



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Cup of Joe
Sale AT-341-2023-W00857-01

District: Astoria

Date: August 08, 2022

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$357,325.66	\$2,329.29	\$359,654.95
		Project Work:	(\$44,684.00)
		Advertised Value:	\$314,970.95



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District: Astoria

Date: August 08, 2022

Timber Description

Location:

Stand Stocking: 80%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	16	0	97
Western Hemlock / Fir	19	0	96
Sitka Spruce	21	0	95
Alder (Red)	14	0	95

Volume by Grade	2S	3S & 4S 6"-11"	Camprun	Total
Douglas - Fir	241	248	0	489
Western Hemlock / Fir	506	251	0	757
Sitka Spruce	0	5	0	5
Alder (Red)	0	0	9	9
Total	747	504	9	1,260

Comments: Pond Values Used: Local Pond Values, June, 2022.

Expected Log Markets: Mist, Willamina, Banks, Clatskanie, Tillamook, Warrenton, Eugene, Longview, WA, Elma, WA, Chehalis, WA, and Vancouver, WA.

PRICING:

Western Red Cedar and other Cedars stumpage = pond value - (Douglas-fir) logging cost.
 $\$904.89/\text{MBF} = \$1,200.00/\text{MBF} - \$295.11/\text{MBF}$

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

Machine Washing for Invasive Weed Compliance = \$2,000

TOTAL Other Costs (with Profit & Risk to be added): \$2,000

Other Costs (No Profit & Risk added):None

SLASH PILING

(See attached appraisal. Includes move-in, pile materials, and end-hauling) = \$6,620.00

ROAD MAINTENANCE

(See attached Road Maintenance Cost Summary Sheet)

TOTAL Road Maintenance: $\$12,257/1,260\text{MBF} = \$9.73/\text{MBF}$



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Logging Conditions

Combination#: 1

Douglas - Fir	68.00%
Western Hemlock / Fir	68.00%
Sitka Spruce	68.00%
Alder (Red)	68.00%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Manual Delimbing
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: \$169.66
machines: Log Loader (A)
Tower Yarder (Medium)

Combination#: 2

Douglas - Fir	32.00%
Western Hemlock / Fir	32.00%
Sitka Spruce	32.00%
Alder (Red)	32.00%

Logging System: Shovel **Process:** Manual Delimbing
yarding distance: Medium (800 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 9 **bd. ft / load:** 4600
cost / mbf: \$84.00
machines: Shovel Logger



"STEWARDSHIP IN FORESTRY"

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Logging Costs

Operating Seasons: 3.00	Profit Risk: 12%
Project Costs: \$44,684.00	Other Costs (P/R): \$2,210.00
Slash Disposal: \$6,620.00	Other Costs: \$0.00

Miles of Road

Road Maintenance: \$9.73

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

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	4.5
Western Hemlock / Fir	\$0.00	3.0	4.5
Sitka Spruce	\$0.00	2.0	3.5
Alder (Red)	\$0.00	2.0	3.2



Timber Sale Appraisal
Cup of Joe
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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									
\$142.25	\$10.02	\$10.45	\$137.33	\$1.75	\$36.22	\$5.25	\$2.00	\$0.00	\$345.27
Western Hemlock / Fir									
\$142.25	\$10.12	\$10.45	\$92.45	\$1.75	\$30.84	\$5.25	\$2.00	\$0.00	\$295.11
Sitka Spruce									
\$142.25	\$10.22	\$10.45	\$180.00	\$1.75	\$41.36	\$5.25	\$2.00	\$0.00	\$393.28
Alder (Red)									
\$142.25	\$10.22	\$10.45	\$196.88	\$1.75	\$43.39	\$5.25	\$2.00	\$0.00	\$412.19

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$689.43	\$344.16	\$0.00
Western Hemlock / Fir	\$0.00	\$543.37	\$248.26	\$0.00
Sitka Spruce	\$0.00	\$613.00	\$219.72	\$0.00
Alder (Red)	\$0.00	\$671.00	\$258.81	\$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
Sitka Spruce	0	\$0.00	\$0.00
Alder (Red)	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	489	\$344.16	\$168,294.24
Western Hemlock / Fir	757	\$248.26	\$187,932.82
Sitka Spruce	5	\$219.72	\$1,098.60
Alder (Red)	9	\$258.81	\$2,329.29

Gross Timber Sale Value

Recovery: \$359,654.95

Prepared By: John Czarnecki

Phone: 503-325-5451

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale: Cup of Joe
Date: June 13th, 2022
By: John Czarnecki

MBF: 1,260.00
\$\$/MBF: \$9.73

Type	Equipment/Rationale	Move-in Rate	Times	Hours	Rate	Cost
Interim Operations	Grader 14G	\$875	1	8	\$113	\$1,779
	Dump Truck 12CY	\$184	1	6	\$89	\$718
	Rubber tired backhoe	\$361	1	4	\$87	\$709
Final Road Maintenance	Grader 14G	\$875	1	16	\$113	\$2,683
	Dump Truck 12CY	\$184	1	8	\$89	\$896
	Vibratory Roller	\$875	1	16	\$87	\$2,267
	Water Truck 2,500 gallon	\$214	1	8	\$101	\$1,022
	Rubber tired backhoe	\$361	1	4	\$87	\$709
	Labor			8	\$45	\$360
Subtotal						\$11,143
	Additional costing for fuel				10%	\$1,114
Total						\$12,257

Interim Operations Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	2.5	2.50	1.0	8

Final Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	1.5	3.00	2.0	16
Vibratory Roller	1.5	3.00	2.0	16

Process and compact: All crushed rock roads

East Summit Road: 1 Mile

Bergsvik Creek Road: 1 Mile

Unnamed Spur Roads: 1 Mile

Grade & Process Total = 3 Miles

Site Prep Appraisal

Sale Number: AT-341-2023-W00857-01

Sale Name: Cup of Joe

Date: 06/14/2022

Vegetation Type/Zone	Vegetation Type/Zone Code	Production Rate (hr/ac)	Estimated Piles/Acre	Landing Production Rate (hrs/30 acres)
Doug-fir	A	0.5	0.5	6
Hemlock/Fir	B	1.3	4.5	8
Hemlock/Spruce	C	1.8	6.0	10
Hemlock	D	1.8	6.0	8
Conifer/Hardwood	E	1.0	2.0	8
Whole Tree Yarding	F	0.5	0.5	12

Sale Area	Harvest Type	Veg Type/Zone	Ground Based Yarding Acres	Estimated Piling Hours/Area	Cost/Hour	Total Cost/Area	
1	MC	F	10	8	\$145.00	\$1,160.00	
2	MC	F	12	8	\$145.00	\$1,160.00	
					In-unit Piling	Sub Total =	\$2,320.00
Sale Area	Number of Landings to be Piled	# cable acres per area	Total Cost/Area	Number of In-Unit Piles	Material Cost/Pile	Total Cost/Area	
1	8	19	\$1,102.00	10	\$5.00	\$50.00	
2	9	28	\$1,624.00	10	\$5.00	\$50.00	
					\$5.00	\$0.00	
					\$5.00	\$0.00	
*Cost includes separating firewood					Materials	Sub Total =	\$100.00
Additional Move-in allowance					Landing Piling	Sub Total =	\$2,726.00
Move-In Allowance	Number of Move-In's	Total Move-In Allowance					
\$1,290.00	1	\$1,290.00	Slash Piler				
\$184.00	1	\$184.00	Dump Truck (12cy)				
					Move-In	Sub Total =	\$1,474.00
Slash Endhaul	Dump Truck hrs	Cost/Hour	Total	Loader hrs	Cost/Hour	Total	
						Sub Total =	\$0.00
						Grand Total =	\$6,620.00

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale: Cup of Joe
Date: June 13th, 2022
By: John Czarnecki

MBF: 1,260.00
\$\$/MBF: \$9.73

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	Dump Truck 12CY	\$184	1	8	\$89	\$896
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	Water Truck 2,500 gallon	\$214	1	8	\$101	\$1,022
	Rubber tired backhoe	\$361	1	4	\$87	\$709
	Labor			8	\$45	\$360
Subtotal						\$11,143
	Additional costing for fuel				10%	\$1,114
Total						\$12,257

Interim Operations Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	2.5	2.50	1.0	8

Final Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	1.5	3.00	2.0	16
Vibratory Roller	1.5	3.00	2.0	16

Process and compact: All crushed rock roads

East Summit Road: 1 Mile

Bergsvik Creek Road: 1 Mile

Unnamed Spur Roads: 1 Mile

Grade & Process Total = 3 Miles

Site Prep Appraisal

Sale Number: AT-341-2023-W00857-01

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Date: 06/14/2022

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Doug-fir	A	0.5	0.5	6
Hemlock/Fir	B	1.3	4.5	8
Hemlock/Spruce	C	1.8	6.0	10
Hemlock	D	1.8	6.0	8
Conifer/Hardwood	E	1.0	2.0	8
Whole Tree Yarding	F	0.5	0.5	12

Sale Area	Harvest Type	Veg Type/Zone	Ground Based Yarding Acres	Estimated Piling Hours/Area	Cost/Hour	Total Cost/Area	
1	MC	F	10	8	\$145.00	\$1,160.00	
2	MC	F	12	8	\$145.00	\$1,160.00	
					In-unit Piling	Sub Total =	\$2,320.00
Sale Area	Number of Landings to be Piled	# cable acres per area	Total Cost/Area	Number of In-Unit Piles	Material Cost/Pile	Total Cost/Area	
1	8	19	\$1,102.00	10	\$5.00	\$50.00	
2	9	28	\$1,624.00	10	\$5.00	\$50.00	
					\$5.00	\$0.00	
					\$5.00	\$0.00	
*Cost includes separating firewood					Materials	Sub Total =	\$100.00
Additional Move-in allowance					Landing Piling	Sub Total =	\$2,726.00
Move-In Allowance	Number of Move-In's	Total Move-In Allowance					
\$1,290.00	1	\$1,290.00	Slash Piler				
\$184.00	1	\$184.00	Dump Truck (12cy)				
					Move-In	Sub Total =	\$1,474.00
Slash Endhaul	Dump Truck hrs	Cost/Hour	Total	Loader hrs	Cost/Hour	Total	
						Sub Total =	\$0.00
						Grand Total =	\$6,620.00

SUMMARY OF ALL PROJECT COSTS

SALE NAME: Cup of Joe

Project No. 1: ROAD CONSTRUCTION:

<u>Road segment</u>	<u>Length (Sta)</u>	<u>Length (Mile)</u>	<u>Cost</u>	<u>With additional fuel allowance per project</u>
1A to 1B, 1C to 1D (UNSURFACED)	9.00	0.17	\$5,621	\$6,183
Road Maint.			\$759	\$835
Move-In			\$1,132	\$1,245
TOTALS	9.00	0.17	\$7,512	\$8,263

Project No. 2: ROAD IMPROVEMENT:

<u>Road segment</u>	<u>Length (Sta)</u>	<u>Length (Mile)</u>	<u>Cost</u>	
I1 to I2, I3 to I4				
I5 to I6, I7 to I8				
I9 to I10, I11 to I12				
I13 to I14	171.00	3.24	\$23,038	\$25,342
Road Maint.			\$3,113	\$3,424
Move-In			\$4,638	\$5,102
TOTALS		3.24	\$30,789	\$33,868

SPECIAL PROJECTS (Move-In and Road Maint. are included separately as needed, for each Special Project):

<u>Description</u>	<u>Length(Mile)</u>	<u>Cost</u>	
Project No. 3 Vacating	0.1	\$2,321	\$2,553
TOTAL		\$2,321	\$2,553

SUBTOTAL \$40,622

10% Increase Fuel Allowance \$4,062

GRAND TOTAL \$44,684

Compiled By: D. Farner

Date: 07/05/2022

Move In and Maintenance Calculator for Construction and Improvement

SALE NAME: Cup of Joe

Project No. 1: ROAD CONSTRUCTION:

<u>Road segment</u>	<u>Length/Sta</u>	<u>Length/Mile</u>	<u>Cost</u>
1A to 1B, 1C to 1D	9.00	0.17	\$5,621
TOTALS	9.00	0.17	\$5,621

Project No. 2: ROAD IMPROVEMENT:

<u>Road segment</u>	<u>Length/Sta</u>	<u>Length/Mile</u>	<u>Cost</u>
I1 to I2, I3 to I4			
I5 to I6, I7 to I8			
I9 to I10, I11 to I12			
I13 to I14	171.00	3.24	\$23,038.26
TOTALS	171.00	3.24	\$23,038

MOVE IN (Construction & Improvement Only)

<u>Equipment</u>	<u>Length/Mile</u>	<u>Cost</u>
Grader (14G)		\$875.00
Vibratory Roller		\$875.00
10/12 cy Highway Dump x 5		\$445.00
Water Truck (2,500 gal.)		\$214.00
Front End Loader (C966)		\$875.00
Excavator Small (C315)		\$905.00
Excavator Large (C330)		\$1,581.00
TOTAL		\$5,770.00

ROAD MAINTENANCE (Construction & Improvement Only)

	<u>Length/Mile</u>	<u>Cost</u>
East Summit Rd., Cole Mt. Ridge Rd.,	5.51	\$3,872.00
Cole Mt. Rd., Hamlet Stockpile Rd.		
TOTAL		\$3,872.00

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Cup of Joe
 ROAD: 1A to 1B(sta. 0+00 to 5+50), 1C to 1D(sta. 0+00 to 3+50)
 POINTS: 1A to 1B STATIONS 9.00 MILES 0.17 MILES
 IMPROVEMENT: 171.00 STATIONS 3.24 MILES

CLEARING & GRUBBING				
Method	Acres/amount		Rate	Cost
1A to 1B Scattered outside of right of way	0.51	x	\$ 1,503	\$766.53
1C to 1D Scattered outside of right of way	0.32	x	\$ 1,503	\$480.96
SUB TOTAL FOR CLEARING & GRUBBING				\$1,247

EXCAVATION				
Material	Cy/amount		Rate	Cost
1A to 1B Reconstruct Junction		x		
0+00 to 1+40 Widen existing road to establish radius, (C330/hr)	3	x	\$175.00	\$525.00
1C to 1D Reconstruct Junction				
0+00 to 1+00 Widen existing road to establish radius, (C330/hr)	3	x	\$175.00	\$525.00
SUB TOTAL FOR EXCAVATION				\$1,050

CULVERT MATERIALS AND INSTALLATION						
Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type
1A to 1B				\$0.00		
1+40	18"CPP	30	\$21.95	\$658.50		
1C to 1D				\$0.00		
1+00	18"CPP	30	\$21.95	\$658.50		
Other/miscellaneous:						
Culvert stakes & markers:						
			2	\$23.00		\$46.00
SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION						\$1,363
Subtotal of Clearing, Exc., Culv.						\$3,660

SURFACING									
Subgrade prep:			Description			Stations/ amount	Rate/ sta/amt	Cost	
Grade, Shape and Ditch 16'			1A to 1B(sta 5.50), 1C to 1D(sta 3.50)			9.00	x	\$27.91	\$251.19
Subgrade Compaction			1A to 1B(sta 5.50), 1C to 1D(sta 3.50)			9.00	x	\$22.69	\$204.21

ROAD SEGMENT		1A to 1B		POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost
Application	Rock Size and Type	Location	Depth of Rock (Inches)	1A to 1B		Number of	stations culverts	70 33	\$8.37 \$4.41	\$586 \$146
				Volume (CY) per	0+00 to 5+50					
Base Rock	4"-0" crushed	0+00 to 1+40	8	station	50	1.40	70			
Culvert Bedding and Backfill	1 1/2"-0" crushed	1+40	N/A	culvert	33	1	33			
Total Rock for Road Segment:		1A to 1B				103		\$731		

ROAD SEGMENT		1C to 1D		POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost
Application	Rock Size and Type	Location	Depth of Rock (Inches)	1C to 1D		Number of	stations culverts	50 13 33	\$8.37 \$4.41 \$4.41	\$419 \$57 \$146
				Volume (CY) per	0+00 to 3+50					
Base Rock	4"-0" crushed	0+00 to 1+00	8	station	50	1.00	50			
Traction Rock	1 1/2"-0" crushed	0+00 to 1+00	2	station	13	1	13			
Culvert Bedding and Backfill	1 1/2"-0" crushed	1+00	N/A	culvert	33	1	33			
Total Rock for Road Segment:		1C to 1D				96		\$621		

Processing:		Description		No.sta	Rate/sta	Cost
Water, Process & Compact Base Rock (4"-0" crushed) :				2.4	\$63.48	\$152.35
Traction Rock		Water, Process & Compact Base Rock (1 1/2"-0" crushed):		1	\$63.48	\$63.48

SUB TOTAL FOR SURFACING		6"-0"pr	4"-0"	1 1/2"-0"	Total
			crushed	crushed	199
			120	79	

SUB TOTAL FOR SURFACING		\$1,961			
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SPECIAL PROJECTS			
Description	Cy/Amount	Rate	Cost

SUB TOTAL FOR SPECIAL PROJECTS		\$0
Subtotal of Surfacing & Spec. Proj.		\$1,961
Subtotal of Clearing, Exc., Culv.		\$3,660
GRAND TOTAL		\$5,621

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Cup of Joe

ROAD: 11 to 12(sta. 51.5), 13 to 14(sta.50.75), 15 to 16(sta. 15.5),
17 to 18(sta.42.0), 19 to 110(sta.7.55), 11 to 12(sta.2.5),
113 to 114(sta.1.2)

NEW CONSTRUCTION: 9.00 STATIONS

IMPROVEMENT: 171.00 STATIONS

0.17 MILES

3.24 MILES

CLEARING & GRUBBING	Method	Acres/amount	x	Rate	=	Cost
			x		=	\$0.00
SUB TOTAL FOR CLEARING & GRUBBING						
\$0						

EXCAVATION	Material	Cy/amount	x	Rate	=	Cost
15 to 16						
7+45	Construct turn/around.	2.0	x	\$114.00	=	\$228.00
113 to 114						
1+20	Expand landing to left.	3.0	x	\$175.00	=	\$525.00
SUB TOTAL FOR EXCAVATION						
\$753						

CULVERT MATERIALS AND INSTALLATION									
Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost
Other/miscellaneous:									
Culvert stakes & markers:									

Subtotal of Clearing, Exc., Culv.

\$845

SURFACING		Subgrade prep:		Description		Stations/ amt		Rate/ sta/amt		Cost	
				Grade, Shape and Ditch 16'		11 to 12(sta. 51+5), 13 to 14(sta.50+75), 15 to 16(sta.15+5), 17 to 18(sta.42+0), 19 to 110(sta.7+55), 11 to 12(sta.2+5), 113 to 114(sta.1+2)		x		\$27.91	
				Subgrade Compaction		11 to 12(sta. 19+85)		x		\$22.69	
										\$450.40	
ROAD SEGMENT		11 to 12		POINT TO POINT		Sta. to Sta.		Rate/ Sta./ amt.		Cost	
Application		Rock Size and Type		Depth of Rock (inches)		Volume (CY) per		TOTAL VOLUME (CY)			
Surfacing		1 1/2"-0" crushed		2		station		19.85		\$1,138	
Surface Leveling Rock		1 1/2"-0" crushed		N/A		load		20		\$970	
Junctions		1 1/2"-0" crushed		N/A		junction		5		\$243	
Turnouts		1 1/2"-0" crushed		N/A		turnout		5		\$243	
Total Rock for Road Segment:				11 to 12						\$2,593	
ROAD SEGMENT		13 to 14		POINT TO POINT		Sta. to Sta.		Rate/ Sta./ amt.		Cost	
Application		Rock Size and Type		Depth of Rock (inches)		Volume (CY) per		TOTAL VOLUME (CY)			
Surface Leveling Rock		1 1/2"-0" crushed		N/A		load		20		\$970	
Junctions		1 1/2"-0" crushed		N/A		junction		3		\$146	
Curve Widening Surface		1 1/2"-0" crushed		N/A		load		2		\$97	
Turnaround		1 1/2"-0" crushed		N/A		turnaround		1		\$49	
Total Rock for Road Segment:				13 to 14						\$1,261	
ROAD SEGMENT		15 to 16		POINT TO POINT		Sta. to Sta.		Rate/ Sta./ amt.		Cost	
Application		Rock Size and Type		Depth of Rock (inches)		Volume (CY) per		TOTAL VOLUME (CY)			
Surface Leveling Rock		1 1/2"-0" crushed		N/A		load		2		\$97	
Turnouts		1 1/2"-0" crushed		N/A		turnout		1		\$49	
Turnaround		1 1/2"-0" crushed		N/A		turnaround		1		\$97	
Total Rock for Road Segment:				15 to 16						\$243	
ROAD SEGMENT		17 to 18		POINT TO POINT		Sta. to Sta.		Rate/ Sta./ amt.		Cost	
Application		Rock Size and Type		Depth of Rock (inches)		Volume (CY) per		TOTAL VOLUME (CY)			
Surface Leveling Rock		1 1/2"-0" crushed		N/A		load		10		\$485	
Total Rock for Road Segment:				17 to 18						\$485	
ROAD SEGMENT		19 to 110		POINT TO POINT		Sta. to Sta.		Rate/ Sta./ amt.		Cost	
Application		Rock Size and Type		Depth of Rock (inches)		Volume (CY) per		TOTAL VOLUME (CY)			
Surface Leveling Rock		1 1/2"-0" crushed		N/A		load		3		\$146	
Turnaround		1 1/2"-0" crushed		N/A		turnaround		1		\$49	
Landings		6'-0" pit run		N/A		landing		1		\$368	
Total Rock for Road Segment:				19 to 110						\$562	
ROAD SEGMENT		111 to 112		POINT TO POINT		Sta. to Sta.		Rate/ Sta./ amt.		Cost	
Application		Rock Size and Type		Depth of Rock (inches)		Volume (CY) per		TOTAL VOLUME (CY)			
Surface Leveling Rock		1 1/2"-0" crushed		N/A		load		1		\$49	
Total Rock for Road Segment:				111 to 112						\$49	

ROAD SEGMENT									
I13 to I14		POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Application	Rock Size and Type	Location	Depth of Rock (Inches)	Volume (CY) per load	Number of loads				
Surface Leveling Rock	1 1/2"-0" crushed	0+00 to 1+20	N/A	11	landings	1	\$4.41	\$49	
Landings	6'-0" pit run	1+20	N/A	66	landings	1	\$8.37	\$552	
Total Rock for Road Segment:								77	\$601
Processing:			Description						
			Water, Process & Compact: 11 to 12 (sta. 51.5), 13 to 14 (sta. 50.75), 15 to 16 (sta. 15.5), 17 to 18 (sta. 42.0), 19 to 110 (sta. 7.55), 111 to 112 (sta. 2.5), 113 to 114 (sta. 1.2)						

Projects Road Maintenance Cost Summary

Sale: Cup of Joe
Date: 05-Jul-22
By: D. Farner *CF*

Type	Equipment/Rationale			Hours	Rate	Cost
Project Work	Grader 14G			8	\$113	\$904
Final Haul	Dump Truck 12CY			8	\$89	\$712
Road	FE Loader C966			8	\$94	\$752
Maintenance	Vibratory Roller			8	\$87	\$696
	Water Truck 2,500 gallon			8	\$101	\$808
Total						\$3,872

Production Rates

Grader

Vibratory Roller

Miles/day	Distance(miles)	Days
1.5	0.25	0.2
1.5	0.25	0.2

NOTE: Hamlet Stockpile Road (Full Final Maintenance)	0.25	Miles
East Summit, Cole Ridge Road, Cole Mountain Road,		Miles
Cole Mountain Pit Road (Spot Grade)	5.26	Miles
		Miles
TOTAL=	5.51	Miles

CRUSHED ROCK COST

SALE NAME:	Cup of Joe
PROJECT:	No. 1 and 2
Stockpile:	Hamlet Stockpile Site

MATERIAL: 1 1/2"-0"

DATE: 07/05/2022
BY: C. Hatcher

[illegible]

ROCK HAUL:

Truck type: D20 No. trucks:
 Delay min.: 8 Efficiency: 85%

Ave haul:	\$3.15	/cy
Load:	\$0.48	/cy
Spread:	\$0.78	/cy

Truck type: D12 No. trucks: 5
 Delay min.: 6 Efficiency: 85%

Truck type: D10 No. trucks:
 Delay min.: 5 Efficiency: 85%

Production: cy/day = 1,002

CRUSHED ROCK HAUL COSTS 1,184 cy @ \$4.41 /cy

CRUSHED ROCK COST

SALE NAME:	Cup of Joe
PROJECT:	No. 1
Stockpile:	Cole Mountain Stockpile Site

DATE: 07/05/2022
BY: C. Hatcher

[illegible]

ROCK HAUL:

Truck type: D20 No. trucks:
 Delay min.: 8 Efficiency: 85%

Ave haul:	\$5.96	/cy
Load:	\$0.84	/cy
Spread:	\$1.56	/cy

Truck type: D12 No. trucks: 5
 Delay min.: 6 Efficiency: 85%

Truck type: D10 No. trucks:
 Delay min.: 5 Efficiency: 85%

Production: cy/day = 529

CRUSHED ROCK HAUL COSTS 231 cy @ \$8.37 /cy

Timber Sale Vacating Costs (Total)										
Work Description	Stations	Pump	C330	C315	D24 trk	D10/12 trk	D-8	Labor	Straw-bales	Seed-lbs
1A to 1B	4.1			4		1		1	2	1
1C to 1D	2.5			4		1		1	2	1
Total Quantity (Hours)		0.00	0.00	8.00	0.00	2.00	0.00	2.00	4.00	2.00
Move in				\$ 905.00		\$184.00				
Rates		\$12.00	\$175.00	\$114.00	\$143.00	\$89.00	\$178.00	\$45.00	\$12.06	\$1.80
Total Dollars		\$0	\$0	\$1,817	\$0	\$362	\$0	\$90	\$48	\$4

Total Cost

\$2,321

Total Stations

6.6

Total Miles

0.1

Timber Sale
Vacating Costs 1A to 1B

Work Description	Station	Pump	C330	C315	D24 trk	D10/12 trk	D-8	Labor	Straw- bales	Seed-lbs
Pt. 1A to 1B (1+40 to 5+50)										
Remove culvert	1+40			2				1	2	1
Block Road	1+40			1						
Install waterbars	1+40 to 5+50			1						
Haul culvert off site						1				
Total Quantity (Hours)		0.00	0.00	4.00	0	1	0	1	2	1
Rates		\$12.00	\$175.00	\$114.00	\$143.00	\$89.00	\$178.00	\$45.00	\$12.06	\$1.80
Total Dollars		\$0	\$0	\$456	\$0	\$89	\$0	\$45	\$24	\$2

Total Cost

\$616

Timber Sale
Vacating Costs 1C to 1D

Work Description	Station	Pump	C330	C315	D24 trk	D10/12 trk	D-8	Labor	Straw- bales	Seed-lbs
Pt. 1C to 1D (1+00 to 3+50)										
Remove culvert	1+00			2				1	2	1
Block Road	1+00			1						
Install waterbars	1+00 to 3+50			1						
Haul culvert off site						1				
Total Quantity (Hours)		0.00	0.00	4.00	0	1	0	1	2	1
Rates		\$12.00	\$175.00	\$114.00	\$143.00	\$89.00	\$178.00	\$45.00	\$12.06	\$1.80
Total Dollars		\$0	\$0	\$456	\$0	\$89	\$0	\$45	\$24	\$2

Total Cost

\$616

**Cup of Joe
TIMBER CRUISE REPORT
FY 2022**

1. **Sale Area Location:** Portions of Section 2 of T4N R9W and portions of Section 35 of T5N R9W, W.M., Clatsop County, OR.
2. **Fund Distribution:** BOF 81%, CSL 19% BOF Tax Code: 1-02 (100%)
3. **Sale Acreage by Area:**

Unit	Harvest Type	Gross Acres	Non-Stocked	Stream Buffer Acres	Existing R/W Acres	New R/W	Reserve Tree Area	Net Acres	Survey Method
1	Modified Clearcut	40	1	8	2	<1	-	29	GIS
2	Modified Clearcut	58	-	16	2	<1	-	40	GIS
3*	R/W	<1	-	-	-		-	<1	GIS
TOTALS		98	1	24	4	<1	-	69	

*Unit 3 (R/W) contains negligible merchantable volume.

4. Cruisers and Cruise Dates: Justin Bush, Kevin Berry, John Czarnecki, Ryan Simpson, and Avery Petersen (06/28/2022 – 06/29/2022)

5. Cruise Method and Computation:

Units 1 and 2: Units 1 and 2 were variable plot cruised utilizing a Relaskop with a 33.61 BAF. A total of 50 plots were sampled on a 6 by 2.5 chain spacing. The count to grade ratio was 1:1, which resulted in 26 grade plots and 24 count plots. One count plot was recorded as blank due to no trees being present in the plot.

Data was collected on Allegro 2 data collectors and downloaded to the Atterbury SuperACE 2008 program for computing. See the attached Cruise Designs for more details on the cruise method. The cruise calculations were processed in the Astoria District office.

UNIT	CRUISE	TRACT	TYPE	ACRES
1 and 2	COJ	U1	00MC	69

6. Timber Description:

Units 1 and 2 are modified clearcuts with an average age of 50 years. The stand consists of western hemlock and Douglas-fir with a minor component of Sitka spruce and red alder. The average take western hemlock is 19 inches DBH and is 60 feet to a merchantable top. The average take Douglas-fir is 16 inches DBH and is 61 feet to a merchantable top. The average take Sitka spruce is 21 inches DBH and is 39 feet to a merchantable top. The average take red alder is 14 inches DBH and is 31 feet to a merchantable top. Average net volume to be harvested per acre is 18 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point.

7. Statistical Analysis and Stand Summary:

Statistics for Stand B.F. volumes

Unit	Estimated CV	Target SE%	Actual CV	Actual SE%
1&2	45%	11%	43.8%	6.2%

8. Volumes by Species and Log Grade:

Volumes by Species and Grade for All Sale Areas: (MBF) Volumes do not include "in-growth."

Conifer

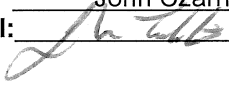
Species	DBH	Net Vol.	2 Saw	3 Saw	4 Saw	% D & B	% Sale
Western hemlock	19"	757	506	209	42	1.1%	60%
Douglas-fir	16"	489	241	210	38	2.7%	38%
Sitka Spruce	21"	5	0	0	5	0%	<1%
TOTALS	--	1,251	758	425	86	--	--

Hardwood

Species	DBH	Net Vol.	6"-7"	% D & B	% Sale
Red alder	14"	9	9	14.4%	<1%
TOTALS	--	9	9	14.4%	--%

TOTAL VOLUME	1,260 MBF
---------------------	------------------

9. Approvals:

Prepared by: John Czarnecki Date: 06/30/2022
Unit Forester Approval:  Date: 7/28/2022

10. **Attachments:** Cruise Design and Map (3 pages)
Volume Report (1 page)
Statistics Report (3 pages)
Log Stock Table (2 pages)
Stand Table Summary (1 page)

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: Cup of Joe

Units U12

Harvest Type: Modified Clearcut

Approx. Cruise Acres: 81 **Estimated CV%** 45 Net BF/Acre **SE% Objective** 11% Net BF/Acre

Planned Sale Volume: 1,860 MBF **Estimated Sale Area Value/Acre:** \$11,250/Acre

A. Cruise Goals: (a) Grade minimum 100 conifer trees.
(b) Sample 50 plots (26 grade/ 24 count); (c) Other goals (Determine "automark" thinning standards; X Determine log grades for sale value; Determine snag and leave tree species and sizes.

B. Cruise Design:

1. Plot Cruises: BAF 33.61 (Full point)

Unit 1:

Cruise Line Direction: 132°/312°
Cruise Line Spacing 6 (chains) 396 (Feet)
Cruise Plot Spacing 2.5 (chains) 165 (Feet)
Grade/Count Ratio 1:1

Unit 2:

Cruise Line Direction: 125°/305°
Cruise Line Spacing 7 (chains) 462 (Feet)
Cruise Plot Spacing 3 (chains) 198 (Feet)
Grade/Count Ratio 1:1

Take plots as marked on cruise map.

Grade minor species (true fir, spruce, cedar, maple, etc.) on count plots if encountered.

DO NOT: record any 22' log lengths, or any 12', 24', or 32' log lengths for hardwoods.

DO NOT: record snags < 12" DBH or record snag measurements on count plots.

C. Tree Measurements:

1. Diameter: Minimum DBH to cruise is 8" for conifers and 8" for hardwoods.

Record dbh to nearest 1/2" for trees < 16", to nearest 1" for trees 16-24", and to nearest 2" for trees > 24". If tree diameters are estimated (only estimate on variable plot cruises), then record to closest estimate.

2. Bole Length: Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.

3. Top Cruise Diameter (TCD): Minimum top outside bark is 7" for conifers and 7" for hardwoods or 40 % of dob at 16' form point. Generally, use 7" outside bark for trees < 20" dbh and 40% of dob @ FP for conifer trees > 20" dbh.

4. Form Factors: (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer

species on the cruise area, and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.

5. **Tree Segments:** Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree. Hardwoods shall be recorded in 8' and 10' multiples.

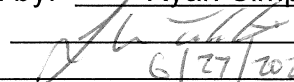
6. **Species, Sort, and Grade Codes:**

- A. **Species:** Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); SF (Silver fir); A (Red alder); M (Bigleaf maple); SN (Snag). For "leave trees", add an "L" to the species code (such as DL, HL, CL, etc.)
- B. **Sort:** Use code "1" (Domestic).
- C. **Grade:** A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull
Hardwoods: Alder Grades: 12" + = 1 Sawmill; 10"-12" = 2 Sawmill; 10"-8" = 3 Sawmill; and 8"-6" 4 Sawmill, or R = Camp Run; 0 = Cull.
All Maple Camp Run = R

Grade oversized 3-SAW (DIB $\geq$ 12", knots $> 2\frac{1}{2}$ " inside scaling cylinder affecting $> 50\%$ of log)

7. **Deductions:** Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.
8. **Standard Field Procedures:** Plot Type Cruises: Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at inter-visible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.
9. **Cruising Equipment:** Relaskop, Rangefinder, Logger's Tape (with dbh on back), Compass, Allegro II Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint, Permanent Marker.
10. **Attachments:** A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

Cruise Design by: Ryan Simpson

Approved by: 

Date: 6/27/2022

TIMBER CRUISE

OF TIMBER SALE CONTRACT

AT-341-2023-W00857-01

CUP OF JOE

PORTIONS OF SECTION 2,
OF T4N, R9W, W.M.,
AND PORTIONS OF SECTION 35,
OF T5N, R9W, W.M.,
CLATSOP COUNTY, OREGON

Net Acres:	81	Cruise Plots:	26
BAF:	33.61	Count Plots:	24
		Total Plots:	50

Unit 1

Line Spacing: 6 ch. (396 ft)
Plot Spacing: 2.5 ch (165 ft)
Line Azimuth: 132°/312°

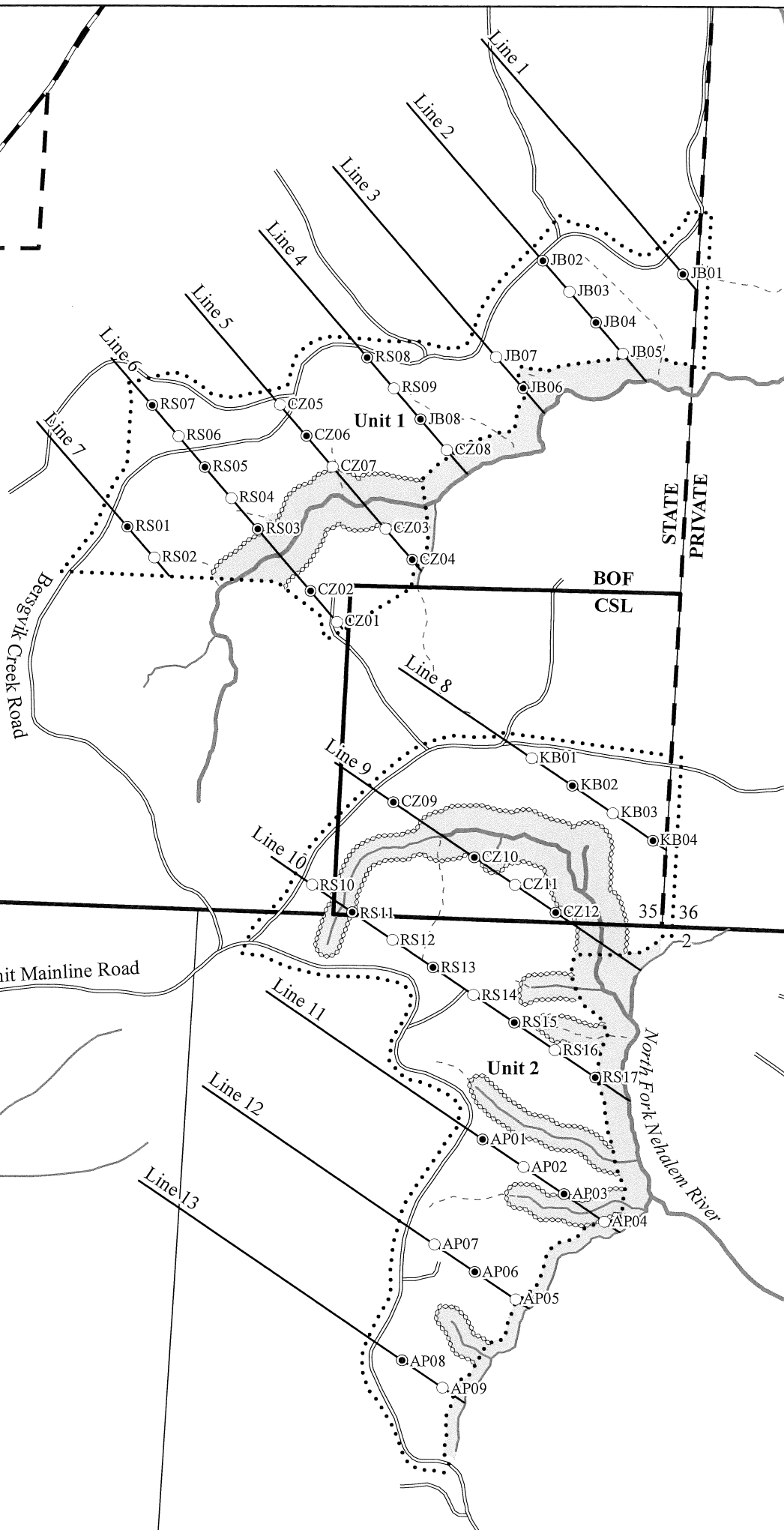
Unit 2

Line Spacing: 7 ch. (462 ft)
Plot Spacing: 3 ch (198 ft)
Line Azimuth: 125°/305°

0 250 500 1,000
Feet

Legend

- Timber Sale Boundary
- Paved Road
- Surfaced Road
- Type F Stream
- Type N Stream
- Seasonal Stream
- Cruise Lines
- Cruise Plots
- Count Plots



TC		PSPCSTGR Species, Sort Grade - Board Foot Volumes (Project)																			
T04N R09W S02 TyTK1				69.00		Project:		COJ								Page		1			
						Acres		69.00								Date		7/22/2022			
																Time		12:51:34PM			
S Spp	So T	Gr rt	ad	% Net BdFt	Bd. Ft. per Acre Def% Gross Net			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	
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
D		DO2S		49	1.9	3,566	3,497	241	15	85		8	9	83	38	12	201	1.43	17.4		
D		DO3S		43	2.4	3,115	3,040	210	100			2	12	26	59	35	8	79	0.70	38.7	
D		DO4S		8	8.5	605	553	38	100			37	49	14		23	6	27	0.47	20.3	
D Totals				39	2.7	7,285	7,090	489	58	42		4	13	17	66	32	8	93	0.85	76.4	
H		DOCU														2	12		0.00	1.8	
H		DO2S		66	1.4	7,436	7,334	506	2	59	39		9	6	85	37	14	309	2.13	23.7	
H		DO3S		28	.8	3,051	3,027	209	96		4	2	35	22	41	32	8	81	0.82	37.5	
H		DO4S		6		604	604	42	100			42	58			21	6	29	0.52	21.2	
H Totals				60	1.1	11,092	10,966	757	34	39	27	3	19	10	68	30	10	130	1.22	84.2	
A		DO4S		100	14.4	152	130	9	100			34		66		28	7	36	0.75	3.6	
A Totals				1	14.4	152	130	9	100			34		66		28	7	36	0.75	3.6	
S		DO4S		100		67	67	5	100					100		38	5	40	1.47	1.7	
S Totals				0		67	67	5	100					100		38	5	40	1.47	1.7	
Totals					1.8	18,596	18,253	1,260	0	44	40	16	3	17	12	67	31	9	110	1.04	165.8

TC PSTATS				PROJECT STATISTICS					PAGE	1		
				PROJECT	COJ						DATE	7/22/2022
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt			
04N	09	02	U12	00MC	69.00	50	229	1	W			
				TREES	ESTIMATED		PERCENT					
				PER PLOT	TOTAL		SAMPLE					
					TREES		TREES					
TOTAL			50	229	4.6							
CRUISE			26	127	4.9	6,399	2.0					
DBH COUNT												
REFOREST												
COUNT			23	102	4.4							
BLANKS			1									
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	
WHEMLOCK			68	44.4	18.5	60	19.2	82.7	11,092	10,966	3,095	
DOUG FIR			52	42.4	16.2	61	15.0	60.5	7,285	7,090	2,098	
S SPRUCE			1	1.7	21.0	39	0.9	4.0	67	67	94	
R ALDER			2	3.6	14.3	31	1.1	4.0	152	130	76	
HEMLEAV			2	.2	38.9	77	0.2	1.3	223	208	48	
SPRUCELV			1	.0	52.0	52	0.1	.7	75	62	21	
SNAG			1	.4	18.0	20	0.2	.7		21	21	
TOTAL			127	92.7	17.4	59	36.9	153.9	18,894	18,523	5,432	
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		
WHEMLOCK			72.0	8.7	337	369	401					
DOUG FIR			48.4	6.7	192	205	219					
S SPRUCE												
R ALDER			70.7	66.2	14	40	66					
HEMLEAV			81.5	76.3	419	1,770	3,121					
SPRUCELV												
SNAG												
TOTAL			103.0	9.1	292	321	351	424	106	47		
CL	68.1	COEFF	TREES/ACRE					# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15		
WHEMLOCK			113.7	16.1	37	44	52					
DOUG FIR			90.5	12.8	37	42	48					
S SPRUCE			321.2	45.4	1	2	2					
R ALDER			401.3	56.7	2	4	6					
HEMLEAV			551.1	77.9	0	0	0					
SPRUCELV			707.1	99.9	0	0	0					
SNAG			707.1	99.9	0	0	1					
TOTAL			57.5	8.1	85	93	100	132	33	15		
CL	68.1	COEFF	BASAL AREA/ACRE					# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15		
WHEMLOCK			91.9	13.0	72	83	93					
DOUG FIR			86.9	12.3	53	60	68					
S SPRUCE			321.2	45.4	2	4	6					
R ALDER			399.8	56.5	2	4	6					
HEMLEAV			494.9	69.9	0	1	2					
SPRUCELV			707.1	99.9	0	1	1					
SNAG			707.1	99.9	0	1	1					
TOTAL			40.0	5.6	145	154	163	64	16	7		
CL	68.1	COEFF	NET BF/ACRE					# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15		

TC PSTATS			PROJECT STATISTICS						PAGE	1		
			PROJECT		COJ		DATE			7/22/2022		
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt		
04N	09	02	U12	TK1		69.00	50	225	1	W		
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL			50	225	4.5							
CRUISE			26	123	4.7	6,358	1.9					
DBH COUNT												
REFOREST												
COUNT			23	102	4.4							
BLANKS			1									
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
WHEMLOCK			68	44.4	18.5	60	19.2	82.7	11,092	10,966	3,095	3,095
DOUG FIR			52	42.4	16.2	61	15.0	60.5	7,285	7,090	2,098	2,098
S SPRUCE			1	1.7	21.0	39	0.9	4.0	67	67	94	94
R ALDER			2	3.6	14.3	31	1.1	4.0	152	130	76	76
TOTAL			123	92.2	17.3	59	36.3	151.2	18,596	18,253	5,363	5,363
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	
WHEMLOCK			72.0	8.7	337	369	401					
DOUG FIR			48.4	6.7	192	205	219					
S SPRUCE												
R ALDER			70.7	66.2	14	40	66					
TOTAL			77.4	7.0	272	292	312		239	60	27	
CL	68.1		COEFF	TREES/ACRE					# OF PLOTS REQ.		INF. POP.	
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15	
WHEMLOCK			113.7	16.1	37	44	52					
DOUG FIR			90.5	12.8	37	42	48					
S SPRUCE			321.2	45.4	1	2	2					
R ALDER			401.3	56.7	2	4	6					
TOTAL			58.0	8.2	85	92	100		134	34	15	
CL	68.1		COEFF	BASAL AREA/ACRE					# OF PLOTS REQ.		INF. POP.	
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15	
WHEMLOCK			91.9	13.0	72	83	93					
DOUG FIR			86.9	12.3	53	60	68					
S SPRUCE			321.2	45.4	2	4	6					
R ALDER			399.8	56.5	2	4	6					
TOTAL			40.7	5.8	143	151	160		66	17	7	
CL	68.1		COEFF	NET BF/ACRE					# OF PLOTS REQ.		INF. POP.	
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15	
WHEMLOCK			89.7	12.7	9,575	10,966	12,356					
DOUG FIR			90.7	12.8	6,181	7,090	7,998					
S SPRUCE			321.2	45.4	37	67	98					
R ALDER			403.6	57.0	56	130	205					
TOTAL			44.4	6.3	17,108	18,253	19,398		79	20	9	

TC PLOGSTVB		Log Stock Table - MBF																	
T04N R09W S02 TyTK1				69.00		Project: COJ												Page 1	
						Acres		69.00										Date 7/22/2022	
																		Time 12:56:16PM	
Spp	S T	So Gr rt 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+
D		DO 2S	24	8		8	1.6					8							
D		DO 2S	26	7		7	1.4					7							
D		DO 2S	28	6	7.1	5	1.1					5							
D		DO 2S	32	15		15	3.1					15							
D		DO 2S	34	8	9.5	7	1.4					7							
D		DO 2S	40	203	1.8	200	40.8				9	28	101	62					
D		DO 3S	20	5		5	1.1					5							
D		DO 3S	24	8		8	1.6			1		7							
D		DO 3S	26	7		7	1.4					7							
D		DO 3S	28	11		11	2.2				11								
D		DO 3S	32	40	4.4	39	7.9			13	12	14							
D		DO 3S	34	18	5.1	17	3.5			12		5							
D		DO 3S	36	14	7.4	13	2.6			13									
D		DO 3S	38	9		9	1.8			5	3								
D		DO 3S	40	104	1.4	102	20.9			41		61							
D		DO 4S	12	0		0	.1			0									
D		DO 4S	16	3		3	.6			3									
D		DO 4S	18	6		6	1.3			6									
D		DO 4S	20	5		5	.9			5									
D		DO 4S	24	3		3	.5			2	1								
D		DO 4S	26	1		1	.3			1									
D		DO 4S	28	4	7.8	4	.8			4									
D		DO 4S	30	13	14.7	11	2.2			11									
D		DO 4S	32	7	20.0	5	1.1			5									
D		Totals		503	2.7	489	38.8			122	36	127	142	62					
H		DO 2S	24	4		4	.5					4							
H		DO 2S	26	3		3	.4					3							
H		DO 2S	28	9		9	1.1						9						
H		DO 2S	30	32		32	4.2					3	18	11					
H		DO 2S	32	20		20	2.7						20						
H		DO 2S	34	9		9	1.2								9				
H		DO 2S	36	8		8	1.0					3	4						
H		DO 2S	40	429	1.6	422	55.8					9	85	113	149	66			
H		DO 3S	12	0		0	.0			0									
H		DO 3S	16	3		3	.4			2	1								
H		DO 3S	20	1		1	.1				1								

TC PLOGSTVB				Log Stock Table - MBF																				
T04N R09W S02 TyTK1 69.00				Project: COJ										Page 2										
				Acres 69.00										Date 7/22/2022										
														Time 12:56:16PM										
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+				
H		DO	3S	24	20	4.0	19	2.5				10	9											
H		DO	3S	26	7		7	.9					7											
H		DO	3S	28	22		22	3.0			5	1	16											
H		DO	3S	30	25		25	3.4			5	12			9									
H		DO	3S	32	41		40	5.3			30	10												
H		DO	3S	34	4		4	.6			4													
H		DO	3S	36	2		2	.3				2												
H		DO	3S	38	17	3.2	16	2.1			2	5	9											
H		DO	3S	40	68		68	9.0			10	18	41											
H		DO	4S	12	1		1	.2			1													
H		DO	4S	14	1		1	.2			1													
H		DO	4S	16	6		6	.9			6													
H		DO	4S	18	2		2	.2			1	1												
H		DO	4S	20	7		7	.9			7													
H		DO	4S	24	11		11	1.4			11													
H		DO	4S	26	1		1	.2			1													
H		DO	4S	28	7		7	.9			7													
H		DO	4S	30	5		5	.7			5													
H		Totals			765	1.1	757	60.1			99	62	93	133	137	167	66							
A		DO	4S	20	5	33.3	3	33.6			3													
A		DO	4S	40	6		6	66.4			6													
A		Totals			11	14.4	9	.7			9													
S		DO	4S	38	5		5	100.0		5														
S		Totals			5		5	.4		5														
Total		All Species			1,283	1.8	1,259	100.0		5	230	98	219	275	199	167	66							

TC		PSTNDSUM		Stand Table Summary										Page 1	
														Date: 7/22/2022	
T04N R09W S02 TyTK1 69.00				Project COJ						Time: 12:56:38PM					
				Acres 69.00						Grown Year:					
S Spec T	Sample DBH		Tot FF 16' Av Ht		Trees/ BA/ Logs Acre Acre Acre			Average Log Net Net Cu.Ft. Bd.Ft.		Net Net Tons/ Cu.Ft. Bd.Ft. Acre Acre Acre		Totals Tons Cunits MBF			
H	10	3	87	61	6.688	3.65	6.69	12.7	50.0		85	334		58 23	
H	11	1	89	96	1.842	1.22	3.68	13.0	45.0		48	166		33 11	
H	12	1	85	66	1.548	1.22	1.55	24.0	70.0		37	108		26 7	
H	13	1	89	59	1.319	1.22	2.64	12.0	45.0		32	119		22 8	
H	14	4	86	67	4.550	4.86	9.10	15.1	51.3		138	466		95 32	
H	15	1	88	76	.991	1.22	1.98	21.0	75.0		42	149		29 10	
H	16	3	85	72	2.612	3.65	4.35	26.2	86.0		114	374		79 26	
H	17	1	85	83	.771	1.22	1.54	30.0	100.0		46	154		32 11	
H	18	6	85	77	4.128	7.30	7.57	32.9	107.3		249	812		172 56	
H	19	9	85	87	5.558	10.94	11.73	35.6	116.8		417	1,371		288 95	
H	20	2	84	89	1.115	2.43	2.23	43.0	142.5		96	318		66 22	
H	21	4	84	81	2.022	4.86	4.04	43.5	135.0		176	546		121 38	
H	22	5	86	95	2.303	6.08	5.07	50.4	179.1		255	907		176 63	
H	23	4	84	86	1.686	4.86	3.37	53.9	185.0		182	624		125 43	
H	24	2	85	82	.774	2.43	1.55	59.3	210.0		92	325		63 22	
H	25	7	83	91	2.497	8.51	5.35	63.4	223.3		339	1,195		234 82	
H	26	5	84	92	1.649	6.08	3.30	74.4	269.0		245	887		169 61	
H	27	3	82	103	.917	3.65	2.45	66.0	253.8		161	621		111 43	
H	28	1	91	125	.284	1.22	.85	78.3	390.0		67	333		46 23	
H	29	2	84	101	.530	2.43	1.33	80.2	326.0		106	432		73 30	
H	30	1	88	112	.248	1.22	.74	82.3	380.0		61	282		42 19	
H	33	2	83	101	.409	2.43	1.23	87.0	360.0		107	442		74 31	
H	Totals	68	86	79	44.442	82.68	82.34	37.6	133.2		3,095	10,966		2,136 757	
D	9	1	89	86	2.633	1.16	2.63	13.0	60.0		34	158		24 11	
D	11	2	83	57	3.526	2.33	3.53	13.5	40.0		48	141		33 10	
D	12	2	84	70	2.963	2.33	4.44	13.7	40.0		61	178		42 12	
D	13	2	84	71	2.524	2.33	3.79	16.0	46.7		61	177		42 12	
D	14	4	86	82	4.353	4.65	7.62	19.7	65.7		150	501		104 35	
D	15	4	87	88	3.792	4.65	7.58	21.0	77.5		159	588		110 41	
D	16	4	84	95	3.333	4.65	6.67	25.6	85.0		171	567		118 39	
D	17	5	87	94	3.690	5.82	7.38	28.9	101.0		213	745		147 51	
D	18	8	85	85	5.267	9.31	10.53	30.3	98.1		319	1,034		220 71	
D	19	6	86	90	3.545	6.98	7.68	32.5	108.5		250	833		172 57	
D	20	6	86	102	3.200	6.98	6.93	40.3	138.5		279	960		193 66	
D	21	4	87	95	1.935	4.65	3.87	46.0	155.0		178	600		123 41	
D	22	3	86	102	1.322	3.49	3.09	44.7	158.6		138	489		95 34	
D	26	1	85	82	.316	1.16	.63	59.5	190.0		38	120		26 8	
D	Totals	52	86	85	42.399	60.50	76.37	27.5	92.8		2,098	7,090		1,448 489	
A	13	1	66	39	2.188	2.02	2.19	15.0	20.0		33	44		23 3	
A	16	1	87	51	1.444	2.02	1.44	30.0	60.0		43	87		30 6	
A	Totals	2	74	44	3.632	4.03	3.63	21.0	35.9		76	130		53 9	
S	21	1	67	45	1.677	4.03	1.68	56.0	40.0		94	67		65 5	
S	Totals	1	67	45	1.677	4.03	1.68	56.0	40.0		94	67		65 5	
Totals		123	85	80	92.150	151.25	164.02	32.7	111.3		5,363	18,253		3,701 1,259	

LOGGING PLAN MAP

OF TIMBER SALE CONTRACT
AT-341-2023-W00857-01
CUP OF JOE
PORTIONS OF SECTION 2,
OF T4N, R9W, W.M.,
AND PORTIONS OF SECTION 35,
OF T5N, R9W, W.M.,
CLATSOP COUNTY, OREGON

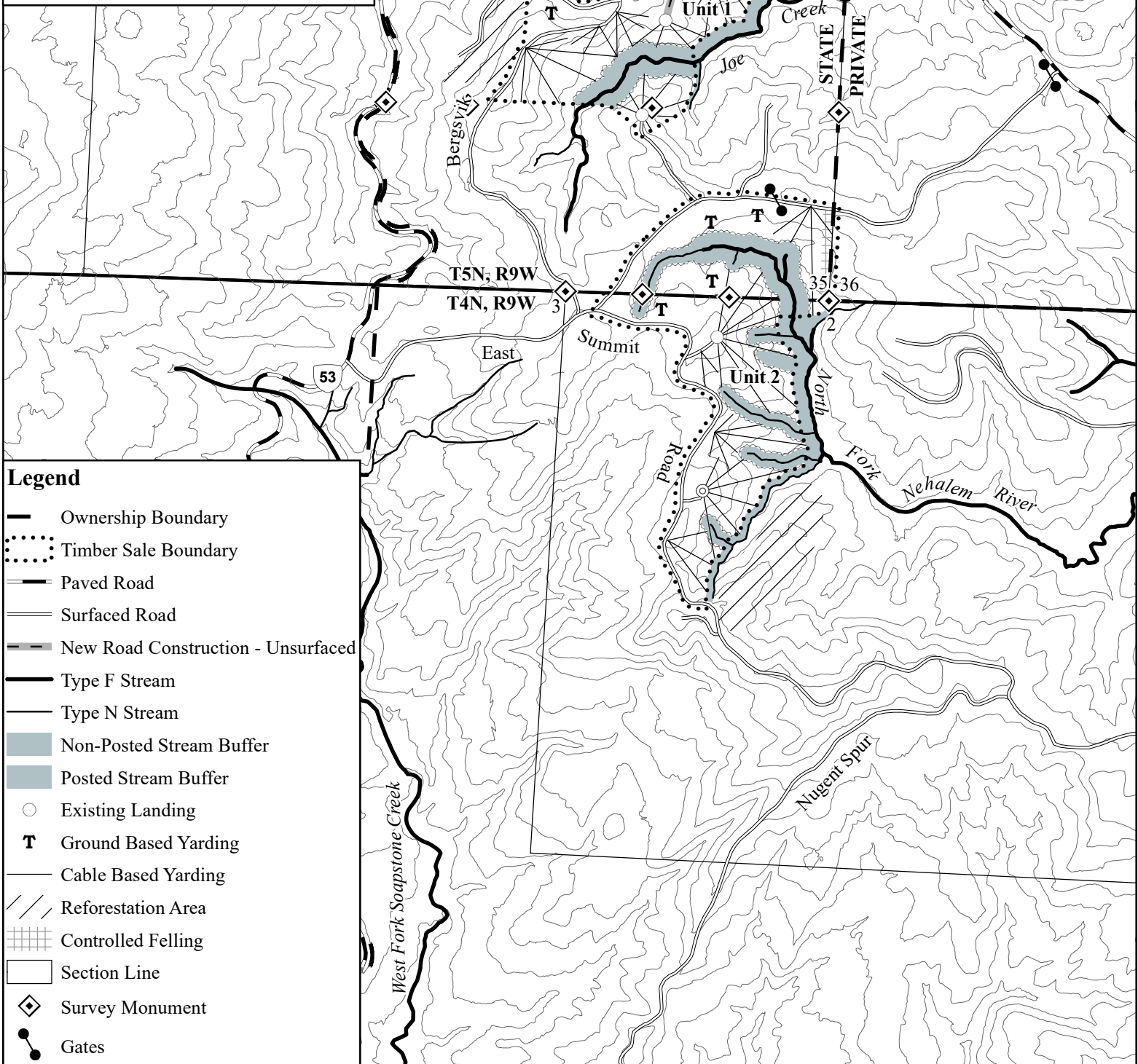


Logging Method

Unit	Tractor	Cable	Acres
Unit 1 (MC)	35%	65%	29
Unit 2 (MC)	30%	70%	40
Total	32%	68%	69

0 500 1,000 2,000
Feet

1 inch = 1,000 feet



LOGGING PLAN MAP

OF TIMBER SALE CONTRACT
AT-341-2023-W00857-01
CUP OF JOE
PORTIONS OF SECTION 2,
OF T4N, R9W, W.M.,
AND PORTIONS OF SECTION 35,
OF T5N, R9W, W.M.,
CLATSOP COUNTY, OREGON



Logging Method

Unit	Tractor	Cable	Acres
Unit 1 (MC)	35%	65%	29
Unit 2 (MC)	30%	70%	40
Total	32%	68%	69

0 500 1,000 2,000
Feet

1 inch = 1,000 feet

