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. 341-05-16
 Snark Ridge
 Portions of Sections 4, 5, 8, 9, 10, and 17
 T3N, R8W, W. M.
 Tillamook County, Oregon

Area	Type of Operation		Acres	
	Partial	Cut	Sale	Net
1			525	250
Total			525	250



Tillamook District GIS
 03-25-2005
 This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.

