



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Switcheroo
Sale 341-10-58

District: Klamath/Lake

Date: October 12, 2009

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$477,056.23	\$0.00	\$477,056.23
		Project Work:	\$(34,548.40)
		Advertised Value:	\$442,507.83



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Switcheroo
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District: Klamath/Lake

Date: October 12, 2009

timber description

Location: Portions of Sections 9 and 16, T33S, R7E, W.M., Klamath County, Oregon.

Stand Stocking: 20%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
White Fir	12	0	97
Ponderosa Pine	13	0	97
Lodgepole Pine	13	0	95

Volume by Grade	Camprur	CR 14" -	CR 6" - 8	CR 8" - 1	Total
White Fir	0	219	242	337	798
Ponderosa Pine	0	71	287	381	739
Lodgepole Pine	3,259	0	0	0	3,259
Total	3,259	290	529	718	4,796

comments: Pond Values Used: 3rd Quarter Calendar Year 2009 + Local Pond Values.

Log Markets: Klamath Falls and Medford.

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 and risk to be added):

Dust abatement: \$17,770

Log branding & painting: \$3,960

TOTAL Other Costs (with profit & risk to be added): \$21,730

Other Costs (No Profit and Risk added):

None.



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District: Klamath/Lake

Date: October 12, 2009

logging conditions

combination#: 1

White Fir	59.00%
Ponderosa Pine	72.00%
Lodgepole Pine	84.00%

yarding distance: Medium (800 ft) **downhill yarding:** Yes
logging system: Wheel Skidder **Process:** Feller Buncher
tree size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
loads / day: 12.0 **bd. ft / load:** 3,700
cost / mbf: \$74.79

machines: Log Loader (B)
Stroke Delimber (B)
Feller Buncher w/ Delimber
Tire Skidder

combination#: 2

White Fir	41.00%
Ponderosa Pine	28.00%
Lodgepole Pine	16.00%

yarding distance: Medium (800 ft) **downhill yarding:** Yes
logging system: Track Skidder **Process:** Manual Falling/Delimiting
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 10.0 **bd. ft / load:** 4,100
cost / mbf: \$83.07

machines: Log Loader (B)
Track Skidder



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logging costs

Operating Seasons:	1.00	Profit Risk:	12.00%
Project Costs:	\$34,548.40	Other Costs (P/R):	\$21,730.00
Slash Disposal:	\$0.00	Other Costs:	\$0.00

Miles of Road

Road Maintenance: \$0.31

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

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
White Fir	\$0.00	3.0	3.9
Ponderosa Pine	\$0.00	3.0	3.7
Lodgepole Pine	\$0.00	3.0	3.6

Local Pond Values

Date	Specie	Grade	Value
10/12/09	White Fir	CR 6" - 8"	\$245.00
10/12/09	White Fir	CR 8" - 14"	\$250.00
10/12/09	White Fir	CR 14" - 22"	\$255.00
10/12/09	Ponderosa Pine	CR 6" - 8"	\$240.00
10/12/09	Ponderosa Pine	CR 8" - 14"	\$245.00
10/12/09	Ponderosa Pine	CR 14" - 22"	\$295.00
10/12/09	Lodgepole Pine	Camprun	\$270.00



Timber Sale Appraisal
Switcheroo
Sale 341-10-58

"STEWARDSHIP IN FORESTRY"

District: Klamath/Lake

Date: October 12, 2009

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
White Fir									
\$78.18	\$0.32	\$0.91	\$55.02	\$4.53	\$16.68	\$0.00	\$5.00	\$0.00	\$160.64
Ponderosa Pine									
\$77.11	\$0.32	\$0.91	\$58.00	\$4.53	\$16.90	\$0.00	\$5.00	\$0.00	\$162.77
Lodgepole Pine									
\$76.11	\$0.33	\$0.91	\$60.76	\$4.53	\$17.12	\$0.00	\$5.00	\$0.00	\$164.76

Specie	Amortization	Pond Value	Stumpage	Amortized
White Fir	\$0.00	\$249.86	\$89.22	\$0.00
Ponderosa Pine	\$0.00	\$247.86	\$85.09	\$0.00
Lodgepole Pine	\$0.00	\$270.00	\$105.24	\$0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Switcheroo
Sale 341-10-58

District: Klamath/Lake

Date: October 12, 2009

summary

Amortized

Specie	MBF	Value	Total
White Fir	0	\$0.00	\$0.00
Ponderosa Pine	0	\$0.00	\$0.00
Lodgepole Pine	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
White Fir	798	\$89.22	\$71,197.56
Ponderosa Pine	739	\$85.09	\$62,881.51
Lodgepole Pine	3,259	\$105.24	\$342,977.16

Gross Timber Sale Value

Recovery: \$477,056.23

Prepared by: Ed Scheick

Phone: 541-883-5681

Summary of Project Work



Switcheroo

341-10-58

Project # 1: Road Reconstruction and Improvement	\$10,001.90
Project # 2: Road Construction	\$424.00
Project # 3: Fell, Skid, and Pile Submerchantable Material	\$21,767.50
Project #4: Sporax Fungicide Treatment.....	\$1,560.00
Project #5: Road Closure.....	\$795.00
	<hr/>
Total:	\$34,548.40

Switcheroo

341-10-58

Other Costs



Road Maintenance

Move-in cost (grader):	\$400.00
Number of Bladings	1
Number of Miles to be Bladed	5.2
Miles / Hour for equipment	0.5
Cost / Hour (grader with operator):	\$105.50
Total Grading Hours:	10.4
Grading Cost:	\$1,097.20
Total Cost:	\$1,497.20
Cost / MBF	\$0.31

Dust Abatement (Profit & Risk to be added in Appraisal)

WF	798	MBF	17%	Average Load	3900	BF	205 # of Loads
LP	3,259	MBF	68%	Average Load	3600	BF	905 # of Loads
PP	739	MBF	15%	Average Load	3700	BF	200 # of Loads
Total:	4,796	MBF					Total Loads 1310
Assume:	4	Trucks/Day					110 Hauling Days
	3	Trips / Day					50 Possible # of Summer Haul
	12	Loads Per Day					4 Hours / Day
							\$88.00 Cost / Hour
							200 Total Hours
							\$170.00 Move-In for Water Truck
							\$17,600.00 Dust Abatement Cost
							\$17,770.00 Total Cost
							\$3.71 Cost / MBF

Brand & Paint (Profit and Risk to be added in Appraisal)

110	Hauling Days
1.5	Hours / Day
\$24.00	Cost / Hour
\$3,960.00	Total Cost
\$0.83	Cost / MBF

Other Costs Summary

\$1,497.20	Total Cost for Road Maintenance (\$0.31 / MBF).
\$17,770.00	Total Cost for Dust Abatement (\$3.71 / MBF).
\$3,960.00	Total Cost for Branding (\$0.83/ MBF)
\$23,227.20	Total Other Costs (\$4.83/MBF)

Switcheroo

341-10-58

Project Work



Project #1 Improvement

Move-in Cost Dozer	\$400.00
Move-in Cost Grader	\$400.00

Road Improvement 21, 25, and 32 Roads

Dozer						
	Points	Distance (feet)	Feet/Hour	Hours	Cost/Hour	Cost
Grub/Retrieve Sidecast	A to B	5300	1000	5.3	\$132.50	\$702.25
Grub/Retrieve Sidecast	B to C	2470	1000	2.5	\$132.50	\$331.25
Grub/Retrieve Sidecast	D to E	7050	1000	7.1	\$132.50	\$940.75
Grub/Retrieve Sidecast	E to F	1025	1000	1.0	\$132.50	\$132.50
Build lead-out Ditches	W and X			2.0	\$132.50	\$265.00
Total						\$2,371.75

Grader						
	Points	Distance (feet)	Feet/Hour	Hours	Cost/Hour	Cost
Grade and Shape	A to B	5300	500	10.6	\$105.50	\$1,118.30
Grade and Shape	B to C	2470	500	4.9	\$105.50	\$516.95
Grade and Shape	D to E	7050	500	14.1	\$105.50	\$1,487.55
Grade and Shape	E to F	1025	500	2.1	\$105.50	\$221.55
Total						\$3,344.35

Water Truck to work with grader

Hours	31.7
Cost per Hour	\$88.00
Total Cost	\$2,789.60

Road Improvement - Spur Roads

	Points	Distance (feet)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	C to G	2340	1000	2.3	\$132.50	\$304.75
Open/Clear/Shape	G to H	3430	1000	3.4	\$132.50	\$450.50
Open/Clear/Shape	G to I	1050	1000	1.1	\$132.50	\$145.75
Open/Clear/Shape	I to J	1775	1000	1.8	\$132.50	\$238.50
Open/Clear/Shape	I to K	1835	1000	1.8	\$132.50	\$238.50
Open/Clear/Shape	L to M	930	1000	0.9	\$132.50	\$119.25
Total						\$1,497.25

Project #1 Cost Summary

Grub/Retrieve Sidecast	2,106.75
Build lead-out Ditches	265.00
Grade and Shape	3,343.30
Water Truck	2,789.60
Open/Clear/Shape	1,497.25
Total Cost Project 1	10,001.90

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341-10-58

Project Work (Continued)



Project #2 Road Construction

	Points	Distance (feet)	Feet / Hour	Hours	Cost / Hour	Cost
Clear/Grub/Shape	N to O	1050	1000	1.1	\$132.50	\$145.75
Clear/Grub/Shape	P to Q	950	1000	1.0	\$132.50	\$132.50
Clear/Grub/Shape	R to S	450	1000	0.5	\$132.50	\$66.25
Clear/Grub/Shape	T to U	600	1000	0.6	\$132.50	\$79.50
Total Cost Project 2						\$424.00

Project #3 Fell, Skid, & Pile Submerchantable Material - Area I only

307.00	Total Subsawlog Volume MBF	89	WF Green Pulp (MBF)
		182	LP Green Pulp (MBF)
\$50.00	Fell & Skid / MBF	36	PP Green Pulp (MBF)
\$10.00	Sort / MBF	307	Total MBF
\$60.00	Total / MBF		
\$18,420.00	Total Cost		

Landing Piling (included with Project # 3) - Areas I, II, & III.

26	Number of Landings						
	Shovel Time:	0.5	Hours / Landing	Cost / Hour	\$125.00	Total Cost	\$1,625.00
	Cat Time:	0.5	Hours / Landing	Cost / Hour	\$132.50	Total Cost	\$1,722.50
						Total Cost:	\$3,347.50

Project #3 Cost Summary

Fell/Pile/Skid	\$18,420.00
Landing Piling	\$3,347.50
Total Cost Project 3	\$21,767.50

Project #4 Sporax Fungicide Treatment (Area I)

Application Labor (State Provides Sporax Product to Operator)

13	Cutting Days (Assume 15 acres per day to get 12 loads per day production)
5	Hours / Day
\$24.00	Cost / Hour
\$1,560.00	Total Cost Project 4

Project #5 Road Closure

4	Number of Closure Points (C,N,P,R)
1	Hours / Point (include travel)
\$132.50	Cost / Hour (Cat)
4	Total Road Blocking Hours
\$530.00	Total Cost

Waterbar Installation Points C to H

2	Hours (include travel)
\$132.50	Cost / Hour (Cat)
\$265.00	Total Waterbar Hours

Total Cost Project #5 \$795.00

Cost Summary All Projects

\$10,001.90	Project # 1 ~ Road Improvement
\$424.00	Project # 2 ~ Road Construction
\$21,767.50	Project # 3 ~ Fell, Skid, & Pile Submerch. Material
\$1,560.00	Project # 4 ~ Sporax Fungicide Treatment (Area 1)
\$795.00	Project # 5 ~ Road Closures
\$34,548.40	Total Cost All Projects

Switcheroo

341-10-58

Cruise Report



"STEWARDSHIP IN FORESTRY"

SALE NAME: Switcheroo

LEGAL DESCRIPTION:

Township 33S, R7E, Portions of Sections 9 & 16, W.M. Klamath County, OR.

BOUNDARY LINES:

Unit boundaries are posted with "Timber Sale Boundary" signs, marked with fluorescent orange paint and fluorescent orange flagging. Area boundaries are posted with "Area Boundary" signs, marked with yellow paint, and pink flagging.

FUND:

100% B.O.F.

ACREAGE: .

The timber sale was delineated into 3 areas based on silvicultural prescriptions.

Area I 324 Acres

Area II 96 Acres

Area III 332 Acres

Approximate Total Sale Acreage:752 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 single tree selection cut unit with cut trees marked with blue paint for trees 5.0 inches dbh and larger. All unmarked trees are reserved from cutting in Area I.

Area II is a diameter limit cut, with all unmarked lodgepole pine greater than 9.0 inches dbh and 50% or greater net sawlog volume to be cut. All blue marked ponderosa pine and white fir are cut trees. All lodgepole pine less than 9.0 inches dbh, and all unmarked ponderosa pine and white fir are reserved from cutting in Area II.

Area III is a single tree selection cut with leave trees marked with orange paint for trees greater than 5.0 inches dbh. All trees less than 5.0 inches dbh are reserved from cutting in Area III.

CRUISE METHOD:

Variable Plot cruise with all the plots being measure plots. Fixed plot cruise for all submerchantable material (5.0" to 8.0") dbh for Area III only.

BASAL AREA FACTOR:

Area	BAF	Type Acreage
Area I	10 BAF	324 acres
Area II	14 BAF	96 acres
Area III	14 BAF	332 acres

PLOT DESIGNATION:

Plot centers were established at every plot. Blue and 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	CV%	DESIRED SE%	ACRES
Area I	55	13	324
Area II	55	13	96
Area III	70	13	332

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

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

Area I $N = \frac{(1)^2(55)^2}{(13)^2} = 18 \text{ plots}$ Took 21 plots

Area II $N = \frac{(1)(65)^2}{(13)^2} = 18$ plots Took 20 plots

Area III $N = \frac{(1)(70)^2}{(13)^2} = 29$ plots Took 30 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” dbh) for Area III only.

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:

Area I : 8.0” dbh for sawlog volume.

Area II: 9.0” dbh for sawlog volume.

Area III: 8.0” dbh. for sawlog volume. 5.0” dbh for submerchantable material.

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: Ed Scheick, Chris Weekly, Kevin Nelson.

FINAL CRUISE RESULTS:

AREA	CV%	SE%	ACRES
Area I	79	17.6	324
Area II	63	14.3	96
Area III	55	10.3	332
COMBINED	73	8.6	752

TIMBER DESCRIPTION

SAWLOG VOLUME:

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

AREA I

SPECIES	AVE. DBH	GROSS VOL (MBF)	NET VOL (MBF)
White Fir	12.0	523	522
Ponderosa Pine	12.8	402	400
Lodgepole Pine	16.4	24	24
Sugar Pine	14.5	71	67

AREA II

SPECIES	AVE. DBH	GROSS VOL (MBF)	NET VOL (MBF)
Lodgepole Pine	14.7	825	821

AREA III

SPECIES	AVE. DBH	GROSS VOL (MBF)	NET VOL (MBF)
Lodgepole Pine	12.6	2445	2414
Ponderosa Pine	14.0	352	339
White Fir	12.1	278	276

TOTAL SAWLOG VOLUME

SPECIES	AVE. DBH	GROSS VOL (MBF)	NET VOL (MBF)
Lodgepole Pine	13.5	3294	3259
White Fir	12.0	801	798
Ponderosa Pine	13.3	754	739
Sugar Pine	14.5	71	67*

TOTAL NET SAWLOG VOLUME: 4796 MBF*

***For appraisal purposes, Sugar Pine not included.**

GREEN PULP VOLUME:

This volume was obtained from the variable cruise (>8" DBH) and the fixed plot cruise (5.0" – 8.0" DBH), for Area III only. All material was graded green pulp. See grade table for minimum standards.

SPECIES	V.PLOT VOLUME	F.PLOT VOLUME	TOTAL VOLUME
Ponderosa Pine	19	17	36
White Fir	17	72	89
Lodgepole Pine	22	160	182

TOTAL GREEN PULP VOLUME: 307 MBF

TC TSTATS				STATISTICS				PAGE 1		
				PROJECT	SWROO	DATE 9/1/2009				
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
33S	7E9	9	AREA1	237	324.00	21	77	1	E	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				PLOTS	TREES	TREES	TREES			
TOTAL	21	77	3.7							
CRUISE	21	77	3.7	13,699			.6			
DBH COUNT										
REFOREST										
COUNT										
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
PPINE	39	20.9	12.8	37		18.6	1,241	1,235	325	325
WHITE F	30	18.1	12.0	37	3	14.3	1,615	1,610	362	362
SUG PINE	7	2.9	14.5	34		3.3	220	206	60	60
LP PINE	1	.3	16.4	64		.5	75	75	15	15
TOTAL	77	42.3	12.6	37		36.7	3,151	3,126	762	762
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		
PPINE	75.8	12.1	64	73	82					
WHITE F	142.2	26.4	146	199	251					
SUG PINE	106.5	43.4	64	113	162					
LP PINE										
TOTAL	150.1	17.1	106	128	150	900	225	100		
CL: 68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.	INF. POP.			
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
PPINE	61.8	9.9	17	19	21					
WHITE F	122.1	22.7	31	40	49					
SUG PINE	86.2	35.1	20	31	42					
LP PINE										
TOTAL	118.1	13.4	25	29	33	557	139	62		
CL: 68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.	INF. POP.			
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
PPINE	104.9	23.4	16	21	26					
WHITE F	122.2	27.3	13	18	23					
SUG PINE	191.3	42.8	2	3	4					
LP PINE	458.3	102.4		0	1					
TOTAL	63.3	14.2	36	42	48	168	42	19		
CL: 68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.	INF. POP.			
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
PPINE	92.1	20.6	15	19	22					
WHITE F	120.4	26.9	10	14	18					
SUG PINE	173.2	38.7	2	3	5					
LP PINE	458.3	102.4		0	1					
TOTAL	60.6	13.5	32	37	42	154	38	17		
CL: 68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.	INF. POP.			
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
PPINE	92.8	20.7	979	1,235	1,491					
WHITE F	137.8	30.8	1,114	1,610	2,106					
SUG PINE	189.0	42.2	119	206	293					
LP PINE	458.3	102.4		75	151					
TOTAL	78.6	17.6	2,576	3,126	3,675	260	65	29		

Log Stock Table - MBF

Project: **SWROO**

T33S R7E9 S9 T237

T33S R7E9 S9 T237

Twp Rge Sec Tract Type Acres Plots Sample Trees
 33S 7E9 9 AREA1 237 324.00 21 77

Page 1
 Date 9/8/2009
 Time 1:20:24PM

S Spp	So T	Gr rt	Log de Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches													
								2-3	4-5	6-7	8-9	10-11	12-14	15-16	17-19	20-22	23-29	30-39	40+		
PP	CR	CR	13	16		16	4.1			16											
PP	CR	CR	17	42	4.6	40	10.1			20	14	6									
PP	CR	CR	23	19		19	4.9			19											
PP	CR	CR	26	60		60	15.0			34	16		10								
PP	CR	CR	34	264		264	66.0			95	91	78									
PP	Totals			402		400	39.5			185	122	84	10								
WF	CR	CR	13	10		10	1.9			10											
WF	CR	CR	17	47		47	8.9			43	2	2									
WF	CR	CR	23	24		24	4.6			24											
WF	CR	CR	26	40		40	7.7			26	14										
WF	CR	CR	27	9		9	1.8			9											
WF	CR	CR	34	393	.4	392	75.1			63	78	44	96	39	45	26					
WF	Totals			523		522	51.5			175	94	46	96	39	45	26					
SP	CR	CR	13	7		7	11.0			7											
SP	CR	CR	17	5		5	7.3				5										
SP	CR	CR	26	10		10	14.7			10											
SP	CR	CR	34	49	9.0	45	67.1				17	13	14								
SP	Totals			71	6.2	67	6.6			17	22	13	14								
LP	CR	CR	26	24		24	100.0			6			18								
LP	Totals			24		24	2.4			6			18								
Total All Species				1,021		1,013	100.0			384	238	144	138	39	45	26					

TC TSTATS				STATISTICS				PAGE	I	
				PROJECT	SWROO			DATE	9/3/2009	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
33S	7E	9	AREA2	238	96.00	20	120	1	E	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				TREES	TREES	TREES				
TOTAL	20	120	6.0							
CRUISE	19	120	6.3	6,881			1.7			
DBH COUNT										
REFOREST										
COUNT										
BLANKS	1									
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
LP PINE	120	71.7	14.7	42		84.0	8,779	8,733	2,093	2,093
TOTAL	120	71.7	14.7	42		84.0	8,779	8,733	2,093	2,093
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		
LP PINE	69.7	6.4	168	179	190					
TOTAL	69.7	6.4	168	179	190	194	48	22		
CL: 68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
LP PINE	62.1	5.7	39	42	44					
TOTAL	62.1	5.7	39	42	44	154	39	17		
CL: 68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
LP PINE	55.3	12.7	63	72	81					
TOTAL	55.3	12.7	63	72	81	128	32	14		
CL: 68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
LP PINE	46.8	10.7	75	84	93					
TOTAL	46.8	10.7	75	84	93	92	23	10		
CL: 68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
LP PINE	62.5	14.3	7,481	8,733	9,985					
TOTAL	62.5	14.3	7,481	8,733	9,985	164	41	18		
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		
LP PINE	55.7	12.8	1,826	2,093	2,360					
TOTAL	55.7	12.8	1,826	2,093	2,360	130	33	14		

Log Stock Table - MBF

Project: SWROO

T33S R7E S9 T238

T33S R7E S9 T238

Twp 33S Rge 7E Sec 9 Tract AREA2 Type 238 Acres 96.00 Plots 20 Sample Trees 120

Page 1
Date 9/8/2009
Time 1:40:05PM

S Spp	So T	Gr rt	Log de	Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
									2-3	4-5	6-7	8-9	10-11	12-14	15-16	17-19	20-22	23-29	30-39	40+
LP	CR	CR	13		23		23	2.7			7	5	1	6		4				
LP	CR	CR	17		58		58	6.9			28	7		17		5				
LP	CR	CR	23		66	.4	66	7.9			33	4	8	6	7	7				
LP	CR	CR	26		116		116	13.8			48	20	12	14	13	8				
LP	CR	CR	34		562	.7	558	66.6			64	139	64	245	45					
LP	CR	GP	14		6		6	.8			4	2								
LP	CR	GP	15		2		2	.3				2								
LP	CR	GP	18		2		2	.2			2									
LP	CR	GP	19		4		4	.5				4								
LP	CR	GP	20		3		3	.4				3								
LP	Totals				843		838	100.0			187	187	85	289	71	19				
Total All Species					843		838	100.0			187	187	85	289	71	19				

TC TSTATS				STATISTICS				PAGE 1		
				PROJECT SWROO		DATE 9/8/2009				
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
33S	7E	16	AREA3	239	332.00	30	173	1	E	
				TREES	ESTIMATED TOTAL	PERCENT SAMPLE				
				PER PLOT	TREES	TREES				
PLOTS		TREES								
TOTAL		30	173	5.8						
CRUISE		30	173	5.8	30,467		.6			
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
LP PINE	131	70.9	12.6	47		61.1	7,430	7,338	1,692	1,692
PPINE	25	10.9	14.0	42		11.7	1,119	1,080	259	259
WHITE F	17	10.0	12.1	38	2	7.9	887	883	197	197
TOTAL	173	91.8	12.7	46		80.7	9,436	9,301	2,147	2,147
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		
LP PINE	66.2	5.8	122	129	136					
PPINE	130.8	26.7	154	210	266					
WHITE F	121.3	30.3	150	216	281					
TOTAL	103.1	7.8	138	149	161	425	106	47		
CL: 68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
LP PINE	55.8	4.9	28	29	31					
PPINE	105.9	21.6	35	45	55					
WHITE F	110.5	27.6	32	44	56					
TOTAL	84.9	6.5	31	33	35	288	72	32		
CL: 68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
LP PINE	75.5	14.0	61	71	81					
PPINE	126.0	23.4	8	11	13					
WHITE F	258.7	48.0	5	10	15					
TOTAL	63.6	11.8	81	92	103	167	42	19		
CL: 68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
LP PINE	69.5	12.9	53	61	69					
PPINE	109.5	20.3	9	12	14					
WHITE F	230.2	42.7	5	8	11					
TOTAL	54.0	10.0	73	81	89	121	30	13		
CL: 68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
LP PINE	72.6	13.5	6,350	7,338	8,326					
PPINE	122.3	22.7	835	1,080	1,325					
WHITE F	245.6	45.6	480	883	1,286					
TOTAL	55.3	10.3	8,347	9,301	10,256	126	32	14		
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		
LP PINE	71.7	13.3	1,467	1,692	1,917					
PPINE	112.1	20.8	205	259	312					
WHITE F	232.7	43.2	112	197	282					

Log Stock Table - MBF

Project: SWROO

T33S R7E S16 T239

T33S R7E S16 T239

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	1
33S	7E	16	AREA3	239	332.00	30	173	Date	9/8/2009
								Time	1:44:44PM

S Spp	So T	Gr rt	Log de	Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
									2-3	4-5	6-7	8-9	10-11	12-14	15-16	17-19	20-22	23-29	30-39	40+
LP	CR	CR	13		67		67	2.8			45	9	5	8						
LP	CR	CR	17		177		177	7.3			79	36	30	20			13			
LP	CR	CR	23		66	1.9	64	2.6			53	11								
LP	CR	CR	26		252	.5	250	10.3			120	30	51	50						
LP	CR	CR	34		1,883	1.5	1,855	76.1			549	658	406	217	25					
LP	CR	GP	16		12		12	.5	4		8									
LP	CR	GP	18		2		2	.1	2											
LP	CR	GP	19		8		8	.3			8									
LP	Totals				2,467	1.2	2,436	78.9	6		854	752	492	294	25		13			
PP	CR	CR	13		20		20	5.5			8	6		6						
PP	CR	CR	17		22	5.2	21	5.7			8	3		9						
PP	CR	CR	23		6		6	1.7			6									
PP	CR	CR	26		44		44	12.2			20	11		13						
PP	CR	CR	32		70	5.6	66	18.4						10	17	20	20			
PP	CR	CR	34		191	4.2	183	51.1			60	29	34	45	15					
PP	CR	GP	15		3		3	.7	3											
PP	CR	GP	16		11		11	3.0	3		8									
PP	CR	GP	18		6		6	1.6			6									
PP	Totals				372	3.5	359	11.6	6		116	49	34	83	31	20	20			
WF	CR	CR	13		12		12	4.1			12									
WF	CR	CR	17		6		6	2.0			6									
WF	CR	CR	23		14		14	4.7			14									
WF	CR	CR	26		26		26	9.0			26									
WF	CR	CR	34		219	.5	218	74.4			9	59	21	19	66	43				
WF	CR	GP	12		6		6	2.1			6									
WF	CR	GP	16		4		4	1.2	4											
WF	CR	GP	17		7		7	2.4			7									
WF	Totals				294		293	9.5	4		74	66	21	19	66	43				
Total All Species					3,133	1.4	3,088	100.0	15		1044	867	547	397	123	63	33			

Species Table Report

TblSpecies

Date: 09/24/2009

Page: 1

Table Name: SUNPASS

Code	Abrv	Description	Bark Ratio	ASub Const	Form Factor	Wood Type	Component	Yield Table	Min	Min	Max	Log	Log	Log	Log	Tree	Tree	BdFt	CuFt	Weight
									Log Dia	Log Len	Log Len	Log Trim	Tree Dia	Tree Hgt.	Rule	Rule				
1	PP	PPINE	.87	PP	.85	C	C	PP--EQUA--100	3	9	20	1.0	99	200	E	1	4800			
2	WF	WHITE F	.94	NF	.87	C	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	5000			
3	LP	LP PINE	.96	DF	.9	C	C	LP--EQUA--100	3	9	20	1.0	99	200	E	1	4800			
4	DF	DOUG-FIR	.92	DF	.87	C	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	5700			
5	SP	SUG PINE	.87	PP	.84	C	C	PP--EQUA--100	3	9	20	1.0	99	200	E	1	4800			
6	IC	INC CED	.90	SS	.8	C	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	4500			
7	RF	SH RFIR	.924	DF	.89	C	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	5000			

Sort/Grade Table

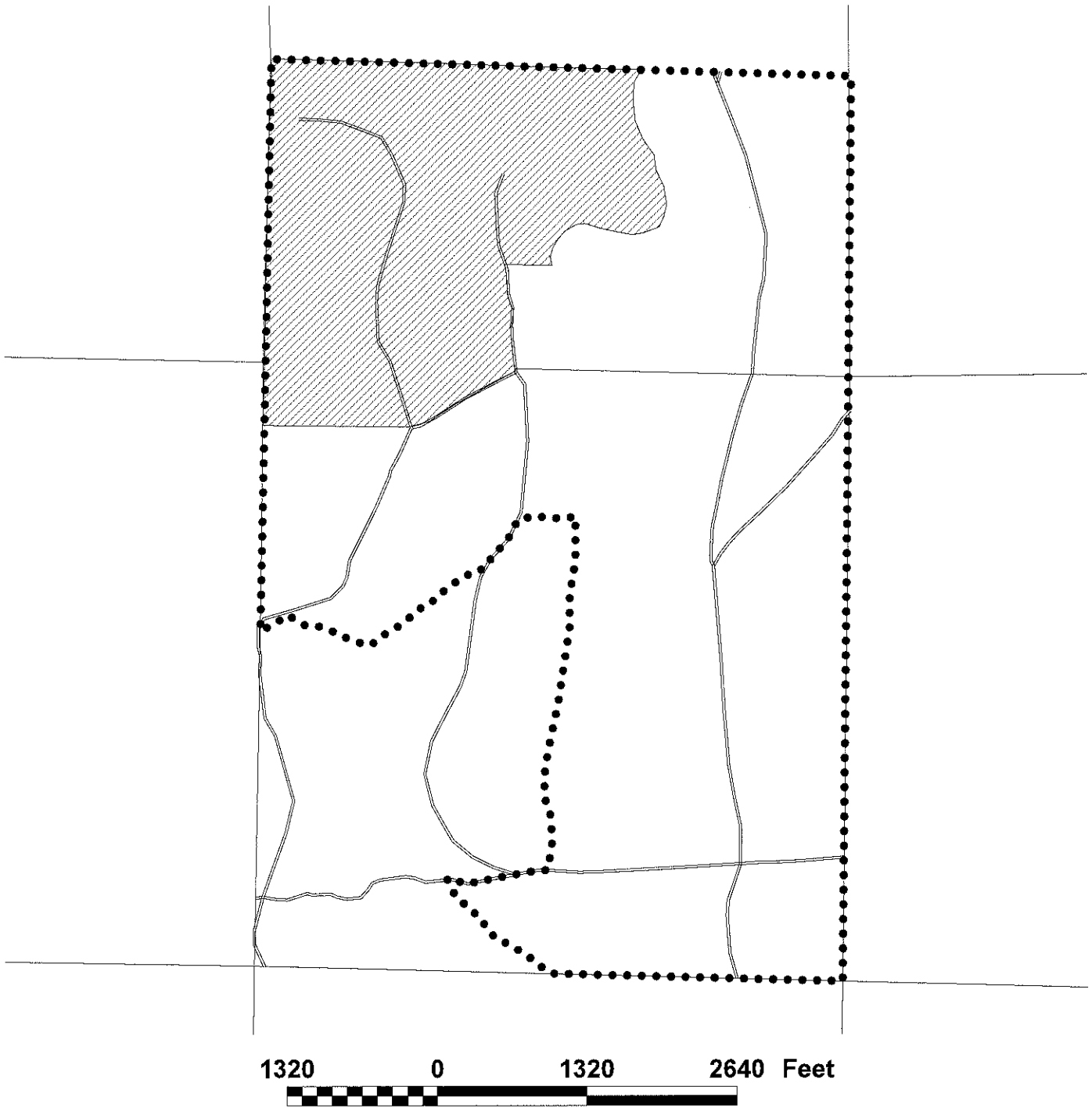
TblSortGrade

Table Name: SUNPASS

Date: 09/24/2009

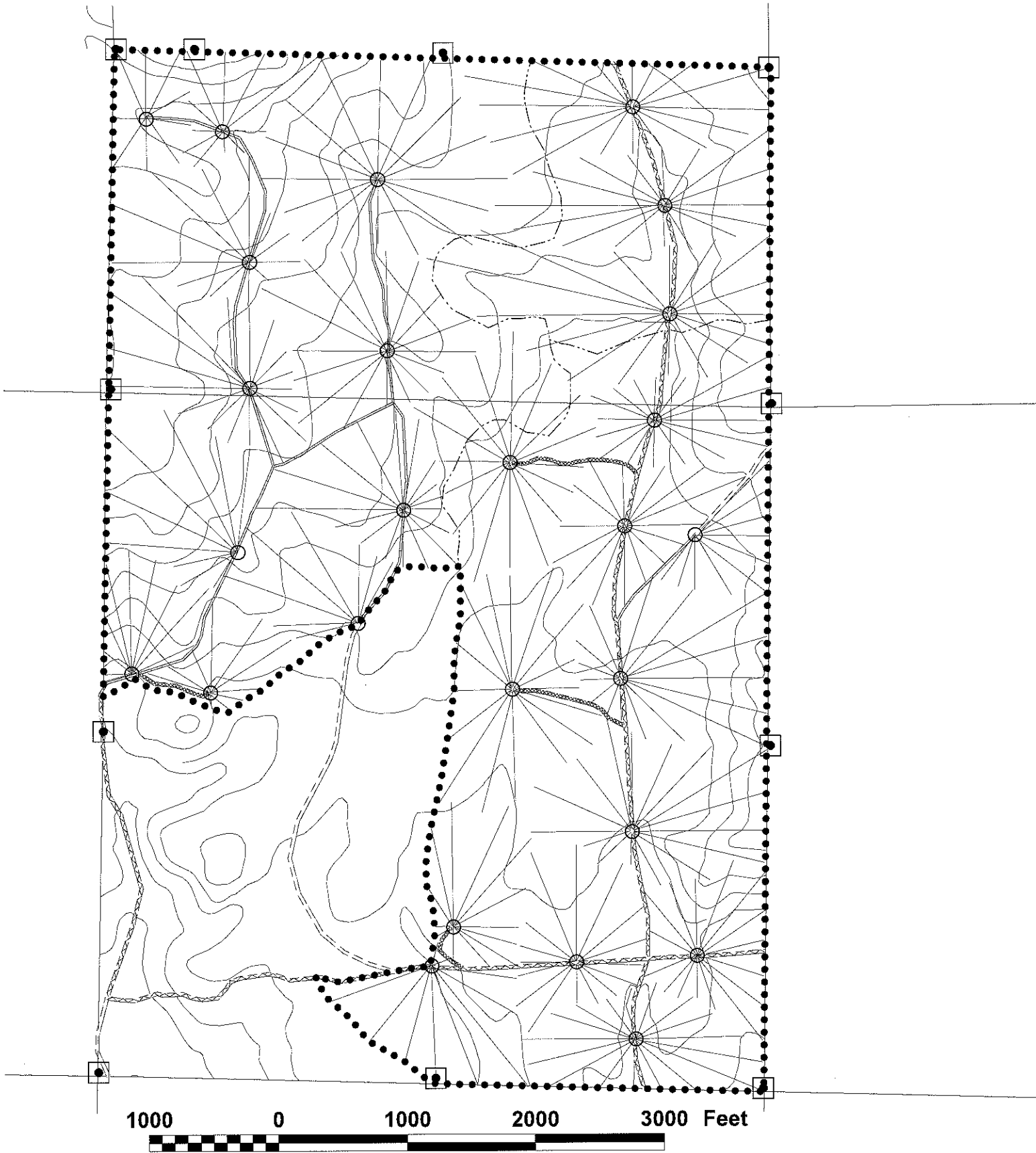
Sort	Grd	Abv	Desc	Fbr	Min Dia	Max Dia	Max l Butt	Min Len	Max Len	Defect	Min Vol	Vol Type	Min Rings	Knot Size	Knot Freq	Str	Sap	Min Age	Lbs	Lbs Type	Cords	Cords Type
0		CU	CULL	G	1	0	0	1	99	0	0	M	0	0	0			0	0		0	
1		CR	CAMPRU	G	6	0	0	10	99	0	0	M	0	0	0			0	0		0	
7		GP	GRNPULP	G	3	0	0	10	99	0	0	M	0	0	0			0	0		0	
8		DP	DEADPUL	G	3	0	0	10	99	0	0	M	0	0	0			0	0		0	
9		UT	UTILITY	G	8	0	0	12	99	0	0	M	0	0	0			0	0		0	
0		CU	CULL	G	1	0	0	1	99	0	0	M	0	0	0			0	0		0	
1		CR	CAMPRU	G	1	0	0	1	99	0	0	M	0	0	0			0	0		0	

Sporax Treatment Area (195 Acres)



-  Unsurfaced Roads
-  Timber Sale Boundary
-  Sporax Treatment Area (195 Acres)
-  Section Lines





Scale: 1:12000 1 Inch = 1000 Feet

Logging Plan

TIMBER SALE CONTRACT NO. 341-10-58
 SWITCHEROO
 PORTIONS OF SECTIONS 9 & 16 T.33S., R.7E., W.M.
 KLAMATH COUNTY, OREGON
 752 ACRES

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