



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Electric Horseman
Sale FG-341-2020-W00257-01

District: Forest Grove

Date: September 12, 2019

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,322,101.20	\$1,853.73	\$1,323,954.93
		Project Work:	(\$74,535.00)
		Advertised Value:	\$1,249,419.93



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District: Forest Grove

Date: September 12, 2019

Timber Description

Location: Portions of Sections 2 & 3, T1N, R6W, W.M. Tillamook County, Oregon, Tax Code 56.

Stand Stocking: 20%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	18	0	98
Western Hemlock / Fir	20	0	98
Alder (Red)	15	0	95

Volume by Grade	2S	3S & 4S 6"-11"	Camprun	Total
Douglas - Fir	1,680	1,320	0	3,000
Western Hemlock / Fir	12	18	0	30
Alder (Red)	0	0	9	9
Total	1,692	1,338	9	3,039

Comments: Pond Values Used: Local Pond Values, July 2019.

Western redcedar and Other Cedars Stumpage Price = Pond Value minus Logging Cost:
 $\$714.69/\text{MBF} = \$936/\text{MBF} - \$221.31/\text{MBF}$

Noble fir and Other conifers Stumpage Price = Pond Value minus Logging Cost:
 $\$333.04/\text{MBF} = \$551.60/\text{MBF} - \$218.56/\text{MBF}$

BRANDING AND PAINTING COST ALLOWANCE = \$2.00/MBF

FUEL COST ALLOWANCE = \$3.00/Gallon

HAULING COST ALLOWANCE

Hauling costs equivalent to \$950 daily truck cost.

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

Other Costs (No Profit & Risk added):

Machine Time to Block/Waterbar Roads, and Skid Trails:

10 hours x \$150/hour = \$1,500

Machine Time to Block/Rip Non-Project Roads:

10 hours x \$100/hour = \$1,000

Machine Time to Pile Landing Slash and Sort Firewood:

20 hours x \$150/hour = \$3,000

Equipment Cleaning: 3 pieces x \$1,000/Piece = \$3,000

Slash Disposal: 25 acres x \$200/acre = \$5,000

Recreation Trail Cleaning and Repair: 1,500' @ \$1.00/foot = \$1,500

TOTAL Other Costs (No Profit & Risk added) = \$15,000

ROAD MAINTENANCE

Move-in: \$4,000

General Road Maintenance: 6 miles x \$1,200/mile = \$7,200

TOTAL Road Maintenance: \$11,200/3,039 MBF = \$3.69/MBF



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Logging Conditions

Combination#: 1

Douglas - Fir	56.87%
Western Hemlock / Fir	72.80%
Alder (Red)	49.00%

Logging System: Shovel **Process:** Stroke Delimber

yarding distance: Medium (800 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)

Combination#: 2

Douglas - Fir	43.13%
Western Hemlock / Fir	27.20%
Alder (Red)	51.00%

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

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

tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF

loads / day: 8 **bd. ft / load:** 4600

cost / mbf: \$163.04

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



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Logging Costs

Operating Seasons: 2.00	Profit Risk: 15%
Project Costs: \$74,535.00	Other Costs (P/R): \$0.00
Slash Disposal: \$0.00	Other Costs: \$15,000.00

Miles of Road

Road Maintenance: \$3.69

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	4.6
Western Hemlock / Fir	\$0.00	3.0	3.9
Alder (Red)	\$0.00	2.0	2.8



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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 - Fir									
\$109.54	\$3.76	\$2.89	\$70.22	\$0.00	\$27.96	\$0.00	\$2.00	\$4.94	\$221.31
Western Hemlock / Fir									
\$94.55	\$3.76	\$2.89	\$82.82	\$0.00	\$27.60	\$0.00	\$2.00	\$4.94	\$218.56
Alder (Red)									
\$116.94	\$3.87	\$2.89	\$178.12	\$0.00	\$45.27	\$0.00	\$2.00	\$4.94	\$354.03

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$658.68	\$437.37	\$0.00
Western Hemlock / Fir	\$0.00	\$551.60	\$333.04	\$0.00
Alder (Red)	\$0.00	\$560.00	\$205.97	\$0.00



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Summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	3,000	\$437.37	\$1,312,110.00
Western Hemlock / Fir	30	\$333.04	\$9,991.20
Alder (Red)	9	\$205.97	\$1,853.73

Gross Timber Sale Value

Recovery: \$1,323,954.93

Prepared By: Kenton Burns

Phone: 503-359-7477

PROJECT COST SUMMARY SHEET

Timber Sale: Electric Horseman
Sale Number: FG-341-2020-W00257-01

PROJECT NO. 1: ROCKED ROAD CONSTRUCTION

	<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
	G to H	7+80	\$8,591.36
	I to J	1+60	\$3,623.71
		9+40 stations	
		0.18 miles	
Total Rock =	603 cy	3" - 0	
	300 cy	Jaw-run	
		Move-in =	<u>\$3,625.32</u>

TOTAL PROJECT NO. 1 COST = \$15,840.39

PROJECT NO. 2: DIRT ROAD CONSTRUCTION AND RECONSTRUCTION

	<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
	A to B	1+36	\$1,532.86
	C to D	5+05	\$2,672.96
	E to F	8+50	\$4,389.96
	K to L	10+00	\$1,802.44
		24+91 stations	
		0.47 miles	
Total Rock =	24 cy	1½" - 0	
		Move-in =	<u>\$2,551.14</u>

TOTAL PROJECT NO. 2 COST = \$12,949.36

PROJECT NO. 3: ROAD VACATING & BLOCKING

	<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
	A to B	1+36	\$1,503.00
	C to D	5+05	\$195.00
	E to F	8+50	\$1,192.25
	K to L	10+00	\$55.00
		24+91 stations	
		0.47 miles	

TOTAL PROJECT NO. 3 COST = \$2,945.25

PROJECT NO. 4: ROAD BRUSHING

TOTAL PROJECT NO. 4 COST = \$42,800.00

TOTAL CREDITS \$74,535.00

SUMMARY OF CONSTRUCTION COST

Timber Sale: Electric Horseman
 Road Segment: A to B

Sale Number: FG-341-2020-W00257-01
 Construction: 1+36 stations
0.03 miles

PROJECT NO. 2

CONSTRUCTION

Clearing & grubbing (scatter)	0.10	ac @	\$1,078.00	per ac =	\$107.80
Balanced road construction	1.36	sta @	\$110.00	per sta =	\$149.60
70' Landing	1	ea @	\$314.00	per ea =	\$314.00
Grade, ditch, & roll	1.36	sta @	\$36.00	per sta =	\$48.96

TOTAL CONSTRUCTION COSTS = \$620.36

CULVERTS

Culverts and Bands

18" Diameter	40	LF @	\$20.00	per LF =	\$800.00
Markers & Stakes					
Culvert markers	1	ea @	\$10.00	per ea =	\$10.00

TOTAL CULVERT COSTS = \$810.00

EROSION CONTROL

Winterization blocking	1	ea @	\$50.00	per ea =	\$50.00
Winterization waterbarring	1	ea @	\$27.50	per ea =	\$27.50
Grass seed & fertilizer	0.05	ac @	\$500.00	per ac =	\$25.00

TOTAL EROSION CONTROL COSTS = \$102.50

TOTAL PROJECT NO. 2 COST = \$1,532.86

PROJECT NO. 3

Construct tank traps	1	ea @	\$55.00	per ea =	\$55.00
Construct waterbars	1	ea @	\$27.50	per ea =	\$27.50
Rip dirt road surface	1.36	sta @	\$50.00	per sta =	\$68.00
Remove existing culverts	1	ea @	\$150.00	per ea =	\$150.00
Grass seed & fertilizer	0.10	ac @	\$425.00	per ac =	\$42.50
Mulch	0.10	ac @	\$600.00	per ac =	\$60.00
Equipment move-in, within area move, & cleaning					\$1,100.00

TOTAL PROJECT NO. 3 COST = \$1,503.00

TOTAL PROJECT COST = \$3,035.86

SUMMARY OF CONSTRUCTION COST

Timber Sale: Electric Horseman
 Road Segment: C to D

Sale Number: FG-341-2020-W00257-01
 Construction: 5+05 stations
0.10 miles

PROJECT NO. 2

CONSTRUCTION

Clearing & grubbing (scatter)	0.47	ac @	\$1,078.00	per ac =	\$506.66
Balanced road construction	5.05	sta @	\$110.00	per sta =	\$555.50
Turnarounds	1	ea @	\$82.50	per ea =	\$82.50
70' Landing	1	ea @	\$314.00	per ea =	\$314.00
Grade, ditch, & roll	5.05	sta @	\$36.00	per sta =	\$181.80
TOTAL CONSTRUCTION COSTS =					\$1,640.46

CULVERTS

Culverts and Bands					
18" Diameter	40	LF @	\$20.00	per LF =	\$800.00
Markers & Stakes					
Culvert markers	1	ea @	\$10.00	per ea =	\$10.00
TOTAL CULVERT COSTS =					\$810.00

EROSION CONTROL

Winterization blocking	1	ea @	\$50.00	per ea =	\$50.00
Winterization waterbarring	2	ea @	\$27.50	per ea =	\$55.00
Grass seed & fertilizer	0.24	ac @	\$500.00	per ac =	\$117.50
TOTAL EROSION CONTROL COSTS =					\$222.50

TOTAL PROJECT NO. 2 COST = \$2,672.96

PROJECT NO. 3

Block road	1	ea @	\$140.00	per ea =	\$140.00
Construct waterbars	2	ea @	\$27.50	per ea =	\$55.00
TOTAL PROJECT NO. 3 COST =					\$195.00

TOTAL PROJECT COST = \$2,867.96

SUMMARY OF CONSTRUCTION COST

Timber Sale: Electric Horseman
 Road Segment: E to F

Sale Number: FG-341-2020-W00257-01
 Construction: 8+50 stations
0.16 miles

PROJECT NO. 2

CONSTRUCTION

Clearing & grubbing (scatter)	0.49	ac @	\$1,078.00	per ac =	\$528.22
Balanced road construction	8.50	sta @	\$110.00	per sta =	\$935.00
Turnouts	1	ea @	\$66.00	per ea =	\$66.00
Turnarounds	1	ea @	\$82.50	per ea =	\$82.50
70' Landing	1	ea @	\$314.00	per ea =	\$314.00
Grade, ditch, & roll	8.50	sta @	\$36.00	per sta =	\$306.00

TOTAL CONSTRUCTION COSTS = \$2,231.72

CULVERTS

Culverts and Bands					
18" Diameter	35	LF @	\$20.00	per LF =	\$700.00
24" Diameter	35	LF @	\$29.00	per LF =	\$1,015.00
Markers & Stakes					
Culvert markers	2	ea @	\$10.00	per ea =	\$20.00

TOTAL CULVERT COSTS = \$1,735.00

ROCK

	Rock Size	Base Cost \$/cy	Haul Cost \$/cy	Placement/ Processing Cost \$/cy	Total CY	Rock Cost
Subgrade rock						
Bedding and backfill	1½" - 0	\$0.80	\$5.71	\$0.50	24	\$168.24
Subtotal =					24	\$168.24

Totals		All Rock =	24
		1½" - 0 =	24

TOTAL ROCK COSTS = \$168.24

EROSION CONTROL

Winterization blocking	1	ea @	\$50.00	per ea =	\$50.00
Winterization waterbarring	3	ea @	\$27.50	per ea =	\$82.50
Grass seed & fertilizer	0.25	ac @	\$500.00	per ac =	\$122.50

TOTAL EROSION CONTROL COSTS = \$255.00

TOTAL PROJECT NO. 2 COST = \$4,389.96

PROJECT NO. 3

Construct tank traps	1	ea @	\$55.00	per ea =	\$55.00
Construct waterbars	2	ea @	\$27.50	per ea =	\$55.00
Rip dirt road surface	6.00	sta @	\$50.00	per sta =	\$300.00
Grass seed & fertilizer	0.49	ac @	\$425.00	per ac =	\$208.25
Mulch	0.49	ac @	\$600.00	per ac =	\$294.00
Reestablish trail	2.00	hrs @	\$140.00	per hr =	\$280.00

TOTAL PROJECT NO. 3 COST = \$1,192.25

TOTAL PROJECT COST = \$5,582.21

SUMMARY OF CONSTRUCTION COST

Timber Sale: Electric Horseman
 Road Segment: G to H

Sale Number: FG-341-2020-W00257-01
 Construction: 7+80 stations
0.15 miles

PROJECT NO. 1

CONSTRUCTION

Clearing & grubbing (scatter)	0.72	ac @	\$1,078.00	per ac =	\$776.16
Balanced road construction	7.80	sta @	\$110.00	per sta =	\$858.00
End-haul					
Excavate & load	200	cy @	\$1.64	per cy =	\$328.00
Haul	260	cy @	\$2.83	per cy =	\$735.80
Compact waste area	260	cy @	\$0.30	per cy =	\$78.00
Turnouts	1	ea @	\$66.00	per ea =	\$66.00
Turnarounds	1	ea @	\$82.50	per ea =	\$82.50
70' Landing	1	ea @	\$314.00	per ea =	\$314.00
Grade, ditch, & roll	7.80	sta @	\$36.00	per sta =	\$280.80

TOTAL CONSTRUCTION COSTS = \$3,519.26

ROCK

	Rock Size	Base Cost \$/cy	Haul Cost \$/cy	Placement/ Processing Cost \$/cy	Total CY	Rock Cost
Surfacing rock						
Surfacing rock	3" - 0 =	\$0.80	\$5.93	\$1.22	414	\$3,291.30
Junction	3" - 0 =	\$0.80	\$5.93	\$1.22	30	\$238.50
Turnout	3" - 0 =	\$0.80	\$5.93	\$1.22	24	\$190.80
Turnaround	3" - 0 =	\$0.80	\$5.93	\$1.22	20	\$159.00
70' Landing	Jaw-run =	\$0.80	\$5.93	\$1.22	150	\$1,192.50
	Subtotal =				638	\$5,072.10

Totals

All Rock =	638
3" - 0 =	488
Jaw-run =	150

TOTAL ROCK COSTS = \$5,072.10

TOTAL PROJECT NO. 1 COST = \$8,591.36

SUMMARY OF CONSTRUCTION COST

Timber Sale: Electric Horseman
 Road Segment: I to J

Sale Number: FG-341-2020-W00257-01
 Construction: 1+60 stations
0.03 miles

PROJECT NO. 1

CONSTRUCTION

Clearing & grubbing (scatter)	0.12	ac @	\$1,078.00	per ac =	\$129.36
Balanced road construction	1.60	sta @	\$110.00	per sta =	\$176.00
70' Landing	1	ea @	\$314.00	per ea =	\$314.00
Grade, ditch, & roll	1.60	sta @	\$36.00	per sta =	\$57.60

TOTAL CONSTRUCTION COSTS = \$676.96

CULVERTS

Culverts and Bands					
18" Diameter	40	LF @	\$20.00	per LF =	\$800.00
Markers & Stakes					
Culvert markers	1	ea @	\$10.00	per ea =	\$10.00

TOTAL CULVERT COSTS = \$810.00

ROCK

	Rock Size	Base Cost \$/cy	Haul Cost \$/cy	Placement/ Processing Cost \$/cy	Total CY	Rock Cost
Surfacing rock						
Surfacing rock	3" - 0 =	\$0.80	\$5.93	\$1.22	85	\$675.75
Junction	3" - 0 =	\$0.80	\$5.93	\$1.22	30	\$238.50
70' Landing	Jaw-run =	\$0.80	\$5.93	\$1.22	150	\$1,192.50
	Subtotal =				265	\$2,106.75

Totals	All Rock =	265
	3" - 0 =	115
	Jaw-run =	150

TOTAL ROCK COSTS = \$2,106.75

EROSION CONTROL

Grass seed & fertilizer	0.06	ac @	\$500.00	per ac =	\$30.00
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TOTAL EROSION CONTROL COSTS = \$30.00

TOTAL PROJECT NO. 1 COST = \$3,623.71

SUMMARY OF CONSTRUCTION COST

Timber Sale:	<u>Electric Horseman</u>	Sale Number:	<u>FG-341-2020-W00257-01</u>
Road Segment:	<u>K to L</u>	Construction:	<u>10+00</u> stations <u>0.19</u> miles

PROJECT NO. 2

RECONSTRUCTION

Clearing & grubbing (scatter)	0.23	ac @	\$1,078.00	per ac =	\$247.94
Balanced road construction	10.00	sta @	\$82.50	per sta =	\$825.00
Clean culvert inlet & outlet	3	ea @	\$25.00	per ea =	\$75.00
50' Landing	1	ea @	\$220.00	per ea =	\$220.00
Grade & roll (outslope)	10.00	sta @	\$32.20	per sta =	\$322.00
					<u>TOTAL CONSTRUCTION COSTS = \$1,689.94</u>

EROSION CONTROL

Winterization blocking	1	ea @	\$55.00	per ea =	\$55.00
Grass seed & fertilizer	0.12	ac @	\$500.00	per ac =	\$57.50
					<u>TOTAL EROSION CONTROL COSTS = \$112.50</u>

TOTAL PROJECT NO. 2 COST = \$1,802.44

PROJECT NO. 3

Road blocking	1	ea @	\$55.00	per ea =	\$55.00
					<u>TOTAL PROJECT NO. 3 COST = \$55.00</u>

SUMMARY OF CONSTRUCTION COST

Timber Sale: Electric Horseman Timber Sale No. : FG-341-2020-W00257-01

PROJECT NO. 4:

Road Brushing

<u>Brush Density</u>	<u>miles @</u>	<u>\$ per mile =</u>	
Light	26.93	\$850.00	\$22,890.50
Moderate	8.94	\$1,100.00	\$9,834.00
Heavy	6.16	\$1,550.00	\$9,548.00

Total Miles= 42.03

Move In & Within Area Move

Brush Cutter \$527.50

TOTAL COST PROJECT NO. 4 = \$42,800.00

SUMMARY OF CONSTRUCTION COST

Timber Sale: Electric Horseman

Sale Number: FG-341-2020-W00257-01

MOVE-IN & EQUIPMENT CLEANING COSTS

<u>Equipment</u>	<u>Total</u>
Grader	\$785.22
Loader into Stockpile Site	\$647.94
Roller (smooth/grid) & Compactor	\$522.69
Excavator (Large) - Equipment Cleaning	\$1,785.22
Dozer (Large) - Equipment Cleaning	\$1,829.80
Dump Trucks (10cy +)	\$466.53
Water Truck (1,500 Gal)	\$139.06
	<u>TOTAL MOVE-IN COSTS = \$6,176.46</u>

CRUISE REPORT
Electric Horseman
FG-341-2020-W00257-01

1. LOCATION: Portions of Sections 2 & 3, T1N, R6W, W.M., Tillamook County, Oregon.

2. CRUISE DESIGN: Pre-cruise evaluation indicated that the stand's average DBH is approximately 16 inches with a Coefficient of Variation of about 56%. For sales of this size and approximate value, ODF cruise standards require a Sampling Error of 9% at a 68% confidence level, and a minimum sample size of 100 graded trees. Statistical analysis indicated that 38 variable radius plots utilizing a 40 BAF prism would produce an adequate sample size.

3. SAMPLING METHOD: The Timber Sale Area was cruised in July, 2019. The Timber Sale Area was sampled with 38 variable radius grade plots laid out on a 5 chain x 5 chain grid. Plots falling on or near existing roads or no-harvest areas were offset 1 chain.

4. CRUISE RESULTS: 174 trees were measured and graded producing a cumulative Sampling Error of 10.9% on the Basal Area and 11.8% on the Board Foot Volume.

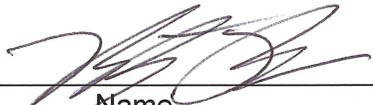
5. TREE MEASUREMENT AND GRADING: All sample trees were measured and graded following Columbia River Log Scale grade rules and favored 40 foot segments.

- a) **Height Standards:** Total tree heights were measured to the nearest foot. For conifers, bole heights were calculated to a six inch top. For hardwoods, bole heights were calculated to a seven inch top.
- b) **Diameter Standards:** Diameters were measured outside bark at breast height to the nearest inch.
- c) **Form Factors:** Measured for each grade tree using a form point of 16 feet.

5. DATA PROCESSING:

- a) **Volumes and Statistics:** Cruise estimates and sampling statistics were derived from Super Ace 2008 cruise software.
- b) **Deductions:** For conifers, two percent of the volume was subtracted from the computed volumes to account for hidden defect and breakage. For hardwoods, five 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 cruisers Kenton Burns and Mark Savage.

Prepared by:  8/15/19
Name Date

Reviewed by:  8/15/19
Name Date

TC PSTATS		PROJECT STATISTICS								PAGE	1
		PROJECT				HORSEWO				DATE	7/24/2019
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
01N	06	03	00A1	00MC	105.00	38	174	S	W		
01N	06W	03	00A2	00MC							
		PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL		38	174	4.6							
CRUISE		38	174	4.6	11,416	1.5					
DBH COUNT											
REFOREST											
COUNT											
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	170	106.0	17.6	104	42.8	179.6	29,423	29,147	6,956	6,956	
WHEMLOCK	2	1.0	19.5	99	0.5	2.0	291	291	76	76	
R ALDER	2	1.7	15.2	69	0.6	2.2	97	85	34	34	
TOTAL	174	108.7	17.6	104	43.8	183.8	29,810	29,523	7,066	7,066	
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		89.4	6.9	453	486	519					
WHEMLOCK		79.9	74.8	116	460	804					
R ALDER		38.6	36.1	35	55	75					
TOTAL		90.1	6.8	448	481	513	324	81	36		
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		80.7	6.2	105	112	119					
WHEMLOCK		82.4	77.2	28	122	215					
R ALDER		3.8	3.6	19	20	21					
TOTAL		81.2	6.1	104	111	118	263	66	29		
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		84.5	13.7	92	106	121					
WHEMLOCK		507.1	82.2	0	1	2					
R ALDER		616.4	99.9	0	2	3					
TOTAL		81.5	13.2	94	109	123	265	66	29		
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		70.4	11.4	159	180	200					
WHEMLOCK		431.3	69.9	1	2	3					
R ALDER		616.4	99.9	0	2	4					
TOTAL		67.5	10.9	164	184	204	182	45	20		
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		74.2	12.0	25,643	29,147	32,651					
WHEMLOCK		430.9	69.8	88	291	494					
R ALDER		616.4	99.9	0	85	171					
TOTAL		72.6	11.8	26,049	29,523	32,997	210	53	23		
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		72.1	11.7	6,144	6,956	7,769					
WHEMLOCK		430.3	69.7	23	76	128					

TC PSTATS		PROJECT STATISTICS						PAGE	2	
		PROJECT		HORSEWO				DATE	7/24/2019	
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
01N	06	03	00A1	00MC	105.00	38	174	S	W	
01N	06W	03	00A2	00MC						
CL	68.1		COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.	INF. POP.	
SD:	1.00		VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
R ALDER			616.4	99.9	0	34	68			
TOTAL			70.1	11.4	6,263	7,066	7,869	196	49	22

Log Stock Table - MBF

T01N R06W S03 Ty00MC 88.00
 T01N R06W S03 Ty00MC 17.00

Project: HORSEWO
 Acres 105.00

Page 1
 Date 7/24/2019
 Time 1:56:00PM

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		2M	22		8		8	.3						8								
DF		2M	40		1,726	1.2	1,706	55.7					451	405	494	229	128					
DF		3M	20		1		1	.0				1										
DF		3M	24		4		4	.1				4										
DF		3M	26		1		1	.0				1										
DF		3M	28		2		2	.1			1	1										
DF		3M	30		7		7	.2			4	3										
DF		3M	32		22		22	.7			17	5										
DF		3M	34		27		27	.9			20	6										
DF		3M	36		38	1.9	38	1.2			13	18	7									
DF		3M	38		22		22	.7			5	14	4									
DF		3M	40		1,084		1,078	35.2			267	314	444	13	6	7	15	13				
DF		4M	12		11		11	.4		4	8											
DF		4M	14		15		15	.5			15											
DF		4M	16		13		13	.4		3	9	1										
DF		4M	18		18		18	.6		2	16											
DF		4M	20		22		22	.7			22											
DF		4M	22		15		15	.5			15											
DF		4M	24		11		11	.4			10	1										
DF		4M	26		12		12	.4			12											
DF		4M	28		12		12	.4		2	9											
DF		4M	30		12	12.8	10	.3			10											
DF		4M	32		1		1	.0		1												
DF		4M	34		5	15.2	4	.1			4											
DF		Totals			3,089		3,060	98.7		12	458	368	455	463	411	509	244	140				
RA		R	29		6	20.0	5	55.0			5											
RA		R	30		4		4	45.0				4										
RA		Totals			10	12.1	9	.3			5	4										
WH		2M	40		12		12	38.9						12								
WH		3M	32		4		4	13.3			4											
WH		3M	40		15		15	47.8				2	12									
WH		Totals			31		31	1.0			4	2	12		12							
Total		All Species			3,130		3,100	100.0		12	467	375	467	463	411	520	244	140				

TC PSTNDSUM		Stand Table Summary										Page	1		
												Date:	7/24/2019		
T01N R06W S03 Ty00MC 88.00		Project HORSEWO										Time:		1:56:02PM	
T01N R06W S03 Ty00MC 17.00		Acres 105.00										Grown Year:			
S Spec T	Sample DBH	Trees	Tot		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	T o t a l s		
			FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF	8	2	87	73	6.196	2.16	6.20	4.6	20.0	.82	29	124	86	30	13
DF	10	2	87	93	3.965	2.16	3.97	12.8	60.0	1.44	51	238	151	53	25
DF	11	6	85	81	9.358	6.18	12.40	12.4	47.9	4.39	154	594	461	162	62
DF	12	8	85	101	10.816	8.50	21.63	12.5	50.7	7.73	271	1,097	812	285	115
DF	13	5	88	86	5.697	5.25	9.22	15.9	59.8	4.17	146	551	437	153	58
DF	14	6	86	97	5.923	6.33	11.85	16.9	67.8	5.71	200	803	600	210	84
DF	15	6	85	106	5.287	6.49	10.57	21.9	88.3	6.60	231	934	693	243	98
DF	16	12	87	106	9.182	12.82	18.36	24.7	103.1	12.95	454	1,894	1,360	477	199
DF	17	14	86	104	9.506	14.98	20.38	26.2	104.9	15.21	534	2,137	1,597	561	224
DF	18	12	86	112	7.255	12.82	15.73	30.9	119.4	13.88	487	1,879	1,457	511	197
DF	19	11	88	113	5.883	11.58	15.06	30.3	121.1	13.01	457	1,824	1,366	479	191
DF	20	11	88	118	5.453	11.90	15.37	32.2	132.9	14.11	495	2,042	1,482	520	214
DF	21	9	87	119	3.981	9.58	10.60	37.3	152.7	11.27	395	1,618	1,183	415	170
DF	22	7	86	120	2.868	7.57	7.37	41.9	178.3	8.80	309	1,315	924	324	138
DF	23	6	85	123	2.195	6.33	6.21	43.8	186.6	7.75	272	1,159	814	286	122
DF	24	8	86	125	2.605	8.18	7.81	45.4	194.2	10.12	355	1,517	1,062	373	159
DF	25	3	84	130	.906	3.09	2.72	48.4	204.7	3.75	132	556	394	138	58
DF	26	7	86	126	2.053	7.57	6.16	54.4	230.0	9.55	335	1,417	1,002	352	149
DF	27	5	86	130	1.321	5.25	3.96	60.0	261.6	6.78	238	1,037	712	250	109
DF	28	4	84	125	.975	4.17	2.93	62.6	263.3	5.22	183	770	548	192	81
DF	29	6	86	136	1.346	6.18	4.04	72.9	337.9	8.39	295	1,365	881	309	143
DF	30	3	84	120	.661	3.24	1.98	69.4	298.9	3.92	138	593	412	144	62
DF	31	2	85	124	.413	2.16	1.24	75.8	331.7	2.68	94	411	281	99	43
DF	32	2	80	138	.387	2.16	1.16	85.1	365.0	2.82	99	424	296	104	45
DF	33	2	84	129	.364	2.16	1.09	88.9	401.7	2.77	97	439	291	102	46
DF	34	1	87	139	.172	1.08	.51	102.9	503.3	1.51	53	259	158	56	27
DF	35	1	83	128	.138	.93	.42	97.5	413.3	1.15	41	172	121	43	18
DF	36	3	84	131	.415	2.93	1.24	106.5	487.9	3.78	133	607	397	139	64
DF	37	1	83	137	.124	.93	.37	115.8	560.0	1.23	43	208	129	45	22
DF	38	2	85	139	.235	1.85	.70	125.6	600.0	2.52	89	423	265	93	44
DF	39	1	87	129	.130	1.08	.39	126.9	653.3	1.41	50	256	148	52	27
DF	40	1	84	137	.124	1.08	.37	137.2	646.7	1.45	51	240	153	54	25
DF	41	1	83	158	.101	.93	.30	158.5	806.7	1.37	48	244	144	50	26
DF	Totals	170	86	104	106.035	179.62	222.33	31.3	131.1	198.26	6,956	29,147	20,817	7,304	3,060
WH	16	1	86	98	.775	1.08	1.55	25.4	100.0	1.26	39	155	132	41	16
WH	30	1	82	104	.188	.93	.38	96.2	360.0	1.16	36	136	122	38	14
WH	Totals	2	85	99	.963	2.01	1.93	39.2	150.9	2.42	76	291	254	79	31
RA	13	1	73	62	1.173	1.08	1.17	19.4	40.0	.63	23	47	66	24	5
RA	19	1	74	83	.549	1.08	.55	20.5	70.0	.31	11	38	32	12	4
RA	Totals	2	73	69	1.722	2.16	1.72	19.7	49.6	.93	34	85	98	36	9
Totals		174	86	104	108.720	183.79	225.98	31.3	130.6	201.61	7,066	29,523	21,169	7,419	3,100

TC PSTATS		PROJECT STATISTICS							PAGE	1	
		PROJECT		HORSEWO			DATE		7/24/2019		
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
01N	06	03	00A1	00MC	88.00	31	146	S	W		
				TREES	ESTIMATED	PERCENT					
		PLOTS	TREES	PER PLOT	TOTAL	SAMPLE					
					TREES	TREES					
TOTAL		31	146	4.7							
CRUISE		31	146	4.7	10,122	1.4					
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	
DOUG FIR	143	112.0	17.4	105	44.3	184.5	29,681	29,424	7,084	7,084	
R ALDER	2	2.1	15.2	69	0.7	2.6	116	102	41	41	
WHEMLOCK	1	.9	16.0	98	0.3	1.3	185	185	47	47	
TOTAL	<i>146</i>	<i>115.0</i>	<i>17.3</i>	<i>104</i>	<i>45.3</i>	<i>188.4</i>	<i>29,981</i>	<i>29,711</i>	<i>7,172</i>	<i>7,172</i>	
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		82.5	6.9	401	430	460					
R ALDER		38.6	36.1	35	55	75					
WHEMLOCK											
TOTAL		<i>83.7</i>	<i>6.9</i>	<i>394</i>	<i>424</i>	<i>453</i>	<i>280</i>	<i>70</i>	<i>31</i>		
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		74.9	6.3	95	101	107					
R ALDER		3.8	3.6	19	20	21					
WHEMLOCK											
TOTAL		<i>75.9</i>	<i>6.3</i>	<i>93</i>	<i>100</i>	<i>106</i>	<i>230</i>	<i>57</i>	<i>26</i>		
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		81.8	14.7	96	112	128					
R ALDER		556.8	99.9	0	2	4					
WHEMLOCK		556.8	99.9	0	1	2					
TOTAL		<i>78.7</i>	<i>14.1</i>	<i>99</i>	<i>115</i>	<i>131</i>	<i>247</i>	<i>62</i>	<i>27</i>		
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		71.2	12.8	161	185	208					
R ALDER		556.8	99.9	0	3	5					
WHEMLOCK		556.8	99.9	0	1	3					
TOTAL		<i>68.7</i>	<i>12.3</i>	<i>165</i>	<i>188</i>	<i>212</i>	<i>189</i>	<i>47</i>	<i>21</i>		
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		77.0	13.8	25,361	29,424	33,487					
R ALDER		556.8	99.9	0	102	204					
WHEMLOCK		556.8	99.9	0	185	369					
TOTAL		<i>75.9</i>	<i>13.6</i>	<i>25,664</i>	<i>29,711</i>	<i>33,757</i>	<i>230</i>	<i>57</i>	<i>26</i>		
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		74.0	13.3	6,143	7,084	8,025					
R ALDER		556.8	99.9	0	41	81					

TC PSTATS		PROJECT STATISTICS						PAGE	2	
		PROJECT		HORSEWO				DATE	7/24/2019	
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
01N	06	03	00A1	00MC	88.00	31	146	S	W	
CL	68.1	COEFF	NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.		
SD:	1.00	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15	
WHEMLOCK		556.8	99.9	0	47	94				
TOTAL		72.7	13.0	6,236	7,172	8,107	211	53	23	

Log Stock Table - MBF

T01N R06W S03 Ty00MC 88.00

Project: HORSEWO
Acres 88.00

Page 1
Date 7/24/2019
Time 1:58:08PM

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		2M	40		1,396	1.2	1,380	53.3					387	359	385	194	54			
DF		3M	20		1		1	.0												
DF		3M	24		4		4	.2												
DF		3M	26		1		1	.0												
DF		3M	28		2		2	.1			1	1								
DF		3M	30		4		4	.2			4									
DF		3M	32		20		20	.8			15	5								
DF		3M	34		24		24	.9			18	6								
DF		3M	36		34	2.1	33	1.3			13	14	7							
DF		3M	38		22		22	.9			5	14	4							
DF		3M	40		976		972	37.5			222	301	414	13	6		15			
DF		4M	12		11		11	.4		4	7									
DF		4M	14		15		15	.6			15									
DF		4M	16		8		8	.3		1	6	1								
DF		4M	18		17		17	.7		2	15									
DF		4M	20		21		21	.8			21									
DF		4M	22		15		15	.6			15									
DF		4M	24		10		10	.4			10									
DF		4M	26		11		11	.4			11									
DF		4M	28		12		12	.5		2	9									
DF		4M	30		3		3	.1			3									
DF		4M	32		1		1	.0		1										
DF		4M	34		5	15.2	4	.2			4									
DF		Totals			2,612		2,589	99.0		10	394	347	425	400	365	385	209	54		
RA		R	29		6	20.0	5	55.0			5									
RA		R	30		4		4	45.0				4								
RA		Totals			10	12.1	9	.3			5	4								
WH		3M	32		4		4	25.0			4									
WH		3M	40		12		12	75.0					12							
WH		Totals			16		16	.6			4		12							
Total		All Species			2,638		2,615	100.0		10	403	351	437	400	365	385	209	54		

TC PSTNDSUM		Stand Table Summary											Page 1		
													Date: 7/24/2019		
T01N R06W S03 Ty00MC 88.00		Project HORSEWO											Time: 1:58:10PM		
		Acres 88.00											Grown Year:		
S Spc T	Sample DBH	Trees	Tot		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
			FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF	8	2	87	73	7.393	2.58	7.39	4.6	20.0	.98	34	148	86	30	13
DF	10	2	87	93	4.732	2.58	4.73	12.8	60.0	1.72	60	284	151	53	25
DF	11	4	85	84	7.821	5.16	9.78	13.5	52.0	3.75	132	508	330	116	45
DF	12	7	85	102	11.500	9.03	23.00	12.7	51.4	8.35	293	1,183	735	258	104
DF	13	4	88	90	5.599	5.16	9.80	15.2	58.6	4.25	149	574	374	131	51
DF	14	5	86	99	6.035	6.45	12.07	17.2	70.0	5.91	207	845	520	182	74
DF	15	6	85	106	6.309	7.74	12.62	21.9	88.3	7.87	276	1,115	693	243	98
DF	16	11	87	105	10.165	14.19	20.33	24.5	101.8	14.22	499	2,070	1,251	439	182
DF	17	13	86	104	10.642	16.77	22.92	26.0	103.9	16.99	596	2,382	1,495	525	210
DF	18	11	86	111	8.032	14.19	17.52	30.7	118.3	15.34	538	2,074	1,350	474	182
DF	19	9	88	115	5.898	11.61	15.73	29.4	118.7	13.16	462	1,868	1,158	406	164
DF	20	11	88	118	6.506	14.19	18.33	32.2	132.9	16.84	591	2,437	1,482	520	214
DF	21	8	87	118	4.292	10.32	11.27	37.5	151.0	12.04	423	1,701	1,060	372	150
DF	22	7	86	120	3.422	9.03	8.80	41.9	178.3	10.50	368	1,569	924	324	138
DF	23	5	85	121	2.236	6.45	6.26	43.7	183.6	7.80	274	1,149	686	241	101
DF	24	5	85	124	2.054	6.45	6.16	44.5	186.7	7.82	274	1,150	688	241	101
DF	25	2	84	134	.757	2.58	2.27	51.7	216.7	3.34	117	492	294	103	43
DF	26	7	86	126	2.450	9.03	7.35	54.4	230.0	11.39	400	1,690	1,002	352	149
DF	27	4	85	125	1.298	5.16	3.89	58.6	249.2	6.50	228	970	572	201	85
DF	28	3	84	121	.905	3.87	2.72	61.4	256.7	4.75	167	697	418	147	61
DF	29	4	86	135	1.125	5.16	3.38	73.0	339.2	7.02	246	1,145	618	217	101
DF	30	3	84	120	.789	3.87	2.37	69.4	298.9	4.68	164	707	412	144	62
DF	31	2	85	124	.492	2.58	1.48	75.8	331.7	3.19	112	490	281	99	43
DF	32	2	80	138	.462	2.58	1.39	85.1	365.0	3.36	118	506	296	104	45
DF	33	2	84	129	.434	2.58	1.30	88.9	401.7	3.30	116	524	291	102	46
DF	34	1	87	139	.205	1.29	.61	102.9	503.3	1.80	63	309	158	56	27
DF	36	1	82	125	.183	1.29	.55	102.0	450.0	1.59	56	246	140	49	22
DF	39	1	87	129	.156	1.29	.47	126.9	653.3	1.69	59	305	148	52	27
DF	40	1	84	137	.148	1.29	.44	137.2	646.7	1.73	61	287	153	54	25
DF	Totals	143	86	105	112.038	184.52	234.92	30.2	125.3	201.90	7,084	29,424	17,767	6,234	2,589
WH	16	1	86	98	.924	1.29	1.85	25.4	100.0	1.50	47	185	132	41	16
WH	Totals	1	86	98	.924	1.29	1.85	25.4	100.0	1.50	47	185	132	41	16
RA	13	1	73	62	1.400	1.29	1.40	19.4	40.0	.75	27	56	66	24	5
RA	19	1	74	83	.655	1.29	.66	20.5	70.0	.37	13	46	32	12	4
RA	Totals	2	73	69	2.055	2.58	2.06	19.7	49.6	1.11	41	102	98	36	9
Totals		146	86	104	115.017	188.39	238.83	30.0	124.4	204.52	7,172	29,711	17,997	6,311	2,615

TC PSTATS		PROJECT STATISTICS						PAGE	1	
		PROJECT HORSEWO						DATE	7/24/2019	
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
01N	06	03	00A2	00MC	17.00	7	28	S	W	
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES			
TOTAL			7	28	4.0					
CRUISE			7	28	4.0	1,294	2.2			
DBH COUNT										
REFOREST										
COUNT										
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	27	75.0	19.4	102	35.0	154.3	28,086	27,715	6,294	6,294
WHEMLOCK	1	1.2	30.0	104	1.0	5.7	838	838	224	224
TOTAL	28	76.1	19.6	102	36.1	160.0	28,924	28,553	6,518	6,518
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		84.4	16.5	650	779	908				
WHEMLOCK										
TOTAL		83.1	16.0	653	777	901	286	71	32	
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		78.2	15.3	144	170	196				
WHEMLOCK										
TOTAL		76.5	14.7	145	171	196	242	61	27	
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		80.2	32.7	50	75	99				
WHEMLOCK		264.6	107.7	1	2					
TOTAL		77.0	31.3	52	76	100	275	69	31	
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		50.6	20.6	123	154	186				
WHEMLOCK		264.6	107.7		6	12				
TOTAL		43.3	17.6	132	160	188	87	22	10	
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		49.3	20.1	22,155	27,715	33,274				
WHEMLOCK		264.6	107.7		838	1,741				
TOTAL		44.0	17.9	23,438	28,553	33,668	90	22	10	
CL	68.1	COEFF	NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		47.8	19.5	5,069	6,294	7,519				
WHEMLOCK		264.6	107.7		224	465				
TOTAL		41.2	16.8	5,426	6,518	7,610	79	20	9	

Log Stock Table - MBF

T01N R06W S03 Ty00MC 17.00

Project: HORSEWO
Acres 17.00

Page 1
Date 7/24/2019
Time 2:01:25PM

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		2M	22		8		8	1.8						8							
DF		2M	40		330	1.0	326	69.2					63	46	108	35	74				
DF		3M	30		3		3	.7				3									
DF		3M	32		3		3	.6			3										
DF		3M	34		2		2	.5			2										
DF		3M	36		4		4	.9				4									
DF		3M	40		108	1.4	106	22.5			44	13	30		7				13		
DF		4M	12		0		0	.1			0										
DF		4M	16		5		5	1.1		2	3										
DF		4M	18		1		1	.2			1										
DF		4M	20		2		2	.4			2										
DF		4M	24		1		1	.3			1	1									
DF		4M	26		1		1	.2			1										
DF		4M	30		8	17.8	7	1.4			7										
DF		Totals			477	1.3	471	97.1		2	64	21	30	63	46	123	35	87			
WH		2M	40		.12		12	83.3							12						
WH		3M	40		2		2	16.7			2										
WH		Totals			14		14	2.9			2				12						
Total		All Species			492	1.3	485	100.0		2	64	24	30	63	46	135	35	87			

TC PSTNDSUM		Stand Table Summary											Page 1		
T01N R06W S03 Ty00MC 17.00		Project HORSEWO											Date: 7/24/2019		
		Acres 17.00											Time: 2:01:26PM		
		Grown Year:													
S Spec T	Sample DBH	Trees	Tot		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
			FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF	11	2	85	77	17.317	11.43	25.98	10.4	40.0	7.67	269	1,039	130	46	18
DF	12	1	87	91	7.276	5.71	14.55	10.9	45.0	4.51	158	655	77	27	11
DF	13	1	86	68	6.199	5.71	6.20	21.1	70.0	3.72	131	434	63	22	7
DF	14	1	88	88	5.345	5.71	10.69	15.4	55.0	4.70	165	588	80	28	10
DF	16	1	87	118	4.093	5.71	8.19	27.4	120.0	6.40	225	982	109	38	17
DF	17	1	88	107	3.625	5.71	7.25	29.1	120.0	6.02	211	870	102	36	15
DF	18	1	88	116	3.234	5.71	6.47	34.1	135.0	6.29	221	873	107	38	15
DF	19	2	86	102	5.804	11.43	11.61	37.0	137.5	12.23	429	1,596	208	73	27
DF	21	1	90	125	2.376	5.71	7.13	35.8	166.7	7.27	255	1,188	124	43	20
DF	23	1	88	131	1.981	5.71	5.94	44.3	203.3	7.51	263	1,208	128	45	21
DF	24	3	87	127	5.457	17.14	16.37	47.2	208.9	22.01	772	3,420	374	131	58
DF	25	1	83	120	1.676	5.71	5.03	40.9	176.7	5.86	206	888	100	35	15
DF	27	1	88	149	1.437	5.71	4.31	66.9	320.0	8.22	288	1,380	140	49	23
DF	28	1	85	137	1.336	5.71	4.01	66.9	286.7	7.64	268	1,149	130	46	20
DF	29	2	85	140	2.492	11.43	7.47	72.8	335.0	15.50	544	2,504	264	92	43
DF	35	1	83	128	.855	5.71	2.57	97.5	413.3	7.13	250	1,061	121	43	18
DF	36	2	85	135	1.617	11.43	4.85	109.1	510.0	15.09	529	2,474	256	90	42
DF	37	1	83	137	.765	5.71	2.30	115.8	560.0	7.58	266	1,286	129	45	22
DF	38	2	85	139	1.451	11.43	4.35	125.6	600.0	15.58	547	2,612	265	93	44
DF	41	1	83	158	.623	5.71	1.87	158.5	806.7	8.44	296	1,508	144	50	26
DF	Totals	27	86	102	74.960	154.29	157.13	40.1	176.4	179.38	6,294	27,714	3,049	1,070	471
WH	30	1	82	104	1.164	5.71	2.33	96.2	360.0	7.17	224	838	122	38	14
WH	Totals	1	82	104	1.164	5.71	2.33	96.2	360.0	7.17	224	838	122	38	14
Totals		28	86	102	76.124	160.00	159.46	40.9	179.1	186.55	6,518	28,553	3,171	1,108	485

VOLUME SUMMARY
(Volumes in MBF)
Electric Horseman
FG-341-2020-W00257-01

August 2019

AREA 1: MC (88 ACRES)

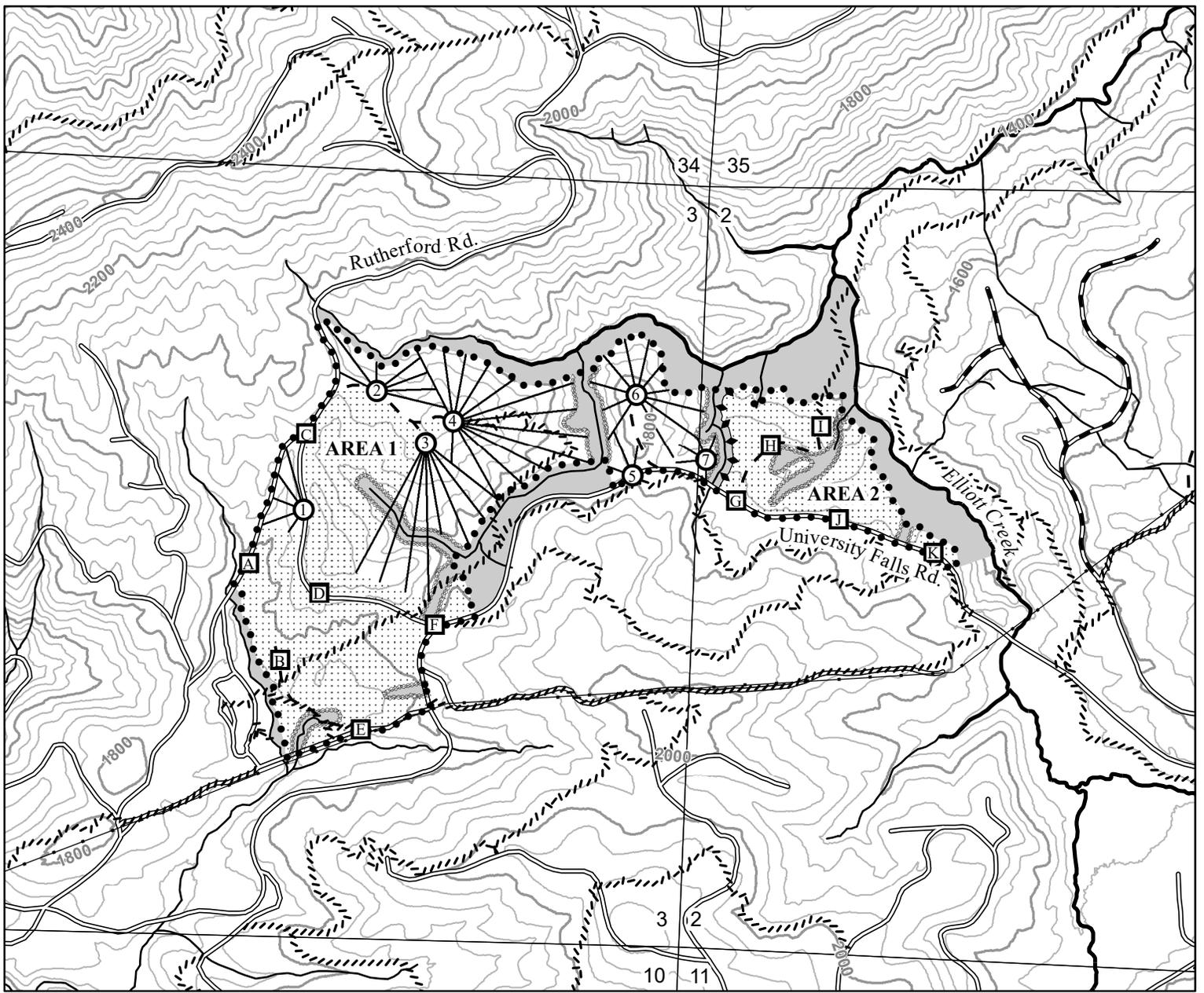
SPECIES		2 SAW	3 SAW	4 SAW	CR	TOTAL
Douglas-fir	Cruise Volume	1,380	1,083	126	0	2,589
	Hidden D&B (2%)	(28)	(22)	(2)	(0)	(52)
	NET TOTAL	1,352	1,061	124	0	2,537
	% of Total	53	42	5	0	
Western hemlock	Cruise Volume	0	16	0	0	16
	Hidden D&B (2%)	(0)	(0)	(0)	(0)	(0)
	NET TOTAL	0	16	0	0	16
	% of Total	0	100	0	0	
Red alder	Cruise Volume	0	0	0	9	9
	Hidden D&B (5%)	(0)	(0)	(0)	(0)	0
	NET TOTAL	0	0	0	9	9
	% of Total	0	0	0	105	

AREA 2: MC (17 ACRES)

SPECIES		2 SAW	3 SAW	4 SAW	CR	TOTAL
Douglas-fir	Cruise Volume	335	119	18	0	472
	Hidden D&B (2%)	(7)	(2)	(0)	(0)	(9)
	NET TOTAL	328	117	18	0	463
	% of Total	71	25	4	0	
Western hemlock	Cruise Volume	12	2	0	0	14
	Hidden D&B (2%)	(0)	(0)	(0)	(0)	(0)
	NET TOTAL	12	2	0	0	14
	% of Total	86	14	0	0	

SALE TOTAL

SPECIES	2 SAW	3 SAW	4 SAW	CR	TOTAL
Douglas-fir	1,680	1,178	142	0	3,000
Western hemlock	12	18	0	0	30
Red alder	0	0	0	9	9
Total	1,692	1,196	142	9	3,039



- Legend**
- Timber Sale Boundary
 - ◆◆◆ Posted Area Boundary
 - ▬▬▬ Stream Buffer Boundary
 - ▭ ODF Ownership Boundary
 - ▬ Surfaced Road
 - - - New Road Construction
 - ↗ Cable Yarding Area
 - ▨ Tractor Yarding Area
 - Cable Landing
 - ▣ Tractor Landing
 - ▬ Type-F Stream
 - ▬ Type-N Stream
 - ▭ Stream Buffer
 - ▨▨▨ Recreation Trails
 - Electric Transmission Lines
 - ▭ Sections
 - ▬ 40 Foot Contour Band
 - ▬ 200 Foot Contour Band

LOGGING PLAN

FOR TIMBER SALE CONTRACT #FG-341-2020-W00257-01
 ELECTRIC HORSEMAN
 PORTIONS OF SECTIONS 2 & 3, T1N, R6W, W.M.,
 TILLAMOOK COUNTY, OREGON

Forest Grove District GIS
 August, 2019

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



APPROXIMATE NET ACRES

	TRACTOR	CABLE
AREA 1	43	45
AREA 2	17	0
TOTAL	60	45

1:12,000

1 inch = 1,000 feet

