



"SUSTAINABLE FORESTRY"

Timber Sale Appraisal  
Toddzilla

Sale KL-341-2016-64-

District: Klamath/Lake

Date: September 02, 2015

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**Cost Summary**

	<b>Conifer</b>	<b>Hardwood</b>	<b>Total</b>
<b>Gross Timber Sale Value</b>	\$503,456.59	\$0.00	\$503,456.59
		<b>Project Work:</b>	(\$57,181.57)
		<b>Advertised Value:</b>	\$446,275.02



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Sale KL-341-2016-64-

District: Klamath/Lake

Date: September 02, 2015

## Timber Description

**Location:** Portions of Sections 22, 25, 26, 27, and 35, T32S, R7½ E, W.M., Klamath County, Oregon.

**Stand Stocking:** 40%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
White Fir	17	0	95
Sugar Pine	16	0	95
Ponderosa Pine	14	0	95
Lodgepole Pine	11	0	95

Volume by Grade	CR 6" - 8"	CR 8" - 14"	CR 14" - 22"	CR 22"+	Camprun	Total
White Fir	444	1,056	956	252	0	2,708
Sugar Pine	12	6	17	10	0	45
Ponderosa Pine	62	33	31	7	0	133
Lodgepole Pine	0	0	0	0	186	186
<b>Total</b>	518	1,095	1,004	269	186	3,072

**Comments:** Pond Values Used: 2nd Quarter Calendar Year 2015.

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 \$780 daily truck cost.

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

TOTAL Other Costs (with Profit & Risk to be added) = \$17,337.61

Other Costs (No Profit & Risk added):

None.



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## Sale KL-341-2016-64-

**District: Klamath/Lake**

**Date: September 02, 2015**

### Logging Conditions

<b>Combination#: 1</b>	White Fir	81.00%
	Sugar Pine	84.89%
	Ponderosa Pine	96.00%
	Lodgepole Pine	100.00%

**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:** 8 **bd. ft / load:** 4200  
**cost / mbf:** \$113.00  
**machines:** Log Loader (B)  
Stroke Delimber (B)  
Feller Buncher w/ Delimber  
Tire Skidder

<b>Combination#: 2</b>	White Fir	19.00%
	Sugar Pine	15.11%
	Ponderosa Pine	4.00%

**Logging System:** Track Skidder **Process:** Manual Falling/Delimiting  
**yarding distance:** Medium (800 ft) **downhill yarding:** Yes  
**tree size:** Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF  
**loads / day:** 8 **bd. ft / load:** 4600  
**cost / mbf:** \$119.86  
**machines:** Log Loader (B)  
Track Skidder



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## Logging Costs

<b>Operating Seasons:</b> 2.00	<b>Profit Risk:</b> 10%
<b>Project Costs:</b> \$57,181.57	<b>Other Costs (P/R):</b> \$17,337.61
<b>Slash Disposal:</b> \$0.00	<b>Other Costs:</b> \$0.00

**Miles of Road**

**Road Maintenance:** \$0.99

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	4.5
Sugar Pine	\$0.00	3.0	4.4
Ponderosa Pine	\$0.00	3.0	4.4
Lodgepole Pine	\$0.00	3.0	4.0

**Local Pond Values**

Date	Specie	Grade	Value
09/02/2015	Lodgepole Pine	Camprun	\$325.00
09/02/2015	White Fir	CR 6" - 8"	\$355.00
09/02/2015	Sugar Pine	CR 6" - 8"	\$280.00
09/02/2015	Ponderosa Pine	CR 6" - 8"	\$290.00
09/02/2015	White Fir	CR 8" - 14"	\$380.00
09/02/2015	Sugar Pine	CR 8" - 14"	\$305.00
09/02/2015	Ponderosa Pine	CR 8" - 14"	\$325.00
09/02/2015	White Fir	CR 14" - 22"	\$385.00
09/02/2015	Sugar Pine	CR 14" - 22"	\$345.00
09/02/2015	Ponderosa Pine	CR 14" - 22"	\$370.00

09/02/2015	White Fir	CR 22"+	\$390.00
09/02/2015	Sugar Pine	CR 22"+	\$380.00
09/02/2015	Ponderosa Pine	CR 22"+	\$420.00



Timber Sale Appraisal  
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**Logging Costs Breakdown**

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
<b>White Fir</b>									
\$114.30	\$1.04	\$2.85	\$60.67	\$5.64	\$18.45	\$0.00	\$5.00	\$0.00	\$207.95
<b>Sugar Pine</b>									
\$114.04	\$1.04	\$2.85	\$62.04	\$5.64	\$18.56	\$0.00	\$5.00	\$0.00	\$209.17
<b>Ponderosa Pine</b>									
\$113.27	\$1.04	\$2.85	\$62.04	\$5.64	\$18.48	\$0.00	\$5.00	\$0.00	\$208.32
<b>Lodgepole Pine</b>									
\$113.00	\$1.04	\$2.85	\$68.25	\$5.64	\$19.08	\$0.00	\$5.00	\$0.00	\$214.86

Specie	Amortization	Pond Value	Stumpage	Amortized
White Fir	\$0.00	\$378.60	\$170.65	\$0.00
Sugar Pine	\$0.00	\$330.11	\$120.94	\$0.00
Ponderosa Pine	\$0.00	\$324.17	\$115.85	\$0.00
Lodgepole Pine	\$0.00	\$325.00	\$110.14	\$0.00



Timber Sale Appraisal  
Toddzilla

Sale KL-341-2016-64-

District: Klamath/Lake

Date: September 02, 2015

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**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
Lodgepole Pine	0	\$0.00	\$0.00

**Unamortized**

Specie	MBF	Value	Total
White Fir	2,708	\$170.65	\$462,120.20
Sugar Pine	45	\$120.94	\$5,442.30
Ponderosa Pine	133	\$115.85	\$15,408.05
Lodgepole Pine	186	\$110.14	\$20,486.04

**Gross Timber Sale Value**

Recovery: \$503,456.59

Prepared By: Chris Weekly

Phone: 541-883-5681

**Toddzilla**  
**KL-341-2016-064**

**Other Costs**

*Road Maintenance*

Move-in cost (grader):	\$400.00
Number of Bladings:	1
Number of Miles to be Bladed:	12.5
Miles / Hour for equipment:	0.5
Cost / Hour (grader with operator):	\$105.50
Total Grading Hours:	25
Grading Cost:	<u>\$2,637.50</u>
<b>Total Cost:</b>	<b><u>\$3,037.50</u></b>
Cost / Mbf:	\$0.99

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

WF	2696 Mbf	88.0%	Average Load	4.5 Mbf	No. of Loads	599
LP	185 Mbf	6.0%	Average Load	4.0 Mbf	No. of Loads	46
PP	133 Mbf	4.3%	Average Load	4.4 Mbf	No. of Loads	30
SP	45 Mbf	1.5%	Average Load	4.4 Mbf	No. of Loads	10
SF	4 Mbf	0.1%	Average Load	4.5 Mbf	No. of Loads	<u>1</u>
<b>Total:</b>	<b>3063 Mbf</b>				<b>Total Loads</b>	<b>687</b>

Assume: 4 Trucks/Day  
3 Trips/Day  
**12 Loads per Day**

57 Hauling Days  
3 Hours/Day  
\$88.00 Cost/Hour  
172 Total Hours  
\$170.00 Move in for Water Truck  
\$15,277.50 Dust Abatement Cost  
**\$15,277.50 Total Cost**  
\$4.99 Cost/Mbf

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

57 Hauling Days  
1.5 Hours/Day  
\$24.00 Cost/Hour  
**\$2,060.11 Total Cost**  
\$0.67 Cost/Mbf

*Other Costs Summary (Profit and Risk to be added in Appraisal)*

\$15,277.50 Total cost for Dust Abatement	\$4.99 per Mbf
<u>\$2,060.11 Total Cost for Log Branding</u>	<u>\$0.67 per Mbf</u>
<b><u>\$17,337.61 Total Other Costs</u></b>	<b><u>\$5.66 per MBF</u></b>



# Toddzilla

## KL-341-2016-064

### Project Costs

*Project No. 1 Road Construction and Improvement*

Move in Cost Cat: \$400.00

Cost per Hour Cat: \$132.50

#### CONSTRUCTION

Improvement	Points	Distance (ft)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	B to C	781	750	1.04	\$132.50	\$137.98
Open/Clear/Shape	U to V	1119	750	1.49	\$132.50	\$197.69
	<b>Totals</b>	<b>2300</b>		<b>2.53</b>		<b>\$335.67</b>

#### IMPROVEMENT

Improvement	Points	Distance (ft)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	N to O	2676	1000	2.68	\$132.50	\$354.57
Open/Clear/Shape	P to R	1394	1000	1.39	\$132.50	\$184.71
Open/Clear/Shape	K to L	2094	1000	2.09	\$132.50	\$277.46
Open/Clear/Shape	M to N	1422	1000	1.42	\$132.50	\$188.42
Open/Clear/Shape	B to D	3591	1000	3.59	\$132.50	\$475.81
Open/Clear/Shape	G to H	3541	1000	3.54	\$132.50	\$469.18
Open/Clear/Shape	F to S	1690	1000	1.69	\$132.50	\$223.93
Open/Clear/Shape	D to E	659	1000	0.66	\$132.50	\$87.32
Open/Clear/Shape	D to S	1534	1000	1.53	\$132.50	\$203.26
Open/Clear/Shape	S to T	341	1000	0.34	\$132.50	\$45.18
Open/Clear/Shape	A to B	2480	1000	2.48	\$132.50	\$328.60
Open/Clear/Shape	H to I	2801	1000	2.80	\$132.50	\$371.13
Open/Clear/Shape	H to M	1547	1000	1.55	\$132.50	\$204.98
Open/Clear/Shape	K to M	3834	1000	3.83	\$132.50	\$508.01
Open/Clear/Shape	J to K	2232	1000	2.23	\$132.50	\$295.74
Open/Clear/Shape	N to P	2645	1000	2.65	\$132.50	\$350.46
Open/Clear/Shape	P to Q	3839	1000	3.84	\$132.50	\$508.67
	<b>Totals</b>	<b>38320</b>		<b>38.32</b>		<b>\$5,077.40</b>

#### Project No. 1 Summary

Move in cost	\$400.00
Open/Clear/Shape	\$5,413.07
<b>Project No. 1 Total</b>	<b>\$5,813.07</b>
per Mbf	\$1.90

Toddzilla  
KL-341-2016-064  
*Project Costs*

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*Project No. 2 Fell, Skid, and Pile Submerchantable Material*

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Total Submerchantable Volume: 212 Mbf

Fell and Skid/Mbf:	\$50.00
Sort and Pile/Mbf:	\$10.00
<b>Total</b>	<b><u>\$12,720.00</u></b>
per Mbf	\$4.15

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*Landing Cleanup*

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Number of Landings: 41

Shovel Time: 1 Hour per Landing	\$125.00 per hour	Total	\$5,125.00
Cat Time: 1 Hour per Landing	\$132.50 per hour	Total	\$5,432.50

<b>Total</b>	<b><u>\$10,557.50</u></b>
per Mbf	\$3.45

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*Project No. 2 Summary*

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Fell, Skid, and Pile Submerch. Material	\$12,720.00
Landing Cleanup	\$10,557.50
<b>Total</b>	<b><u>\$23,277.50</u></b>
per Mbf	\$7.60

# Toddzilla

## KL-341-2016-064

### Project Costs

#### Project #3 Sporax Treatment

#### State to Provide Chemical Supplies

Acres to be treated:	430
Cutting Days (assume 5 acres per day):	86
Hours per Day:	5
Cost per Hour:	<u>\$24.00</u>
<b>Total Cost:</b>	<b><u>\$10,320.00</u></b>
Cost per Mbf:	<u>\$3.37</u>

#### Project #4 Spot Rocking

#### Spot Rocking - Delivered

<b>3/4 -</b>	<b>Rock Size</b>	
192	Cubic Yards	
1.5	Tons per Cubic Yard	
288	Tons	
<u>\$13.50</u>	cost per ton (delivered)	
<b><u>\$3,888.00</u></b>	<b>Total</b>	
\$1.27	per Mbf	

#### Rock Spreading (Grader)

	8	Total Grader Hours
	<u>\$105.50</u>	Cost per Hour
	\$844.00	Total
	8	Total Water Truck Hours
	<u>\$88.00</u>	Cost per Hour
	\$704.00	Total
	<b><u>\$1,548.00</u></b>	<b>Total Rock Spreading</b>
	\$0.21	per Mbf

#### Project #4 Summary

Total cost Rock	\$3,888.00
Total cost Spreading	<u>\$1,548.00</u>
<b>Total</b>	<b><u>\$5,436.00</u></b>
per Mbf	\$1.77

# Toddzilla

## KL-341-2016-064

### Project Costs

#### *Project #5 Slash and Brush Piling*

Equipment Move In:	\$400.00
Acres to be Piled	25
Hours per Acre	2
Cost per Hour	\$85.00
Cost of Piling	<u>\$4,250.00</u>
<b>Total Cost</b>	<b><u>\$4,650.00</u></b>
per Mbf	\$1.52

#### *Project #6 Habitat Pile Construction*

Number of FCA Landings	29
Hours per Landing	2
Cost per Hour	<u>\$132.50</u>
<b>Total Cost</b>	<b><u>\$7,685.00</u></b>
per Mbf	\$2.51

#### *Cost Summary All Projects*

Project No. 1 - Road Construction and Improvement	\$5,813.07
Project No. 2 - Fell, Skid, and Pile Submerchantable Material	\$23,277.50
Project No. 3 - Sporax Treatment	\$10,320.00
Project No. 4 - Spot Rocking	\$5,436.00
Project No. 5 - Slash and Brush Piling	\$4,650.00
Project No. 6 - Habitat Pile Construction	<u>\$7,685.00</u>
<b>Total Cost</b>	<b><u>\$57,181.57</u></b>
per Mbf	\$18.67

# Toddzilla

341-16-64  
Cruise Report



**SALE NAME:** Toddzilla

**LEGAL DESCRIPTION:**

T32S, R7½E, Portions of Sections 22, 25, 26, 27 and 35, W.M., Klamath County, Oregon.

**ACREAGE:**

The timber sale is 610 acres with 41 acres of exclusions and was cruised as three separate areas (cruise areas were drawn on stand types and **DO NOT** correspond to the Timber Sale Areas):

Area	Gross Acres	Exclusion	Net Acres
Area 1	244	27	217
Area 2	227	14	213
Area 3	139	0	139
Total	610	41	569

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

**TREATMENT:**

The sale is a single tree selection cut. In Timber Sale areas 1 and 2 leave trees are marked with an orange paint band at breast height. In Timber Sale area 3 cut trees are marked with a blue paint band at breast height.

**CRUISE METHOD:**

Merchantable volume on the timber sale was sampled using a variable plot cruise using a ratio of one measure for every count plots. Submerchantable material (5.0" to 9.0" dbh) was measured with a 1/50 acre fixed plot.

### **BASAL AREA FACTOR:**

Area	BAF	Type Acreage
Area 1	5 BAF	217 acres
Area 2	5 BAF	213 acres
Area 3	13.61 BAF	139 acres

### **FIXED PLOT:**

Area	Radius	Type Acreage
All Areas	16.6	569 acres

### **PLOT DESIGNATION:**

Plot centers were established at every plot with blue and white candy stripe flagging. Candy stripe blue and white flagging was attached to the nearest available tree branch listing the plot number and date of cruise.

### **SAMPLE SIZE:**

Area 1: 27 Plots  
Area 2: 25 Plots  
Area 3: 25 Plots

#### Measurements and Grading:

- DBH and Height were measured on all "in" trees for 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.

### **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 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 form factor.

**FORM POINT:**

All trees were sighted at D.B.H.

**VOLUME COMPUTATION:**

All cruise data was compiled using SuperACE.

**FINAL CRUISE RESULTS:**

<b>AREA</b>	<b>CV%</b>	<b>SE%</b>	<b>Acres</b>
Area 1	62.4	12.5	217
Area 2	61.4	12.5	213
Area 3	72.0	14.7	139
Combined	108.8	12.5	569

## 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)
White fir	14.4	1,803	1,767	391	383
Lodgepole pine	13.6	389	386	84	84
Ponderosa pine	16.8	154	145	33	31
Shasta fir	13.5	17	17	4	4
Combined	14.3	2,364	2,315	513	502

#### 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)
White fir	15.3	2,494	2,443	531	520
Lodgepole pine	11.2	477	477	102	102
Ponderosa pine	14.6	170	167	36	36
Sugar pine	11.4	34	34	7	7
Combined	14.3	3,175	3,121	676	656



### Area 3

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)
White fir	18.8	13,130	12,933	1,825	1,759
Ponderosa pine	12.5	472	472	66	66
Sugar pine	19.2	271	271	38	38
Combined	14.3	13,873	13,676	1,929	1,863

### TOTAL SAWLOG VOLUME

Species	Average DBH	Gross Volume (Mbf)	Net Volume (Mbf)
White fir	16.7	2,751	2,704
Lodgepole pine	11.4	187	186
Ponderosa pine	13.5	136	133
Sugar pine	15.9	45	45
Shasta fir	13.5	4	4
Combined	15.8	3,123	3,072

**TOTAL NET SAWLOG VOLUME: 3,072 MBF**

**GREEN PULP VOLUME:****Submerchantable Material**

This volume was obtained from the fixed plot cruise (5.0" – 10.0" DBH) combined with all material graded as green pulp during the variable plot cruise. All material was graded green pulp, see grade table for minimum standards.

<b>Species</b>	<b>Average DBH</b>	<b>Trees per Acre</b>	<b>Gross Volume (bf)</b>
White fir	7.6	12.5	231
Ponderosa pine	8.5	7.2	111
Lodgepole pine	6.4	2.2	22
Shasta fir	7.0	.7	7
Combined	7.7	22.7	372

**TOTAL GREEN PULP VOLUME: 212 MBF**

**Log Stock Table - MBF**

T032 R007 S26 TyVARI	219.00
T032 R007 S26 TyVARI	213.00
T032 R007 S27 TyVAR3	139.00

**Project: TZILA1**  
**Acres 571.00**

**Page 1**  
**Date 6/23/2015**  
**Time 14:18:41**

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	6-8	9-10	11-12	13-14	15-16	17-19	20-21	22-29	30-39	40+	
LP		CR	CR	17	57		57	30.4			41	3	4	8							
LP		CR	CR	26	37		37	19.9			16	21									
LP		CR	CR	34	93		92	49.7			32	43		18							
LP		Totals			187		186	6.1			90	66	4	26							
PP		CR	CR	17	26		26	19.8			20	1				6					
PP		CR	CR	26	5		5	4.1			3		2								
PP		CR	CR	27	9		9	6.6			9										
PP		CR	CR	28	4		4	2.7					4								
PP		CR	CR	32	31	6.7	29	21.9							15	7	7				
PP		CR	CR	34	60		60	44.9			30	26			4						
PP		Totals			136	2.0	133	4.3			61	27	6		4	20	7	7			
WF		CR	CR	17	211	2.7	205	7.6			63	39	20	5	13	25	30	9			
WF		CR	CR	26	180	2.2	176	6.5		1	80	22	42	4		12		14			
WF		CR	CR	27	37		37	1.4			23	10	4								
WF		CR	CR	34	2,323	1.6	2,287	84.5			274	347	276	287	232	364	279	229			
WF		Totals			2,751	1.7	2,705	88.0		1	440	418	341	297	246	402	308	252			
SP		CR	CR	16	3		3	6.3			1	1	2								
SP		CR	CR	17	3		3	6.8				3									
SP		CR	CR	20	5		5	10.8						5							
SP		CR	CR	24	7		7	16.1			7										
SP		CR	CR	32	27		27	60.0			4				13		10				
SP		Totals			45		45	1.5			12	4	2		5	13		10			
RF		CR	CR	34	4		4	100.0			4										
RF		Totals			4		4	.1			4										
Total		All Species			3,122	1.6	3,073	100.0		1	607	515	353	323	255	435	316	269			

TC PSTATS		PROJECT STATISTICS							PAGE	1	
		PROJECT TZILA1							DATE	6/23/2015	
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt	
032	007	26	267	VARI		571.00	76	420	1	E	
032	007	26	267B	VARI							
032	007	27	197	VAR3							
		PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL		76	420	5.5							
CRUISE		44	221	5.0	17,695	1.2					
DBH COUNT REFOREST COUNT		30	199	6.6							
BLANKS		2									
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	
WHITE F		175	21.8	16.7	51	8.1	33.2	4,818	4,738	954	
LP PINE		18	5.6	11.4	32	1.2	4.0	327	326	76	
PPINE		21	2.9	13.5	36	0.8	2.9	237	233	55	
SUG PINE		6	.6	15.9	35	0.2	.9	79	79	17	
SH FIR		1	.1	13.5	48	0.0	.1	7	7	2	
<b>TOTAL</b>		<b>221</b>	<b>31.0</b>	<b>15.6</b>	<b>46</b>	<b>10.4</b>	<b>41.0</b>	<b>5,468</b>	<b>5,382</b>	<b>1,104</b>	
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		
WHITE F		105.4	8.0	371	403	435					
LP PINE		88.6	21.5	71	90	109					
PPINE		164.1	36.7	133	210	286					
SUG PINE		148.7	66.3	142	422	701					
SH FIR											
<b>TOTAL</b>		<b>116.1</b>	<b>7.8</b>	<b>330</b>	<b>358</b>	<b>386</b>	<b>539</b>	<b>135</b>	<b>60</b>		
CL	68.1	COEFF		SAMPLE TREES - CF			# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
WHITE F		91.5	6.9	70	75	81					
LP PINE		74.5	18.1	17	20	24					
PPINE		142.0	31.8	29	42	55					
SUG PINE		131.3	58.5	33	80	126					
SH FIR											
<b>TOTAL</b>		<b>101.0</b>	<b>6.8</b>	<b>63</b>	<b>68</b>	<b>72</b>	<b>408</b>	<b>102</b>	<b>45</b>		
CL	68.1	COEFF		TREES/ACRE			# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
WHITE F		91.4	10.5	19	22	24					
LP PINE		357.1	41.0	3	6	8					
PPINE		360.0	41.3	2	3	4					
SUG PINE		331.7	38.0	0	1	1					
SH FIR		871.8	100.0	0	0	0					
<b>TOTAL</b>		<b>83.7</b>	<b>9.6</b>	<b>28</b>	<b>31</b>	<b>34</b>	<b>280</b>	<b>70</b>	<b>31</b>		
CL	68.1	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
WHITE F		102.7	11.8	29	33	37					
LP PINE		291.5	33.4	3	4	5					
PPINE		301.8	34.6	2	3	4					
SUG PINE		303.8	34.8	1	1	1					
SH FIR		871.8	100.0	0	0	0					
<b>TOTAL</b>		<b>82.2</b>	<b>9.4</b>	<b>37</b>	<b>41</b>	<b>45</b>	<b>270</b>	<b>68</b>	<b>30</b>		

**PROJECT STATISTICS**  
**PROJECT TZILA1**

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
032	007	26	267	VARI	571.00	76	420	1	E
032	007	26	267B	VARI					
032	007	27	197	VAR3					

CL	68.1	COEFF	NET BF/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHITE F		123.4	14.2	4,067	4,738	5,408			
LP PINE		259.6	29.8	229	326	423			
PPINE		274.2	31.5	160	233	306			
SUG PINE		378.6	43.4	44	79	113			
SH FIR		871.8	100.0	0	7	13			
<b>TOTAL</b>		<b>106.2</b>	<b>12.2</b>	<b>4,726</b>	<b>5,382</b>	<b>6,037</b>	<b>451</b>	<b>113</b>	<b>50</b>

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
WHITE F		116.4	13.3	827	954	1,082			
LP PINE		267.4	30.7	53	76	100			
PPINE		272.1	31.2	38	55	72			
SUG PINE		339.9	39.0	10	17	24			
SH FIR		871.8	100.0	0	2	3			
<b>TOTAL</b>		<b>98.1</b>	<b>11.3</b>	<b>980</b>	<b>1,104</b>	<b>1,229</b>	<b>385</b>	<b>96</b>	<b>43</b>

TblSortGrade

## Sort/Grade Table

**Table Name:** SUNPASS

**Date:** 06/23/2015

Sort	Grd	Abr	Desc	Fbr	Min Dia	Max Dia	Max B Butt	Min I Len	Max Len	Defect	Min Vol	Vol Type	Min Rings	Knot S 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	

## Species Table Report

TblSpecies

Date: 06/23/2015

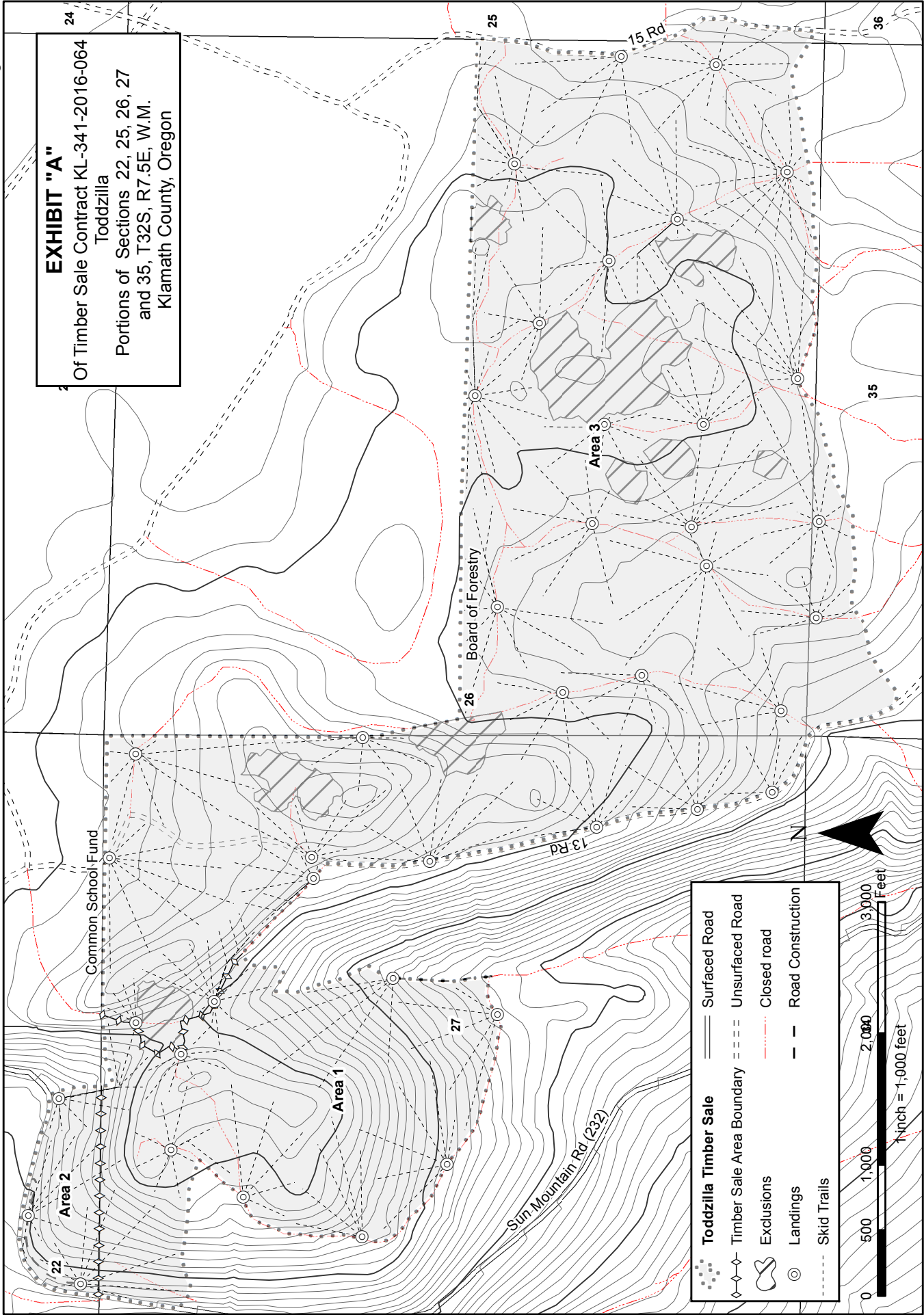
Page: 1

Table Name: SUNPASS

Code	Abrv	Description	Bark Ratio	ASub Const	Form Factor	Wood Type	Component	Yield Table	Min Log Dia	Min Log Len	Max Log Len	Log Trim	Max Tree Dia	Max Tree Hgt.	BdFt Rule	CuFt Rule	Weight
1	PP	PPINE	.87	PP	.85	P	C	PP--EQUA--100	3	9	20	1.0	99	200	E	1	4800
2	WF	WHITE F	.94	NF	.87	W	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	5000
3	LP	LP PINE	.96	DF	.9	P	C	LP--EQUA--100	3	9	20	1.0	99	200	E	1	4800
4	DF	DOUG-FIR	.92	DF	.87	D	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	5700
5	SP	SUG PINE	.87	PP	.84	P	C	PP--EQUA--100	3	9	20	1.0	99	200	E	1	4800
6	IC	INC CED	.90	SS	.80	C	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	4500
7	RF	SH FIR	.924	DF	.89	W	C	DF--EQUA--050	3	9	20	1.0	99	200	E	1	5000

# EXHIBIT "A"

Of Timber Sale Contract KL-341-2016-064  
 Toddzilla  
 Portions of Sections 22, 25, 26, 27  
 and 35, T32S, R7.5E, W.M.  
 Klamath County, Oregon



- |  |                           |  |                   |
|--|---------------------------|--|-------------------|
|  | Toddzilla Timber Sale     |  | Surfaced Road     |
|  | Timber Sale Area Boundary |  | Unsurfaced Road   |
|  | Exclusions                |  | Closed road       |
|  | Landings                  |  | Road Construction |
|  | Skid Trails               |  |                   |

