

## Sale KL-341-2020-W00769-01

District: Klamath/Lake Date: July 10, 2019

## **Cost Summary**

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$907,844.57	\$0.00	\$907,844.57
		Project Work:	(\$40,908.38)
		Advertised Value:	\$866,936.19

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#### Sale KL-341-2020-W00769-01

District: Klamath/Lake Date: July 10, 2019

### **Timber Description**

**Location:** Portions of Sections 6, 7, and 18, T33S, R7E, Portions of Sections 12 and 13, T33S, R7.5E, W.M., Klamath County, Oregon

Stand Stocking: 20%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	26	0	98
White Fir	18	0	98
Sugar Pine	23	0	95
Ponderosa Pine	19	0	95
Lodgepole Pine	17	0	95

Volume by Grade	28	3S & 4S 6"- 11"	3S 12"+	6" - 11"	12"-15"	16"+	Camprun	Total
Douglas - Fir	11	30	5	0	0	0	0	46
White Fir	816	1,057	100	0	0	0	0	1,973
Sugar Pine	0	0	0	445	580	599	0	1,624
Ponderosa Pine	0	0	0	919	675	673	0	2,267
Lodgepole Pine	О	0	0	0	0	0	73	73
Total	827	1,087	105	1,364	1,255	1,272	73	5,983

**Comments:** Pond Values Used: Local Pond Values, June 2019.

Log Markets: Klamath Falls and Medford.

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

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

ROAD MAINTENANCE

Move-in: \$500.00

General Road Maintenance: 8.5 miles x \$211 per mile x2 Bladings = \$3,587.00

Total Road Maintenance: \$4,087.00, \$0.67 per Mbf

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#### Sale KL-341-2020-W00769-01

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### **Logging Conditions**

Combination#: 1 White Fir 77.00%

Sugar Pine30.00%Ponderosa Pine62.00%Lodgepole Pine100.00%

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: 10 bd. ft / load: 3900

cost / mbf: \$97.35

machines: Log Loader (B)

Stroke Delimber (B)

Feller Buncher w/ Delimber

Tire Skidder

Combination#: 2 Douglas - Fir 100.00%

 White Fir
 23.00%

 Sugar Pine
 70.00%

 Ponderosa Pine
 38.00%

Logging System: Track Skidder Process: Manual Falling/Delimbing

yarding distance: Medium (800 ft) downhill yarding: Yes

tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 10 bd. ft / load: 4000

cost / mbf: \$110.27

machines: Log Loader (B)

Track Skidder

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### Sale KL-341-2020-W00769-01

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## **Logging Costs**

**Operating Seasons:** 2.00

Profit Risk: 10%

**Project Costs:** \$40,908.38

Other Costs (P/R): \$0.00

Slash Disposal: \$0.00

Other Costs: \$0.00

#### Miles of Road

Road Maintenance:

\$0.67

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

#### **Hauling Costs**

Species	\$/MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	3.8
White Fir	\$0.00	3.0	4.0
Sugar Pine	\$0.00	3.0	3.8
Ponderosa Pine	\$0.00	3.0	3.8
Lodgepole Pine	\$0.00	3.0	3.6

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## Sale KL-341-2020-W00769-01

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## **Logging Costs Breakdown**

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - I	Fir								
\$110.27	\$0.68	\$1.47	\$127.50	\$0.00	\$23.99	\$0.00	\$2.00	\$0.00	\$265.91
White Fir									
\$100.32	\$0.68	\$1.47	\$80.75	\$0.00	\$18.32	\$0.00	\$2.00	\$0.00	\$203.54
Sugar Pine	<del></del>								
\$106.39	\$0.70	\$1.47	\$87.50	\$0.00	\$19.61	\$0.00	\$2.00	\$0.00	\$217.67
Ponderosa	Pine								
\$102.26	\$0.70	\$1.47	\$87.50	\$0.00	\$19.19	\$0.00	\$2.00	\$0.00	\$213.12
Lodgepole	Pine								
\$97.35	\$0.70	\$1.47	\$92.36	\$0.00	\$19.19	\$0.00	\$2.00	\$0.00	\$213.07

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$508.11	\$242.20	\$0.00
White Fir	\$0.00	\$414.43	\$210.89	\$0.00
Sugar Pine	\$0.00	\$340.10	\$122.43	\$0.00
Ponderosa Pine	\$0.00	\$332.69	\$119.57	\$0.00
Lodgepole Pine	\$0.00	\$360.00	\$146.93	\$0.00

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## Sale KL-341-2020-W00769-01

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### **Summary**

#### Amortized

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

#### Unamortized

Specie	MBF	Value	Total
Douglas - Fir	46	\$242.20	\$11,141.20
White Fir	1,973	\$210.89	\$416,085.97
Sugar Pine	1,624	\$122.43	\$198,826.32
Ponderosa Pine	2,267	\$119.57	\$271,065.19
Lodgepole Pine	73	\$146.93	\$10,725.89

#### **Gross Timber Sale Value**

**Recovery:** \$907,844.57

Prepared By: Chris Weekly Phone: 541-883-5681

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# Borderline

## KL-341-2020-W00769-01

## **Additional Costs**

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	Road	l Maintenance			
Move-in cost (grader):	\$500.00				
Number of Miles to be Bladed:	8.5				
Number of Bladings:	2				
Total Miles	17.0				
Miles / Hour for equipment:	0.5				
Cost / Hour (grader with operator):	\$105.50				
Total Grading Hours:	34				
Grading Cost:	\$3,587.00				
	\$4,087.00				
Total Cost:	\$4,087.00				
Cost / Mbf:	\$0.67				

# Borderline KL-341-2020-W00769-01

# Project Costs

	Project #1 Dust Abatement								
PP	2312 Mbf	37.9%	Average Load	3.8 Mbf	No. of Loads	608			
WF	2014 Mbf	33.0%	Average Load	4.0 Mbf	No. of Loads	504			
SP	1657 Mbf	27.2%	Average Load	3.8 Mbf	No. of Loads	436			
LP	72 Mbf	1.2%	Average Load	3.6 Mbf	No. of Loads	20			
DF	47 Mbf	0.8%	Average Load	3.8 Mbf	No. of Loads	12			
Total:	6102 Mbf				Total Loads	1580			
Assume:	6 Trucks/[	Day							
	2 Trips/Da	У		132 Days of Dust Abatement					
	12 Loads pe	er Day		1.5 Hours/Day					
	132 Hauling	Days		\$88.00 Cost/Hour					
				198 Total Ho	ours				
			\$	200.00 Move in	for Water Truck				
			\$17,	583.76 Dust Ab	atement Cost				
			\$17,	583.76 Total Co	ost				
				\$2.88 Cost/M	bf				

# Borderline KL-341-2020-W00769-01

## **Project Costs**

#### Project #2 Road Improvement and Construction

Move in Cost Dozer: \$500.00

#### Improvement

	Points	Distance (ft)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	A to B	540	1000	0.5	\$132.50	\$71.55
Open/Clear/Shape	C to D	3052	1000	3.1	\$132.50	\$404.39
Open/Clear/Shape	E to F	629	1000	0.6	\$132.50	\$83.34
Open/Clear/Shape	G to H	1573	1000	1.6	\$132.50	\$208.42
Open/Clear/Shape	I to J	4805	1000	4.8	\$132.50	\$636.66
Open/Clear/Shape	K to L	1146	1000	1.1	\$132.50	\$151.85
Open/Clear/Shape	O to P	2370	1000	2.4	\$132.50	\$314.03
	Total	14115			Total	\$1,870.24

#### Construction

	Points	Distance (ft)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	M to N	305	750	0.4	\$132.50	\$53.88
	Tota	l 305			Total	\$53.88

#### Project #2 Summary

Project #1 Total	\$2,424.12
Construction Costs	\$53.88
Improvement Costs	\$1,870.24
<b>Equipment Costs</b>	\$500.00

## Borderline KL-341-2020-W00769-01

## **Project Costs**

#### Project #3 Slash and Brush Piling

#### Landing Piling

Number of Landings: 33

Shovel Time: 1 Hour per Landing Cost per Hour: \$125.00 Total Cost \$4,125.00

Cat Time: 1 Hour per Landing Cost per Hour: \$132.50 Total Cost \$4,372.50

**Total** \$8,497.50 per MBF \$1.39

#### **Unit Piling**

Equipment Move In: \$500.00

Acres to be Piled 15
Hours per Acre 2
Cost per Hour \$85.00

Cost per Hour \$85.00

Cost of Piling \$2,550.00

Total Cost \$3,050.00

per Mbf \$0.50

#### Project #3 Summary

Landing Piling \$8,497.50 Unit Piling \$3,050.00

**Total Cost** \$11,547.50 per Mbf \$1.89

## Final Straw KL-341-2019-W00511-01

## **Project Costs**

#### Project #4 Spot Rocking

Spot Rocking - Delivered		Rock Spreading	g (Grader)
3/4 -	Rock Size	8	Total Grader Hours
180	Cubic Yards	\$105.50	Cost per Hour
1.5	Tons per Cubic Yard	\$844.00	Total
270	Tons		
\$14.00	cost per ton (delivered)	8	Total Water Truck Hours
\$3,780.00	Total	\$88.00	Cost per Hour
\$0.62	e per MBF	\$704.00	Total
		\$1,548.00	Total Rock Spreading
			\$0.25 per MBF

#### Project #4 Summary

Project #5 PreCommercial Thinning

Cost Summary All Projects

Total cost Rock \$3,780.00

Total cost Spreading \$1,548.00

Total \$5,328.00

per MBF \$0.87

		-,	9	
	Hours	Cost per Hour	Total	
Feller Buncher	20	\$130.00	\$2,600.00	
Skidder	8	\$100.00	\$800.00	
Shovel	5	\$125.00	\$625.00	
		Total Cost	\$4,025.00	
		Cost per Mbf	\$0.66	

Project No. 1 - Dust Abatement	\$17,583.76
Project No. 2 - Road Improvement and Construction	\$2,424.12
Project No. 3 - Slash and Brush Piling	\$11,547.50
Project No. 4 - Spot Rocking	\$5,328.00
Project No. 5 - Precommercial Thin	\$4,025.00
Total Cost _	\$40,908.38
per Mbf	\$6.70

# **Summary of Project Work**

# **Borderline** KL-341-2020-W00769-01

Project No. 1:	Dust Abatement	\$17,583.76
Project No. 2:	Road Improvement and Construction	\$2,424.12
Project No. 3:	Slash and Brush Piling	\$11,547.50
Project No. 4:	Spot Rocking	\$5,328.00
Project No. 5:	Precommercial Thin	\$4,025.00

Total: \$40,908.38

# **Borderline**

### KL-341-2020-W00769-01 Cruise Report



**SALE NAME:** Borderline

#### **LEGAL DESCRIPTION:**

Township 32 South, Range 7 East, Portion of Section 31, and Township 33 South, Range 7.5 East, Portions of Sections 12, and Township 33 South, Range 7 East, Portions of Sections 6, 7, and 18, Willamette Meridian, Klamath County, Oregon.

#### **ACREAGE**:

The timber sale is 762 acres and was cruised as two separate stands.

Stand	Gross Acres	Exclusion	Net Acres
Area 1	587	17	570
Area 2	164	0	164
Area 3	11	0	11
Total	762	17	745

Acreage was determined using data collected using GPS and compiled using ArcMap.

#### TREATMENT:

Area 1 is a single tree selection cut with leave trees marked with orange paint for trees 10.0 inches dbh and larger. No submerchantable material will be cut.

Area 2 is a selection cut based on prescription by description, and is referenced in the contract as Areas 2. Area 2 is a purchaser select cut with requirements listed in contract Section 2320, "Thinning Specifications".

Area 3 is plantation. No cruise was performed for this area, but thinning will be required under the Project Work portion of the Timber Sale.

#### **CRUISE METHOD:**

Merchantable volume on the timber sale was sampled using a variable plot cruise with a ratio of one measure plot for every count plot. Submerchantable material (5.0"to 9.0" dbh) was measured with a 1/50 acre fixed plot but it was determined to be negligible. Therefore, submerchantable material will not be cut, with the exception of the Project Work thinning for Area 3.

#### **BASAL AREA FACTOR:**

Stand	BAF	Type Acreage
Area 1	13.61 BAF	584 acres
Area 2	13.61 BAF	164 acres

#### **FIXED PLOT**:

Stand	Radius	Type Acreage
Areas 1 and 2	16.6	748

#### PLOT DESIGNATION:

Plot centers were established at every plot with pin flags and candy stripe blue and white flagging attached to the nearest available tree branch listing the plot number.

#### SAMPLE SIZE:

Area 1: 28 Plots Area 2: 21 Plots

Measurements and Grading:

- DBH and Height were measured on all "in" trees for measure plots.
- Submerch volume and sawlog volume cruised.
- See attached species and grade tables for minimum requirements.
- All trees were graded using the segment system.

#### 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:

10" dbh for sawlog 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 form factor.

#### FORM POINT:

All trees were sighted at D.B.H.

#### **VOLUME COMPUTATION:**

All cruise data was compiled using SuperACE.

#### **FINAL CRUISE RESULTS:**

STAND	CV%	SE%	Acres
Area 1	67.3	12.9	584
Area 2	58.6	13.1	164
Combined	90.8	13.0	759

### **TIMBER DESCRIPTION**

#### **SAWLOG VOLUME:**

All material graded camprun. See grade table for minimum standards.

#### Area 1

Species	Average DBH	Gross Volume per acre (bf/acre)	Net Volume per acre (bf/acre)	Gross Volume per area (Mbf)	Net Volume per area (Mbf)
Ponderosa pine	17.7	3,102	3,096	1,768	1,765
Sugar pine	22.4	2,414	2,407	1,376	1,372
White fir	18.8	2,979	2,973	1,698	1,695
Lodgepole pine	19.8	82	82	47	47
Douglas-fir	25.5	81	81	46	46
Combined	19.1	8,658	8,638	4,935	4,924

#### Area 2

Species	Average DBH	Gross Volume per acre (bf/acre)	Net Volume per acre (bf/acre)	Gross Volume per area (Mbf)	Net Volume per area (Mbf)
Ponderosa pine	25.5	3,142	3,072	515	503
White fir	16.1	1,698	1,698	278	278
Sugar pine	24.3	1,538	1,538	252	252
Lodgepole pine	13.8	153	153	25	25
Combined	20.3	6,531	6,461	1,077	1,059

## **TOTAL SAWLOG VOLUME**

Species	Average DBH	Gross Volume (Mbf)	Net Volume (Mbf)
Ponderosa pine	18.2	2,283	2,269
White fir	18.2	1,977	1,973
Sugar pine	22.7	1,628	1,624
Lodgepole pine	17.0	73	72
Douglas-fir	25.5	46	46
Combined	19.3	6,095	6,075

**TOTAL NET SAWLOG VOLUME: 6,075 MBF** 

TC PSTATS						OJECT S OJECT	STATIS BDE			PAGE DATE	<b>1</b> 6/27/2019	
TWP RGE		SC	TRACT	7	ТҮРЕ			RES	PLOTS	TREES	CuFt	BdFt
033 007 033 007		06 07	222 243		VARI VARI			734.00	49	218	1	E
<u></u>	<u> </u>	- 07	213		Y	TREES	]	ESTIMATED TOTAL		ERCENT AMPLE		
		]	PLOTS	TREES		PER PLOT		TREES		TREES		
TOTAL			49	218		4.4						
CRUISE DBH CO REFORE			24	107		4.5		23,144		.5		
COUNT BLANKS 100 %	S		25	111		4.4						
					STAN	ND SUMMA	ARY					
			MPLE FREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
P PINE			49	14.5	18.6	51	6.3	27.3	3,111	3,091	665	665
WHITE I			23	9.5	18.2	57	4.0	17.2	2,693	2,688	549	549
SUG PIN LP PINE			30 4	6.3 1.1	22.7 17.0	59 49	3.7 0.4	17.6 1.7	2,218 106	2,213 106	470 25	470 25
DOUG-F			4	1.1 .1	25.5	49 62	0.4	.4	63	63	13	25 13
TOTAL			107	31.5	19.3	54	14.6	64.1	8,191	8,161	1,722	1,722
CL 6	58.1		COEFF VAR.%	S.E.%	Lo		AVG	<b>BF</b> HIGH	#	OF TREES RI	EQ. 10	INF. POP.
	58.1 1.0			S.E.% 12.7	Lo				#		-	
SD: P PINE WHITE I	1.0		VAR.% 88.9 67.3	12.7 14.3	L	332 285	AVG 381 332	HIGH 429 380	#		-	
SD: P PINE WHITE F SUG PIN	1.0 F		VAR.% 88.9 67.3 78.2	12.7 14.3 14.5	L	332 285 382	381 332 447	HIGH 429 380 512	#		-	
SD: P PINE WHITE I	1.0 F		VAR.% 88.9 67.3	12.7 14.3	L	332 285	AVG 381 332	HIGH 429 380	#		-	
SD: P PINE WHITE F SUG PIN LP PINE	1.0 F		VAR.% 88.9 67.3 78.2	12.7 14.3 14.5	L	332 285 382	381 332 447	HIGH 429 380 512	#		-	1
SD: P PINE WHITE I SUG PIN LP PINE DOUG-F TOTAL	1.0 F IE FIR		VAR.% 88.9 67.3 78.2 28.6 83.7 COEFF	12.7 14.3 14.5 16.3		332 285 382 73 349 SAMPLE	381 332 447 88 380	HIGH  429  380  512  102  411  CF		5 280 OF TREES RI	70 EQ.	3 INF. POP.
SD: P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL CL 6 SD:	1.0 FE FIE FIR		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%	12.7 14.3 14.5 16.3 8.1		332 285 382 73 349 SAMPLE	381 332 447 88 380 2 TREES -	HIGH  429  380  512  102  411  CF  HIGH		5 280	70	3
P PINE WHITE F SUG PINE LP PINE DOUG-F TOTAL  CL 6 SD: P PINE	1.0 FIE FIR 58.1 1.0		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7	12.7 14.3 14.5 16.3 8.1 S.E.%		332 285 382 73 349 SAMPLE DW 68	381 332 447 88 380 2 TREES - AVG	HIGH  429  380  512  102  411  CF  HIGH  84		5 280 OF TREES RI	70 EQ.	3 INF. POP.
SD: P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL CL 6 SD:	1.0 FIE SIR 58.1 1.0		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%	12.7 14.3 14.5 16.3 8.1		332 285 382 73 349 SAMPLE	381 332 447 88 380 2 TREES -	HIGH  429  380  512  102  411  CF  HIGH		5 280 OF TREES RI	70 EQ.	3 INF. POP.
P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE F	1.0 FIE EIR 58.1 1.0 FIE		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3	12.7 14.3 14.5 16.3 8.1 S.E.% 10.7 12.2		332 285 382 73 349 SAMPLE DW 68 59	381 332 447 88 380 2 TREES - AVG 76 67	HIGH  429  380  512  102  411  CF  HIGH  84  75		5 280 OF TREES RI	70 EQ.	3 INF. POP.
P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE F SUG PIN LP PINE DOUG-F	1.0 FIR 58.1 1.0 FIE FIE FIE		VAR.%  88.9 67.3 78.2 28.6  83.7  COEFF VAR.% 74.7 57.3 57.1 41.0	12.7 14.3 14.5 16.3 8.1 S.E.% 10.7 12.2 10.6 23.4		332 285 382 73 349 SAMPLE DW 68 59 82 18	381 332 447 88 380 2 TREES - AVG 76 67 92 23	HIGH  429  380  512  102  411  CF  HIGH  84  75  102  29		5 280 OF TREES RI 5	70 EQ. 10	3 INF. POP.
P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL  CL G SD: P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL	1.0 FIE FIR 58.1 1.0 FIE FIE FIE		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9	12.7 14.3 14.5 16.3 8.1 S.E.% 10.7 12.2 10.6		332 285 382 73 349 SAMPLE DW 68 59 82 18	381 332 447 88 380 2 TREES - AVG 76 67 92 23	HIGH  429  380  512  102  411  CF  HIGH  84  75  102	#	5 280 OF TREES RI 5	70 EQ. 10	3 INF. POP. 1
P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL  CL 6	1.0 FIE FIE FIE FIE FIE FIE FIE FIE FIE FIE		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6	Lo	332 285 382 73 349 SAMPLE DW 68 59 82 18 72	381 332 447 88 380 2 TREES - AVG 76 67 92 23 77	HIGH  429  380  512  102  411  CF  HIGH  84  75  102  29  82	#	280 OF TREES RI 5	70 EQ. 10	3 INF. POP. 1 INF. POP.
P PINE WHITE I SUG PIN LP PINE DOUG-F TOTAL  CL (SD: P PINE WHITE I SUG PIN LP PINE DOUG-F TOTAL  CL (SD: CL (	1.0 FIE FIR 58.1 1.0 FIE FIE FIE		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9	12.7 14.3 14.5 16.3 8.1 S.E.% 10.7 12.2 10.6 23.4	Lo	332 285 382 73 349 SAMPLE DW 68 59 82 18	381 332 447 88 380 2 TREES - AVG 76 67 92 23	HIGH  429  380  512  102  411  CF  HIGH  84  75  102  29	#	5 280 OF TREES RI 5	70 EQ. 10	3 INF. POP. 1 INF. POP.
P PINE WHITE F SUG PIN LP PINE CL 6 SD: P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL  CL 6 CL	1.0 FEEDIR 558.1 1.0 FEEDIR		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6	Lo	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A	381 332 447 88 380 2 TREES - AVG 76 67 92 23 77 ACRE AVG	HIGH  429  380  512  102  411  CF  HIGH  84  75  102  29  82  HIGH	#	280 OF TREES RI 5	70 EQ. 10	3 INF. POP. 1 INF. POP.
P PINE WHITE IS SUG PINE CL CSD: P PINE WHITE IS SUG PINE LP PINE DOUG-F TOTAL  CL CSD: P PINE WHITE IS SUG PINE DOUG-F TOTAL  CL CSD: P PINE SUG PINE SUG PINE SUG PINE SUG PINE WHITE IS SUG PINE SUG PINE SUG PINE	1.0 FEE SIR SEE SEE SEE SEE SEE SEE SEE SEE SEE SE		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%  151.1  171.6  158.9	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6  S.E.% 21.6 24.5 22.7	Lo	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A	381 332 447 88 380 CTREES - AVG 76 67 92 23 77 ACRE AVG 15 10 6	HIGH  429 380 512 102  411  CF HIGH  84 75 102 29 82  HIGH  18 12 8	#	280 OF TREES RI 5	70 EQ. 10	3 INF. POP. 1 INF. POP.
P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE F SUG PIN LP PINE SUG PIN LP PINE WHITE F SUG PINE WHITE F SUG PINE WHITE F SUG PINE LP PINE	1.0 FEE SIR SEE SEE SEE SEE SEE SEE SEE SEE SEE SE		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%  151.1  171.6  158.9  371.4	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6  S.E.% 21.6 24.5 22.7 53.0	Lo	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A	381 332 447 88 380 2 TREES - AVG 76 67 92 23 77 ACRE AVG 15 10 6 1	HIGH  429 380 512 102  411  CF HIGH  84 75 102 29 82  HIGH  18 12 8 2	#	280 OF TREES RI 5	70 EQ. 10	3 INF. POP. 1 INF. POP.
P PINE WHITE I SUG PIN CL C SD: P PINE WHITE I SUG PIN LP PINE DOUG-F TOTAL  CL C SD: P PINE WHITE I SUG PIN LP PINE DOUG-F TOTAL  CL C SD: P PINE WHITE I SUG PIN LP PINE WHITE I SUG PIN LP PINE DOUG-F OTOTAL	1.0 FEE FIE FIE FIE FIE FIE FIE FIE FIE FIE		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%  151.1  171.6  158.9  371.4  700.0	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6  S.E.% 21.6 24.5 22.7 53.0 99.9	Lo	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A	381 332 447 88 380 2 TREES - AVG 76 67 92 23 77 ACRE AVG 15 10 6 1	HIGH  429 380 512 102  411  CF HIGH  84 75 102 29 82  HIGH  18 12 8 2 0	#	5  280  OF TREES RI 5  184  OF PLOTS RI 5	70 EQ. 10 46 EQ. 10	3 INF. POP. 1 INF. POP. 1
P PINE WHITE F SUG PIN LP PINE SD: P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL  CL 7 SD: P PINE WHITE F SUG PIN LP PINE DOUG-F TOTAL	1.0 FIE IIR 558.1 1.0 FIE IIIR		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%  151.1  171.6  158.9  371.4  700.0  88.8	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6  S.E.% 21.6 24.5 22.7 53.0	Lo	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A	381 332 447 88 380 2 TREES - AVG 76 67 92 23 77 ACRE AVG 15 10 6 1 0 32	HIGH  429 380 512 102  411  CF HIGH  84 75 102 29 82  HIGH  18 12 8 2 0 36	#	280 OF TREES RI 5  184 OF PLOTS RI 5	70 EQ. 10 46 EQ. 10	3 INF. POP. 1 INF. POP.
P PINE WHITE I SUG PIN CL 6 SD: P PINE WHITE I SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE I SUG PIN LP PINE SUG PIN LP PINE F WHITE I SUG PIN LP PINE WHITE I SUG PIN LP PINE CL 6 SD: P PINE WHITE I SUG PIN LP PINE CL CL 6 CL C	1.0 FEE SIR SEE SEE SEE SEE SEE SEE SEE SEE SEE SE		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%  151.1  171.6  158.9  371.4  700.0  88.8  COEFF	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6  S.E.% 21.6 24.5 22.7 53.0 99.9 12.7	L	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A DW 11 7 5 1 0 28	381 332 447 88 380 2 TREES - AVG 76 67 92 23 77 ACRE AVG 15 10 6 1 0 32 AREA/ACI	HIGH  429 380 512 102  411  CF HIGH  84 75 102 29 82  HIGH  18 12 8 2 0 36  RE	#	280  OF TREES RI 5  184  OF PLOTS RI 5  315  OF PLOTS RI	70 EQ. 10  46 EQ. 10	3 INF. POP. 1 INF. POP. 1 3 INF. POP.
P PINE WHITE I SUG PIN LP PINE OUG-F TOTAL  CL (SD: P PINE WHITE I SUG PIN LP PINE DOUG-F TOTAL  CL (SD: P PINE WHITE I SUG PIN LP PINE DOUG-F TOTAL  CL (SD:	1.0 FIE IIR 558.1 1.0 FIE IIIR		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%  151.1  171.6  158.9  371.4  700.0  88.8	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6  S.E.% 21.6 24.5 22.7 53.0 99.9	L	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A	381 332 447 88 380 2 TREES - AVG 76 67 92 23 77 ACRE AVG 15 10 6 1 0 32	HIGH  429 380 512 102  411  CF HIGH  84 75 102 29 82  HIGH  18 12 8 2 0 36	#	280 OF TREES RI 5  184 OF PLOTS RI 5	70 EQ. 10 46 EQ. 10	3 INF. POP. 1 INF. POP.
P PINE WHITE I SUG PIN CL 6 SD: P PINE WHITE I SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE I SUG PIN LP PINE SUG PIN LP PINE F WHITE I SUG PIN LP PINE WHITE I SUG PIN LP PINE CL 6 SD: P PINE WHITE I SUG PIN LP PINE CL CL 6 CL C	1.0 FEE SIR SEE SEE SEE SEE SEE SEE SEE SEE SEE SE		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%  151.1  171.6  158.9  371.4  700.0  88.8  COEFF  VAR.%	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6  S.E.% 21.6 24.5 22.7 53.0 99.9 12.7  S.E.%	L	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A DW 11 7 5 1 0 28 BASAL A	381 332 447 88 380 CTREES - AVG 76 67 92 23 77 ACRE AVG 15 10 6 1 0 32 AREA/ACI AVG	HIGH  429  380  512  102  411  CF  HIGH  84  75  102  29  82  HIGH  18  12  8  2  0  36  RE  HIGH	#	280  OF TREES RI 5  184  OF PLOTS RI 5  315  OF PLOTS RI	70 EQ. 10  46 EQ. 10	3 INF. POP. 1 INF. POP. 1 3 INF. POP.
P PINE WHITE H SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE H SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE H SUG PIN LP PINE WHITE H SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE H SUG PIN LP PINE BOUG-F TOTAL  CL 6 SD: P PINE WHITE H SUG PINE WHITE H SUG PINE WHITE H SUG PINE	1.0 FEE FIR FIE		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%  151.1  171.6  158.9  371.4  700.0  88.8  COEFF  VAR.%  107.9  180.0  150.8	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6  S.E.% 21.6 24.5 22.7 53.0 99.9 12.7  S.E.% 15.4 25.7 21.5	L	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A DW 11 7 5 1 0 28 BASAL A	381 332 447 88 380 2 TREES - AVG 76 67 92 23 77 ACRE AVG 15 10 6 1 0 32 AREA/ACI AVG 27 17 18	HIGH  429 380 512 102  411  CF HIGH  84 75 102 29 82  HIGH  18 12 8 2 0 36  RE HIGH  31 22 21	#	280  OF TREES RI 5  184  OF PLOTS RI 5  315  OF PLOTS RI	70 EQ. 10  46 EQ. 10	3 INF. POP. 1 INF. POP. 3
P PINE WHITE H SUG PIN LP PINE DOUG-F TOTAL  CL (SD: P PINE WHITE H SUG PIN LP PINE DOUG-F TOTAL  CL (SD: P PINE DOUG-F TOTAL  CL (SD: P PINE WHITE H SUG PIN LP PINE DOUG-F TOTAL  CL (SD: P PINE WHITE H SUG PIN LP PINE SUG PIN LP PINE WHITE H SUG PINE LP PINE WHITE H SUG PINE WHITE H SUG PINE LP PINE	1.0 FEE SERIE SERI		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%  151.1  171.6  158.9  371.4  700.0  88.8  COEFF  VAR.%  107.9  180.0  150.8  383.7	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6  S.E.% 21.6 24.5 22.7 53.0 99.9 12.7  S.E.% 15.4 25.7 21.5 54.8	L	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A DW 11 7 5 1 0 28 BASAL A DW 23 13 14 1	381 332 447 88 380 2 TREES - AVG 76 67 92 23 77 ACRE AVG 15 10 6 1 0 32 AREA/ACI AVG 27 17 18 2	HIGH  429 380 512 102  411  CF HIGH  84 75 102 29 82  HIGH  18 12 8 2 0 36  RE HIGH  31 22 21 3	#	280  OF TREES RI 5  184  OF PLOTS RI 5  315  OF PLOTS RI	70 EQ. 10  46 EQ. 10	3 INF. POP. 1 INF. POP. 3
P PINE WHITE H SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE H SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE H SUG PIN LP PINE WHITE H SUG PIN LP PINE DOUG-F TOTAL  CL 6 SD: P PINE WHITE H SUG PIN LP PINE BOUG-F TOTAL  CL 6 SD: P PINE WHITE H SUG PINE WHITE H SUG PINE WHITE H SUG PINE	1.0  FIE  1.0  1.0  1.0  1.0  1.0  1.0  1.0  1.		VAR.%  88.9  67.3  78.2  28.6  83.7  COEFF  VAR.%  74.7  57.3  57.1  41.0  67.9  COEFF  VAR.%  151.1  171.6  158.9  371.4  700.0  88.8  COEFF  VAR.%  107.9  180.0  150.8	12.7 14.3 14.5 16.3 8.1  S.E.% 10.7 12.2 10.6 23.4 6.6  S.E.% 21.6 24.5 22.7 53.0 99.9 12.7  S.E.% 15.4 25.7 21.5	L	332 285 382 73 349 SAMPLE DW 68 59 82 18 72 TREES/A DW 11 7 5 1 0 28 BASAL A DW 23 13	381 332 447 88 380 2 TREES - AVG 76 67 92 23 77 ACRE AVG 15 10 6 1 0 32 AREA/ACI AVG 27 17 18	HIGH  429 380 512 102  411  CF HIGH  84 75 102 29 82  HIGH  18 12 8 2 0 36  RE HIGH  31 22 21	#	280  OF TREES RI 5  184  OF PLOTS RI 5  315  OF PLOTS RI	70 EQ. 10  46 EQ. 10	3 INF. POP. 1 INF. POP. 1 3 INF. POP.

 PSTATS

## PROJECT STATISTICS PROJECT RDERLNE

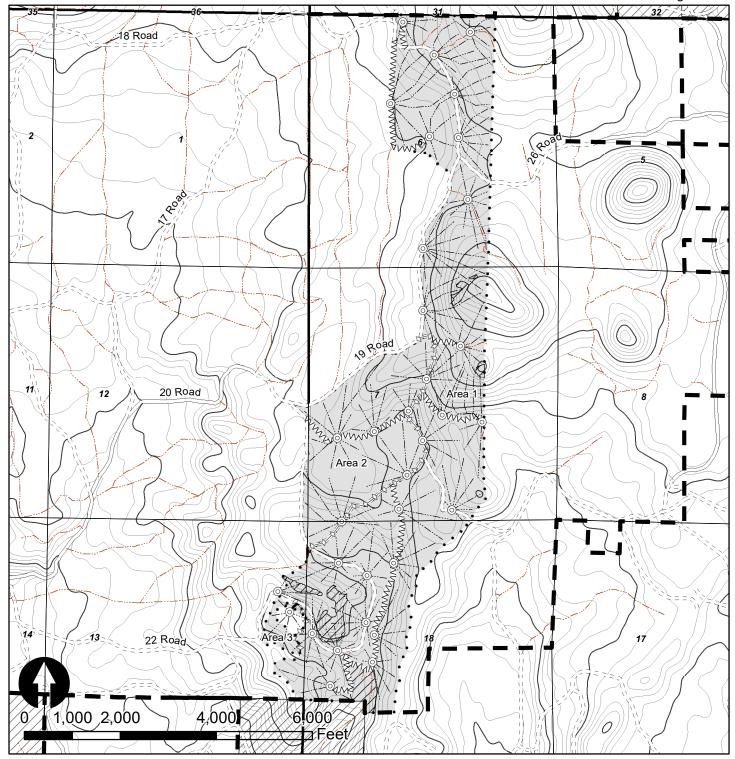
PAGE 2

					PROJECT	BD	ERLNE			DATE	6/27/2019
TWP	RGE	SC	TRACT	TYPE	2	A	ACRES		TREES	CuFt	BdFt
033 033	007 007	06 07	222 243	VARI VARI			734.00	49	218	3 1	Е
CL	68.1		COEFF		NET BF	/ACRE			# OF PLOTS 1	REQ.	INF. POP.
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15
P PIN	E		95.8	13.7	2,668	3,091	3,514				
WHIT	ΓEF		191.2	27.3	1,954	2,688	3,421				
SUG	PINE		155.0	22.1	1,723	2,213	2,702				
LP PI	NE		373.7	53.3	50	106	163				
DOUG	G-FIR		700.0	99.9	0	63	126				
TOTA	AL		90.2	12.9	7,110	8,161	9,211		325	81	36
CL	68.1		COEFF		NET CU	JFT FT/A	CRE		# OF PLOTS I	REQ.	INF. POP.
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15
P PIN	E		96.7	13.8	573	665	757				
WHIT	ΓEF		186.9	26.7	403	549	696				
SUG I	PINE		152.9	21.8	367	470	572				
LP PI	NE		370.1	52.8	12	25	38				
DOUG	G-FIR		700.0	99.9	0	13	26				
TOTA	AL		86.5	12.3	1,509	1,722	1,934		299	75	33

TC	PSPCSTGR		Sp	oecies, S	ort Gra	de - Board Fo	oot V	olum	es (Pı	oject	)							
11	033 R007 S06 Ty 033 R007 S07 Ty			70.00 64.00		Project: Acres	BE	734.							Page 1 Date 6/27/2019 Time 12:33:47PM		19	
Spp	S So Gr T rt ad	% Net BdFt	Bd. Ft.	per Acre Gross	Net	Total Net MBF	_	cent of I Log Sc 6-11	ale Dia.		Volume	Log l	Length	Ln Ft	Dia	nge Log Bd Ft	CF/	Logs Per /Acre
WF		100	.2	2,693	2,688	1,973	4-3	41	12-16	16	12-20	21-30	31-35 36-99 84	<b>†</b>	11	169	1.19	15.9
<del></del>	Totals	33	.2	2,693	2,688	1,973		41	43	16	8	8	84		11		1.19	15.9
PP	CR CR	100	.6	3,111	3,091	2,269		41	36	24	7	11	82	28	10	153	1.16	20.3
PP	Totals	38	.6	3,111	3,091	2,269		41	36	24	7	11	82	28	10	153	1.16	20.3
DF	CR CR	100		63	63	46		24		76			100	34	13	295	1.78	.2
DF	Totals	1		63	63	46		24		76			100	34	13	295	1.78	.2
SP	CR CR	100	.3	2,218	2,213	1,624		27	55	18	5	8	86	29	12	207	1.53	10.7
SP	Totals	27	.3	2,218	2,213	1,624		27	55	18	5	8	86	29	12	207	1.53	10.7
LP LP	CR CR CR GP	91 9		98 9 106	98 9 106	72 6 78	12				12 100	65	23	26 20 25	10 7 9	100 40 89	0.81 0.87	1.0 .2
Tot			0.4	8,191	8,161	5,990	0	38	42	20	7	10	83	29	11	169	1.25	48.3

TC PLOGSTVB **Log Stock Table - MBF** Page 1 T033 R007 S06 TyVARI 570.00 **Project: BDERLNE** Date 6/27/2019 T033 R007 S07 TyVARI 164.00 Acres 734.00 Time 12:33:09PM

S	So C	<del>}</del> r	Log	Gross	Def Net	%	Net Volume by Scaling Diameter in Inches												
Spp T	rt d	e	Len	MBF	% MBF	Spc	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	155	1:	7.8			31	20	50		53						
WF	CR	CR	26	164	10	8.3				116			48						
WF	CR	CR	34	1,658	1,65	83.8			52	201	346	269	374	412					
WF	7	Γotals		1,977	1,9	32.9			83	337	396	269	475	412					
PP	CR	CR	12	18		.8						18							
PP	CR	CR	16	2		2 .1			2										
PP	CR	CR	17	133	1:	5.9			42	23	42		25						
PP	CR	CR	18	17	27.8	.6								13					
PP	CR	CR	24	27	:	1.2							27						
PP	CR	CR	26	191	19	8.4			42	90	29	31							
PP	CR	CR	27	14		.6				14									
PP	CR	CR	28	14	18.2	.5						12							
PP	CR	CR	32	689	65	30.3					13	83	22	377	162	31			
PP	CR	CR	34	1,178	1,1	51.7			72	174	376	235	225	91					
PP	7	Γotals		2,283	2,20	59 37.9			158	301	460	378	298	480	162	31			
DF	CR	CR	34	46		100.0				11				35					
DF	7	Γotals		46		.8				11				35					
SP	CR	CR	12	8		.5								8					
SP	CR	CR	16	9		9 .5								9					
SP	CR	CR	17	66	(	66 4.1			19	14	19	14							
SP	CR	CR	26	106	10	6.5				72	34								
SP	CR	CR	28	32		2.0								32					
SP	CR	CR	32	455	4:	28.0						52	78	154	76	95			
SP	CR	CR	34	952	9.	58.4				66	220	167	270	165	60				
SP	1	Γotals		1,628	1,62	27.1			19	153	273	232	348	368	136	95			
LP	CR	CR	17	9		9 11.3					9								
LP	CR	CR	26	47	4	59.7					47								
LP	CR	CR	34	16	·	6 20.8				16									
LP	CR	GP	20	6		6 8.2		1			6								
LP	1	Γotals		78		78 1.3		1		16	61								
Total	All S	pecies	3	6,012	5,99	0 100.0		1	260	818	1190	880	1122	1295	297	126			



#### **LOGGING PLAN**

Of Timber Sale Contract KL-341-2020-W00769-01 Borderline Portions of Sections 12 and 13 T33S, R7.5E, Portions of Sections 6, 7 and 18, T33S, R7E, Willamette Meridain, Klamath County, Oregon

