



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Panther Bowl
Sale 341-09-53

District: Coos

Date: April 09, 2009

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,157,612.38	\$3,611.16	\$1,161,223.54
		Project Work:	\$(58,634.00)
		Advertised Value:	\$1,102,589.54



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District: Coos

Date: April 09, 2009

timber description

Location: Section 17, T23S, R10W, W.M., Coos County, Oregon.

Stand Stocking: 60%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	23	0	95
Western Hemlock / Fir	26	0	95
Alder (Red)	19	0	90

Volume by Grade	10" - 11"	2S	3P	3S	4S	6" - 7"	SM	Total
Douglas - Fir	0	2,871	42	400	0	0	460	3,773
Western Hemlock / Fir	0	22	0	24	7	0	0	53
Alder (Red)	13	0	0	0	0	5	0	18
Total	13	2,893	42	424	7	5	460	3,844



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comments: Pond Values Used: 1st Quarter Calendar Year 2009.

Regeneration harvest of approximately 69 acres of 115 year-old predominately Douglas-fir sawtimber.

Western Red Cedar Stumpage Price = Pond Value minus Logging Cost
\$510/MBF = \$710/MBF - \$200/MBF

SCALING COST ALLOWANCE = \$5.00/MBF

FUEL COST ALLOWANCE = \$3.00/Gallon

HAULING COST ALLOWANCE

Hauling costs equivalent to \$700 daily truck cost.

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

FELLING

Directional Felling: 411 trees @ \$2/each = \$822

YARDING & LOADING

Artificial Guyline Supports: 3 anchors @ \$500/each = \$1,500

Brand and Paint Logs: 1\$/MBF x 3,923 MBF = \$3,923

Loader Time for Firewood Stacking: 8 hours @ \$75/hour = \$600

SNAG CREATION

Tree Topping: 18 trees @ \$100/each = \$1,800

Tree Girdling: 17 trees @ \$20/each = \$340

MISCELLANEOUS COSTS

Log Placement in Stream: 4 crossings @ \$796/each = \$3,184

Additional Fire Equipment: 1 season @ \$1,000/season = \$1,000

TOTAL Other Costs (with Profit & Risk to be added) = \$13,169

Other Costs (No Profit & Risk to be added):

None.



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logging conditions

combination#: 1	Douglas - Fir	100.00%	
	Western Hemlock / Fir	100.00%	
	Alder (Red)	100.00%	
yarding distance:	Medium (800 ft)	downhill yarding:	No
logging system:	Cable: Large Tower >=70	Process:	Manual Delimiting
tree size:	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF		
loads / day:	12.0	bd. ft / load:	5,000
cost / mbf:	\$61.56		
machines:	Log Loader (A)		
	Tower Yarder (Large)		



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logging costs

Operating Seasons:	1.00	Profit Risk:	10.00%
Project Costs:	\$58,634.00	Other Costs (P/R):	\$13,169.00
Slash Disposal:	\$0.00	Other Costs:	\$0.00

Miles of Road

Road Maintenance: \$0.00

Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	2.0	0.0	0.0

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	3.0	5.0
Western Hemlock / Fir	\$0.00	2.0	4.0
Alder (Red)	\$0.00	2.0	3.5

Local Pond Values

Date	Specie	Grade	Value
4/9/09	Douglas - Fir	3P	\$650.00
4/9/09	Douglas - Fir	SM	\$500.00
4/9/09	Douglas - Fir	2S	\$440.00
4/9/09	Douglas - Fir	3S	\$300.00



"STEWARDSHIP IN FORESTRY"

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logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$61.56	\$2.14	\$1.14	\$44.54	\$3.43	\$11.28	\$0.00	\$5.00	\$0.00	\$129.09
Western Hemlock / Fir									
\$61.56	\$2.14	\$1.14	\$83.52	\$3.43	\$15.18	\$0.00	\$5.00	\$0.00	\$171.97
Alder (Red)									
\$61.56	\$2.24	\$1.14	\$100.00	\$3.43	\$16.84	\$0.00	\$5.00	\$0.00	\$190.21

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$434.81	\$305.72	\$0.00
Western Hemlock / Fir	\$0.00	\$249.91	\$77.94	\$0.00
Alder (Red)	\$0.00	\$390.83	\$200.62	\$0.00



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summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Western Hemlock / Fir	0	\$0.00	\$0.00
Alder (Red)	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	3,773	\$305.72	\$1,153,481.56
Western Hemlock / Fir	53	\$77.94	\$4,130.82
Alder (Red)	18	\$200.62	\$3,611.16

Gross Timber Sale Value

Recovery: \$1,161,223.54

Prepared by: Matthew Wells

Phone: 541-267-1759

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Panther Bowl

Additional "Other Cost" with additional profit and risk to be added:

	<u>Units</u>	<u>Quantity</u>	<u>Cost/unit</u>	<u>Total Cost</u>
Felling				
Felling of unmerch material	MBF	0	\$ 1.00	\$ -
Directional Felling	MBF	411	\$ 2.00	\$ 822.00
Yarding and Loading				
Locate Corridors and Skid Roads	MBF	16	\$ -	\$ -
Artificial guyline support	anchor	3	\$ 500.00	\$ 1,500.00
Brand and paint logs	MBF	3923	\$ 1.00	\$ 3,923.00
Loader time for firewood stacking	Hours	8	\$ 75.00	\$ 600.00
Snag Creation				
Tree Topping	Trees	18	\$ 100.00	\$ 1,800.00
Tree Girdling	Trees	17	\$ 20.00	\$ 340.00
Miscellaneous Costs				
Log Placement in Stream	Crossings	4	\$ 796.00	\$ 3,184.00
Additional Fire Equipment	Seasons	1	\$ 1,000.00	\$ 1,000.00
Maintenance rock per section 5	Cubic Yards	0	\$ 18.00	\$ -
Safety Flagging and/or signing	per day	0	\$ 110.00	\$ -

Total additional "Other Cost" with additional profit and risk to be added

\$ 13,169.00

Panther Bowl Fish Log Placement

Name: Panther Bowl Fish Log Placement

Location: Panther Creek

Date: 01/26/2009 Pond Value Period: 4th qtr 2009

Prepared by: M. Wells

18 logs to be 40 feet in length with a 20" minimum diameter on small end

<u>Length</u>	<u>Scaling Diameter</u>	<u>Number of Logs</u>	<u>Vol/log</u>	<u>Total Vol</u>	
40 feet	20"	18	700	12,600	
Total		18		12,600	
Grade		3P	SM	2S	3S
Grade Breakdown		1%	12%	76%	11%
Volume Breakdown		126	1,512	9,576	1,386

Douglas-fir Pond Value

GROSS					
<u>GRADE</u>	<u>MBF</u>	<u>% VOL</u>	<u>\$ / MBF</u>	<u>TOTAL</u>	
3PEE	0.13	1%	\$575	\$72	
SM	1.51	12%	\$480	\$726	
2SAW	9.58	76%	\$420	\$4,022	
3SAW	1.39	11.00%	\$350	\$485	
4SAW	0	0.00%	0	\$0	
TOTAL	12.6	100.00%		\$5,305	

Felling, Bucking, Yarding, Skidding, Stacking Costs \$3,184

Summary Information

Gross Pond Value of logs \$ 5,305 4th qtr 2009 pond value
 Gross Volume of logs(mbf) 12.6 mbf
 Labor Costs \$ 3,184

Total Log Value + Labor Costs: \$8,489

Average value/log \$472

SUMMARY OF CONSTRUCTION COST

Panther Bowl

Project 1A: Road and Landing Construction

Points:	D to E	Length:	525'	Type:	14' no ditch
Excavator			25	hrs at	\$120.00
				per hour	\$3,000.00
Cat time			25	hrs at	\$120.00
				per hour	\$3,000.00
Dump Truck - haul to sta 0+00 to 2+25			20	hrs at	\$95.00
				per hour	\$1,900.00
Grader			1	hrs at	\$75.00
				per hour	\$75.00
Laborer			25	hrs at	\$30.00
				per hour	\$750.00

Total Project 1A: \$8,725.00

Project 1B: Road and Landing Construction

Points:	J to K	Length:	533'	Type:	14' no ditch
Excavator			20	hrs at	\$120.00
				per hour	\$2,400.00
Cat time			20	hrs at	\$120.00
				per hour	\$2,400.00
Grader			1	hrs at	\$75.00
				per hour	\$75.00
Laborer			20	hrs at	\$30.00
				per hour	\$600.00

Total Project 1B: \$5,475.00

Move-in

Equipment	Miles	hrs/RT	Lowboy Rate/hr	Total
Excavator	35	5.5	\$95.00	\$522.50
Cat	35	5.5	\$95.00	\$522.50
Grader	35	3.5	\$95.00	\$332.50
Dump Truck	35	4	\$95.00	\$380.00

Total Move-in: \$1,758.00

Project 1 Total \$15,958.00

Project 2A: Road and Landing Improvement

Points:	A to B	Length:	2920'	Type:	14' w/ditch
Grader time			2	hrs at	\$75.00
				per hour	\$150.00

Total Project 2A: \$150.00

Project 2B: Road and Landing Improvement

Points:	B to C	Length:	2145'	Type:	14' no ditch
Grader time			2	hrs at	\$75.00
				per hour	\$150.00

Total Project 2B: \$150.00

**SUMMARY OF CONSTRUCTION COST
Panther Bowl**

Project 2C: Road and Landing Improvement

Points: C to D Length: 3121' Type: 14' no ditch

Excavator - remove slides and pullback	25	hrs at	\$120.00	per hour	\$3,000.00
Cat time	25	hrs at	\$120.00	per hour	\$3,000.00
Dump Truck - haul to Pts F and G	20	hrs at	\$95.00	per hour	\$1,900.00
Grader time	2	hrs at	\$75.00	per hour	\$150.00
Laborer	25	hrs at	\$30.00	per hour	\$750.00
18" culverts (includes installation)	100	ft at	\$17.00	per ft	\$1,700.00
18" bands	4	bands at	\$19.00	per band	\$76.00

Total Project 2C: \$10,576.00

Project 2D: Road and Landing Improvement

Points: H to I Length: 2920' Type: 14' no ditch

Cat time	5	hrs at	\$120.00	per hour	\$600.00
Grader time	2	hrs at	\$75.00	per hour	\$150.00
Laborer	5	hrs at	\$30.00	per hour	\$150.00

Total Project 2D: \$900.00

Project 2 Total \$11,776.00

Project 3: Rock Stockpile

Location: Cougar Pass (7000/7700 jct)
Measured amount: 1200 cu yds
Size: 1 1/2" - 0"

Cost per cu yd at crusher (WWD pricing):	\$9.25	per yd
Haul cost per cu yd (3 hr RT):	\$15.00	per yd
Piling and shaping cost per cu yd:	\$1.50	per yd
Total cost per cu yd:	\$25.75	per yd
Total cu yds:	1200	yards

Total Cost for Stockpile rock: \$30,900.00

Project 3 Total \$30,900.00

Total Project Costs \$58,634.00

TIMBER SALE SUMMARY

Panther Bowl

1. **Type of sale:** Final harvest; Recovery, Sealed Bid.
2. **Boundary Lines:** Sale boundaries are marked on the ground with "Timber Sale Boundary" posters, red paint, and red flagging at locations shown on the Exhibit A.
3. **Revenue Distribution:** 100% CSL; 100% Coos County.
4. **Sale Acreage:** The total sale area is 69 acres. Buffers areas are posted outside the sale area and are not included in the net acreage calculation. The acreage was determined using orthophoto imagery on the ARCMAP Geographic Information System program.
5. **Volume by Species, Fund, and County:** See attached table.
6. **Grade by Percent:**

Species	3 Peeler	SM	2 Saw (12"+)	3 Saw (10-11")	4 Saw (8-9")	(6-7")
Douglas-fir	1%	12%	76%	11%	-----	-----
W Hemlock	-----	-----	42%	45%	13%	-----
Hardwood	-----	-----	-----	73%	-----	27%

7. **Cruise:** The unit was variable plot cruised using the Big BAF cruise design, which consisted of 59 nested plots. For the mature stand each plot consists of both a full 40 BAF count plot and a full 360 BAF measure plot. The 40 BAF plot was used to tally the number of trees by species to determine the stand basal area. The 40 BAF plot was then used to select hardwoods and minor species to cruise and the 360 BAF plot to select Douglas-fir trees to cruise. Selected trees were cruised for diameter at breast height, height, grade and defect. Fifty two Douglas-fir Big BAF trees were cruised for diameter, height, grade and defect. The cruise was analyzed using the SuperACE cruising program.

A. Cruise Summary Data:

Diameter	Top Diameter	Form Point	Form Factor	CV %	SE %
D4H	Total Height	Conifer: 16' Hardwood: 4'	Estimated or measured on all trees	51.3	7.02

B. Stand Summary:

Species	D4H	Trees per Acre	Basal Area (ft ² /ac)	BF per acre
Douglas-fir	22.7	94	262.2	68,438
Hemlock	26	6	8.7	1,122
Hardwood	19	3	4.1	365

C. Green Tree Retention Summary: The following tree counts and tree volumes were marked for retention within the cruised portion of the sale Area. The tree volumes were deleted from the cruise results.

8. **Timber Description:** The timber sale is moderately stocked single age stand that is predominantly second growth Douglas-fir. It is composed of approximately 115 year-old Douglas-fir of good to average quality with a minor component of red alder and Western Hemlock. Conifers range from 80 to 198 feet tall (Ave ht. 125 ft) while hardwoods are about 76 feet in height.

9. **Topography:** The stand ranges from mild slopes of about 20% in the southern part of the sale area with steep slopes of over 100% near the stream buffers.

10. **Logging Method:** The sale will be cable logged uphill with single-end suspension over the unit; full suspension will be required over designated streams and RMAs. A motorized carriage will be required to obtain the necessary suspension.

11. **Access:** From Coos Bay travel North on Highway 101 to the town of Reedsport and proceed east on Highway 38 for approximately 13 miles to the Loon Lake Road junction. From here proceed for approximately 10 miles to Elk Ridge Road (1000 Line). Proceed on the 1000 line for 5.5 miles to the 8000 road junction, and then proceed approximately .25 miles to the 8800 road junction proceed 0.7 miles up the 8800 rd to the 8820 road jucting. This road is the upper road on the west side of the timber sale.

12. **Projects:**

Project No. 1: Road and Landing Construction

Project No. 2: Road and Landing Improvement

Project No. 3: Rock Stockpile

NET VOLUMES AND ACREAGE

SALE AREA & SPECIES		Tree cnt. 100% Units	NET VOLUMES (MBF)							
			By County and Fund						Total Vols.	Vol. per Acre
			Coos			Douglas				
Area	Spec	CSL	BOF	Total	CSL	BOF	Total			
I&II	D-fir	3773		3773	0		0	3773	54.68	
	Hdwd	18		18	0		0	18	0.26	
	Cedar			0	0		0	0	0.00	
	Spruce			0	0		0	0	0.00	
	Hemlock	53		53	0		0	53	0.77	
TOTALS			3844	0	3844	0	0	0	3844	

TOTAL SALE VOLUME BY SPECIES

Douglas-fir	<u>3773</u>	MBF
Hemlock	<u>53</u>	MBF
Cedar	<u>0</u>	MBF
Spruce	<u>0</u>	
Hardwoods	<u>18</u>	MBF
Total	<u>3844</u>	MBF

Report by: Panther Bowl

Date: 01/27/2009

Unit For. Norma Kline 1/28/09
Date

Asst. Dist. For. Greg Kreimeyer 3.25.2009
Date

**UTILITY VOLUME NOT SHOWN TO PROVIDE FOR RETENTION OF DOWN LOGS
NO INGROWTH INCLUDED**

ACREAGE BY COUNTY (to nearest acre)

Sale Area	Coos County						Douglas County						TOTAL ACRES
	CSL			BOF			CSL			BOF			
	Conifer		Hard wood	Conifer		Hard woods	Conifer		Hard woods	Conifer		Hard woods	
	cc	pc		cc	pc		cc	pc		cc	pc		
I	69												69
													0
													0
													0
SUM	69	0	0	0	0	0	0	0	0	0	0	0	69

cc- clearcut

pc- partial cut

BOF - Board of Forestry

CSL - Common School Land

CRUISE VOLUME COMPUTATION REPORT

SALE NAME: Panther Bowl
 LEGAL LOCATION: T23S, R10W Sec. 17

01/27/2009
 Matthew L. Wells

CRUISE NET VOLUME MBF

SPECIES>>	Doug-fir	Hemlock	Red Cedar	Sitka Spuce	Hardwds	TOTAL
AREA	BY AREA					
GROSS	4722	77	0	0	25	4,824
CRUISE CULL	14	0	0	0	0	14
Less GTR Vol.	194	14	0	0	3	211
Fish Logs	13	0	0	0	0	13
Less DWD Vol.	10	0	0	0	0	10
TOTAL	4492	63	0	0	22	4577

DEFECT AND BREAKAGE

Species	Doug-fir	Hemlock	Red Cedar	Sitka Spruce	Hardwds
Hidden cull	0.08	0.09	0.09	0.09	0.1
Breakage	0.08	0.07	0.07	0.07	0.07
Total	0.16	0.16	0.16	0.16	0.17

NET VOLUME BY MBF BY AREA

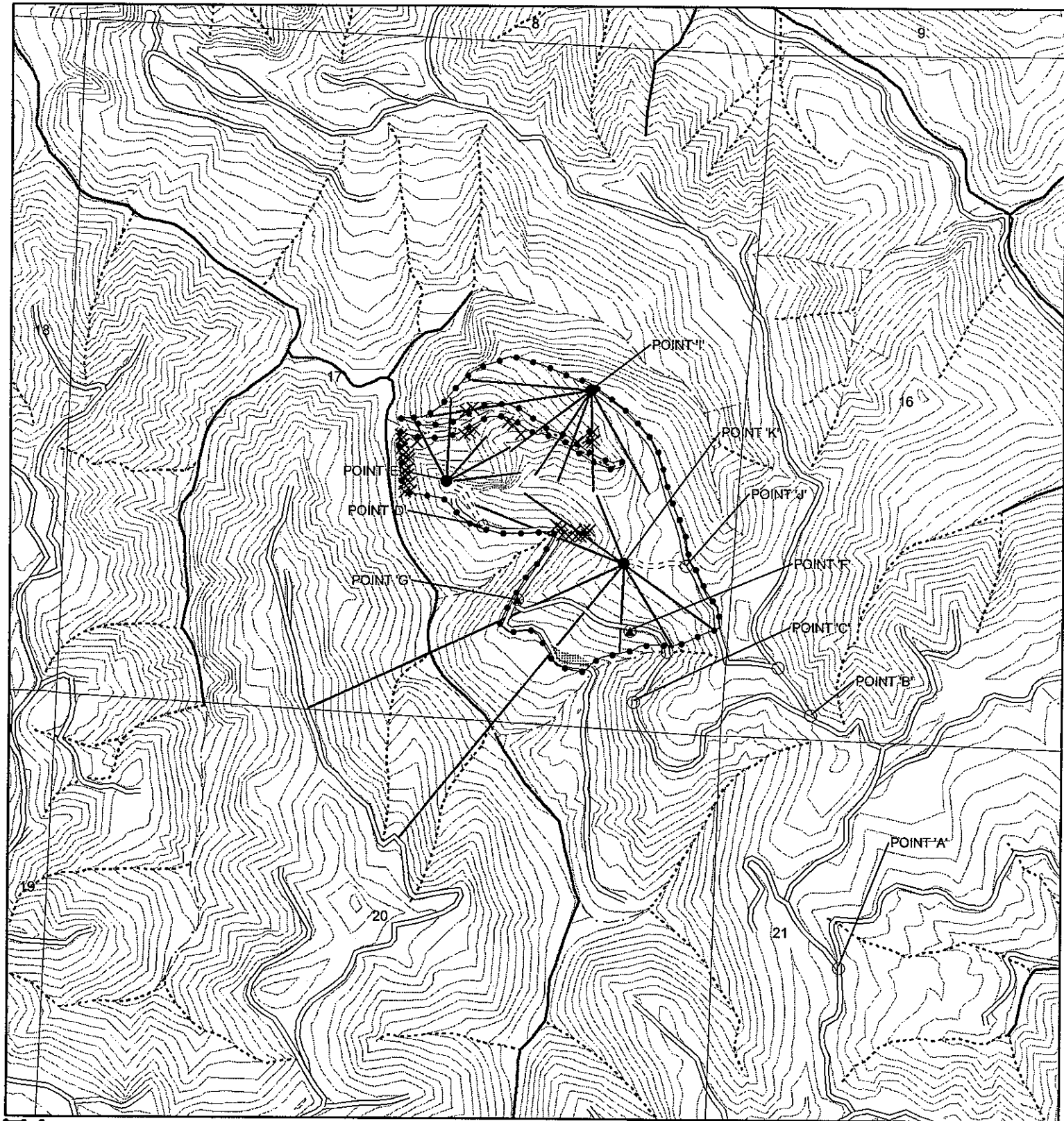
SPECIES	Doug-fir	Hemlock	Red Cedar	Sitka Spruce	Hardwds	TOTALS
AREA	BY AREA					
I	3773	53	0	0	18	3844
TOTALS	3773	53	0	0	18	3844

NET VOLUME BY GRADE AND MBF

Grade >>>>>>>>>	2 PEE	3 PEE	SM	2SAW(12"+)	3SAW(10-11")	(RA) 4SAW(8-9")	(RA) (6-7")
AREA I	Species						
Doug-Fir	0	42	460	2871	400	0	0
Hdwds	0	0	0	0	13	0	5
Red Cedar	0	0	0	0	0	0	0
Hemlock	0	0	0	22	24	7	0
Sitka Spruce	0	0	0	0	0	0	0

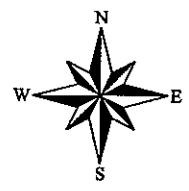
GRADE DISTRIBUTION BY PERCENT

Grade >>>>>>>>>	2 PEE	3 PEE	SM	2SAW(12"+)	3SAW(10-11")	4SAW(8-9")	(6-7")
Doug-fir	0%	1%	12%	76%	11%	0%	0%
Hardwood	0%	0%	0%	0%	73%	0%	27%
Red Cedar	0%	0%	0%	0%	0%	0%	0%
Hemlock	0%	0%	0%	42%	45%	13%	0%
Sitka Spruce	0%	0%	0%	0%	0%	0%	0%



- Sale Boundary
- Road Point
- Landing
- Waste Area
- Individual GTR Trees
- Green Tree Retention Area
- Existing
- New Construction
- Type F
- Type N Perennial
- Type N Seasonal
- 40 ft Contours
- Harvest Corridors

Logging Plan
 OF TIMBER SALE No. 341-09-53
 PANTHER BOWL
 SECTION 17, T23S, R10W, W.M.
 COOS COUNTY, OREGON
 APPROXIMATELY 69 NET HARVEST ACRES



The information shown on this map depicts approximate locations. Exact locations of features represented by map symbols shall be determined on site and shall depend upon the conditions that exist on site. Activities will be conducted based upon features determined on site rather than feature shown on this map