



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Cabin Fever Salvage
Sale WO-341-2017-66-

District: West Oregon

Date: November 28, 2016

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$101,369.52	\$9,591.54	\$110,961.06
		Project Work:	(\$8,108.00)
		Advertised Value:	\$102,853.06



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District: West Oregon

Date: November 28, 2016

Timber Description

Location: Portions of Section 29, T11S, R8W, W.M., Lincoln County, Oregon.

Stand Stocking: 60%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	11	0	95
Alder (Red)	12	0	95

Volume by Grade	3S	4S	Camprun	Total
Douglas - Fir	361	143	0	504
Alder (Red)	0	0	41	41
Total	361	143	41	545

Comments: Pond Values Used: 4th Quarter Calendar Year 2016.

Western Hemlock and Other Conifers Stumpage Price = Douglas-fir bid price.

Bigleaf Maple and Other Hardwoods Stumpage Price = Red Alder bid price.

Pulp Logs = \$25 per MBF

SCALING COST ALLOWANCE = \$5.00/MBF

BRANDING AND PAINTING COST ALLOWANCE = \$2.00/MBF

FUEL COST ALLOWANCE = \$3.00/Gallon

LOG HAUL:

Costed to Philomath or Toledo.

HAULING COST ALLOWANCE

Hauling costs equivalent to \$780 daily truck cost.

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

Intermediate Support / Tail Trees: 3 supports @ \$100/support: \$300

TOTAL Other Costs (with Profit & Risk to be added) = \$300

Other Costs (No Profit & Risk added):

Non-Project Roads and Landings: \$500

Invasive Species Equipment Cleaning: \$2,000

Firewood Sorting & Landing Piling: 9 landings @ \$100/landing: \$900

TOTAL Other Costs (No Profit & Risk added) = \$3,400

SLASH DISPOSAL COSTS:

Move-in: \$750

Piling Work: \$2,400

TOTAL Slash Disposal = \$3,150



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Logging Conditions

Combination#: 1 Douglas - Fir 16.76%

Logging System: Cable: Small Tower <=40 **Process:** Stroke Delimber

yarding distance: Medium (800 ft) **downhill yarding:** No

tree size: Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF

loads / day: 5 **bd. ft / load:** 3500

cost / mbf: \$320.00

machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Small)

Combination#: 2 Douglas - Fir 63.95%
 Alder (Red) 79.00%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber

yarding distance: Medium (800 ft) **downhill yarding:** No

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

loads / day: 8 **bd. ft / load:** 3500

cost / mbf: \$214.29

machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Medium)

Combination#: 3 Douglas - Fir 17.00%
 Alder (Red) 21.00%

Logging System: Track Skidder **Process:** Stroke Delimber

yarding distance: Short (400 ft) **downhill yarding:** No

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

loads / day: 8 **bd. ft / load:** 3500

cost / mbf: \$113.28

machines: Stroke Delimber (B)

Combination#: 4 Douglas - Fir 2.29%

Logging System: Track Skidder **Process:** Stroke Delimber

yarding distance: Short (400 ft) **downhill yarding:** No

tree size: Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF

loads / day: 5 **bd. ft / load:** 3500

cost / mbf: \$181.26

machines: Stroke Delimber (B)



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District: West Oregon

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Logging Costs

Operating Seasons: 1.00	Profit Risk: 15%
Project Costs: \$8,108.00	Other Costs (P/R): \$300.00
Slash Disposal: \$3,150.00	Other Costs: \$3,400.00

Miles of Road

Road Maintenance: \$4.60

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	3.0	3.5
Alder (Red)	\$0.00	2.0	3.5



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Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling / Brand & Paint	Other	Total
Douglas - Fir									
\$214.08	\$4.83	\$8.05	\$78.00	\$0.55	\$45.83	\$5.78	\$7.00	\$6.24	\$370.36
Alder (Red)									
\$193.08	\$4.83	\$8.05	\$117.00	\$0.55	\$48.53	\$5.78	\$7.00	\$6.24	\$391.06

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$571.49	\$201.13	\$0.00
Alder (Red)	\$0.00	\$625.00	\$233.94	\$0.00



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Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Alder (Red)	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	504	\$201.13	\$101,369.52
Alder (Red)	41	\$233.94	\$9,591.54

Gross Timber Sale Value

Recovery: \$110,961.06

Prepared By: Carli Morgan

Phone: 541-929-3266

SUMMARY OF ALL PROJECT COSTS

Sale Name: Cabin Fever

Date: October 2016

Time: 10:50

Project #1 - New Construction & Improvements

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>	
A to B	7.6 sta	\$ 2,041	
I1 to I2	10.4 sta	\$ 1,111	
I2 to I3	3.4 sta	\$ 391	
I2 to A	15.8 sta	\$ 699	
I4 to I6	4.4 sta	\$ 188	
I5 to I7	1.3 sta	\$ 55	
TOTALS	42.9 sta		\$ 4,485

<u>Move in</u>	<u>Cost</u>	
Dozer, D-7 or equiv.	\$ 805	
Grader, G14 or equiv.	\$ 778	
Backhoe	\$ 321	
Vibratory roller	\$ 778	
10-12 cy Highway Dump Truck	\$ 163	
Front-end Loader	\$ 778	
TOTAL		\$ 3,623

GRAND TOTAL \$ 8,108

Compiled by C. Morgan

Date 11/29/2016

SUMMARY OF CONSTRUCTION COST

SALE Cabin Fever Project # 1 LENGTH const 7.6 sta
ROAD A to B (dirt spur)

CLEARING AND GRUBBING

0.50 acre @ \$ 1,010.24 /acre = \$ 505.12

TOTAL CLEARING AND GRUBBING = \$ 505

EXCAVATION

With D7 dozer or equivalent

Balanced Construction 7.60 sta @ \$ 122.00 /sta = \$927.20

Landing Construction 1.00 Ldg @ \$ 316.00 /Ldg = \$316.00

Grade/shape surface 7.60 sta @ \$ 18.35 /sta = \$139.46

Compact subgrade 7.60 sta @ \$ 20.19 /sta = \$153.44
(with vibratory roller)

TOTAL EXCAVATION = \$ 1,536

Compiled by: C. Morgan
Date: Nov 29, 2016

GRAND TOTAL =====> \$ 2,041

SUMMARY OF CONSTRUCTION COST

SALE Cabin Fever Project # 1 LENGTH improve 10.4 sta
ROAD I1 to I2

SUBGRADE PREP

Grade/shape surface	10.4	sta	@	\$	24.83	/sta	=	\$	258.23	
(with road grader)										
Slough Removal	20.0	cy	@	\$	1.27	/cy	=	\$	25.40	
						Sub total				\$ 284

SURFACING

				Size	Cost/yd				
Surface Rock (3" lift)	166.0	cy		1½-0"	\$2.43	=	\$	403.38	
Landing Rock	30.0	cy		3-0"	\$5.04	=	\$	151.20	
Grade/compact surface rock	10.4	sta	@	\$	24.28	/sta	=	\$	252.51
(with vibratory roller)									

TOTAL ROCK COST = \$ 807

SPECIAL PROJECTS

Cut 3 trees in R/W	0.5	hrs	@	\$	40.00	=	\$	20.00	
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TOTAL SPECIAL PROJECTS COST = \$ 20

Compiled by: C. Morgan
Date: Nov 29, 2016

GRAND TOTAL =====> \$ 1,111

SUMMARY OF CONSTRUCTION COST

SALE Cabin Fever Project # 1 LENGTH improve 3.4 sta
ROAD I2 to I3

SUBGRADE PREP

Grade/shape surface 3.4 sta @ \$24.83 /sta = \$ 84.42
(with road grader)

Sub total \$ 84

SURFACING

			Size	Cost/yd		
Spot Rock	30.0	cy	1½-0"	\$2.43	=	\$ 72.90
Landing Rock	30.0	cy	3-0"	\$5.04	=	\$ 151.20
Grade/compact surface rock (with vibratory roller)	3.4	sta. @	\$24.28	/sta	=	\$ 82.55

TOTAL ROCK COST = \$ 307

Compiled by: C. Morgan
Date: Nov 29, 2016

GRAND TOTAL =====> \$ 391

SUMMARY OF CONSTRUCTION COST

SALE Cabin Fever Project # 1 LENGTH improve 15.8 sta
ROAD I2 to A

IMPROVEMENT

Clear brush and debris (with dozer or grader)	15.8	sta	@	\$ 18.35	/sta	=	\$ 289.93
Slough Removal	20.0	cy	@	\$ 1.27	/cy	=	\$ 25.40
Grade/shape/compact (with grader and vibratory roller)	15.8	sta	@	\$ 24.28	/sta	=	\$ 383.62

TOTAL IMPROVEMENT = \$ 699

Compiled by: C. Morgan
Date: Nov 29, 2016

GRAND TOTAL =====> \$ 699

SUMMARY OF CONSTRUCTION COST

SALE Cabin Fever Project # 1 LENGTH improve 4.4 sta
ROAD I4 to I6

IMPROVEMENT

Clear brush and debris 4.4 sta @ \$ 18.35 /sta = \$ 80.74
(with dozer or grader)
Grade/shape/compact 4.4 sta @ \$ 24.28 /sta = \$106.83
(with grader and vibratory roller)

TOTAL IMPROVEMENT = \$188

Compiled by: C. Morgan
Date: Nov 29, 2016

GRAND TOTAL =====> \$188

SUMMARY OF CONSTRUCTION COST

SALE Cabin Fever Project # 1 LENGTH improve 1.3 sta
ROAD I5 to I7

IMPROVEMENT

Clear brush and debris (with dozer or grader)	1.3	sta	@	\$ 18.35	/sta	=	\$ 23.86
Grade/shape/compact (with grader and vibratory roller)	1.3	sta	@	\$ 24.28	/sta	=	\$ 31.56

TOTAL IMPROVEMENT = \$55

Compiled by: C. Morgan
Date: Nov 29, 2016

GRAND TOTAL =====> \$55

SUMMARY OF MAINTENANCE COST

SALE

Cabin Fever

Final Maintenance Cost Estimate

(Costed in appraisal, not in project costs)

Grading

Move-in

Grader

\$ 778.00

10-12 CY Highway Dump Truck	\$	163.00
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Front End Loader	\$ 778.00
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Road Segment	Length	Cost/Sta	Cost	Mileage
Surfaced Roads				
I1 to I2	10.4	\$13.75	\$ 143.00	0.20
I2 to I3	3.4	\$13.75	\$ 46.75	0.06
Sub Total			\$ 189.75	

NOTES:

Surfaced roads: spot grading and spot maintenance rock as directed by State with grader or dozer.

Road Segment	Length	Cost/Sta	Cost	Mileage
Unsurfaced Roads				
A to B	7.6	\$15.96	\$ 121.30	0.14
I2 to A	15.8	\$15.96	\$ 252.17	0.30
I4 to I6	4.4	\$15.96	\$ 70.22	0.08
I5 to I7	1.3	\$15.96	\$ 20.75	0.02
Tank Trap (near I2)			\$ 35.00	0.00
Sub Total			\$ 499.44	

NOTES:

Unsurfaced roads: block and install waterbars with grader or dozer, as directed by State. Tank Trap will be installed near point I2 to block dirt spurs, as directed by State.

Maintenance Rock:	Volume	Cost/CY	Cost
1½-0"	40	\$ 2.43	\$ 97.20

Grand Total	\$ 2,505.39
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TS Volume	545	MBF
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Cost / MBF = \$ 4.60

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	I1 to I2		0+00 to 10+40			
				Volume (CY) per		Number of			
Surface rock	1 1/2-0"	0+00 to 10+40	3	16	station	10.4	stations	166	224
Landing rock	3-0"	10+40	NA	30	landing	1	landing	30	41
Total Rock for Road Segment:								196	265
ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	I2 to I3		0+00 to 3+40			
				Volume (CY) per		Number of			
Spot rock	1 1/2-0"	0+00 to 3+40	NA	9	station	3.4	stations	30	41
Landing rock	3-0"	3+40	NA	30	landing	1	landing	30	41
Total Rock for Road Segment:								60	82
MAINTENANCE ROCK VOLUMES (CY)									
Rock Size	3/4-0"	1 1/2-0"	3-0"	4-0"	jaw-run	pit-run			
Rock Totals	--	40	--	--	--	--			
ROCK CONVERSION FACTORS									
Size	3/4-0"	1 1/2-0"	3-0"	4-0"	jaw-run	pit-run			
Tons/CY	1.35	1.35	1.35	1.35	1.35	1.35			
TOTAL ROCK VOLUMES									
Rock Size	3/4-0"	1 1/2-0"	3-0"	4-0"	jaw-run	pit-run			
CY	--	236	60	--	--	--			
Tons	--	319	82	--	--	--			

**Cabin Fever Salvage (341-17-66)
FY 2017**

TIMBER CRUISE REPORT

1. **Sale Area Location:** Portions of Section 29, T11S, R08W, W.M., Lincoln County, Oregon.

2. **Fund Distribution:**

- a. **Fund** BOF 100%
- b. **Tax Code** 260

3. **Sale Acreage by Area:**

Area	Treatment	Gross Acres	Stream Buffers	Existing Roads	Green Tree Retention Areas	Difficult Logging Area	Net Sale Acres	Acreage Comp. Method
1	Modified Clearcut	43	1	1	2	0	39	Ortho photo, GIS, GPS
2	Partial Cut	19	< 1	1	0	1	16	Ortho photo, GIS, GPS
Total		62					55	

4. **Cruisers and Cruise Dates:** This sale was cruised by Carli Morgan and Evelyn Hukari in September of 2016.

5. **Cruise Method and Computation:** The Cabin Fever Salvage consists of one modified clearcut (Area 1) and one partial cut (Area 2). Area 1 was cruised using variable radius plot sampling with a 20 BAF. A total of 25 plots were taken – 15 plots were counted and 10 plots were cruised. Tree count and species were recorded on count plots. Cruise plots were measured for DBH, height, form factor, grade, and defect. Data was entered into the Atterbury SuperACE cruise program to determine stand statistics and net board foot volume.

Area 2 was also cruised with a 20 BAF. A compass transect was run through the center of the unit, and ten plots were measured on a two-chain spacing. Douglas-fir trees contributing to excess basal area on each plot (above the residual basal area target of 120 ft²/acre) were measured for DBH, height, grade, and defect. Data from measured trees was entered into the Atterbury SuperAce 2008 cruise program to determine stand statistics and removal volumes.

Digital ortho photos, Lidar data, and GPS data were used to map the boundaries for the sale, and ArcMap 10.3 was used to determine gross and net acreage.

6. **Measurement Standards:** Heights were measured to the nearest foot, to a top diameter of 6 or 7 inches outside bark or to 40% of form factor. Diameters were measured to the nearest inch, and a form point of 16 feet was used to calculate form factor.

7. **Timber Description:** Timber in Area 1 and Area 2 consists of 30 year-old Douglas-fir and red alder. Other species, such as bigleaf maple, may be present within the sale area in negligible amounts but were not captured in the cruise results.

- In Area 1, Douglas-fir trees are approximately 12 inches DBH with an average bole height of 41 feet to a merchantable top. The red alder are approximately 12 inches DBH with an average bole height of 33 feet to a merchantable top. The average net volume per acre is 11.5 MBF. Area 1 contains ice-damaged trees, some of which are standing dead trees. Dead trees were not cruised and, therefore, are not reflected in the gross or net volumes. Standing dead trees may still be salvaged if the wood is deemed sound.
- In Area 2, the average Douglas-fir tree to be harvested is 10 inches DBH with an average bole height of 40 feet. The average net volume per acre to be harvested is 6.0 MBF.

8. Statistical Analysis and Stand Summary:

Area	Target CV	Target SE	Actual CV	Actual SE
1	65%	15%	33%	7%
2	65%	15%	65%	22%

Note: Statistics shown are for conifer and hardwood trees combined. Percentages are for net board foot volume.

9. Total Volume (MBF) by Species and Grade:

Species	Gross Cruise Volume	Cruised D & B	Cruised D & B (MBF)	Hidden D & B	Hidden D & B (MBF)	Net Sale Volume
Area 1						
Douglas-fir	436	2.5%	11	4%	17	408
Red alder	46	7%	3	4%	2	41
Area 2						
Douglas-fir	102	2.5%	2	4%	4	96
Total						

Species	Avg. DBH	Net Vol.	2-Saw	3-Saw	4-Saw	Camp Run	% by Species
Area 1							
Douglas-fir	Grade Percentages		--	72%	28%		
	12	408	--	294	114		91%
Red alder	Grade Percentages		--	--	--	100%	
	12	41	--	--	--	41	9%
Area 2							
Douglas-fir	Grade Percentages		--	70%	30%		
	10	96	--	67	29		100%
Total	Grade Percentages		--	66%	26%	8%	
	11	545	--	361	143	41	100%

Attachments: Project Statistics
Stand Table Summary
Species, Sort Grade – Board Foot Volumes
Log Stock Table – MBF
Cruise Maps

Prepared by: Carli Morgan
Unit Forester: Evelyn Hukari

Date: October 20, 2016
Date: 11/2/16

TC TSTATS				STATISTICS				PAGE	1		
Oregon Department of Forestr				PROJECT		CABFEVER		DATE	10/20/2016		
TWP	RGE	SECT	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt	
11S	08W	29	1	0001		39.00	25	190	1	W	
			PLOTS	TREES	TREES	ESTIMATED TOTAL	PERCENT SAMPLE				
				PER PLOT		TREES	TREES				
TOTAL			25	190	7.6						
CRUISE			10	69	6.9	7,783	.9				
DBH COUNT											
REFOREST											
COUNT			15	121	8.1						
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
DF			54	172.5	11.7	42	37.8	129.6	11,184	10,902	3,321
R ALDER			15	27.1	12.3	33	6.4	22.4	1,167	1,088	410
TOTAL			69	199.6	11.8	41	44.2	152.0	12,350	11,990	3,731
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	
DF		54.3	7.4	70	76	81					
R ALDER		62.1	16.6	41	49	57					
TOTAL		57.8	7.0	65	70	75	133	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	
DF		45.3	9.2	157	173	188					
R ALDER		172.2	35.1	18	27	37					
TOTAL		33.5	6.8	186	200	213	47	12	5		
CL:	68.1 %	COEFF		BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15	
DF		43.2	8.8	118	130	141					
R ALDER		151.0	30.8	16	22	29					
TOTAL		25.8	5.3	144	152	160	28	7	3		
CL:	68.1 %	COEFF		NET BF/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15	
DF		45.7	9.3	9,885	10,902	11,919					
R ALDER		159.9	32.6	733	1,088	1,443					
TOTAL		32.9	6.7	11,185	11,990	12,795	45	11	5		

TC TSTATS				STATISTICS				PAGE	1	
Oregon Department of Forestr				PROJECT		CABFEVER		DATE	10/20/2016	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
11S	08W	29	1	0002	16.00	10	36	1	W	
			TREES	ESTIMATED		PERCENT				
			PER PLOT	TOTAL		SAMPLE				
			TREES	TREES		TREES				
TOTAL			10	36	3.6					
CRUISE			10	36	3.6	1,964		1.8		
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
DF		36	122.7	10.4	40	22.4	72.0	6,402	6,244	1,750
TOTAL		36	122.7	10.4	40	22.4	72.0	6,402	6,244	1,750
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
DF		47.5	7.9	52	57	61				
TOTAL		47.5	7.9	52	57	61	90		22	10
CL:	68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15
DF		63.8	21.2	97	123	149				
TOTAL		63.8	21.2	97	123	149	180		45	20
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15
DF		55.9	18.6	59	72	85				
TOTAL		55.9	18.6	59	72	85	138		35	15
CL:	68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15
DF		64.8	21.6	4,897	6,244	7,591				
TOTAL		64.8	21.6	4,897	6,244	7,591	186		47	21

Stand Table Summary															
TC TSTNDSUM				Oregon Department of Forestry											
Project				CABFEVER											
T11S R08W S29 T0001															
T11S R08W S29 T0001															
Twp	Rge	Sec	Tract	Type				Acres		Plots	Sample Trees		Page:	1	
11S	08W	29	1	0001				39.00		25	69		Date:	10/20/2010	
Time: 3:49:37PM															
S Spc	T	Sample		FF	Ht	Trees/ Acre	BA/	Logs	Average Log		Tons/ Acre	Net	Net	T o t a l s	
		DBH	Trees	16'	Tot		Acre	Acre	Acre	Net		Net	Cu.Ft.	Bd.Ft.	Tons
DF		8	2	91	36	13.751	4.80	13.75	5.0	20.0		69	275	27	11
DF		9	6	87	64	32.595	14.40	32.59	9.5	35.0		310	1,141	121	44
DF		10	4	84	66	17.601	9.60	17.60	12.5	42.5		220	748	86	29
DF		11	6	89	73	21.820	14.40	25.46	14.6	52.9		371	1,346	145	52
DF		12	9	88	66	27.502	21.60	30.56	17.4	54.0		532	1,650	207	64
DF		13	10	90	71	26.037	24.00	33.85	19.5	63.1		661	2,135	258	83
DF		14	7	87	68	15.715	16.80	20.21	20.9	62.2		422	1,257	165	49
DF		15	5	89	70	9.778	12.00	15.65	21.6	67.5		338	1,056	132	41
DF		16	2	92	76	3.438	4.80	6.88	22.8	85.0		156	584	61	23
DF		17	2	91	74	3.045	4.80	6.09	24.0	82.5		146	502	57	20
DF		19	1	88	69	1.219	2.40	2.44	28.0	85.0		68	207	27	8
DF		Totals		54	88	65	172.502	129.60	205.06	16.1	53.2	3,294	10,902	1,285	425
RA		8	1	87	31	4.278	1.49	4.28	5.0	20.0		21	86	8	3
RA		9	1	86	30	3.380	1.49	3.38	6.0	20.0		20	68	8	3
RA		10	1	86	48	2.738	1.49	2.74	11.0	30.0		30	82	12	3
RA		11	1	86	47	2.263	1.49	2.26	13.0	40.0		29	91	11	4
RA		12	1	87	46	1.901	1.49	1.90	12.0	30.0		23	57	9	2
RA		13	3	87	51	4.860	4.48	6.48	14.3	30.0		92	194	36	8
RA		14	1	86	56	1.397	1.49	2.79	13.5	45.0		38	126	15	5
RA		15	3	87	45	3.651	4.48	4.87	15.5	42.5		75	207	29	8
RA		16	1	87	48	1.070	1.49	1.07	28.0	60.0		30	64	12	3
RA		19	2	86	59	1.517	2.99	2.28	22.3	50.0		51	114	20	4
RA		Totals		15	87	44	27.055	22.40	32.05	12.8	33.9	410	1,088	160	42
Totals				69	88	63	199.557	152.00	237.11	15.6	50.6	3704	11,990	1,445	468

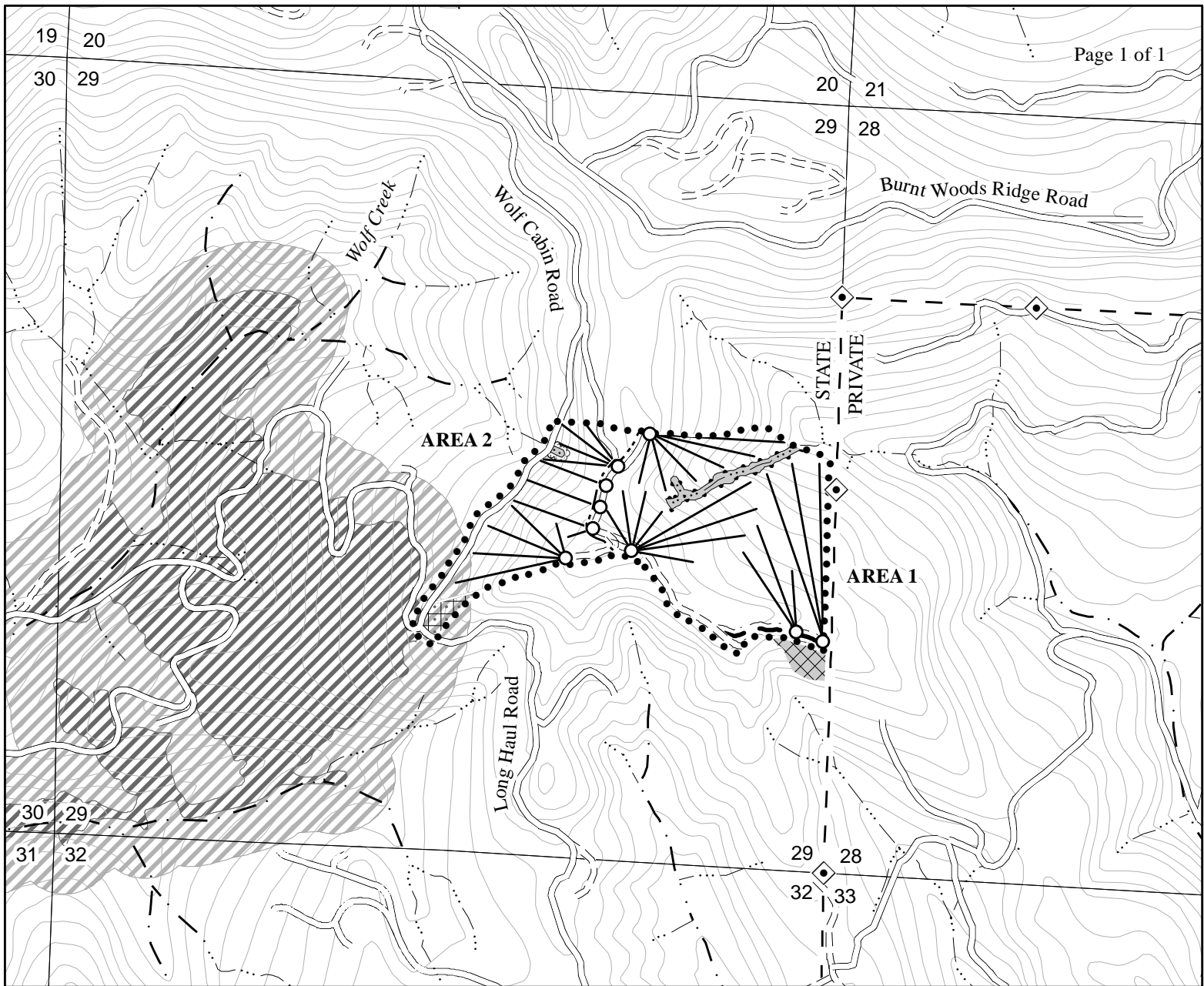
TC TSTNDSUM				Stand Table Summary												
Oregon Department of Forestry				Project				CABFEVER								
T11S R08W S29 T0002										T11S R08W S29 T0002						
Twp		Rge	Sec	Tract		Type		Acres		Plots		Sample Trees		Page: 1		
11S		08W	29	1		0002		16.00		10		36		Date: 10/20/2016		
														Time: 9:13:24AM		
S Spc	T	Sample		FF	Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	T o t a l s		
		DBH	Trees	16'	Tot				Cu.Ft.	Bd.Ft.		Cu.Ft.	Bd.Ft.			
											Tons	Cunits	MBF			
DF		8	3	88	41	17.189	6.00	17.19	5.3	23.3	92	401	15	6		
DF		9	5	89	57	22.635	10.00	22.64	9.0	38.0	204	860	33	14		
DF		10	10	88	68	36.669	20.00	44.00	11.3	42.5	499	1,870	80	30		
DF		11	8	88	69	24.244	16.00	30.31	12.8	46.0	388	1,394	62	22		
DF		12	5	88	73	12.732	10.00	15.28	17.3	56.7	265	866	42	14		
DF		13	2	89	69	4.340	4.00	4.34	23.0	65.0	100	282	16	5		
DF		14	1	88	80	1.871	2.00	3.74	17.0	50.0	64	187	10	3		
DF		15	1	89	77	1.630	2.00	3.26	20.0	65.0	65	212	10	3		
DF		16	1	89	76	1.432	2.00	1.43	37.0	120.0	53	172	8	3		
DF		Totals		36	88	63	122.743	72.00	142.18	12.2	43.9	1,728	6,244	277	100	
Totals				36	88	63	122.743	72.00	142.18	12.2	43.9	1728	6,244	277	100	

T		TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)										Page		1													
Oregon Department of Forestry				Project:		CABFEVER										Date		10/20/2016											
																Time		3:49:37PM											
T11S R08W S29 T0001														T11S R08W S29 T0001															
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		CuFt		BdFt											
11S		08W		29		1		0001		39.00		25		69		1		W											
				% Net BdFt		Bd. Ft. per Acre Def% Gross Net		Total Net MBF		Percent Net Board Foot Volume								Average Log				Logs Per /Acre							
										Log Scale Dia.				Log Length				Ln Dia Bd CF/ Ft In Ft Lf											
S So Gr T rt ad Spp										4-5		6-11		12-16		17+		12-20		21-30		31-35		36-99					
DF		CU				100.0 67														26 5		0.00		2.2					
DF		3		72		1.5 7,969 7,853		306		100				2		2		22 74		37 8		78 0.63		101.2					
DF		4		28		3.1 3,147 3,049		119		100				37		30		17 16		23 6		29 0.38		103.9					
DF		Totals		91		2.5 11,184 10,902		425		100				12		10		21 58		30 7		53 0.53		207.3					
RA		CU																		7 13		0.00		7.5					
RA		CR		100		6.8 1,167 1,088		42		39 51 10				28		34		28 10		25 6		34 0.51		32.0					
RA		Totals		9		6.8 1,167 1,088		42		39 51 10				28		34		28 10		22 7		28 0.48		39.5					
Type Totals						2.9 12,350 11,990		468		4 96 1				13		12		21 53		29 7		49 0.52		246.8					

T		TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)										Page		1						
Oregon Department of Forestry				Project:		CABFEVER										Date		10/20/2016				
																Time		9:14:58AM				
T11S R08W S29 T0002														T11S R08W S29 T0002								
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		CuFt		BdFt				
11S		08W		29		1		0002		16.00		10		36		1		W				
S So Gr T rt ad Spp		% Net BdFt		Bd. Ft. per Acre Def% Gross Net			Total Net MBF		Percent Net Board Foot Volume								Average Log				Logs Per /Acre	
									Log Scale Dia.				Log Length				Ln Dia Bd CF/ Ft In Ft Lf					
DF		CU		100.0 61			71		100				23 77				22 5 0.00				3.0	
DF		3		70 2.2 4,511 4,414			71		100				23 77				38 6 61 0.46				71.9	
DF		4		30 1,830 1,830			29		77 23				37 34 20 8				22 5 26 0.31				70.3	
DF Totals				100 2.5 6,402 6,244			100		23 77				11 10 22 57				30 6 43 0.40				145.2	
Type Totals				2.5 6,402 6,244			100		23 77				11 10 22 57				30 6 43 0.40				145.2	

TC TLOGSTVB				Log Stock Table - MBF																
Oregon Department of Forestry				Project: CABFEVER																
T11S R08W S29 T0001										T11S R08W S29 T0001										
Twp	Rge	Sec	Tract	Type		Acres	Plots	Sample Trees		Page	1									
11S	08W	29	1	0001		39.00	25	69		Date	10/20/2016									
										Time	3:51:26PM									
Spp	S	So	Gr	Log	Gross	% 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+
DF			CU	26	3	100.0														
DF		3	18		7		7	1.6					7							
DF		3	26		6		6	1.4				6								
DF		3	32		71	4.5	67	15.9			16	43	9							
DF		3	36		9		9	2.2					9							
DF		3	38		20		20	4.7			20									
DF		3	40		198	.7	196	46.2			118	44	34							
DF		4	13		3		3	.8			3									
DF		4	14		3		3	.7			3									
DF		4	15		1		1	.3			1									
DF		4	16		2		2	.6			2									
DF		4	17		7		7	1.7			7									
DF		4	18		15		15	3.5			15									
DF		4	19		8		8	1.8			8									
DF		4	20		4		4	1.0			4									
DF		4	21		2		2	.5			2									
DF		4	22		6		6	1.5			6									
DF		4	25		6		6	1.5			6									
DF		4	26		5		5	1.2			5									
DF		4	28		10		10	2.3			10									
DF		4	30		6		6	1.3			6									
DF		4	32		17	12.8	14	3.4			14									
DF		4	34		6		6	1.4			6									
DF		4	38		21	8.3	19	4.4			19									
DF		Totals			436	2.5	425	90.9			273	92	60							
RA		CU	5																	
RA		CU	6																	
RA		CU	7																	
RA		CU	10																	
RA		CR	9										3							
RA		CR	16		4	14.3	3	7.7												
RA		CR	17		1		1	2.2			1									
RA		CR	18		4		4	10.1						4						
RA		CR	20		3		3	7.9		3										
RA		CR	21		6	10.9	5	12.2		3		3								
RA		CR	22		1	50.0	1	1.5		1										
RA		CR	23		1		1	3.4			1									
RA		CR	24		2		2	5.2			2									
RA		CR	26		2		2	3.9		2										
RA		CR	29		3	25.0	2	4.5			2									
RA		CR	30		1		1	3.4		1										
RA		CR	31		3		3	7.6		3										
RA		CR	32		3		3	6.3				3								
RA		CR	33		7	9.4	6	14.3		4	3									
RA		CR	38		3		3	5.9			3									
RA		CR	40		2		2	4.2			2									
RA		Totals			45	6.8	42	9.1		16	13	5	3	4						
Total All Species					482	2.9	468	100.0		16	286	98	63	4						

TC TLOGSTVB				Log Stock Table - MBF															
Oregon Department of Forestry				Project: CABFEVER															
T11S R08W S29 T0002										T11S R08W S29 T0002									
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	1										
11S	08W	29	1	0002	16.00	10	36	Date	10/20/2016										
								Time	9:15:58AM										
Spp	S	So	Gr	Log	Gross	% Def	Net	% 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
DF			CU	22	1	100.0													
DF		3		32	4		4	3.6			4								
DF		3		34	12		12	12.4			12								
DF		3		36	6		6	6.0			6								
DF		3		38	10	5.9	9	9.4			9								
DF		3		40	40	2.4	39	39.3			31	8							
DF		4		15	1		1	.8		1									
DF		4		16	7		7	6.9		2	2	3							
DF		4		18	3		3	3.3		3									
DF		4		21	2		2	1.8		2									
DF		4		23	1		1	1.2		1									
DF		4		24	3		3	2.8		3									
DF		4		25	4		4	4.4		4									
DF		4		31	4		4	4.1		2	2								
DF		4		32	2		2	1.8		2									
DF		4		38	2		2	2.3		2									
DF			Totals		102	2.5	100	100.0		23	66	11							
Total All Species					102	2.5	100	100.0		23	66	11							



Legend

Boundaries

- Timber Sale Boundary
- - - - Area Boundary (Posted)
- - - State Forest Property Boundary
- - - Right of Way (Posted)

Roads

- ==== Surfaced Road
- == == Unsurfaced Road
- — New Construction

Streams

- — · Type F Stream
- Type N Stream
- Posted Stream Buffer
- ~~~~~ Unposted Stream Buffer
- Stream Buffer
- Marbled Murrelet Management Area
- ▨ Occupied Habitat
- ▧ Non-Habitat Buffer
- Cable Corridors
- ◆ Land Survey Monument
- ▨ Green Tree Retention Area
- ▨ Difficult Logging Area

LOGGING PLAN

OF TIMBER SALE CONTRACT NO. 341-17-66
CABIN FEVER SALVAGE
PORTIONS OF SECTION 29, T11S, R8W, W.M.,
LINCOLN COUNTY, OREGON

This product is for informational use and may not have been prepared for or be suitable for legal, engineering or survey purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of this information.

Scale

1:12,000



	NET ACRES	NET ACRES
AREA	TRACTOR	CABLE
1 (MC)	8	31
2 (PC)	2	14
TOTAL	10	45



Created By: Blake McKinley
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Date: 11/02/2016