



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Shambolic
Sale KL-341-2024-W01029-01

District: Klamath/Lake

Date: February 14, 2024

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$32,226.24	\$0.00	\$32,226.24
		Project Work:	(\$4,947.35)
		Advertised Value:	\$27,278.89



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Shambolic
Sale KL-341-2024-W01029-01

District: Klamath/Lake

Date: February 14, 2024

Timber Description

Location:

Stand Stocking: 20%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
White Fir	15	0	98
Sugar Pine	22	0	95
Ponderosa Pine	20	0	98

Volume by Grade	2S	3S & 4S 6"-11"	6" - 11"	12"-15"	16"+	Total
White Fir	144	156	0	0	0	300
Sugar Pine	0	0	21	13	34	68
Ponderosa Pine	0	0	126	117	49	292
Total	144	156	147	130	83	660

Comments: Pond Values Used: Local Pond Values, December 2023

Pulp Price: \$0.25 per ton

Log Markets: Klamath Falls and Medford.

Other Costs (no Profit & Risk): None

Other Costs (with Profit & Risk to be added): None

ROAD MAINTENANCE

Move-in: \$400.00

General Road Maintenance: 5.5 miles x \$270 per mile x 1 bladings = \$1,485.00

Total Road Maintenance: \$1,885.00, \$2.86 per Mbf



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Shambolic
Sale KL-341-2024-W01029-01

District: Klamath/Lake

Date: February 14, 2024

Logging Conditions

Combination#: 1

White Fir	76.00%
Sugar Pine	13.00%
Ponderosa Pine	32.00%

Logging System: Wheel Skidder **Process:** Feller Buncher
yarding distance: Medium (800 ft) **downhill yarding:** Yes
tree size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
loads / day: 13 **bd. ft / load:** 4300
cost / mbf: \$178.90
machines: Log Loader (B)
Stroke Delimber (B)
Feller Buncher w/ Delimber
Tire Skidder

Combination#: 2

White Fir	24.00%
Sugar Pine	87.00%
Ponderosa Pine	68.00%

Logging System: Track Skidder **Process:** Manual Falling/Delimiting
yarding distance: Medium (800 ft) **downhill yarding:** Yes
tree size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
loads / day: 12 **bd. ft / load:** 4500
cost / mbf: \$185.19
machines: Log Loader (B)
Track Skidder



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Shambolic
Sale KL-341-2024-W01029-01

District: Klamath/Lake

Date: February 14, 2024

Logging Costs

Operating Seasons: 1.00	Profit Risk: 10%
Project Costs: \$4,947.35	Other Costs (P/R): \$0.00
Slash Disposal: \$0.00	Other Costs: \$0.00

Miles of Road

Road Maintenance: \$2.86

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	4.2
Sugar Pine	\$0.00	4.0	4.2
Ponderosa Pine	\$0.00	4.0	4.3



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Shambolic
Sale KL-341-2024-W01029-01

District: Klamath/Lake

Date: February 14, 2024

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
White Fir									
\$180.41	\$2.92	\$6.65	\$101.19	\$0.00	\$29.12	\$0.00	\$2.00	\$0.00	\$322.29
Sugar Pine									
\$184.37	\$3.00	\$6.65	\$78.12	\$0.00	\$27.21	\$0.00	\$2.00	\$0.00	\$301.35
Ponderosa Pine									
\$183.18	\$2.92	\$6.65	\$74.12	\$0.00	\$26.69	\$0.00	\$2.00	\$0.00	\$295.56

Specie	Amortization	Pond Value	Stumpage	Amortized
White Fir	\$0.00	\$427.20	\$104.91	\$0.00
Sugar Pine	\$0.00	\$308.82	\$7.47	\$0.00
Ponderosa Pine	\$0.00	\$296.40	\$0.84	\$0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Shambolic
Sale KL-341-2024-W01029-01

District: Klamath/Lake

Date: February 14, 2024

Summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
White Fir	300	\$104.91	\$31,473.00
Sugar Pine	68	\$7.47	\$507.96
Ponderosa Pine	292	\$0.84	\$245.28

Gross Timber Sale Value

Recovery: \$32,226.24

Prepared By: Chris Weekly

Phone: 541-883-5681

Shambolic

KL-341-2024-W01029-01

Other Costs

Road Maintenance

Move-in cost (grader):	\$400.00
Number of Miles to be Bladed:	5.5
Number of Bladings:	1
Total Miles:	5.5
Miles/Hour for Equipment:	0.5
Cost/Hour (grader with operator):	\$135.00
Total Grading Hours:	11
Grading Cost:	<u>\$1,485.00</u>
Total Cost:	<u>\$1,885.00</u>
Cost/Mbf:	\$2.86

WF	300 Mbf	45%	Average Load	4.0 Mbf	No. of Loads	75
PP	292 Mbf	44%	Average Load	4.0 Mbf	No. of Loads	73
SP	68 Mbf	10%	Average Load	4.0 Mbf	No. of Loads	<u>17</u>
Total:	660 Mbf				Total Loads	165

Assume: 4 Trucks/Day
 3 Trips/Day

12 Loads per Day

14 Hauling Days

Shambolic

KL-341-2024-W01029-01

Project Costs

Project #1 Road Improvement

Improvement

Move in Cost Cat: \$500

	Points	Distance(ft)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	A to B	4,271	1000	4.27	\$150.00	\$640.65
Open/Clear/Shape	C to D	2,378	1000	2.38	\$150.00	\$356.70
	Total	6,649		6.65		\$997.35

Move In Costs	\$500.00
Improvement Cost	\$997.35
Project # 1 Total	\$1,497.35
per Mbf	\$2.27

Project #2 Slash Piling

Landing Slash Piling

Number of Landings: 7

Shovel Time:	1 Hour per Landing	Cost per Hour: \$150.00	Total Cost	\$1,050.00
Cat Time:	1 Hour per Landing	Cost per Hour: \$150.00	Total Cost	\$1,050.00

Total	\$2,100.00
per MBF	\$3.18

Shambolic

KL-341-2024-W01029-01

Project Costs

Project #3 Road Closures and Waterbarring

Road Closures

1	Number of Closure Points	A
	Cost per Hour (Cat)	\$150.00
	Total	\$150.00
	per Mbf	\$0.23

Skid Trail Waterbarring

4	Number of Landings	
	Hours per Landing	2
	Cost per Hour (Cat)	\$150.00
	Total	\$1,200.00
	per Mbf	\$1.82

Project #3 Summary

Road Closures:	\$150.00
Waterbarring:	\$1,200.00
Total:	\$1,350.00
per Mbf:	\$2.05

Cost Summary All Projects

Project No.1 - Road Improvement	\$1,497.35
Project No.2 - Slash Piling	\$2,100.00
Project No.3 - Road Closure and Waterbarring	\$1,350.00
Total Cost	\$4,947.35
per Mbf	\$7.50

Shambolic
KL-341-2024-W01029-01
Cruise Report



SALE NAME: Shambolic

LEGAL DESCRIPTION:

Located in Section(s) 5, 6, 7 and 8 of T33S, R7E, Willamette Meridian, Klamath County, Oregon

BOUNDARY LINES:

Unit boundaries are unmarked.

ACREAGE:

Gross Sale Acreage:	160 Acres
Exclusion Acreage:	22 Acres
Net Sale Acreage:	138 Acres

Mapping was accomplished using Avenza pdf Maps with the data processed through ArcMap.

TREATMENT:

The Timber Sale is a purchaser select, partial cut harvest.

CRUISE METHOD:

Variable plot cruise with a ratio of one count plot for every measure plot.

BASAL AREA FACTOR:

A basal area factor of 10 was used for all variable cruise plots.

PLOT DESIGNATION:

Plot centers were established at every plot with blue flag wire stakes with the corresponding plot number. Blue and white stripped flagging was attached to the nearest available tree branch.

SAMPLE SIZE CALCULATIONS:

AREA	CV%	DESIRED SE%	ACRES
Area 1	81%	12%	138

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

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

$$N = \frac{(1)^2(81)^2}{(12)^2} = 45 \text{ plots}$$

Measurements and Grading:

- Ratio of two count plot for every measure plot.
- DBH and Height were measured on all “in” trees for measure plots.
- Pulp volume and sawlog volume cruised.
- All trees were graded using the segment system.
- Nested fixed plot cruise for all submerchantable material (5” to 9” DBH).

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:

9.0” DBH.

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 DBH.

VOLUME COMPUTATION:

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

FINAL CRUISE RESULTS:

CV%	SE%	ACRES
46.8	7.1	138

TIMBER DESCRIPTION

SAWLOG VOLUME:

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

TOTAL SAWLOG VOLUME

Species	Ave. DBH	Acres	Gross Vol/Acre (bf)	Net Vol/Acre (bf)	Net Sale Vol (Mbf)
White fir	15.0	138	2,189	2,175	300
Ponderosa pine	19.7	138	2,164	2,113	292
Sugar pine	22.1	138	497	493	68
		Total	4,849	4,781	660

TOTAL NET SAWLOG VOLUME: 660 MBF

Log Stock Table - MBF

T033 R007 S08 TyORIG 138.00

Project: SHAM
Acres 138.00

Page 1
Date 2/15/2024
Time 2:37:09PM

Spp	S T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches												
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+	
WF		CR	CR	17	25		25	8.4			4	20		1							
WF		CR	CR	27	18		18	6.1				5		6	7						
WF		CR	CR	34	259		257	85.6			24	60		37	57	51	28				
WF		Totals			302		300	45.5			28	85		43	65	51	28				
PP		CR	CR	16	17		17	5.7			6	2		3	1			4			
PP		CR	CR	20	5		5	1.8			1	3		1							
PP		CR	CR	24	10		10	3.5			2	8									
PP		CR	CR	28	7		7	2.2			3	4									
PP		CR	CR	32	260	2.7	253	86.8			2	19		71	88	28	44				
PP		Totals			299	2.4	292	44.2			14	36		76	89	28	44	4			
SP		CR	CR	16	8		8	11.6			1	1			3	3					
SP		CR	CR	20	1		1	1.4					1								
SP		CR	CR	24	1		1	2.0				1									
SP		CR	CR	28	5		5	7.9				1	4								
SP		CR	CR	32	53		53	77.1				10	3	5	5	30					
SP		Totals			69		68	10.3			1	14		8	5	8	33				
Total		All Species			669	1.4	660	100.0			43	135		126	160	86	105	4			

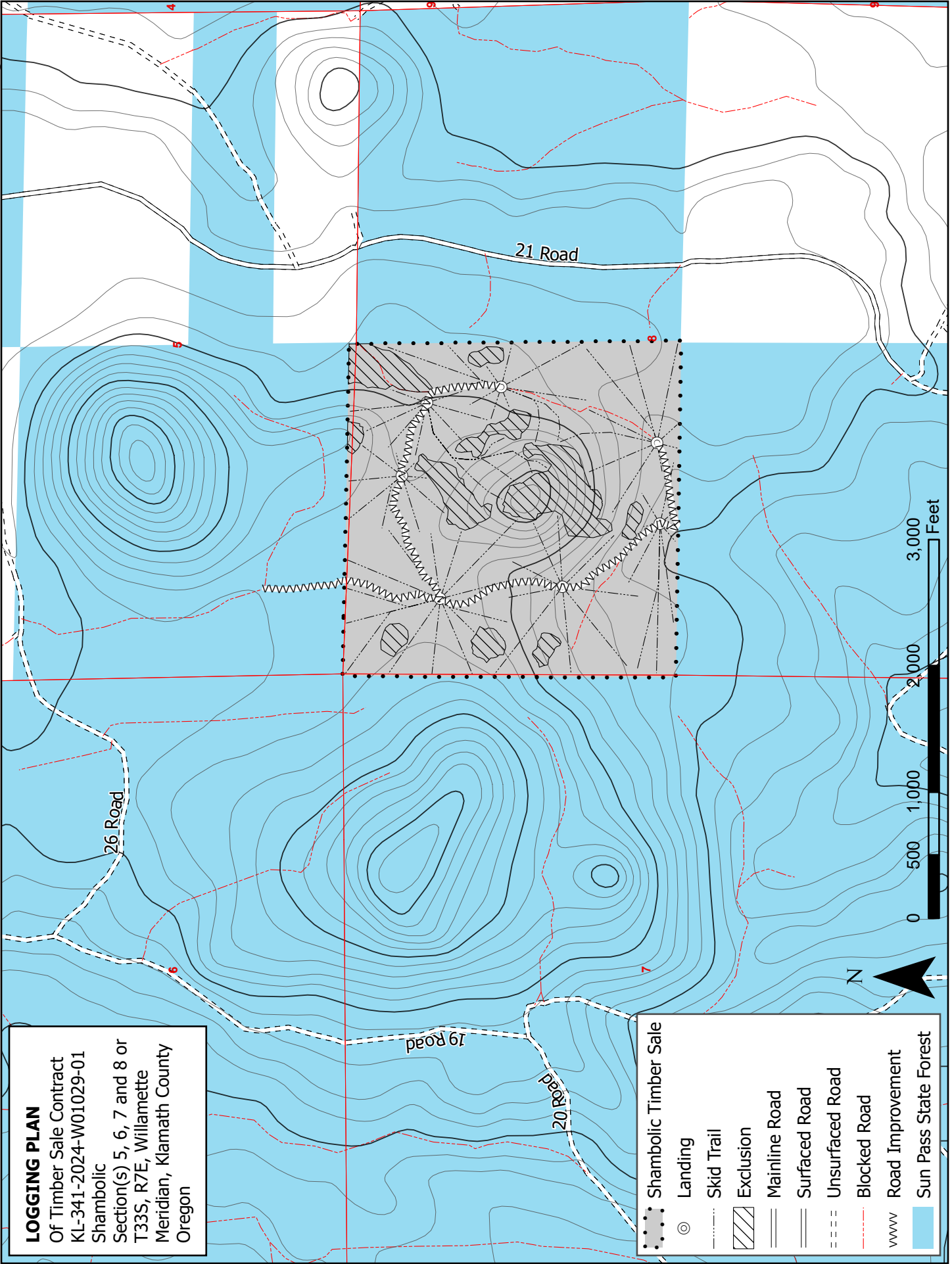
TC PSTATS		PROJECT STATISTICS							PAGE	1	
		PROJECT SHAM							DATE	2/15/2024	
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt	
033	007	08	226	ORIG		138.00	43	176	1	E	
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES				
TOTAL			43	176	4.1						
CRUISE			22	91	4.1	3,450	2.6				
DBH COUNT REFOREST COUNT			21	85	4.0						
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	
P PINE		45	8.7	19.7	56	4.1	18.4	2,164	2,113	453	
WHITE F		35	14.7	15.0	45	4.7	18.1	2,189	2,175	487	
SUG PINE		11	1.7	22.1	51	0.9	4.4	497	493	106	
TOTAL		91	25.0	17.3	49	9.8	40.9	4,849	4,781	1,046	
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		
P PINE		56.9	8.5	263	288	312					
WHITE F		80.2	13.5	185	214	243					
SUG PINE		52.0	16.4	317	379	441					
TOTAL		65.5	6.9	252	271	289	171	43	19		
CL	68.1	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
P PINE		47.1	7.0	56	60	65					
WHITE F		71.6	12.1	40	46	52					
SUG PINE		46.5	14.7	68	80	92					
TOTAL		57.3	6.0	54	57	61	131	33	15		
CL	68.1	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
P PINE		88.5	13.5	7	9	10					
WHITE F		99.5	15.2	12	15	17					
SUG PINE		202.6	30.9	1	2	2					
TOTAL		52.7	8.0	23	25	27	111	28	12		
CL	68.1	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
P PINE		83.1	12.7	16	18	21					
WHITE F		97.2	14.8	15	18	21					
SUG PINE		199.4	30.4	3	4	6					
TOTAL		41.2	6.3	38	41	44	68	17	8		
CL	68.1	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
P PINE		83.1	12.7	1,845	2,113	2,380					
WHITE F		103.7	15.8	1,831	2,175	2,519					
SUG PINE		214.4	32.7	332	493	655					
TOTAL		46.8	7.1	4,440	4,781	5,122	88	22	10		
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		
P PINE		82.7	12.6	396	453	510					
WHITE F		100.8	15.4	412	487	562					

PROJECT STATISTICS
PROJECT SHAM

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
033	007	08	226	ORIG	138.00	43	176	1	E
CL	68.1	COEFF			NET CUFT FT/ACRE			# OF PLOTS REQ.	INF. POP.
SD:	1.00	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
SUG PINE		209.2	31.9	72	106	140			
TOTAL		45.3	6.9	974	1,046	1,119	82	21	9

LOGGING PLAN

Of Timber Sale Contract
KL-341-2024-W01029-01
Shambolic
Section(s) 5, 6, 7 and 8 or
T33S, R7E, Willamette
Meridian, Klamath County
Oregon



- Shambolic Timber Sale
- ⊙ Landing
- - - - - Skid Trail
- ▨ Exclusion
- ==== Mainline Road
- ==== Surfaced Road
- - - - - Unsurfaced Road
- - - - - Blocked Road
- www Road Improvement
- Sun Pass State Forest

