



Timber Sale Appraisal
Gales Back Pocket
Sale FG-341-2017-37-

District: Forest Grove

Date: September 01, 2016

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$2,050,197.96	\$0.00	\$2,050,197.96
		Project Work:	(\$85,585.00)
		Advertised Value:	\$1,964,612.96



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Timber Description

Location: Portions of Sections 33 and 34, T2N T5W, W.M., Washington County, Oregon.

Stand Stocking: 20%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	16	0	98

Volume by Grade	2S	3S	4S	Total
Douglas - Fir	2,027	2,376	319	4,722
Total	2,027	2,376	319	4,722

Comments: Pond Values Used: 2nd Quarter Calendar Year 2016.

Western Hemlock and Other Conifers Stumpage Price = Pond Value minus Logging Cost:
 $\$276.37/\text{MBF} = \$435/\text{MBF} - \$158.63/\text{MBF}$

Western redcedar and Other Cedars Stumpage Price = Pond Value minus Logging Cost:
 $\$1,016.63/\text{MBF} = \$1,175/\text{MBF} - 158.37/\text{MBF}$

Red Alder and Other Hardwoods Stumpage Price = Pond Value minus Logging Cost:
 $\$451.37/\text{MBF} = \$610/\text{MBF} - \$158.63/\text{MBF}$

SCALING COST ALLOWANCE = \$5.00/MBF

BRANDING AND PAINTING COST ALLOWANCE = \$2.00/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):
None.

Other Costs (No Profit & Risk added):
Block/Waterbar Roads/Skid Trails: 10 hrs x \$150/hour = \$1,500
Pile Landing Slash: 20 hrs x \$150/hour = \$3,000
Equipment Cleaning: 3 x \$1,000/Piece = \$3,000
TOTAL Other Costs (No Profit & Risk added) = \$7,500

ROAD MAINTENANCE
Move-in: \$4,000
General Road Maintenance: 4.5 miles x \$1,200/mile = \$5,400
TOTAL Road Maintenance: $\$9,400/4,722 \text{ MBF} = \$1.99/\text{MBF}$



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Logging Conditions

Combination#: 1	Douglas - Fir	100.00%
Logging System:	Shovel	Process: Stroke Delimber
yarding distance:	Short (400 ft)	downhill yarding: No
tree size:	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF	
loads / day:	10	bd. ft / load: 4600
cost / mbf:	\$68.96	
machines:	Stroke Delimber (B)	



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Logging Costs

Operating Seasons: 1.00	Profit Risk: 10%
Project Costs: \$85,585.00	Other Costs (P/R): \$0.00
Slash Disposal: \$0.00	Other Costs: \$7,500.00

Miles of Road

Road Maintenance: \$1.99

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	4.0



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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									
\$68.96	\$2.03	\$0.93	\$66.30	\$0.00	\$13.82	\$0.00	\$7.00	\$1.59	\$160.63

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$594.81	\$434.18	\$0.00



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Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	4,722	\$434.18	\$2,050,197.96

Gross Timber Sale Value

Recovery: \$2,050,197.96

Prepared By: Eric Foucht

Phone: 503-359-7473

TIMBER SALE SUMMARY
Gales Back Pocket
Contract No. 341-17-37

1. **Location:** Portions of Sections 33 and 34, T2N, R5W, W.M., Washington County, Oregon.
2. **Type of Sale:** This timber sale is 113 net acres of Modified Clearcut, and 1 acre of Right-of-Way. The timber will be sold on a recovery basis at a sealed bid auction.
3. **Revenue Distribution:** 89% BOF and 11% CSL, Washington County.
4. **Sale Acreage:** Acres are net of stream buffers and road prisms. Acreage was determined using ESRI ArcMap GIS software.
5. **Cruise:** The Timber Sale was cruised by ODF Cruisers in April of 2016. For more information see Cruise Report.
6. **Timber Description:** The Timber Sale Area consists of an over-stocked 65 year old Douglas-fir stand with minor amounts of western hemlock, western redcedar, true firs, and hardwoods. The stand has an average of 269 ft² of basal area (all species), an average Douglas-fir DBH of 16 inches, and an estimated average net Douglas-fir volume of approximately 42.3 MBF per acre.
7. **Volume Summary**

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Douglas-fir	Cruise Volume	2,068	2,425	326	4,819
	Hidden D&B (2%)	(41)	(49)	(7)	(97)
	NET TOTAL	2,027	2,376	319	4,722
	% of Total	43	50	7	

8. **Topography and Logging Method:** Slopes within the sale areas range from 5% to 60%, are generally less than 35%, and variable in aspect. The timber sale is 100% ground-based yarding. The average horizontal skid trail length is approximately 300 feet and the maximum is approximately 800 feet.
9. **Access:** All access to the Timber Sale Area is on surfaced all-weather roads. From Forest Grove travel west on Highway 8 to its intersection with Highway 6. Proceed west onto Highway 6 for approximately 5½ miles between mileposts 36 and 37, to the South Fork Gales Creek Road. Turn and proceed south on South Fork Gales Creek Road 2¾ miles to a spur on the left. Turn and continue east a little less than ½ mile to the west side of the Timber Sale Area.

10. Projects:

Project No. 1: Road Construction and Improvement	\$20,116.83
Project No. 2: Road Surfacing	\$55,751.72
Project No. 3: Grass Seed, Fertilize, and Mulch	\$646.38
Move in and equipment cleaning:	\$9,070.07

Total Credit for all Projects (rounded)	\$85,585.00
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PROJECT COST SUMMARY SHEET

Timber Sale: Gales Back Pocket
Sale Number: 341-17-37

PROJECT NO. 1: ROAD CONSTRUCTION AND IMPROVEMENT

CONSTRUCTION

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
A to B	12+80	\$5,270.72
C to D	3+55	\$1,184.30
E to F	20+00	\$5,157.60
	36+35 stations	
	0.69 miles	

SUBTOTAL CONSTRUCTION = \$11,612.62

IMPROVEMENTS

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
G to H	56+00	\$6,159.01
I to J	22+20	\$2,019.20
K to A	6+00	\$326.00
	84+20 stations	
	1.59 miles	

SUBTOTAL IMPROVEMENTS = \$8,504.21

TOTAL PROJECT NO. 1 COST = \$20,116.83

PROJECT NO. 2: SURFACING

<u>Road Segment</u>	<u>Rock Amount</u>	<u>Rock Type</u>	<u>Cost</u>
A to B	892 cy	3" - 0	\$8,812.96
A to B	20 cy	1 1/2" - 0	\$264.60
C to D	378 cy	3" - 0	\$3,700.62
E to F	1,327 cy	3" - 0	\$13,349.62
G to H	1,862 cy	3" - 0	\$17,335.22
G to H	100 cy	1 1/2" - 0	\$1,221.00
I to J	744 cy	3" - 0	\$7,216.80
I to J	40 cy	1 1/2" - 0	\$516.40
K to A	342 cy	3" - 0	\$3,334.50
Total	5,705 cy		
	5,545 cy	3" - 0	
	160 cy	1 1/2" - 0	

TOTAL PROJECT NO. 2 COST = \$55,751.72

PROJECT NO. 3 GRASS SEED, FERTILIZE, & MULCH

TOTAL PROJECT NO. 3 COST = \$646.38

MOVE-IN & EQUIPMENT CLEANING

Grader	\$833.07
Loader (into Wildcat Stockpile)	\$698.90
Roller (smooth/grid) & Compactor	\$560.09
Excavator - Equipment Cleaning	\$1,833.07
Dozer - Equipment Cleaning	\$1,877.65
Dump Trucks	\$466.84

TOTAL MOVE-IN & EQUIPMENT CLEANING COST = \$9,070.07

TOTAL ALL PROJECTS \$85,585.00

SUMMARY OF CONSTRUCTION COST

Timber Sale: Gales Back Pocket Sale Number: 341-17-37
Road Segment: A to B Construction: 12+80 stations
0.24 miles

PROJECT NO. 1

EXCAVATION

Clearing & grubbing (scatter)	0.89	ac @	\$1,078.00	per acre =	\$959.42
Balanced road construction	12.80	sta @	\$110.00	per sta =	\$1,408.00
Turnouts	1	ea @	\$66.00	per ea =	\$66.00
Turnarounds	1	ea @	\$82.50	per ea =	\$82.50
Landing	1	ea @	\$314.00	per ea =	\$314.00
Grade, ditch, & roll	12.80	sta @	\$36.00	per sta =	\$460.80

TOTAL EXCAVATION COSTS = \$3,290.72

CULVERTS - MATERIALS & INSTALLATION

Culverts

40 LF of 18" \$800.00

40 LF of 24" \$1,160.00

Culvert Markers

2 markers \$20.00

TOTAL CULVERT COSTS = \$1,980.00

PROJECT NO. 1 TOTAL COST = \$5,270.72

PROJECT NO. 2:

SURFACING	10	" deep =	53 cy/sta				
A to B	678	cy of	3" - 0	@	\$9.88	per cy =	\$6,698.64
Turnouts (1)	24	cy of	3" - 0	@	\$9.88	per cy =	\$237.12
Turnaround	16	cy of	3" - 0	@	\$9.88	per cy =	\$158.08
Junction	24	cy of	3" - 0	@	\$9.88	per cy =	\$237.12
Landing	150	cy of	3" - 0	@	\$9.88	per cy =	\$1,482.00
Culvert bedding	20	cy of	1 1/2" - 0	@	\$13.23	per cy =	\$264.60
Rock Total =	912						
	20	cy of	1 1/2" - 0		\$13.23	per cy =	\$264.60
	892	cy of	3" - 0		\$9.88	per cy =	\$8,812.96

PROJECT NO. 2 TOTAL COST = \$9,077.56

PROJECT NO. 3:

Grass seed & fertilizer	0.45	acres	@	\$425.00	per acre =	\$189.13
Mulch	8	bales	@	\$8.00	per bale =	\$64.00

PROJECT NO. 3 TOTAL COST = \$253.13

TOTAL COST = \$14,601.41

SUMMARY OF CONSTRUCTION COST

Timber Sale: Gales Back Pocket
 Road Segment: C to D

Sale Number: 341-17-37
 Construction: 3+55 stations
0.07 miles

PROJECT NO. 1

EXCAVATION

Clearing & grubbing (scatter)	0.25	ac @	\$1,078.00	per acre =	\$269.50
Balanced road construction	3.55	sta @	\$110.00	per sta =	\$390.50
Turnarounds	1	ea @	\$82.50	per ea =	\$82.50
Landing	1	ea @	\$314.00	per ea =	\$314.00
Grade, ditch, & roll	3.55	sta @	\$36.00	per sta =	\$127.80

TOTAL EXCAVATION COSTS = \$1,184.30

PROJECT NO. 1 TOTAL COST = \$1,184.30

PROJECT NO. 2:

SURFACING

	10	" deep =	53 cy/sta			
C to D	188	cy of	3" - 0	@	\$9.79	per cy = \$1,840.52
Turnaround	16	cy of	3" - 0	@	\$9.79	per cy = \$156.64
Junction	24	cy of	3" - 0	@	\$9.79	per cy = \$234.96
Landing	150	cy of	3" - 0	@	\$9.79	per cy = \$1,468.50
Rock Total =	378					
	378	cy of	3" - 0		\$9.79	per cy = \$3,700.62

PROJECT NO. 2 TOTAL COST = \$3,700.62

PROJECT NO. 3:

Grass seed & fertilizer	0.13	acres	@	\$425.00	per acre =	\$53.13
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PROJECT NO. 3 TOTAL COST = \$53.13

TOTAL COST = \$4,938.05

SUMMARY OF CONSTRUCTION COST

Timber Sale:	Gales Back Pocket	Sale Number:	341-17-37
Road Segment:	E to F	Construction:	20+00 stations 0.38 miles

PROJECT NO. 1

EXCAVATION

Clearing & grubbing (scatter)	1.45	ac @	\$1,078.00	per acre =	\$1,563.10
Balanced road construction	20.00	sta @	\$110.00	per sta =	\$2,200.00
Junction construction	1.00	sta @	\$110.00	per sta =	\$110.00
Turnouts	2	ea @	\$66.00	per ea =	\$132.00
Turnarounds	1	ea @	\$82.50	per ea =	\$82.50
Landing	1	ea @	\$314.00	per ea =	\$314.00
Grade, ditch, & roll	21.00	sta @	\$36.00	per sta =	\$756.00
TOTAL EXCAVATION COSTS =					\$5,157.60

PROJECT NO. 1 TOTAL COST = \$5,157.60

PROJECT NO. 2:

SURFACING	10	" deep =	53 cy/sta				
E to F	1060	cy of	3" - 0	@	\$10.06	per cy =	\$10,663.60
Turnouts (2)	48	cy of	3" - 0	@	\$10.06	per cy =	\$482.88
Turnaround	16	cy of	3" - 0	@	\$10.06	per cy =	\$160.96
Junction	53	cy of	3" - 0	@	\$10.06	per cy =	\$533.18
Landing	150	cy of	3" - 0	@	\$10.06	per cy =	\$1,509.00
Rock Total =	1,327						
	1,327	cy of	3" - 0		\$10.06	per cy =	\$13,349.62

PROJECT NO. 2 TOTAL COST = \$13,349.62

PROJECT NO. 3:

Grass seed & fertilizer	0.73	acres	@	\$425.00	per acre =	\$308.13
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PROJECT NO. 3 TOTAL COST = \$308.13

TOTAL COST = \$18,815.35

SUMMARY OF CONSTRUCTION COST

Timber Sale: Gales Back Pocket
 Road Segment: G to H

Sale Number: 341-17-37
 Improvement: 56+00 stations
1.06 miles

PROJECT NO. 1

EXCAVATION

Clean ditch & scatter waste material	11.00	sta @	\$12.41	per sta =	\$136.51
Turnarounds	1	ea @	\$82.50	per ea =	\$82.50
Landing	1	ea @	\$314.00	per ea =	\$314.00
Grade, ditch, & roll	56.00	sta @	\$36.00	per sta =	\$2,016.00
TOTAL EXCAVATION COSTS =					\$2,549.01

CULVERTS - MATERIALS & INSTALLATION

Culverts

120 LF of 18"	\$2,400.00
40 LF of 24"	\$1,160.00

Culvert Markers

5 markers	\$50.00
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TOTAL CULVERT COSTS = \$3,610.00

PROJECT NO. 1 TOTAL COST = \$6,159.01

PROJECT NO. 2:

SURFACING

	6	" deep =	31 cy/sta				
G to H	1736	cy of	3" - 0	@	\$9.31	per cy =	\$16,162.16
Turnouts (8)	112	cy of	3" - 0	@	\$9.31	per cy =	\$1,042.72
Junction	14	cy of	3" - 0	@	\$9.31	per cy =	\$130.34
Culvert bedding/Backfill	100	cy of	1 1/2" - 0	@	\$12.21	per cy =	\$1,221.00
Rock Total =	1,962						
	100	cy of	1 1/2" - 0		\$12.21	per cy =	\$1,221.00
	1,862	cy of	3" - 0		\$9.31	per cy =	\$17,335.22

PROJECT NO. 2 TOTAL COST = \$18,556.22

PROJECT NO. 3:

Mulch	4	bales	@	\$8.00	per bale =	\$32.00
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PROJECT NO. 3 TOTAL COST = \$32.00

TOTAL COST = \$24,747.23

SUMMARY OF CONSTRUCTION COST

Timber Sale: Gales Back Pocket
 Road Segment: I to J

Sale Number: 341-17-37
 Improvement: 22+20 stations
0.42 miles

PROJECT NO. 1

EXCAVATION

Grade, ditch, & roll	22.20	sta @	\$36.00	per sta =	\$799.20
					TOTAL EXCAVATION COSTS = \$799.20

CULVERTS - MATERIALS & INSTALLATION

Culverts

60 LF of 18" \$1,200.00

Culvert Markers

2 markers \$20.00

TOTAL CULVERT COSTS = \$1,220.00

PROJECT NO. 1 TOTAL COST = \$2,019.20

PROJECT NO. 2:

SURFACING

	6	" deep =	31 cy/sta			
I to J	688	cy of	3" - 0	@	\$9.70	per cy = \$6,673.60
Turnouts (3)	42	cy of	3" - 0	@	\$9.70	per cy = \$407.40
Junction	14	cy of	3" - 0	@	\$9.70	per cy = \$135.80
Culvert bedding/Backfill	40	cy of	1 1/2" - 0	@	\$12.91	per cy = \$516.40
Rock Total =	784					
	40	cy of	1 1/2" - 0		\$12.91	per cy = \$516.40
	744	cy of	3" - 0		\$9.70	per cy = \$7,216.80

PROJECT NO. 2 TOTAL COST = \$7,733.20

TOTAL COST = \$9,752.40

SUMMARY OF CONSTRUCTION COST

Timber Sale: Gales Back Pocket Sale Number: 341-17-37
Road Segment: K to A Improvement: 6+00 stations
0.11 miles

PROJECT NO. 1

EXCAVATION

Road widening (drift)	1.00	sta @	\$110.00	per sta =	\$110.00	
Grade, ditch, & roll	6.00	sta @	\$36.00	per sta =	\$216.00	
					TOTAL EXCAVATION COSTS =	\$326.00

PROJECT NO. 1 TOTAL COST = **\$326.00**

PROJECT NO. 2:

SURFACING

	10	" deep =	53 cy/sta			
K to A	318	cy of	3" - 0	@	\$9.75	per cy = \$3,100.50
Junction	24	cy of	3" - 0	@	\$9.75	per cy = \$234.00
Rock Total =	342					
	342	cy of	3" - 0		\$9.75	per cy = \$3,334.50

PROJECT NO. 2 TOTAL COST = **\$3,334.50**

TOTAL COST = **\$3,660.50**

CRUISE REPORT
Gales Back Pocket
341-17-37

1. LOCATION: Portions of Sections 33 and 34, T2N T5W, W.M., Washington County, Oregon.

2. CRUISE DESIGN:

Pre-cruise evaluation indicated that the stand's average DBH is approximately 15 inches and its Coefficient of Variation (CV%) is estimated to be 58%. For sales of this size and approximate value, ODF cruise standards require a Sampling Error (SE%) of 10%, and a minimum sample size of 100 graded trees. A combination of count and measure plots and a higher than usual sample size was employed to address a CV% estimate that was higher than normal.

3. SAMPLING METHOD:

The Sale Area was cruised in April 2016 with 22 variable radius grade plots and 23 variable radius count plots using a 40 BAF prism. Plots were laid out on a 4 chain x 6 chain grid. (Plots falling on or near existing roads or no-harvest areas were offset 1 chain).

4. CRUISE RESULTS

161 trees were measured and graded producing a cumulative sampling error of 4.6% on the Basal Area and 5.1% on the Board Foot Volume.

5. TREE MEASUREMENT AND GRADING:

All grade plot sample trees were measured and graded following Columbia River Log Scale grade rules and favoring 40 foot segments.

a) **Height Standards:**

Total tree heights were measured to the nearest foot. Bole heights were calculated to a six inch top.

b) **Diameter Standards:** Diameters were measured outside bark at breast height to the nearest inch.

c) **Form Factors** were measured for each grade tree using a form point of 16 feet.

5. DATA PROCESSING

a) **Volumes and Statistics:** Cruise volume estimates, and sampling statistics, were derived from Super Ace 2008 cruise software.

b) **Deductions:** Two percent of the volume was subtracted from the computed volumes to account for hidden defect and breakage.

6. Cruisers: The sale was cruised by ODF cruiser Kenton Burns.

Prepared by: Kenton Burns 5/16/2016
Date

Reviewed by: Eric Foucht 5/17/2016
Date

TC PSTATS			PROJECT STATISTICS						PAGE	1		
			PROJECT		GLSBPFIN		DATE 5/17/2016					
TWP	RGE	SC	TRACT	TYPE		ACRES		PLOTS	TREES	CuFt	BdFt	
T2N	R5	34	00A1	00MC		114.00		45	304	S	W	
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES		PERCENT SAMPLE TREES				
TOTAL			45	304	6.8							
CRUISE			22	161	7.3	21,546		.7				
DBH COUNT												
REFOREST												
COUNT			23	143	6.2							
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	
DOUG FIR-T			153	183.5	16.1	109	64.5	258.7	42,674	42,276	10,156	
GR FIR-L			6	4.4	17.3	111	1.7	7.1	1,361	1,361	296	
WHEMLOCK-L			1	.8	25.0	127	0.5	2.7	681	618	137	
WR CEDAR-L			1	.3	23.0	110	0.2	.9	80	74	34	
TOTAL			161	189.0	16.2	109	67.0	269.3	44,797	44,329	10,622	
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			
DOUG FIR-T			57.6	4.7	310	325	340					
GR FIR-L			39.5	17.6	280	340	400					
WHEMLOCK-L												
WR CEDAR-L												
TOTAL			57.3	4.5	313	328	343	131	33	15		
CL	68.1	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.			
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15			
DOUG FIR-T			55.7	4.5	74	78	82					
GR FIR-L			34.7	15.4	62	73	84					
WHEMLOCK-L												
WR CEDAR-L												
TOTAL			55.2	4.3	75	79	82	122	30	14		
CL	68.1	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.			
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15			
DOUG FIR-T			37.9	5.7	173	184	194					
GR FIR-L			526.7	78.4	1	4	8					
WHEMLOCK-L			378.4	56.4	0	1	1					
WR CEDAR-L			670.8	99.9	0	0	1					
TOTAL			36.3	5.4	179	189	199	53	13	6		
CL	68.1	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.			
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15			
DOUG FIR-T			31.2	4.6	247	259	271					
GR FIR-L			526.7	78.4	2	7	13					
WHEMLOCK-L			378.4	56.4	1	3	4					
WR CEDAR-L			670.8	99.9	0	1	2					
TOTAL			27.3	4.1	258	269	280	30	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			
DOUG FIR-T			34.2	5.1	40,122	42,276	44,429					
GR FIR-L			526.7	78.4	293	1,361	2,430					
WHEMLOCK-L			378.4	56.4	270	618	966					
WR CEDAR-L			670.8	99.9	0	74	148					

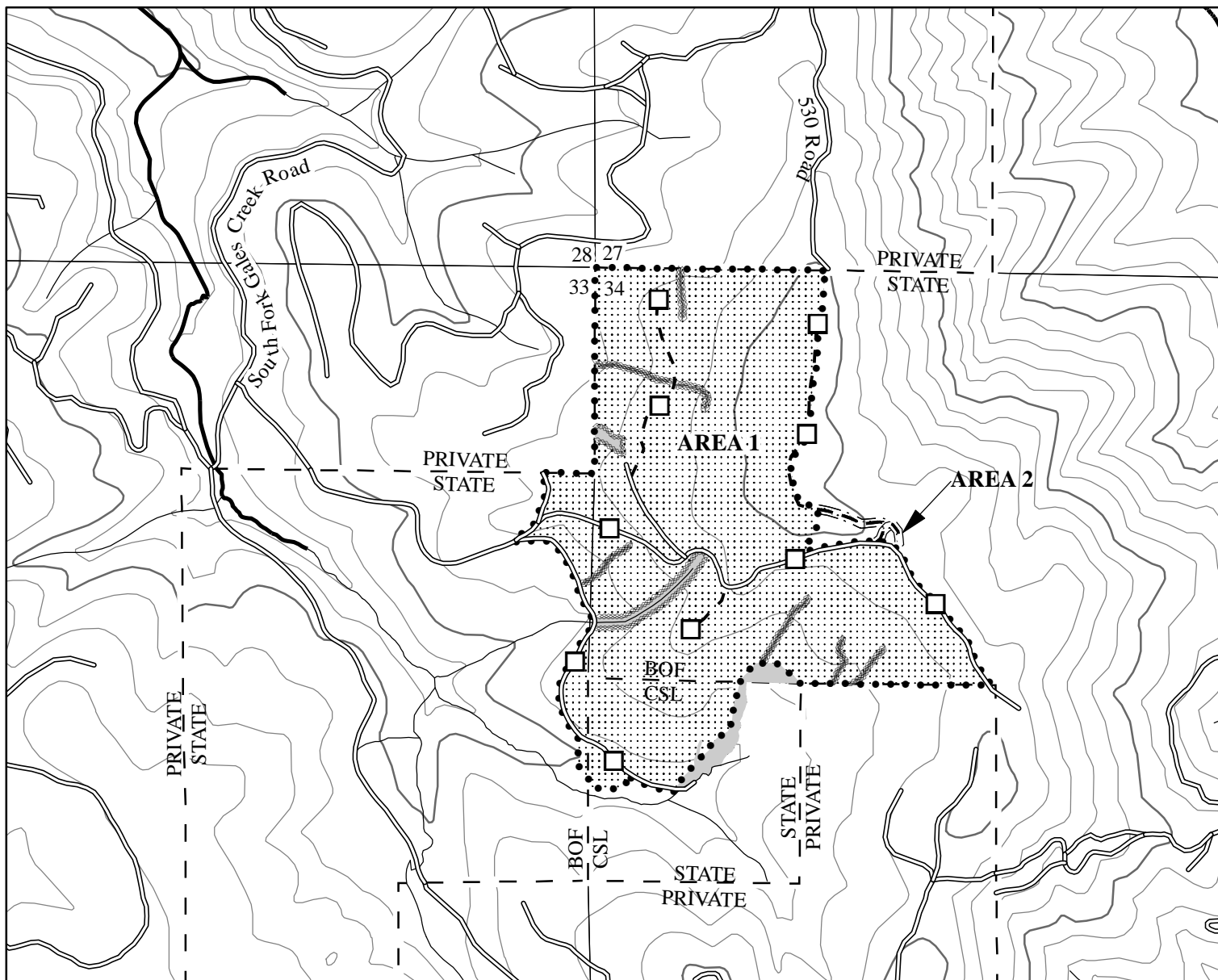
TC PSTATS				PROJECT GLSBPFIN				PAGE 2		
								DATE	5/17/2016	
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
T2N	R5	34	00A1	00MC	114.00	45	304	S	W	
CL	68.1		COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD:	1.00		VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
TOTAL			29.7	4.4	42,368	44,329	46,290	35	9	4
CL	68.1		COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR-T			33.6	5.0	9,647	10,156	10,665			
GR FIR-L			526.7	78.4	64	296	528			
WHEMLOCK-L			378.4	56.4	60	137	214			
WR CEDAR-L			670.8	99.9	0	34	67			
TOTAL			29.1	4.3	10,162	10,622	11,082	34	8	4

TC		PSPCSTGR Species, Sort Grade - Board Foot Volumes (Project)																					
TT2N RR5W S34 Ty00MC 114.00				Project: GLSBPFIN										Page 1									
				Acres 114.00										Date 5/17/2016									
														Time 1:17:04PM									
Spp	S	So	Gr	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre		
									Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf			
					Def%	Gross	Net		4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99							
DF	T	2M		42	1.5	18,423	18,138	2,068			90	10	1	1	2	97	40	14	274	1.61	66.3		
DF	T	3M		51	.5	21,389	21,275	2,425			96	4	1	0	4	95	39	8	99	0.63	214.1		
DF	T	4M		7		2,862	2,862	326			100		45	38	10	7	19	6	23	0.31	122.4		
DF Totals				95	.9	42,674	42,276	4,819			55	41	4	4	3	3	90	33	8	105	0.77	402.7	
GF L 3M				100		1,361	1,361	155			11	32	57		40	45	15	32	9	112	0.76	12.1	
GF Totals				3		1,361	1,361	155			11	32	57		40	45	15	32	9	112	0.76	12.1	
RC L 2M				75	10.0	62	55	6			100					100	40	12	180	2.24	.3		
RC L 3M				25		18	18	2			100					100	40	6	60	0.49	.3		
RC Totals				0	7.7	80	74	8			25	75				100	40	9	120	1.36	.6		
WH L 2M				65	13.3	469	407	46				100				100	40	19	520	2.56	.8		
WH L 3M				31		188	188	21				100				100	40	13	240	1.45	.8		
WH L 4M				4		23	23	3			100				100		26	6	30	0.56	.8		
WH Totals				1	9.2	681	618	70			4	30	66		4	96	35	13	263	1.65	2.3		
Totals					1.0	44,797	44,329	5,053			0	53	41	5	3	4	5	88	33	8	106	0.77	417.8

TC PLOGSTVB				Log Stock Table - MBF																
TT2N RR5W S34 Ty00MC 114.00				Project: GLSBPFIN				Page 1				Date 5/17/2016				Time 1:17:05PM				
				Acres 114.00																
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+
DF	T		2M	20	15	10.0	13	.3							13					
DF	T		2M	30	19		19	.4							19					
DF	T		2M	32	20		20	.4							20					
DF	T		2M	35	21	11.8	18	.4						18						
DF	T		2M	40	2,025	1.4	1,996	41.4						781	676	539				
DF	T		3M	16	9		9	.2					9							
DF	T		3M	20	7	14.3	6	.1					6							
DF	T		3M	30	8		8	.2			8									
DF	T		3M	32	54		54	1.1			42			12						
DF	T		3M	34	38		38	.8			24	15								
DF	T		3M	36	233		233	4.8			164	69								
DF	T		3M	38	46		46	.9			12	34								
DF	T		3M	40	2,044		2,032	42.2			389	665	886	78	13					
DF	T		4M	12	33		33	.7			33									
DF	T		4M	14	41		41	.8			41									
DF	T		4M	16	25		25	.5			25									
DF	T		4M	18	19		19	.4			19									
DF	T		4M	20	28		28	.6			28									
DF	T		4M	22	14		14	.3			14									
DF	T		4M	24	22		22	.5			22									
DF	T		4M	26	47		47	1.0			47									
DF	T		4M	28	18		18	.4			18									
DF	T		4M	30	24		24	.5			24									
DF	T		4M	32	33		33	.7			33									
DF	T		4M	36	22		22	.5			22									
DF			Totals		4,865		4,819	95.4			965	782	901	890	709	572				
GF	L		3M	28	41		41	26.2			14			27						
GF	L		3M	30	22		22	14.1		6					16					
GF	L		3M	31	8		8	5.4					8							
GF	L		3M	32	38		38	24.2		2					17	18				
GF	L		3M	33	9		9	6.0					9							
GF	L		3M	34	14		14	9.2		5				10						
GF	L		3M	38	19		19	12.1					19							
GF	L		3M	40	4		4	2.8		4										
GF			Totals		155		155	3.1		17	14		36	37	33	18				
RC	L		2M	40	7	10.0	6	75.0					6							

TC PLOGSTVB				Log Stock Table - MBF															
TT2N RR5W S34 Ty00MC 114.00				Project: GLSBPFIN Acres 114.00										Page 2 Date 5/17/2016 Time 1:17:05PM					
S T	S pp	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
RC	L			3M 40	2		2	25.0			2								
RC				Totals	9	7.7	8	.2			2		6						
WH	L			2M 40	54	13.3	46	65.8							46				
WH	L			3M 40	21		21	30.4					21						
WH	L			4M 26	3		3	3.8			3								
WH				Totals	78	9.2	70	1.4			3		21		46				
Total				All Species	5,107	1.0	5,053	100.0		17	970	796	938	954	743	636			

TC		PSTNDSUM		Stand Table Summary										Page Date:		1 5/17/2016	
TT2N RR5W S34 Ty00MC 114.00					Project GLSBPFIN					Time: 1:17:03PM							
					Acres 114.00					Grown Year:							
S Spec T			Tot					Average Log		Net		Net	Totals				
	DBH	Sample Trees	FF 16'	Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Net Cu.Ft.	Net Bd.Ft.	Tons/ Acre	Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF		
DF T	9	4	86	81	15.307	6.76	15.31	9.2	50.0	4.00	140	765	456	160	87		
DF T	10	4	84	79	12.399	6.76	12.40	12.3	52.5	4.35	153	651	496	174	74		
DF T	11	7	83	92	17.932	11.83	28.18	12.1	47.3	9.75	342	1,332	1,112	390	152		
DF T	12	5	83	101	10.763	8.45	21.53	12.4	45.0	7.62	268	969	869	305	110		
DF T	13	11	85	99	20.176	18.60	38.52	16.0	64.3	17.54	615	2,476	2,000	702	282		
DF T	14	6	87	106	9.489	10.14	18.98	18.6	81.7	10.07	353	1,550	1,148	403	177		
DF T	15	9	86	111	12.399	15.22	27.55	20.1	88.0	15.79	554	2,425	1,801	632	276		
DF T	16	5	86	109	6.054	8.45	12.11	26.2	110.0	9.04	317	1,332	1,030	361	152		
DF T	17	18	87	122	19.306	30.43	51.48	24.0	99.4	35.26	1,237	5,116	4,020	1,411	583		
DF T	18	10	87	125	9.567	16.91	27.74	25.4	103.4	20.10	705	2,870	2,292	804	327		
DF T	19	17	86	126	14.597	28.74	42.93	28.4	114.8	34.78	1,220	4,929	3,965	1,391	562		
DF T	20	9	86	123	6.974	15.22	20.92	30.4	122.2	18.13	636	2,557	2,067	725	292		
DF T	21	13	86	129	9.137	21.98	27.41	35.4	147.2	27.69	971	4,035	3,156	1,107	460		
DF T	22	11	86	129	7.045	18.60	20.49	40.3	176.9	23.54	826	3,625	2,684	942	413		
DF T	23	7	83	136	4.102	11.83	12.31	43.8	187.6	15.34	538	2,309	1,749	614	263		
DF T	24	6	84	128	3.229	10.14	9.69	45.2	191.7	12.48	438	1,857	1,423	499	212		
DF T	25	3	80	139	1.488	5.07	4.46	51.9	208.9	6.60	232	932	753	264	106		
DF T	26	6	84	134	2.751	10.14	8.25	56.2	238.3	13.21	464	1,967	1,506	528	224		
DF T	27	1	80	147	.425	1.69	1.28	58.6	246.7	2.13	75	315	243	85	36		
DF T	28	1	79	125	.395	1.69	1.19	59.1	223.3	2.00	70	265	228	80	30		
DF T	Totals	153	85	109	183.536	258.67	402.73	25.2	105.0	289.45	10,156	42,276	32,997	11,578	4,819		
GFL	15	1	93	100	.966	1.19	1.93	24.4	105.0	1.04	47	203	118	54	23		
GFL	16	2	92	110	1.698	2.37	5.09	18.0	80.0	2.02	92	407	230	105	46		
GFL	18	1	92	115	.671	1.19	2.01	25.2	116.7	1.12	51	235	127	58	27		
GFL	20	1	93	120	.543	1.19	1.63	31.9	156.7	1.15	52	255	131	59	29		
GFL	21	1	92	120	.493	1.19	1.48	36.7	176.7	1.19	54	261	136	62	30		
GFL	Totals	6	92	111	4.370	7.11	12.14	24.4	112.1	6.51	296	1,361	742	337	155		
WHL	25	1	94	127	.782	2.67	2.35	58.2	263.3	4.37	137	618	498	156	70		
WHL	Totals	1	94	127	.782	2.67	2.35	58.2	263.3	4.37	137	618	498	156	70		
RCL	23	1	70	110	.308	.89	.62	54.5	120.0	.79	34	74	90	38	8		
RCL	Totals	1	70	110	.308	.89	.62	54.5	120.0	.79	34	74	90	38	8		
Totals		161	85	109	188.996	269.33	417.84	25.4	106.1	301.11	10,622	44,329	34,327	12,109	5,053		



Legend

- • • • Timber Sale Boundary
- Roads
- - - New Construction
- = : = Posted R/W Boundary
- Type F Stream
- Type N Stream
- Stream Buffer
- Stream Buffer Boundary
- Tractor Yarding Area
- Landings
- - - ODF Property Boundary
- Section Line
- 400 Foot Contour Band
- 80 Foot Contour Band

LOGGING PLAN

FOR TIMBER SALE CONTRACT # 341-17-37
GALE'S BACK POCKET
PORTIONS OF SECTIONS 33 & 34, T2N, R5W, W.M.
WASHINGTON COUNTY, OREGON

Forest Grove District GIS
May, 2015

This product is for informational use and may not be
suitable for legal, engineering, or surveying purposes.



NET ACRES TRACTOR YARDING = 114

1:12,000

1 inch = 1,000 feet

