



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Smokestack Sale 341-04-91

District: Klamath/Lake

Date: 5/5/04

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$535,697.81	\$0.00	\$535,697.81
		Project Work	(\$20,903.48)
		Advertised Value	\$514,794.33



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Timber Description Smokestack Sale 341-04-91

District: Klamath/Lake

Location: Portions of Sections 4, 5, 8, and 9, T41S, R7E, W.M., Klamath County, Oregon.

Date: 5/5/04

Stand Stocking: 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	14	0	98
Incense Cedar	35	0	95
Ponderosa Pine	14	0	98

Volume by Grade	Douglas - Fir	Incense Cedar	Ponderosa Pine	Total
Camprun	0	9	0	9
CR 8" - 14"	208	0	1,558	1,766
CR 14" - 22"	72	0	498	570
CR 22"+	26	0	21	47
CR 6" - 8"	119	0	0	119
Total	425	9	2,077	2,511

Comments: Pond Values Used: 1st Quarter 2004.

Additional Costs with P&R:

Dust Abatement: \$20,764.40

Brand & Paint: \$7,200.00

Additional Costs without P&R:

Temporary water-use permit fee: \$100.00

BLM road-use permit fee: \$.39/mile/mbf (Approx. 2.4 miles)(\$.936/mbf)

Boise Cascade road-use fee: \$3.47/mbf



Timber Sale Appraisal Logging Conditions Smokestack Sale 341-04-91

"STEWARDSHIP IN FORESTRY"

Combination#: 1

Douglas - Fir	77.00%
Incense Cedar	56.00%
Ponderosa Pine	80.00%

Yarding Distance: Short (400 ft) **Downhill Yarding:** Yes
Logging System: Wheel Skidder **Process:** Feller Buncher
Tree Size: Small / Thinning 9in (70 Bft/tree), 20+ logs/MBF
Loads/Day: 10 **Bd. Ft./Load:** 3,400
Cost/MBF: \$98.65
Machines:
Feller Buncher w/ Delimber
Log Loader (B)
Stroke Delimber (B)
Tire Skidder

Combination#: 2

Douglas - Fir	23.00%
Incense Cedar	44.00%
Ponderosa Pine	20.00%

Yarding Distance: Short (400 ft) **Downhill Yarding:** Yes
Logging System: Wheel Skidder **Process:** Manual Falling/Delimiting
Tree Size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
Loads/Day: 10 **Bd. Ft./Load:** 4,800
Cost/MBF: \$62.52
Machines:
Log Loader (B)
Tire Skidder



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Smokestack Sale 341-04-91

Date: 5/5/04

Operating Seasons: 1.0

Profit & Risk: 12%

Project Costs: \$20,903

Other Costs (P/R): \$27,964

Slash Disposal: \$0

Other Costs: \$11,163

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

Road Maintenance: \$0.95

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	2.0	3.5
Incense Cedar	\$0.00	2.0	3.0
Ponderosa Pine	\$0.00	2.0	3.5

Local Pond Values

Date	Species	Grade	Value
5/5/04	Douglas - Fir	CR 8" - 14"	\$475.00
5/5/04	Douglas - Fir	CR 14" - 22"	\$505.00
5/5/04	Douglas - Fir	CR 22"+	\$505.00
5/5/04	Douglas - Fir	CR 6" - 8"	\$445.00
5/5/04	Incense Cedar	Camprun	\$550.00
5/5/04	Ponderosa Pine	CR 8" - 14"	\$355.00
5/5/04	Ponderosa Pine	CR 14" - 22"	\$525.00
5/5/04	Ponderosa Pine	CR 22"+	\$640.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Logging Costs Breakdown Smokestack Sale 341-04-91

Costs	Douglas - Fir	Incense Cedar	Ponderosa Pine
Logging	90.34	82.75	91.42
Road Maintenance	0.97	1.00	0.97
Fire Protection	1.08	1.08	1.08
Hauling	67.04	80.84	67.04
Other (P/R appl.)	11.14	11.14	11.14
Profit & Risk	20.47	21.22	20.60
Slash Disposal	0.00	0.00	0.00
Scaling	2.00	2.00	2.00
Other	4.45	4.45	4.45
Total	197.49	204.48	198.70

Amortization	0.00	0.00	0.00
Pond Value	473.52	550.00	398.64
Stumpage	276.03	345.52	199.94
Amortized	0.00	0.00	0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary Smokestack Sale 341-04-91

Amortized

	Douglas - Fir	Incense Cedar	Ponderosa Pine
MBF	0.00	0.00	0.00
Value	0.00	0.00	0.00
Total	0.00	0.00	0.00

Unamortized

	Douglas - Fir	Incense Cedar	Ponderosa Pine
MBF	425.00	9.00	2,077.00
Value	276.03	345.52	199.94
Total	117,312.75	3,109.68	415,275.38

Gross Timber Sale Value

Recovery \$535,697.81

Prepared by: John Pellissier

Date: 5/5/04

District: Klamath/Lake

Phone: (541) 883-5681

Summary of Project Work

Smokestack

Project #1: Road Construction and Improvement New Construction: 3,260 feet Improvement: 31,750 feet	\$4,683.02
Project #2: Fell, Skid, and Pile Submerchantable Material	\$13,545.54
Project #3: Slash Piling	\$2,224.92
Project #4: Road Closures	\$450.00
TOTAL:	<u>\$20,903.48</u>

Smokestack

341-04-91

Additional Costs Sheet



"STEWARDSHIP IN FORESTRY"

Road Maintenance									
Move-in cost (grader):	\$	241.00							
Number of Bladings		1	Topsy road to be bladed at least 4 times						
Number of Miles to be Bladed		14.7							
Miles / Hour for equipment		0.5							
Cost / Hour:	\$	73.25							
Total Grading Hours:		29.4							
Grading Cost:	\$	2,153.55							
Total Cost:	\$	2,394.55							
Cost / MBF	\$	0.95							
Dust Abatement									
PP	2,077,000	BF	83%	Average Load	3500	BF	593	# of Loads	
DF	425,000	BF	17%	Average Load	3500	BF	121	# of Loads	
IC	9,000	BF	<1%		3000	BF	3	# of Loads	
Total:	2,511,000	BF					Total Loads	718	
Assume:	5	Trucks/Day							
	2	Trips / Day			72		Hauling Days		
	10	Loads Per Day			5		Hours / Day		
					\$ 57.24		Cost / Hour		
					360		Total Hours		
					\$ 20,606.40		Dust Abatement Cost		
					\$ 158.00		Move-In for Water Truck		
					\$ 20,764.40		Total Cost		
					\$ 8.27		Cost / MBF		
Knot Bumper and Branding					Additional Costs with P&R				
72	Hauling Days				Dust Abatement	\$	20,764.40		
10	Hours / Day				Knot Bumping & Branding	\$	7,200.00		
\$ 10.00	Cost / Hour				Total Cost	\$	27,964.40		
\$ 7,200.00	Total Cost				Cost/MBF	\$	11.14		
\$ 2.87	Cost / MBF								
					Additional Costs without P&R				
	BLM Road Use Fee:	.39/mbf/mile	\$	2,350.30					
	Boise Cascade Road Use Fee:	\$3.37/mbf	\$	8,713.17					
	Temp. Water Use Fee:		\$	100.00					
	Total Cost		\$	11,163.47					
	Cost/MBF		\$	4.45					

Smokestack

341-04-91

Project #1 Road Construction/Improvement

Move-in cost Cat \$ 370.00



"STEWARDSHIP IN FORESTRY"

<i>New Construction</i>						
	Points	Distance (feet)	Feet / Hour	Hours	Cost / Hour (Cat)	Cost
<i>shape to drain</i>	D to E	460	460	1	70.74	\$ 70.74
<i>shape to drain</i>	Q to R	2800	1000	2.8	70.74	\$ 198.07
	Total	3260		3.8		\$ 268.81
<i>Grade and Shape (shape to drain)</i>						
Grader	Total Feet	3260				
	Feet / Hour	1625				
	Cost / Hour	\$ 73.25				
	Total Hours	<u>2.0</u>				
	Total Cost	\$ 146.50				
				Water Truck		
				Hours		2.0
				Cost / Hour	\$	57.24
				Total Cost	\$	114.48

<i>Road Improvement</i>						
	Points	Distance (feet)	Feet / Hour	Hours	Cost / Hour	Cost
<i>Shape to drain</i>	C to F	3650		3.0	\$ 73.25	\$ 219.75
""	F to H	5900		3.0	\$ 73.25	\$ 219.75
""	G to I	3150		3.0	\$ 73.25	\$ 219.75
""	C to I	4000		4.0	\$ 73.25	\$ 293.00
""	I to J	620		1.0	\$ 73.25	\$ 73.25
""	J to K	4300		3.0	\$ 73.25	\$ 219.75
""	J to O	3000		3.0	\$ 73.25	\$ 219.75
""	N to M	1530		2.0	\$ 73.25	\$ 146.50
""	O to P	2600		3.0	\$ 73.25	\$ 219.75
""	J to L	3000		2.0	\$ 73.25	\$ 146.50
		31750		27.0	Total Cost	\$ 1,977.75

Water Truck	Hours	27
	Cost / Hour	<u>\$ 57.24</u>
	Total Cost	\$ 1,545.48

Surfacing Rock		
Point F		13 Tons
	\$	20.00 Delivered \$/ton
Total:	\$	260.00

Total Cost: \$ 4,683.02

Smokestack

341-04-91



<i>Project #2 Fell, Skid, & Pile Submerchantable Material</i>				"STEWARDSHIP IN FORESTRY"	
233	Total Subsawlog Volume MBF	217,000	PP Green Pulp (BF)		
\$ 38.55	Fell & Skid / MBF	6,000	WF Green Pulp(BF)		
\$ 6.45	Sort / MBF	223,000	BF Green Pulp		
\$ 45.00	Total / MBF	10,000	BF Subsawlog Fixed Plot		
\$ 10,485.00	Total Cost	233,000	Total Board Feet		
<i>Landing Cleanup (included with Project # 2)</i>					
21	Number of Landings				
	Shovel Time: 1	Hours / Landing	\$ 75.00	Cost/Hour	\$ 1,575.00
	Cat Time: 1	Hours / Landing	\$ 70.74	Cost/Hour	\$ 1,485.54
				Total Cost	\$ 3,060.54
	Total Cost Project #2		\$ 13,545.54		
<i>Project #3 Slash Piling (Excavator)</i>					
0.05	Percentage of Acres to be Piled				
486	Total Acres		Move in cost Excavator:		\$ 387.00
24.0	Total Acres to be Piled (rounded #)				
1	Hours / Acre				
\$ 76.58	Cost / Hour				
\$ 1,837.92	Total			Total Cost:	\$ 2,224.92

Project # 4 Road Closures

Road Blocking	
6	Number of Closure Points (D,M,N,O,P,&R)
1	Hours / Point (include travel)
\$75	Cost / Hour (Shovel)
	Cost / Hour (Cat)
6	Total Road Blocking Hours
\$ 450.00	Total Cost

<i>Cost Summary</i>	
\$ 4,683.02	Project # 1 ~ Road Construction and Improvement
\$ 13,545.54	Project # 2 ~ Fell, Skid, & Pile Submerchantable Material
\$ 2,224.92	Project # 3 ~ Slash Piling
\$ 450.00	Project # 4 ~ Road Closures
\$ 20,903.48	Total Cost

Smokestack

Cruise Report



SALE NAME: Smokestack

LEGAL DESCRIPTION: T.41S., R.7E., Portions of Sections 4,5,8, and 9.

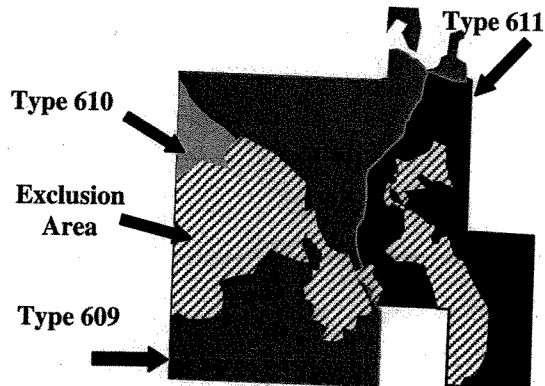
BOUNDARY LINES:

Unit boundaries are posted with “Timber Sale Boundary” signs, marked with fluorescent orange paint and fluorescent orange flagging. Area II is posted with “Area Boundary” signs, marked with fluorescent orange paint, and fluorescent orange flagging between Areas I and II. Required new road construction is posted with orange “Right of Way Boundary” signs, and blue and pink flagging.

FUND: 100% B.O.F.

ACREAGE: The timber sale was further delineated beyond harvest areas to timber type boundaries for the timber cruise.

Area I:	<u>Acres</u>
Type 609	319.0
Type 611	144.0
Area II:	
Type 610	23.0
Approximate Sale Acreage:	486 acres



Mapping was accomplished using a handheld Global Positioning System unit with the data run on the district Geographical Information System Program.

TREATMENT:

Area I is a selection cut, leave tree marked with orange paint.
 Area II is also a selection cut, with cut trees marked in blue paint.
 Wildlife trees are designated with an orange “W”.

CRUISE METHOD:

Variable Plot cruise with all the plots being measure plots. Fixed plot cruise for all submerchantable material (5.0" to 8.0"), with all plots being measure plots. Measure and grade all trees.

BASAL AREA FACTOR:

Type	BAF	Type Acreage
611	14BAF	144.0 acres
609	14 BAF	319.0 acres
610	10 BAF	23.0 acres

Full point plots taken, 1/50th acre fixed plots for submerchantable material (5.0" to 8.0" DBH)

PLOT DESIGNATION:

Plot centers were established at every plot. White flagging with the corresponding plot number was attached to the plot center and also to the nearest available tree branch.

SAMPLE SIZE CALCULATIONS:

Area I			
	CV %	Desired SE %	Acres
Type 609	79	13	319.0
Type 611	68	13	144.0
Area II			
	CV %	Desired SE %	Acres
Type 610	50	13	23.0

$$\text{Number of Plots} = \frac{T^2 C^2}{A^2}$$

C = Coefficient of Variation in Percent (Taken from inventory data)

T = Number of Standard Errors

A = Desired Sampling Error for a sale of this size and value

$$\text{Type 609 Number of Plots: } \frac{(1)^2(79)^2}{13^2} = 37 \text{ Plots}$$

$$\text{Type 611 Number of Plots: } \frac{(1)^2(68)^2}{13^2} = 28 \text{ Plots}$$

$$\text{Type 610 Number of Plots: } \frac{(1)^2(50)^2}{13^2} = 15 \text{ Plots}$$

Measurements and Grading:

- DBH and Height were measured on all "in" trees in the plot.
- All plots were measure plots.
- Pulp volume and sawlog volume cruised.
- See attached species and grade tables for minimum requirements.
- All trees were graded using the segment system.
- Separate fixed plot cruise for all submerchantable material (5"to 8")

TREE HEIGHT:

All trees were measured to a fixed diameter outside bark. This height is usually taken as high up the bole as possible, where the cruiser can clearly see the bole, and the taper remains constant. (Usually 6 or 8 inches). The log segments are broken out and graded accordingly.

MINIMUM D.B.H.:

8.0" D.B.H. for sawlog volume. (Must have a minimum of 20 board feet.)
5.0" D.B.H. for pulp volume.

DIAMETER STANDARDS:

1" diameter class

BTR:

Standard ratios were used. See attached species tables.

FORM FACTOR:

Form factor was measured or estimated at 16' for each tree. Each tree was assigned its own FF.

FORM POINT:

All trees were sighted at D.B.H.

VOLUME COMPUTATION:

All cruise data was input and run at the district on Atterbury's Super Ace program.

CRUISERS: John Pellissier, & Jason Pettigrew

FINAL CRUISE RESULTS:

Area I			
	CV %	SE %	Acres
Type 609	76.3	12.6	319.0
Type 611	64.7	12.2	144.0
Area II			
	CV %	SE %	Acres
Type 610	56.2	14.5	23.0
Total Sale Area			
	CV %	SE %	Acres
All Types	75.3	8.4	486.0

TIMBER DESCRIPTION:

SAWLOG VOLUME:

This volume was obtained from the variable plot cruise. All material > 8.0" DBH.
 All material graded camprun
 See grade table for minimum standards.

	Species	Average DBH	Net Volume (MBF)
Areas I & II	Ponderosa Pine	14.3	2,077
	Douglas-fir	14.5	425
	Incense Cedar	35.0	9
	Total MBF		2,511

(Volumes taken from Species, Sort Grade -Board Foot Volumes Report)

GREEN PULP VOLUME:

This volume was obtained from the variable plot cruise (>8" DBH) and the fixed plot cruise (5.0"-8.0"). All material graded green pulp. See grade table for minimum standards. The summary for green pulp listed below includes all types for the timber sale.

	Species	Green Pulp Volume (MBF)
Areas I & II Variable Plot	Douglas-fir	6
	Ponderosa Pine	217
		Total: 223 MBF

(Volumes taken from Species, Sort Grade –Board Foot Volumes Report)

	Species	Green Pulp Volume (MBF)
Areas I & II Fixed Plot	Douglas-fir	1
	Ponderosa Pine	9
		Total: 10 MBF

Total Green Pulp Volume: 233 MBF

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES				
41	7	8	VAR	10	486.00	80	366				
41	7	8	VAR	9							
41	7	8	VARIABLE	1							
		PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL		80	366	4.6							
CRUISE DBH COUNT REFOREST COUNT BLANKS 100 %		77	366	4.8	29,143	1.3					
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	
P PINE	329	52.6	14.3	35		58.3	4,793	4,721	1,104	1,104	
DOUG-FIR	36	7.3	14.5	38	2	8.4	908	885	199	199	
INC CED	1	.1	35.0	39		.4	19	19	9	9	
TOTAL	366	60.0	14.3	35		67.2	5,720	5,626	1,312	1,312	
SD:	COEFF VAR.	S.E.%	SAMPLE TREES - BF			# OF TREES REQ.		INF. POP.			
1			LOW	AVG	HIGH	5	10			15	
P PINE	133.9	7.0	158	170	182						
DOUG-FIR	529.0	27.7	21	29	37						
INC CED	1913.1	100.0	0	1	2						
TOTAL	127.7	6.7	186	200	213	653	163			73	
SD:	COEFF VAR.	S.E.%	SAMPLE TREES - CF			# OF TREES REQ.		INF. POP.			
1			LOW	AVG	HIGH	5	10			15	
P PINE	111.0	5.8	34	36	38						
DOUG-FIR	474.2	24.8	4	6	7						
INC CED	1913.1	100.0		0	1						
TOTAL	104.6	5.5	39	42	44	437	109			49	
SD:	COEFF VAR.	S.E.%	TREES/ACRE			# OF PLOTS REQ.		INF. POP.			
1			LOW	AVG	HIGH	5	10			15	
P PINE	114.4	12.8	46	53	59						
DOUG-FIR	358.9	40.1	5	7	9						
INC CED	894.4	100.0	0	0	0						
TOTAL	108.0	12.1	53	60	67	467	117			52	
SD:	COEFF VAR.	S.E.%	BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.			
1			LOW	AVG	HIGH	5	10			15	
P PINE	82.4	9.2	53	58	64						
DOUG-FIR	289.1	32.3	6	8	10						
INC CED	894.4	100.0	0	0	1						
TOTAL	75.6	8.5	62	67	72	229	57			25	
SD:	COEFF VAR.	S.E.%	NET BF/ACRE			# OF PLOTS REQ.		INF. POP.			
1			LOW	AVG	HIGH	5	10			15	
P PINE	81.7	9.1	4,294	4,721	5,148						
DOUG-FIR	307.0	34.3	661	885	1,110						
INC CED	894.4	100.0	6	19	33						
TOTAL	75.3	8.4	5,175	5,626	6,076	227	57			25	
SD:	COEFF VAR.	S.E.%	NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.			
1			LOW	AVG	HIGH	5	10			15	
P PINE	79.0	8.8	1,009	1,104	1,199						
DOUG-FIR	295.5	33.0	151	199	248						
INC CED	894.4	100.0	3	9	16						
TOTAL	72.5	8.1	1,213	1,312	1,412	210	53			23	

TC PSPCSTGR **Species, Sort Grade - Board Foot Volumes (Project)**

T41 R7 S8 Ty10	23.00
T41 R7 S8 Ty9	319.00
T41 R7 S8 Ty1	144.00

Project: SMOKSTCK
Acres 486.00

Page 1
Date 3/8/2004
Time 11:42:55AM

S Spp	So T	Gr rt ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log			Logs Per /Acre
				Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf	
								6-7	8-14	15-22	23+	12-20	21-30	31-35	36-99				
DF	CR	CR	16	2.6	897	874	425	28	49	17	6	11	11	71	7	23	147	1.41	5.9
DF	CR	GP	0		12	12	6	100								11	10	0.32	1.2
DF Totals			16	2.6	908	885	430	29	48	17	5	12	11	70	7	21	124	1.32	7.1
PP	CR	CR	76	1.6	4,346	4,274	2,077		75	24	1	15	22	50	13	21	137	1.50	31.2
PP	CR	GP	8		447	447	217	90	10			97	3			15	15	0.27	29.4
PP Totals			84	1.5	4,793	4,721	2,295	9	69	22	1	23	20	45	12	18	78	1.01	60.6
IC	CR	CR	0		19	19	9	100								38	580	7.53	.0
IC Totals			0		19	19	9	100								38	580	7.53	.0
Totals				1.7	5,720	5,626	2,734	12	66	21	2	21	19	49	11	18	83	1.05	67.8

Species Table Report

TblSpecies

Date: 3/8/04
Page: 1

Table Name: LEOS

Cod	Abrv	Description	Bark Ratio	ASub Const	Form Factor	Wood Type	Component	Yield Table	Min	Min	Max		Max	Max	BdFt Rule	CuFt Rule	Weight
									Log Dia	Log Len	Log Len	Log Trim	Tree Dia	Tree Hgt.			
1	PP	P PINE	.87	PP	.85	C	C	PP--EQUA--100	3	9	20	1.0	99	200	E	1	LB M
2	WF	WHITE F	.94	NF	.87	C	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	LB M
3	LP	LP PINE	.96	DF	.9	C	C	LP--EQUA--100	3	9	20	1.0	99	200	E	1	LB M
5	SP	SUG PINE	.87	PP	.84	C	C	PP--EQUA--100	3	9	20	1.0	99	200	E	1	LB M
6	IC	INC CED	.90	SS	.8	C	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	LB M
4	DF	DOUG-FIR	.92	DF	.87	C	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	LB M
7	RF	SH RFIR	.924	DF	.89	C	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	LB M

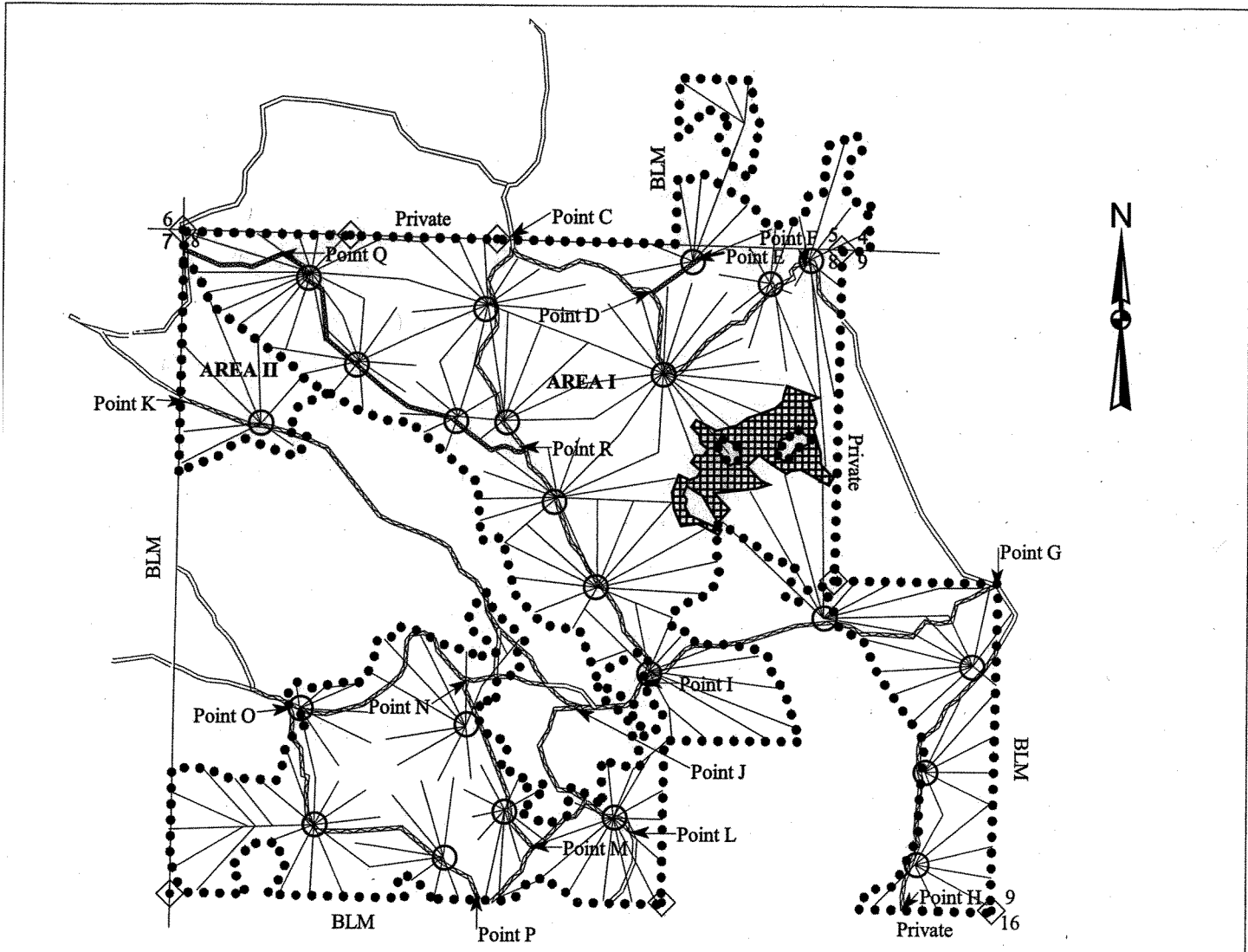
TblSortGrade

Sort/Grade Table

Table Name: KLAMATH

Date: 3/8/04


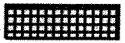







t	Grd	Abr	Desc	Fbr	Min	Max	Max	Min	Max	Defect	Min	Vol	Min	Knot	Knot	Str	Sap	Min	Lbs	Lbs	Cords	Cords
					Dia	Dia	Butt	Len	Len		Vol	Type	Ring	Size	Freq		Age	Type	Type	Type		
0		CU	CULL	G	1	0	0	1	0	0	0	0	0	0	0			0	0	0	0	0
1		CR	CAMPRUN	G	6	0	0	10	0	0	0	0	0	0	0			0	0	0	0	0
7		GP	GRNPULP	G	3	0	0	10	0	0	0	0	0	0	0			0	0	0	0	0
8		DP	DEADPUL	G	3	0	0	10	0	0	0	0	0	0	0			0	0	0	0	0
9		UT	UTILITY	G	8	0	0	12	0	0	0	0	0	0	0			0	0	0	0	0
		CU	CULL	G	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0
		CR	CAMPRUN	G	1	0	0	1	0	0	0	0	0	0	0			0	0	0	0	0



LOGGING PLAN

OF TIMBER SALE CONTRACT NO. 341-04-91
 SMOKESTACK
 PORTIONS OF SECTIONS 4,5,8,&9,T41S.,R7E.,W.M.
 KLAMATH COUNTY, OREGON

LEGEND

-  Timber sale boundary (posted)
-  Exclusion Area
-  Skid Trails
-  Section line
-  Land Survey Monument
-  Landing
-  Unsurfaced Road
-  Unsurfaced Road (improvement required)
-  Unsurfaced Road (construction required)

AREA I	463 acres
AREA II	23 acres
EXCLUSION	13 acres

TOTAL SALE AREA 499 acres

Scale
 1:15,840
 1 Inch = 1,320 Feet

