



Timber Sale Appraisal
Sager
Sale AT-341-2026-W01254-01

"STEWARDSHIP IN FORESTRY"

District: Astoria

Date: March 19, 2026

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$4,969,478.72	\$119,575.53	\$5,089,054.25
	Project Work:		(\$802,262.00)
	Advertised Value:		\$4,286,792.25



Timber Sale Appraisal
Sager
Sale AT-341-2026-W01254-01

"STEWARDSHIP IN FORESTRY"

District: Astoria

Date: March 19, 2026

Timber Description

Location:

Stand Stocking: 80%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	25	0	98
Western Hemlock / Fir	19	0	97
Red Cedar	24	0	95
Alder (Red)	13	0	96
Maple	17	0	96

Volume by Grade	2S	3S & 4S 6"-11"	3S 12"+	Special Cull	SM & Better	3S	4S	8" - 9"	10" - 11"	12"+	6" - 7"	Camprun	Total
Douglas - Fir	5,310	929	34	48	1,806	0	0	0	0	0	0	0	8,127
Western Hemlock / Fir	573	236	0	0	53	0	0	0	0	0	0	0	862
Red Cedar	523	0	0	0	0	93	32	0	0	0	0	0	648
Alder (Red)	0	0	0	0	0	0	0	130	78	90	196	0	494
Maple	0	0	0	0	0	0	0	0	0	0	0	293	293
Total	6,406	1,165	34	48	1,859	93	32	130	78	90	196	293	10,424

Comments: Pond Values Used: Local Pond Values, March, 2026.

Expected Log Markets: Clatskanie, Forest Grove, Mist, Sheridan, St. Helens, Noti, Eugene, Tillamook, Warrenton, Wauna, Willamina, Elma, WA, Longview, WA

PRICING:

Spruce = pond value - (Douglas-fir) logging cost.
\$274.10/MBF = \$530/MBF - \$255.90/MBF

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

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

Ditch Filters:
20 bales of straw @ \$13.39/bale = \$267.80
2 hours of labor (installation/removal) @ \$50/hr = \$100

Waterbar and block unsurfaced roads:
4 hours w/C315 Excavator @ \$127/hour = \$508

Highway 202 daily cleanup:
Road Sweeper rental (1 week + delivery) = \$1,500
8 hours labor @ \$50/hr = \$400

Flagging on Highway 202:
5 days of flagging crew @ \$3,500/day = \$17,500

Extra allowance for controlled felling adjacent to Highway 202:
Swamper @ \$200.00/day X 10 days = \$2,000.00

Line pull in Unit 1 along Highway 202:
5 days X \$400/day = \$2,000.00

Total P&R Cost = \$26,275.80

Other Costs (No Profit & Risk added): None

SLASH PILING
(See attached appraisal. Includes move-in and pile materials) = \$15,960

ROAD MAINTENANCE
(See attached Road Maintenance Cost Summary Sheet)
TOTAL Road Maintenance: \$28,088/10,424 MBF = \$2.69/MBF



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Sager
Sale AT-341-2026-W01254-01

District: Astoria

Date: March 19, 2026

Logging Conditions

Combination#:	1	Douglas - Fir Western Hemlock / Fir Red Cedar Alder (Red) Maple	44.00% 44.00% 44.00% 44.00% 44.00%
Logging System:	Cable: Medium Tower >40 - <70	Process: Manual Felling/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: 4800	
cost / mbf:	\$207.76		
machines:	Log Loader (A) Tower Yarder (Medium)		
Combination#:	2	Douglas - Fir Western Hemlock / Fir Red Cedar Alder (Red) Maple	56.00% 56.00% 56.00% 56.00% 56.00%
Logging System:	Shovel	Process: Feller Buncher	
yarding distance:	Short (400 ft)	downhill yarding: No	
tree size:	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF		
loads / day:	18	bd. ft / load: 5500	
cost / mbf:	\$101.01		
machines:	Feller Buncher w/ Delimber		



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Sager
Sale AT-341-2026-W01254-01

District: Astoria

Date: March 19, 2026

Logging Costs

Operating Seasons: 3.00	Profit Risk: 12%
Project Costs: \$802,262.00	Other Costs (P/R): \$26,275.80
Slash Disposal: \$15,960.00	Other Costs: \$0.00

Miles of Road

Road Maintenance: \$2.69

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	6.0
Western Hemlock / Fir	\$0.00	3.0	5.2
Red Cedar	\$0.00	2.0	6.5
Alder (Red)	\$0.00	2.0	5.0
Maple	\$0.00	2.0	4.2



Timber Sale Appraisal
Sager
Sale AT-341-2026-W01254-01

"STEWARDSHIP IN FORESTRY"

District: Astoria

Date: March 19, 2026

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
\$147.98	\$2.74	\$1.26	\$70.83	\$2.52	\$27.04	\$1.53	\$2.00	\$0.00	\$255.90
Western Hemlock / Fir									
\$147.98	\$2.77	\$1.26	\$82.53	\$2.52	\$28.45	\$1.53	\$2.00	\$0.00	\$269.04
Red Cedar									
\$147.98	\$2.82	\$1.26	\$100.96	\$2.52	\$30.66	\$1.53	\$2.00	\$0.00	\$289.73
Alder (Red)									
\$147.98	\$2.80	\$1.26	\$130.00	\$2.52	\$34.15	\$1.53	\$2.00	\$0.00	\$322.24
Maple									
\$147.98	\$2.80	\$1.26	\$154.76	\$2.52	\$37.12	\$1.53	\$2.00	\$0.00	\$349.97

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$757.26	\$501.36	\$0.00
Western Hemlock / Fir	\$0.00	\$534.08	\$265.04	\$0.00
Red Cedar	\$0.00	\$1,318.22	\$1,028.49	\$0.00
Alder (Red)	\$0.00	\$549.45	\$227.21	\$0.00
Maple	\$0.00	\$375.00	\$25.03	\$0.00



Timber Sale Appraisal Sager

Sale AT-341-2026-W01254-01

"STEWARDSHIP IN FORESTRY"

District: Astoria

Date: March 19, 2026

Summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	8,127	\$501.36	\$4,074,552.72
Western Hemlock / Fir	862	\$265.04	\$228,464.48
Red Cedar	648	\$1,028.49	\$666,461.52
Alder (Red)	494	\$227.21	\$112,241.74
Maple	293	\$25.03	\$7,333.79

Gross Timber Sale Value

Recovery: \$5,089,054.25

Prepared By: Justin Bush

Phone: 503-325-5451

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale: Sager
Date: February 20, 2026
By: Justin Bush

MBF: 10,424
\$\$/MBF: \$2.69

Type	Equipment/Rationale	Move-in Rate	Times	Hours	Rate	Cost	
Interim Operations	Grader 14G	\$972	1	8	\$126	\$1,980	
	Rubber Tired Backhoe - small	\$401	1	4	\$97	\$789	
	Dump Truck 12CY	\$205	1	8	\$110	\$1,085	
Interim Operations	Grader 14G	\$972	1	8	\$126	\$1,980	
	Dump Truck 12CY	\$205	1	8	\$110	\$1,085	
	Rubber Tired Backhoe - small	\$401	1	4	\$97	\$789	
	Vibratory Roller	\$972	1	8	\$97	\$1,748	
Final Road Maintenance	Grader 14G	\$972	1	37	\$126	\$5,634	
	Dump Truck 12CY	\$205	2	20	\$110	\$2,610	
	FE Loader C966	\$972	1	8	\$105	\$1,812	
	Vibratory Roller	\$972	1	37	\$97	\$4,561	
	Water Truck 2,500 gallon	\$238	1	12	\$113	\$1,594	
	C315 Excavator	\$1,005	1	8	\$127	\$2,021	
	Labor			8	\$50	\$400	
Total							\$28,088

Interim Operations Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	3.0	3.0	1.0	8

Final Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	1.5	7.0	4.7	37
Vibratory Roller	1.5	7.0	4.7	37

Process and compact: All crushed rock roads

Sager Creek Road = 1.6 miles
West Sager Road = 1.5 miles
Jones Road = 1.3 miles
Kauppi Mainline = 0.9 miles
(Existing) Unnamed Spur Roads = 1.6 miles
New Construction Spur Roads = 0.1
Grade & Process Total = 7.0 miles

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	4
Hemlock/Fir	B	1.0	4.5	6
Hemlock/Spruce	C	1.8	5.0	8
Hemlock	D	1.8	5.0	8
Conifer/Hardwood	E	0.8	2.0	6
Whole Tree Yarding	F	0.5	0.3	10

Sale Area		Harvest Type	Veg Type/Zone	Ground Based Yarding Acres	Estimated Piling Hours/Area	Cost/Hour	Total Cost/Area	
1		CC	A	78	39	\$160.00	\$6,240.00	
2		CC	A	2	1	\$160.00	\$160.00	
3		CC	A	38	19	\$160.00	\$3,040.00	
						In-unit Piling	Sub Total =	\$9,440.00
Sale Area		Number of Landings to be Piled	# acres to Landings per Area	Total Cost/Area	Number of In-Unit Piles	Material Cost/Pile	Total Cost/Area	
1		12	78	\$1,664.00	51	\$5.00	\$255.00	
2		6	38	\$810.67	7	\$5.00	\$35.00	
3		9	94	\$2,005.33	28	\$5.00	\$140.00	
*Cost includes separating firewood						Materials	Sub Total =	\$430.00
Additonal Move-in allowance						Landing Piling	Sub Total =	\$4,480.00
Move-In Allowance	Number of Move-In's	Total Move-In Allowance						
\$1,610.00	1	\$1,610.00	Slash piler					
						Move-In	Sub Total =	\$1,610.00
Slash Endhaul								
Dump Truck hrs	Cost/Hour	Total	Loader hrs	Cost/Hour	Total			
0	\$110.00	\$0.00	0	\$160.00	\$0.00			
						Sub Total =	\$0.00	
						Grand Total =	\$15,960.00	

SUMMARY OF ALL PROJECT COSTS

SALE NAME: Sager

Project No. 1: SALE ACCESS and LANDING CONSTRUCTIONROAD CONSTRUCTION:

<u>Road segment</u>	<u>Length (Sta)</u>	<u>Length (Mile)</u>	<u>Cost</u>
unsurfaced			
1A to 1B, 1C to 1D,	14.50	0.27	\$9,060
surfaced			
1E to 1F, 1G to 1H			
1I to 1J, 2A to 2B			
3A	4.15	0.08	\$3,882
Road Maint.			\$842
Move-In			\$335
TOTALS	18.65	0.35	\$14,120

Project No. 2: SALE ACCESS ROAD IMPROVEMENT, SURFACE ROCK REPLACEMENT, and ROAD MAINTANENECE:

<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, I15 to I16, I17 to I18,			
I19 to I20, I21 to I22			
I23 to I24	728.15	13.79	\$281,959
Road Maint.			\$18,346
Move-In			\$7,304
TOTALS	728.15	13.79	\$307,609

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

<u>Description</u>	<u>Length/Vol.</u>	<u>Cost</u>
Proj. 3 Waterhole Improvement		\$12,189
Proj. 4 Rock Crushing Northrup Quarry		\$41,703
Proj. 5 Rock Crushing Viewpoint Quarry		\$426,641
TOTAL		\$480,533.03

GRAND TOTAL **\$802,262**

Compiled By: D. Farner

Date: 03/09/2026

Move In and Maintenance Calculator for Construction and Improvement

SALE NAME: Sager

Project No. 1: SALE ACCESS and LANDING CONSTRUCTIONROAD CONSTRUCTION:

<u>Road segment</u>	<u>Length/Sta</u>	<u>Length/Mile</u>	<u>Cost</u>
1A to 1B, 1C to 1D, unsurfaced	14.50	0.27	\$9,060
1E to 1F, 1G to 1H surfaced			
1I to 1J, 2A to 2B			
3A	4.15	0.08	\$3,882
TOTALS	18.65	0.35	\$12,942

Project No. 2: SALE ACCESS ROAD IMPROVEMENT, SURFACE ROCK REPLACEMENT, and ROAD MAINTANENECE:

<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, I15 to I16, I17 to I18,			
I19 to I20, I21 to I22			
I23 to I24	728.15	13.79	\$281,959.50
TOTALS	728.15	13.79	\$281,959

MOVE IN (Construction & Improvement Only)

<u>Equipment</u>	<u>Length/Mile</u>	<u>Cost</u>
Grader (14G)		\$921.00
Vibratory Compactor		\$972.00
Water Truck (2500 gal.)		\$238.00
Excavator (C315)		\$1,005.00
Excavator (C330)		\$1,755.00
Front End Loader (C966)		\$972.00
Dump Truck 10-12 yard (4)		\$820.00
Dump Truck w/pup trailer 20 yd (4)		\$956.00
TOTAL		\$7,639.00

ROAD MAINTENANCE (Construction & Improvement Only)

	<u>Length/Mile</u>	<u>Cost</u>
Nicolai-Bovine		\$19,188.00
TOTAL		\$19,188.00

SALE NAME:	Sager	NEW CONSTRUCTION:	18.65 STATIONS
ROAD:	1A to 1B (3.75 sta.), 1C to 1D 8.9 sta.)	IMPROVEMENT:	728.15 STATIONS
POINTS:	1E to 1F (1 sta.), 1G to 1H (1 sta.), 1I to 1J (3.0 sta.), 2A to 2B (1 sta.), 3A (0 sta.)		
			0.35 MILES
			13.79 MILES

EXCAVATION		Material	Cy/amount	x	Rate	=	Cost
1A to 1B 0+00 to 3+75		Clear trees and debris,					
		remove all orgaincs from					
		right of way, restore					
1C to 1D 0+00 to 8+40		drainage	3	x	\$127.00	=	\$381.00
1E to 1F 0+00 to 1+00		Clear trees and debris,					
		remove all orgaincs from					
		right of way, restore					
1G to 1H 0+00 to 1+00		drainage	5.00	x	\$127.00	=	\$635.00
1I to 1J 0+00 to 1+50		Install culvert at south edge of new					
		junctions, across sager mainline					
		capturing drainage from spur and					
1K to 1L 0+00 to 1+00		mainline.	1	x	\$127.00	=	\$127.00
		Balanced construction	1	x	\$154.00	=	\$154.00
		Balanced construction	1	x	\$154.00	=	\$154.00
1M to 1N 0+00 to 1+50		Clear trees and debris,					
		remove all orgaincs from					
		right of way, restore					
1O to 1P 0+00 to 1+00		drainage	1	x	\$127.00	=	\$127.00
1Q to 1R 0+00 to 1+00		Balanced construction	1.5	x	\$154.00	=	\$231.00
1S to 1T 0+00 to 1+00		Reopen spur.					
		Clear trees and debris,					
		remove all orgaincs from					
1U to 1V 0+00 to 1+00		right of way, restore					
		drainage	2	x	\$127.00	=	\$254.00
1W to 1X 0+00 to 1+00		Construct landing	1	x	\$487.00	=	\$487.00
SUB TOTAL FOR EXCAVATION							

CULVERT MATERIALS AND INSTALLATION									
Location	Dialtype	Lineal ft.	Rate	Cost	Location	Dialtype	Lineal ft.	Rate	Cost
1E to 1F									
0+00	18"/CPP	30	\$29.73	\$891.90					
Other/miscellaneous:									
Culvert stakes & markers:									
SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION									
					\$917 Subtotal of Clearing, Exc., Culv. \$4,636				

SURFACING									
Subgrade prep:		Description		Stations/ amount	Rate/ sta./amt	Cost			
Grade, Shape, and Outslope 14':		1A to 1B (3.75 sta.), 1C to 1D (8.9 sta.), 1E to 1F (1.85.0 sta.)		14.50	\$22.89	\$331.91			
Grade, Shape and Ditch 16' :		1E to 1F (1 sta.), 1G to 1H (1 sta.), 1I to 1J (1.15 sta.), 2A to 2B (1 sta.), 3A (0 sta.)		4.15	\$30.98	\$128.57			
Subgrade Compaction :		1A to 1B (3.75 sta.), 1C to 1D (8.9 sta.), 1E to 1F (1 sta.), 1G to 1H (1 sta.), 1I to 1J (3.0 sta.), 2A to 2B (1 sta.), 3A (0 sta.)		18.65	\$25.19	\$469.79			

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Sager
ROAD: 11 to 12 (284.00 sta.), 13 to 14 (27.80 sta.), 15 to 16 (84.80 s
POINTS: 17 to 18 (1.45 sta.), 19 to 110 (2.65 sta.), 111 to 112 (6.30 sta.),
113 to 114 (20.00 sta.), 115 to 116 (200.50 sta.), 117 to 118 (65.25 sta.),
119 to 120 (22.25 sta.), 121 to 122 (2.00 sta.), 123 to 124 (11.15 sta.)

NEW CONSTRUCTION: 18.65 STATIONS
IMPROVEMENT: 728.15 STATIONS

0.35 MILES
13.79 MILES

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

EXCAVATION		Cy/amount	x	Rate	=	Cost
Material						
11 to 12						
47+85 to 48+95	Begin bridge approach reconstruction remove contaminated rock and debris from both ends bridge					
	End haul to waste area c315/hr	8.0	x	\$127.00	=	\$1,016.00
	Reconstruct approaches dumptruck/hr	8.0	x	\$110.00	=	\$880.00
48+20	Reconstruct ditchouts both sides of bridge improve bridge drainage					
	away from deck c315/hr	1.0	x	\$127.00	=	\$127.00
	Install series of 3 rock ditch filters both sides of bridge	1.0	x	\$127.00	=	\$127.00
48+40	remove all dirt and debris from bridge deck					
	Reconstruct ditchouts both sides of bridge	0.5	x	\$127.00	=	\$63.50
48+60	improve bridge drainage away from deck					
	Install series of 3 rock ditch filters both sides of road	0.5	x	\$127.00	=	\$63.50
48+95	Clear and prepare waste area c315/hr	1.0	x	\$127.00	=	\$127.00
58+40	Reconstruct turnaround c315/hr	1.0	x	\$127.00	=	\$127.00
94+20	Construct turnaround	0.5	x	\$127.00	=	\$63.50
103+60	Maintain drainage behind turnaround					
	Construct turnouts on both sides of 11 to 12	1.0	x	\$127.00	=	\$127.00
109+20	Construct turnaround c315/hr	1.0	x	\$127.00	=	\$127.00
119+75	Construct turnout c315/hr	1.0	x	\$127.00	=	\$127.00
123+60	Remove marked tree c315/hr	0.5	x	\$127.00	=	\$63.50
127+80	Dig out culvert outlet					
246+80	Repair exsiting culvert outlet cut off damaged outlet, install repair section					
	reconstruct fill c315/hr	2.0	x	\$127.00	=	\$254.00
	Labor labor/hr	2.0	x	\$50.00	=	\$100.00
	18" aluminum dimple culvert repair band	1.0	x	\$75.00	=	\$75.00

SURFACING									
Application	Subgrade prep:	Description	Stations/ amount	Rate/ sta./amt	Cost				
Surfacing	Grade and Shape 16" : 11 to 12 ((45+50 to 284+00)238.50 sta.), 19 to 110 (2.65 sta.), 111 to 112 (6.3 sta.), 119 to 120 (22.25 sta.), 121 to 122 (2.0 sta.), 123 to 124 (11.15 sta.)	Grade, Shape and Ditch 16" : 11 to 12 (0+00 to 45+50) 45.5 sta., 115 to 116 (200.5 sta.),	282.85	x	\$12.72				
			246.00	x	\$30.98				
			528.85	x	\$25.19				
Curve Widening Surface	Subgrade Compaction : 11 to 12 (284 sta.), 19 to 110 (2.65 sta.), 111 to 112 (6.3 sta.), 115 to 116 (200.5 sta.), 119 to 120 (22.25 sta.), 121 to 122 (2.0 sta.), 123 to 124 (11.15 sta.)	Sod Removal and Ditch Reconstruction : 11 to 12 (45+50 to 284+00)238.50 sta.), 19 to 110 (2.65 sta.), 111 to 112 (6.3 sta.), 119 to 120 (22.25 sta.), 121 to 122 (2.0 sta.), 123 to 124 (11.15 sta.), Scatter w/backuphoe : 11 to 12 ((45+50 to 284+00)238.50 sta.), 19 to 110 (2.65 sta.), 111 to 112 (6.3 sta.), 119 to 120 (22.25 sta.), 121 to 122 (2.0 sta.), 123 to 124 (11.15 sta.), Spot Grade (14G (\$/hr)) : 13 to 14 (27.8 sta.), 15 to 16 (0+00 to 84+80) 84.8 sta.), 17 to 18 (1.45 sta.), 113 to 114 (20.0 sta.), 117 to 118 (65.25 sta.)	282.85	x	\$29.08				
			142.00	x	\$11.19				
			12.00	x	\$126.00				
Curve Widening Surface	Spot Grade Compaction (Vibratory Roller (\$/hr)) : 13 to 14 (27.8 sta.), 15 to 16 (0+00 to 84+80) 84.8 sta.), 17 to 18 (1.45 sta.), 113 to 114 (20.0 sta.), 117 to 118 (65.25 sta.)		8.00	x	\$97.00				
ROAD SEGMENT									
Application	Rock Size and Type	Location	Depth of Rock (inches)	POINT TO POINT		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
				11 to 12	Sta. to Sta.				
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per station	Number of stations	TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
				19	284				5,396
Curve Widening Surface	1 1/2"-0" crushed	7+25, 11+10, 0+00 to 284+00	3	station	19	4	\$16.95	\$746	
	1 1/2"-0" crushed	76+30, 148+55	N/A	load	11	loads	\$16.95	\$746	
	1 1/2"-0" crushed	48+95 to 53+70	N/A	load	11	loads	\$16.95	\$559	
Turnouts	1 1/2"-0" crushed	0+00, 6+10, 9+50, 16+55, 18+95, 20+90, 27+90, 33+15, 36+75, 40+20, 67+70, 74+25, 78+05, 91+20, 94+20, 102+80, 113+60, 114+70, 119+75, 122+85, 127+80, 133+95, 145+05, 151+05, 169+55, 172+80, 182+55, 187+00, 200+90, 213+65, 218+80, 239+55, 256+75, 264+25, 269+80, 275+30, 279+25	N/A	turnout	11	turnouts	\$16.95	\$6,899	
		58+40	N/A	turnaround	22	turnarounds	1	\$16.95	\$373
		109+20	N/A	turnaround	66	turnarounds	1	\$9.66	\$638
		123+60	N/A	turnaround	33	turnarounds	1	\$9.66	\$319
		0+00, 45+50, 94+20	N/A	turnaround	11	turnarounds	3	\$16.95	\$559
		103+60, 119+75	N/A	turnaround	11	turnarounds	1	\$10.36	\$114
		45+50, 59+80, 61+00, 83+15, 131+80, 160+15, 174+55, 191+70, 209+25, 227+00, 256+75, 275+30	N/A	turnaround	33	turnarounds	2	\$9.66	\$638
		12+00, 196+50, 250+65	N/A	junction	11	junctions	12	\$16.95	\$2,237
		246+80	N/A	junction	22	junctions	3	\$16.95	\$1,119
		246+80	N/A	culvert	11	culverts	1	\$16.95	\$186
Junctions	1 1/2"-0" crushed	48+20, 48+95	N/A	culvert	22	culverts	\$9.66	\$213	
		47+85 to 48+20, 48+60 to 48+95	N/A	3 filter series	11	3 filter series	2	\$9.66	\$213
		47+85 to 48+20, 48+60 to 48+95	2	load	11	loads	2	\$16.95	\$373
Road Subgrade Reconst.	4"-0" crushed	47+85 to 48+20, 48+60 to 48+95	8	load	11	loads	\$10.36	\$456	
		48+60 to 48+95	11 to 12	44	\$10.36	\$456			
Total Rock for Road Segment						6,430		\$107,102	

ROAD SEGMENT						
Application	I5 to I16		Depth of Rock (inches)	POINT TO POINT		Cost
	Rock Size and Type	Location		I5 to I16	I5 to I16 Volume (CY) per load	
Leveling Rock	4'-0" crushed	0+00 to 84+80	N/A	11	10	\$1,140
Total Rock for Road Segment:						
ROAD SEGMENT						
Application	I9 to I10		Depth of Rock (inches)	POINT TO POINT		Cost
	Rock Size and Type	Location		I9 to I10	I9 to I10 Volume (CY) per station	
Surfacing	4'-0" crushed	0+00 to 2+65	4	25	2.65	\$686
Junctions	1 1/2'-0" crushed	0+00	N/A	11	1	\$186
Turnouts	4'-0" crushed	0+35	4	11	1	\$114
Landings	6" jaw-run	2+65	N/A	66	1	\$638
Total Rock for Road Segment:						
ROAD SEGMENT						
Application	I11 to I12		Depth of Rock (inches)	POINT TO POINT		Cost
	Rock Size and Type	Location		I11 to I12	I11 to I12 Volume (CY) per station	
Surfacing	1 1/2'-0" crushed	0+00 to 6+30	2	13	6.3	\$1,388
Junctions	1 1/2'-0" crushed	0+00	N/A	11	1	\$186
Turnaround	6" jaw-run	2+60	N/A	33	1	\$319
Landings	6" jaw-run	6+30	N/A	66	1	\$638
Total Rock for Road Segment:						
ROAD SEGMENT						
Application	I15 to I16		Depth of Rock (inches)	POINT TO POINT		Cost
	Rock Size and Type	Location		I15 to I16	I15 to I16 Volume (CY) per station	
Surfacing	3/4'-0" crushed	0+00 to 50+45	4	25	50.45	\$21,378
Surfacing	1 1/2'-0" crushed	50+45 to 65+40	4	25	14.95	\$6,335
Surfacing	1 1/2'-0" crushed	65+40 to 200+50	3	19	135.1	\$43,509
Curve Widening Surface	3/4'-0" crushed	19+75	N/A	11	1	\$186
Turnouts	3/4'-0" crushed	9+50, 18+30, 21+85, 37+75, 41+15, 47+60	N/A	11	6	\$1,119
		52+50, 55+40, 62+50, 67+80, 72+90, 77+80, 81+30, 101+00, 110+65, 117+30, 120+05, 127+25, 129+65, 133+90, 140+70, 144+00, 169+50, 172+35, 180+30, 183+15, 189+00, 191+00, 199+05	N/A	11	23	\$4,268
		47+60	N/A	11	1	\$186
		15+90, 27+45, 44+30, 50+45	N/A	11	4	\$746
		90+80, 102+50, 108+12, 112+30, 121+85, 125+95, 132+55, 138+00, 149+60, 151+35, 162+35, 158+66, 166+30, 200+50	N/A	11	14	\$2,610
Junctions	1 1/2'-0" crushed	166+30, 200+50	N/A	11	154	\$2,610
Turnaround	3/4'-0" crushed	47+60	N/A	11	1	\$186
Junctions	3/4'-0" crushed	15+90, 27+45, 44+30, 50+45, 90+80, 102+50, 108+12, 112+30, 121+85, 125+95, 132+55, 138+00, 149+60, 151+35, 162+35, 158+66, 166+30, 200+50	N/A	11	44	\$746
Junctions	1 1/2'-0" crushed	65+40	N/A	11	1	\$373
		11	N/A	22	22	\$373
		11	N/A	22	22	\$373
		11	N/A	22	22	\$373
		11	N/A	22	22	\$373
Total Rock for Road Segment:						
ROAD SEGMENT						
Application	I19 to I20		Depth of Rock (inches)	POINT TO POINT		Cost
	Rock Size and Type	Location		I19 to I20	I19 to I20 Volume (CY) per station	
Surfacing	1 1/2'-0" crushed	0+00 to 18+80	2	13	16.8	\$3,702
Turnouts	1 1/2'-0" crushed	4+75	N/A	11	1	\$186
Junctions	1 1/2'-0" crushed	0+00, 11+90	N/A	11	2	\$373
Total Rock for Road Segment:						
ROAD SEGMENT						
Total Rock for Road Segment:						
ROAD SEGMENT						
Total Rock for Road Segment:						

[illegible]

Projects Road Maintenance Cost Summary

Sale: Sager
Date: 09-Mar-26
By: D. Farner

Type	Equipment/Rationale			Hours	Rate	Cost
Project Work	Grader 14G			64	\$126	\$8,064
Final Haul	Dump Truck 12CY			8	\$110	\$880
Road	FE Loader C966			4	\$105	\$420
Maintenance	Vibratory Roller			64	\$97	\$6,208
	Water Truck 2,500 gallon			32	\$113	\$3,616
Total						\$19,188

Production Rates

Grader

Vibratory Roller

Miles/day	Distance(miles)	Days
1.5	12.45	8.3
1.5	12.45	8.3

NOTE: Nicolai Mainline (Viewpoint Quarry to Bovine Mainline)	5.67	Miles
Bovine Mainline (Nicolai Mainline to Northrup Cr. Rd.)	4.87	Miles
Northrup Cr. Rd. (County line to Foster Mainline)	0.74	Miles
Foster Mainline (Northrup Cr. Rd. to Northrup Quarry Rd.)	0.56	Miles
Northrup Quarry Rd. (Foster Mainline To Northrup Quarry)	0.61	Miles
TOTAL=	12.45	Miles

Waterhole Improvement

Location: WH1

Access Improvement	Stations		\$/Station	\$
Remove marked trees				\$ -
Clear debris and clean rock ditch filters				\$ -
Construct roadside parking area and draft site				\$ -
Clean waterhole to reach extent of C330 excavator from roadside parking area				\$ -
End haul all waste to waste area (I1 to I2 sta. 58+40)		CY	\$/CY	
Armor fill and draft access slopes				\$ -
See Rock Table for Volumes				\$ -
Excavation/Construction/Daylighting	Hours		\$/Hour	
C330	2	\$	195.00	\$ 390.00
10-12cy dump truck	2	\$	110.00	\$ 220.00
Waterhole Excavation/Ramp and Drafting Area Construction	Hours		\$/Hour	
C330	6	\$	195.00	\$ 1,170.00
10-12cy dump truck	6	\$	110.00	\$ 660.00
Compactor	4	\$	97.00	\$ 388.00
Armoring/Rock Placement/Waste Area (Clearing , Construction, and Final Shaping)	Hours		\$/Hour	
C330	2	\$	195.00	\$ 390.00
				\$ -
Labor/dewater/seed and mulch	1	\$	450.00	\$ 450.00
	CY		\$/CY	
				\$ -
			Total	\$ 3,668.00

Compiled by : D. Farner Date: 03/09/2026

Waterhole Improvement

Location: WH2

Access Improvement	Stations		\$/Station	\$
Remove trees and clear and prep waste area				\$ -
Remove trees with in boundry tags				\$ -
Construct access road and drafting site on north side of waterhole				\$ -
Construct machine access and loading area on south side of water hole to be blocked at end of project				\$ -
Clean waterhole to extent of reach of C330 excavator from access locations				\$ -
End haul all waste to waste area (I13 to I14 sta. 13+60)				\$ -
Armor fill and draft access slopes		CY	\$/CY	
Ship all logs as directed by STATE				\$ -
See Rock Table for Volumes				\$ -
Initial Excavation/Berm Construction/Daylighting	Hours		\$/Hour	
C330	3	\$	195.00	\$ 585.00
10-12cy dump truck	3	\$	110.00	\$ 330.00
Waterhole Excavation/Ramp and Drafting Area Construction	Hours		\$/Hour	
C330	16	\$	195.00	\$ 3,120.00
10-12cy dump truck	16	\$	110.00	\$ 1,760.00
Compactor	8	\$	97.00	\$ 776.00
Armoring/Rock Placement/Waste Area (Clearing , Construction, and Final Shaping)	Hours		\$/Hour	
C330	5	\$	195.00	\$ 975.00
Waste Area (I13 to I14 sta. 13+60)				\$ -
Labor/dewater/seed and mulch	1	\$	975.00	\$ 975.00
	CY		\$/CY	
Armoring (24"-6" Riprap) - Cost for rock is in rock tables				\$ -
			Total	\$ 8,521.00

Compiled by : D. Farner Date: 03/09/2026

CRUSHED ROCK COST

SALE NAME:	Sager
PROJECT:	Nos. 1, 2 and 3
Stockpile:	Viewpoint Quarry

MATERIAL: 3/4"-0", 1-1/2"-0"

DATE: 03/09/2026
BY: D. Farner

[illegible]

ROCK HAUL:

Truck type:	<u>D20</u>	No. trucks:	<u>3</u>
Delay min.:	<u>8</u>	Efficiency:	<u>85%</u>

Ave haul:	\$14.41	/cy
Load:	\$0.81	/cy
Spread:	\$1.73	/cy

Truck type:	<u>D12</u>	No. trucks:	<u>5</u>
Delay min.:	<u>6</u>	Efficiency:	<u>85%</u>

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

Production: cy/day = 515

CRUSHED ROCK HAUL COSTS 11,449 cy @ \$16.95 /cy

CRUSHED ROCK COST

SALE NAME:	Sager
PROJECT:	Nos. 1 and 2
Stockpile:	Cow Creek Stockpile

MATERIAL: 4"-0"

DATE: 03/09/2026
BY: D. Farner

[illegible]

ROCK HAUL:

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

Ave haul:	\$8.08	/cy
Load:	\$0.79	/cy
Spread:	\$1.49	/cy

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

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

Production: cy/day = 653

CRUSHED ROCK HAUL COSTS

835 cy @ \$10.36 /cy

CRUSHED ROCK COST

SALE NAME:	Sager
PROJECT:	Nos.1, 2, and 3
Stockpile:	Northrup Quarry

MATERIAL: 6"-0" jaw-run, 6"-0" pit-run,
6"-4" pit-run, 24"-12" riprap

DATE: 03/09/2029
BY: D. Farner

[illegible]

ROCK HAUL:

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

Ave haul: \$9.10 /cy

Load: \$0.46 /cy

Spread: \$0.10 /cy

Truck type:	<u>D12</u>	No. trucks:	<u>6</u>
Delay min.:	<u>6</u>	Efficiency:	<u>85%</u>

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

Production: cy/day = 580

CRUSHED ROCK HAUL COSTS 1,239 cy @ \$9.66 /cy

SUMMARY OF ROCK DEVELOPMENT AND CRUSHING COSTS

PROJECT NO. 4	Timber Sale Name: Sager
Quarry: Northrup Quarry	Swell:
Location: SE 1/4, Sec. 17, T6N, R6W	Shrink: 16%
County: Clatsop	
By: D. Farner	Loading Hopper: No
Date: 02/26/2025	

ROCK SIZE	REJECT	GRADATION	STOCKPILE CU. YDS.	TRUCK MEAS CU. YDS.	TOTAL CU. YDS.
3/4"-0"		CR			
1-1/2"-0"		CR			
6"-0" JR		CR	3,000	942	4,422
6"-0"		PR		132	132
24"-6"		RR		165	165
36"		RR			
TOTAL CUBIC YARDS OF ROCK:			3,000	1,239	4,719

1) MOBILIZATION & SET UP:

EQUIPMENT	QUANTITY	RATE	COST	EQUIPMENT	QUANTITY	RATE	COST
				Off Highway Dump Truck	1	\$691	\$691
1 Stage Crusher	1	\$1,805	\$1,805	Excavator	1	\$1,755	\$1,755
D8 Cat	1	\$1,755	\$1,755	Loader	1	\$1,005	\$1,005

SUB TOTAL FOR MOBILIZATION

\$7,011

EQUIPMENT SET UP	TIMES	RATE	COST
1 Stage Crusher	1	\$1,256	\$1,256

SUB TOTAL FOR SET UP COSTS

\$1,256

TOTAL MOBILIZATION & SET UP COSTS

\$8,267

2) CLEARING & GRUBBING

DESCRIPTION	QUANTITY	UNIT	RATE	COST

TOTAL CLEARING & GRUBBING COSTS

3) EXCAVATION

MATERIAL DESCRIPTION	QUANTITY	UNIT	RATE	COST

TOTAL EXCAVATION COSTS

4) DEVELOP ROCK

ROCK SUMMARY			METHOD	%	QUANTITY	RATE	COST
Type	Cu. yd. Vol.	Weight	Ripping	100%	4,719	\$3.80	\$17,932
crushed	4,422	94%	Drill & shoot			\$3.90	
pit run	132	3%	Oversize red			\$7.70	
rip rap	165	3%	Other				
Total	4,719						
reject							

TOTAL ROCK DEVELOPMENT COSTS

\$17,932

5) CALIBRATION & TESTING

DESCRIPTION	NO.	\$/TEST	COST
Calibrate			
Calibrate			
Test			
Test			

TOTAL CALIBRATION & TESTING COSTS

6) FEEDING & LOADING

DESCRIPTION	CU. YD. QUANTITY	COST CU. YD.	TOTAL COST
Dig & Feed Rock	4,422	\$0.76	\$3,366

TOTAL FEEDING & LOADING COSTS

\$3,366

7) ROCK CRUSHING

ROCK SIZE	ROCK TYPE	CU. YD. QUANTITY	CRUSHER TYPE	HOURLY PRODUCTION	RATE CU. YD.	TOTAL COST
3/4"-0"	crushed	4,422			\$1.03	\$4,569
1-1/2"-0"	crushed					
6"-0" JR	crushed		1 stage w/s	180		

TOTAL ROCK CRUSHING COSTS

\$4,569

8) STOCKPILING**STOCKPILE SITE PREPARATION**

Equipment	Hours	Rate	Total
Dozer		\$180.00	
Compactor		\$97.00	
Grader		\$126.00	
Excavator		\$195.00	

SUB TOTAL

Rock for Floor (CY)	\$/CY Haul	Total

HAUL & STOCKPILE

STOCKPILE LOCATION	SIZE	# of TRUCKS	CU. YDS.	RATE	COST
1. Northrup Quarry	6"-0" JR	3	3,000	\$1.58	\$4,747
2.					
3.					
4.					
5.					
6.					

SUB TOTAL

\$4,747

TOTAL STOCKPILING COSTS\$4,747**9) MISCELLANEOUS COSTS**

DESCRIPTION	COST
Final Quarry Dev., Access Road Const., Waterbarring, Drainage, Block Quarry Access	\$2,822

TOTAL MISCELLANEOUS COSTS\$2,822**10) GRAND TOTAL:****\$41,703**

\$/Cubic Yard

\$9.43

Footnotes:

HAUL and STOCKPILE COST

SALE NAME: Sager
 QUARRY: Northrup Quarry

ROCK TYPE: Crushed

Location 1. Northrup Q 6"-0" JR	ONE WAY HAUL IN MILES						
	50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
							0.01
Truck type: <u>D20</u> No. trucks: <u>1</u> Delay min.: <u>8</u> Efficiency: <u>85%</u>							
Ave haul: \$0.92 /cy Load: \$0.32 /cy Stockpile: \$0.34 /cy							
Truck type: <u>D12</u> No. trucks: <u>2</u> Delay min.: <u>6</u> Efficiency: <u>85%</u>							
Production: cy/day = 2,992							
Truck type: <u> </u> No. trucks: <u> </u> Delay min.: <u>5</u> Efficiency: <u>85%</u>							
Location 1. Northrup Quarry Haul and Stockpile Cost \$1.58 /cy							

Location 2. 0	ONE WAY HAUL IN MILES						
	50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
			7.50		1.30		
Truck type: <u>D20</u> No. trucks: <u> </u> Delay min.: <u>8</u> Efficiency: <u>85%</u>							
Ave haul: #DIV/0! /cy Load: #N/A /cy Stockpile: #N/A /cy							
Truck type: <u>D12</u> No. trucks: <u> </u> Delay min.: <u>6</u> Efficiency: <u>85%</u>							
Production: cy/day = 0							
Truck type: <u>D10</u> No. trucks: <u> </u> Delay min.: <u>5</u> Efficiency: <u>85%</u>							
Location 2. 0 Haul and Stockpile Cost #DIV/0! /cy							

Location 3. 0	ONE WAY HAUL IN MILES						
	50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
				1.00	1.00		
Truck type: <u>D20</u> No. trucks: <u> </u> Delay min.: <u>8</u> Efficiency: <u>85%</u>							
Ave haul: #DIV/0! /cy Load: #N/A /cy Stockpile: #N/A /cy							
Truck type: <u>D12</u> No. trucks: <u> </u> Delay min.: <u>6</u> Efficiency: <u>85%</u>							
Production: cy/day = 0							
Truck type: <u>D10</u> No. trucks: <u> </u> Delay min.: <u>5</u> Efficiency: <u>85%</u>							
Location 3. 0 Haul and Stockpile Cost #DIV/0! /cy							

SUMMARY OF ROCK DEVELOPMENT AND CRUSHING COSTS

PROJECT NO. <u>5</u>	Timber Sale Name: <u>Sager</u>
Quarry: <u>Viewpoint Quarry</u>	Swell: <u> </u>
Location: <u>SE 1/4, Sec. 4, T7N, R6W</u>	Shrink: <u>16%</u>
County: <u>Clatsop</u>	
By: <u>D. Farner</u>	Loading Hopper: <u>Yes</u>
Date: <u>02/26/2026</u>	

ROCK SIZE	REJECT	GRADATION	STOCKPILE CU. YDS.	TRUCK MEAS CU. YDS.	TOTAL CU. YDS.
3/4"-0"	2%	CR		1,393	1,393
1-1/2"-0"	2%	CR	11,000	10,056	22,816
4"-0"		CR	5,000		5,800
6"-0" JR		PR		1,000	1,000
24"-6"		RR			
36"		RR			
TOTAL CUBIC YARDS OF ROCK:			16,000	12,449	31,009

1) MOBILIZATION & SET UP:

EQUIPMENT	QUANTITY	RATE	COST	EQUIPMENT	QUANTITY	RATE	COST
				Off Highway Dump Truck	1	\$691	\$691
Screening Plants	2	\$691	\$1,382	Excavator	1	\$1,755	\$1,755
3 Stage Crusher	1	\$3,608	\$3,608	Loading Hopper	1	\$691	\$691
D6 Cat	1	\$972	\$972	Loader	1	\$1,005	\$1,005
Drill & Compressor	1	\$1,755	\$1,755				
Powder	1	\$439	\$439				

SUB TOTAL FOR MOBILIZATION

\$12,298

EQUIPMENT SET UP	TIMES	RATE	COST
3 Stage Crusher	1	\$4,292	\$4,292
Screening Plants	2	\$367	\$734
Loading Hopper	1	\$367	\$367
Original Calibration	1	\$680	\$680

SUB TOTAL FOR SET UP COSTS

\$6,073

TOTAL MOBILIZATION & SET UP COSTS

\$18,371

2) CLEARING & GRUBBING

DESCRIPTION	QUANTITY	UNIT	RATE	COST

TOTAL CLEARING & GRUBBING COSTS

3) EXCAVATION

MATERIAL DESCRIPTION	QUANTITY	UNIT	RATE	COST

TOTAL EXCAVATION COSTS

4) DEVELOP ROCK

ROCK SUMMARY			METHOD	%	QUANTITY	RATE	COST
Type	Cu. yd. Vol.	Weight	Ripping	20%	6,202	\$3.80	\$23,567
crushed	30,009	97%	Drill & shoot	70%	22,045	\$3.90	\$85,976
pit run	1,000	3%	Oversize red	10%	3,101	\$7.70	\$23,877
rip rap	0	0	Other				
Total	31,009						
reject	484	1.6%					

TOTAL ROCK DEVELOPMENT COSTS

\$133,420

5) CALIBRATION & TESTING

DESCRIPTION	NO.	\$/TEST	COST
Calibrate	3	\$558.00	\$1,674
Calibrate			
Test	15	\$63.60	\$954
Test			

TOTAL CALIBRATION & TESTING COSTS

\$2,628

6) FEEDING & LOADING

DESCRIPTION	CU. YD. QUANTITY	COST CU. YD.	TOTAL COST
Dig & Feed Rock	31,493	\$1.11	\$34,964

TOTAL FEEDING & LOADING COSTS

\$34,964

7) ROCK CRUSHING

ROCK SIZE	ROCK TYPE	CU. YD. QUANTITY	CRUSHER TYPE	HOURLY PRODUCTION	RATE CU. YD.	TOTAL COST
3/4"-0"	crushed	1,393	3 stage w/s	110	\$4.38	\$6,104
1-1/2"-0"	crushed	22,816	3 stage w/s	120	\$4.02	\$91,644
4"-0"	crushed	5,800	2 stage w/s	140	\$3.07	\$17,814
6"-0 JR	crushed	1,000	1 stage w/s	180	\$1.03	\$1,033

TOTAL ROCK CRUSHING COSTS

\$116,596

8) STOCKPILING**STOCKPILE SITE PREPARATION**

Equipment	Hours	Rate	Total
Dozer	2	\$180.00	\$360.00
Compactor		\$97.00	
Grader		\$126.00	
Excavator		\$195.00	

Rock for Floor (CY)	\$/CY Haul	Total

\$360.00

SUB TOTAL

\$360

HAUL & STOCKPILE

STOCKPILE LOCATION	SIZE	# of TRUCKS	CU. YDS.	RATE	COST
1. Slaughters Creek	1-1/2"-0"	8	6,000	\$16.15	\$96,910
2. Viewpoint	1-1/2"-0"	3	5,000	\$1.73	\$8,650
3. Viewpoint	4"-0"	3	5,000	\$1.73	\$8,644
4. Viewpoint		3	1,000	\$1.26	\$1,262
5.					
6.					

SUB TOTAL

\$115,466

TOTAL STOCKPILING COSTS

\$115,826

9) MISCELLANEOUS COSTS

DESCRIPTION	COST
Load, Haul, and Spread the reject material at the waste area.	\$2,014
\$4.16 /CY 484 CY	
Final Quarry Dev., Access Road Const., Waterbarring, Drainage, Block Quarry Access	\$2,822

TOTAL MISCELLANEOUS COSTS

\$4,836

10) GRAND TOTAL:

\$426,641

\$/Cubic Yard

\$14.22

Footnotes:

HAUL and STOCKPILE COST

SALE NAME: Sager
 QUARRY: Viewpoint Quarry ROCK TYPE: Crushed

Location 1. Slaughters 1-1/2"-0"	ONE WAY HAUL IN MILES						
	50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
	4.05	1.53	6.61	2.00	1.60	1.20	0.20
Truck type: <u>D20</u> No. trucks: <u>4</u> Delay min.: <u>8</u> Efficiency: <u>85%</u> Ave haul: \$14.07 /cy Load: \$0.00 /cy Stockpile: \$2.08 /cy Truck type: <u>D12</u> No. trucks: <u>4</u> Delay min.: <u>6</u> Efficiency: <u>85%</u> Production: cy/day = 534 Truck type: No. trucks: Delay min.: <u>10</u> Efficiency: <u>75%</u>							
Location 1. Slaughters Creek Haul and Stockpile Cost \$16.15 /cy							

Location 2. Viewpoint 1-1/2"-0"	ONE WAY HAUL IN MILES						
	50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
							0.10
Truck type: <u>D20</u> No. trucks: <u>1</u> Delay min.: <u>8</u> Efficiency: <u>85%</u> Ave haul: \$1.26 /cy Load: \$0.00 /cy Stockpile: \$0.47 /cy Truck type: <u>D12</u> No. trucks: <u>2</u> Delay min.: <u>6</u> Efficiency: <u>85%</u> Production: cy/day = 2,192 Truck type: <u>D10</u> No. trucks: Delay min.: <u>5</u> Efficiency: <u>85%</u>							
Location 2. Viewpoint Haul and Stockpile Cost \$1.73 /cy							

Location 3. Viewpoint 4"-0"	ONE WAY HAUL IN MILES						
	50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
							0.10
Truck type: <u>D20</u> No. trucks: <u>1</u> Delay min.: <u>8</u> Efficiency: <u>85%</u> Ave haul: \$1.26 /cy Load: \$0.00 /cy Stockpile: \$0.47 /cy Truck type: <u>D12</u> No. trucks: <u>2</u> Delay min.: <u>6</u> Efficiency: <u>85%</u> Production: cy/day = 2,192 Truck type: <u>D10</u> No. trucks: Delay min.: <u>5</u> Efficiency: <u>85%</u>							
Location 3. Viewpoint Haul and Stockpile Cost \$1.73 /cy							

HAUL and STOCKPILE COST

Location 4. Viewpoint	ONE WAY HAUL IN MILES						
	50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
Truck type: <u>D20</u>	No. trucks: <u>1</u>						
Delay min.: <u>8</u>	Efficiency: <u>85%</u>						
				Ave haul:	\$0.92	/cy	
				Load:	\$0.00	/cy	
Truck type: <u>D12</u>	No. trucks: <u>2</u>						
Delay min.: <u>6</u>	Efficiency: <u>85%</u>						
				Stockpile:	\$0.34	/cy	
Truck type: <u>D10</u>	No. trucks: <u></u>						
Delay min.: <u>5</u>	Efficiency: <u>85%</u>						
				Production: cy/day =	2,992		
Location 4. Viewpoint	Haul & Stockpile Cost				\$1.26 /cy		

Location 5. 0	ONE WAY HAUL IN MILES						
	50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
Truck type: <u>D20</u>	No. trucks: <u>2</u>						
Delay min.: <u>8</u>	Efficiency: <u>85%</u>						
				Ave haul:	\$1.13	/cy	
				Load:	\$0.00	/cy	
Truck type: <u>D12</u>	No. trucks: <u></u>						
Delay min.: <u>6</u>	Efficiency: <u>85%</u>						
				Stockpile:	\$0.64	/cy	
Truck type: <u>D10</u>	No. trucks: <u></u>						
Delay min.: <u>5</u>	Efficiency: <u>85%</u>						
				Production: cy/day =	1,773		
Location 5.	0	Haul & Stockpile Cost				\$1.77 /cy	

Location 6. 0	ONE WAY HAUL IN MILES						
	50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
				1.00	1.00		
Truck type: <u>D20</u>	No. trucks: <u></u>						
Delay min.: <u>8</u>	Efficiency: <u>85%</u>						
				Ave haul:	#DIV/0!	/cy	
				Load:	\$0.00	/cy	
Truck type: <u>D12</u>	No. trucks: <u></u>						
Delay min.: <u>6</u>	Efficiency: <u>85%</u>						
				Stockpile:	#N/A	/cy	
Truck type: <u>D10</u>	No. trucks: <u></u>						
Delay min.: <u>5</u>	Efficiency: <u>85%</u>						
				Production: cy/day =	0		
Location 6.	0	Haul & Stockpile Cost				#DIV/0! /cy	

**Sager
TIMBER CRUISE REPORT
FY 2026**

1. **Sale Area Location:** Portions of Section 1, T5N, R6W, and Sections 23 and 34 of T6N, R6W, W.M., Clatsop County, Oregon.
2. **Fund Distribution:** BOF 77.54% CSL 22.46% **Tax Code:** 8-01 (53.55%) 8-03 (23.99%)
3. **Sale Acreage by Area:**

Unit	Harvest Type	Gross Acres	Stream Buffer Acres	Non-Stocked Area	Reserve Tree Area	Existing R/W Acres	New R/W	Net Acres	Survey Method
1	Clearcut	84	1	<1	3	2	<1	78	GIS
2	Clearcut	42	-	-	2	2	<1	38	GIS
3	Clearcut	113	13	-	3	3	<1	94	GIS
4	Right-of-Way	<1	-	-	-	-	-	<1	LxW
TOTALS	-	239	14	<1	8	7	<1	210	

4. **Cruisers and Cruise Dates:** Avery Petersen, John Czarnecki, Ryan Simpson, and Kevin Berry (01/28/2026 through 02/05/2026)

5. Cruise Method and Computation:

The Sager Timber Sale was stratified into three cruises due to the presence of multiple stand types within each unit. Strata were delineated based primarily on age class. Approximately four acres within Unit 2 were not cruised, but contain approximately 30 MBF per acre of timber most similar to that in the SAGER_A cruise. This volume was not included in the tables below. An additional fifteen percent deduction was applied to Douglas-fir volume in the SAGER_C cruise to account for hidden defect and additional breakage in this older timber type.

SAGER_A: Portions of Units 1 and 3 (approximately 78 acres) were variable plot cruised with a 33.61 BAF. A total of 38 plots were sampled on a seven chain by three chain spacing with a count to grade ratio of 2:1, resulting in 14 grade plots and 24 count plots. Two count plots were dropped from the cruise due to being located in retention areas.

SAGER_B: Portions of Units 1 and 3 (approximately 95 acres) were variable plot cruised with a 54.45 BAF for conifer species and a 33.61 BAF for hardwood species. A total of 66 plots were sampled on a five chain by three chain spacing with a count to grade ratio of 2:1, resulting in 25 grade plots and 41 count plots. One count plot was dropped due to being located in a landing.

SAGER_C: A Portion of Unit 2 (approximately 34 acres) was variable plot cruised with a 71.11 BAF for conifer species and a 33.61 BAF for hardwood species. A total of 36 plots were sampled on a five chain by two chain spacing with a count to grade ratio of 1:1, resulting in 18 grade plots and 18 count plots.

The reported number of grade plots vary from those indicated in the SuperACE reports due to measuring minor species on count plots in both the SAGER_B and SAGER_C cruises.

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(s)	CRUISE	TRACT	TYPE	ACRES
1 & 3 (young)	SAGER	SAGERA	00CC	79
1 & 3 (mature)	SAGER	SAGERB	00CC	98
2 (mature)	SAGER	SAGERC	00CC	35

6. Timber Description:

SAGER_A: Stands in Units 1 and 3 with an average age of 51 years, representing approximately 1/2 of the area in Unit 1 and 1/3 of the area in Unit 3. The stands consist of previously thinned Douglas-fir with lesser components of red alder, western hemlock, western redcedar, and a minor component of bigleaf maple. The average Douglas-fir is approximately 19 inches DBH and 86 feet to a merchantable top. The average red alder is approximately 12 inches DBH and 49 feet to a merchantable top. The average western redcedar is approximately 34 inches DBH and 78 feet to a merchantable top. The average western hemlock is approximately 20 inches DBH and 67 feet to a merchantable top. The average bigleaf maple is approximately 15 inches DBH and 60 feet to a merchantable top. Average net volume to be harvested per acre is 27 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point.

SAGER_B: Stands in Units 1 and 3 with an average age of approximately 100 years, representing approximately 1/2 of the area in Unit 1 and 2/3 of the area in Unit 3. Portions were previously thinned at different intensities, and approximately seven acres are not thinned. The stands consist of Douglas-fir with lesser components of western redcedar, western hemlock, red alder, and bigleaf maple. The average Douglas-fir is approximately 27 inches DBH and 96 feet to a merchantable top. The average western redcedar is approximately 22 inches DBH and 58 feet to a merchantable top. The average western hemlock is approximately 19 inches DBH and 63 feet to a merchantable top. The average red alder is approximately 16 inches DBH and 55 feet to a merchantable top. The average bigleaf maple is approximately 19 inches DBH and 76 feet to a merchantable top. Average net volume to be harvested per acre is 60 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point.

SAGER_C: The stand age is approximately 120 years, representing approximately 90% of the area in Unit 2. The stand consists of Douglas-fir with lesser components of western hemlock, western redcedar, red alder, and bigleaf maple. The average Douglas-fir is approximately 37 inches DBH and 119 feet to a merchantable top. The average western hemlock is approximately 17 inches DBH and 56 feet to a merchantable top. The average western redcedar is approximately 28 inches DBH and 70 feet to a merchantable top. The average red alder is approximately 17 inches DBH and 61 feet to a merchantable top. The average bigleaf maple is approximately 17 inches DBH and 49 feet to a merchantable top. Average net volume to be harvested per acre is 76 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point.

Unit 4 (R/W) is less than one acre of stocked right-of-way for in-unit spur roads and landings similar in description to timber in Units 1 and 3.

7. Statistical Analysis and Stand Summary:

Statistics for Stand B.F. volumes

Type	Estimated CV	Target SE%	Actual CV	Actual SE%
SAGER_A	35%	11%	30.2%	4.9%
SAGER_B	46%	8%	51.9%	6.4%
SAGER_C	43%	9%	42.6%	7.1%

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.	1P	2P	3P	SM	PC	2 Saw	3 Saw	4 Saw	% D & B	% Sale
Douglas-fir	25"	8,127	565	59	676	506	48	5,310	864	99	5.0*	78%
western hemlock	19"	862	-	-	53	-	-	573	192	44	0.5	8%
western redcedar	24"	648	-	-	-	-	-	523	93	32	0.4	6%
TOTALS	--	9,637	565	59	729	506	48	6,406	1,149	175	--	--

*A 15% deduction was applied to Douglas-fir volume in Unit 2.

Hardwood

Species	DBH	Net Vol.	12"+	10"-11"	8"-9"	6"-7"	% D & B	% Sale
red alder	13"	494	90	78	130	196	0.4	5%
bigleaf maple	17"	293	121	101	-	71	0.1	3%
TOTALS	--	787	211	179	130	267	--	--

TOTAL VOLUME	10,424
---------------------	---------------

9. Approvals:

Prepared by: Justin Bush Date: 03/02/2026

Unit Forester Approval: _____ Date: _____

10. **Attachments:** Cruise Design and Map (11 pages)
Volume Report (4 pages)
Statistics Report (8 pages)
Log Stock Table (4 pages)
Stand Table Summary (3 pages)

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: Sager

Unit SAGER A

Harvest Type: Clearcut

Approx. Cruise Acres: 79 **Estimated CV%** 35 Net BF/Acre **SE% Objective** 11% Net BF/Acre

Planned Sale Volume: 2,000 MBF **Estimated Sale Area Value/Acre:** \$8,750/Acre

A. Cruise Goals: (a) Grade minimum 50 conifer trees and 25 hardwood trees.
(b) Sample 40 plots (14 grade/ 26 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

Cruise Line Direction (Lines 1 - 4): 28°/208°
Cruise Line Direction (Lines 5 - 7): 141°/321°
Cruise Line Spacing 7 (chains) 462 (Feet)
Cruise Plot Spacing 3 (chains) 198 (Feet)
Grade/Count Ratio 1:2

Take plots as marked on cruise map.

Grade minor species (true fir, cedar, maple, spruce, 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 < 15" 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:

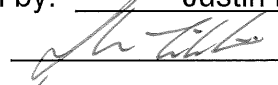
- A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); GF (Grand fir); SF (Silver fir); A (Red alder); M (Bigleaf maple); SN (Snag). For "leave trees", add an "L" to the species code (such as DL, HL, CL, etc.).
- B. Sort: Use code "1" (Domestic).
- 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

- **Oversize Spruce (2-Saw or better): Measure bole height to 27" outside bark. Record separately.**
Bars = : 4"at 66', 3"at 50', and 2"at 33'.

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: Justin Bush

Approved by: 

Date: 1/26/2026

TIMBER CRUISE MAP

OF TIMBER SALE

SAGER

PORTIONS OF SECTION 1,

T5N, R6W, AND SECTIONS

23 & 34, T6N, R6W, W.M.,

CLATSOP COUNTY, OREGON



1 inch = 500 feet Contour = 20 feet

SAGER A Cruise

AZ (Lines 1-4): 28°/208°

AZ (Lines 5-7): 141°/321°

BAF: 33.61

Line Spacing: 7ch. (462 ft)

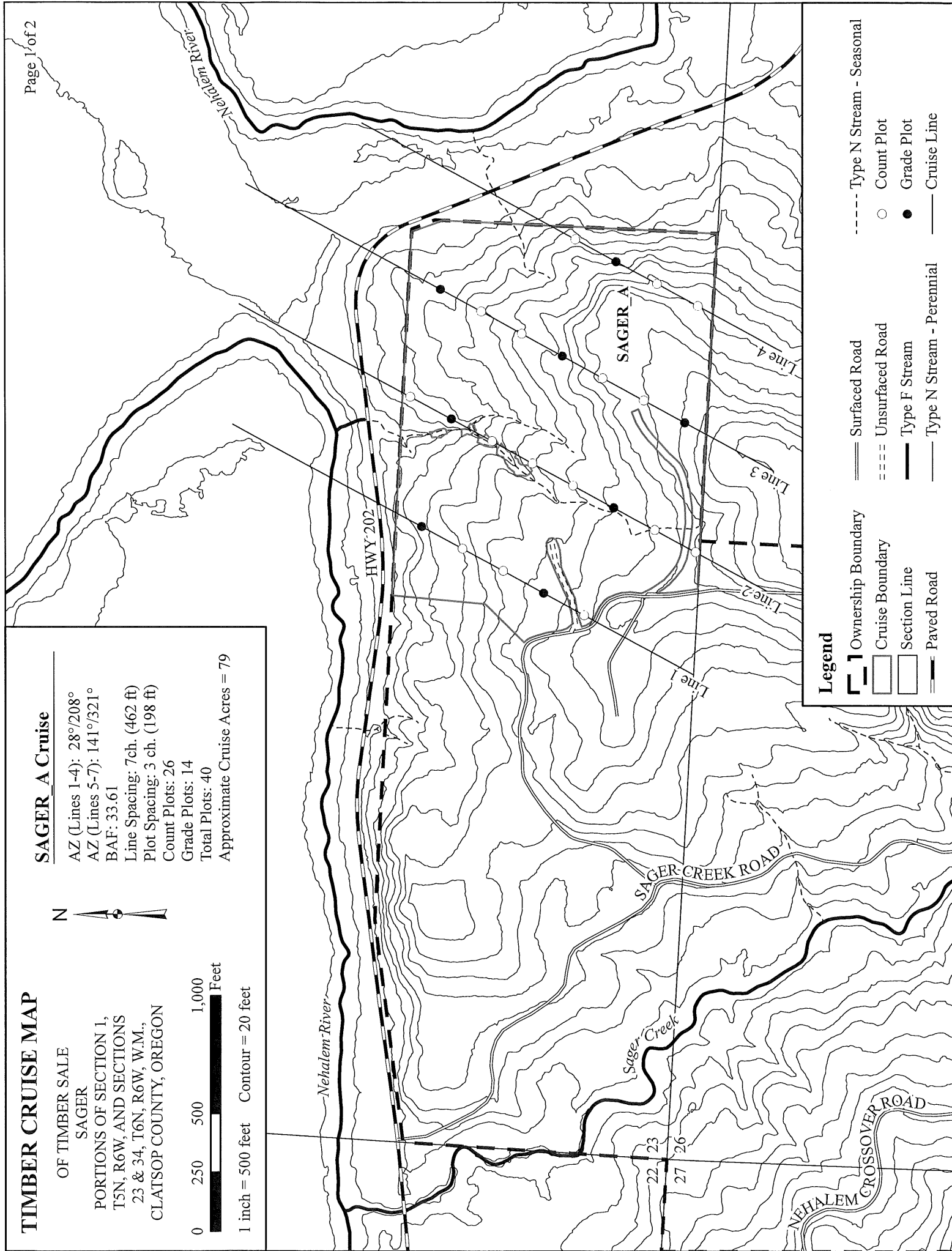
Plot Spacing: 3 ch. (198 ft)

Count Plots: 26

Grade Plots: 14

Total Plots: 40

Approximate Cruise Acres = 79



Legend

- | | | |
|--------------------|---------------------------|--------------------------|
| Ownership Boundary | Surfaced Road | Type N Stream - Seasonal |
| Cruise Boundary | Unsurfaced Road | Count Plot |
| Section Line | Type F Stream | Grade Plot |
| Paved Road | Type N Stream - Perennial | Cruise Line |

TIMBER CRUISE MAP

OF TIMBER SALE
SAGER
PORTIONS OF SECTION 1,
T5N, R6W, AND SECTIONS
23 & 34, T6N, R6W, W.M.,
CLATSOP COUNTY, OREGON



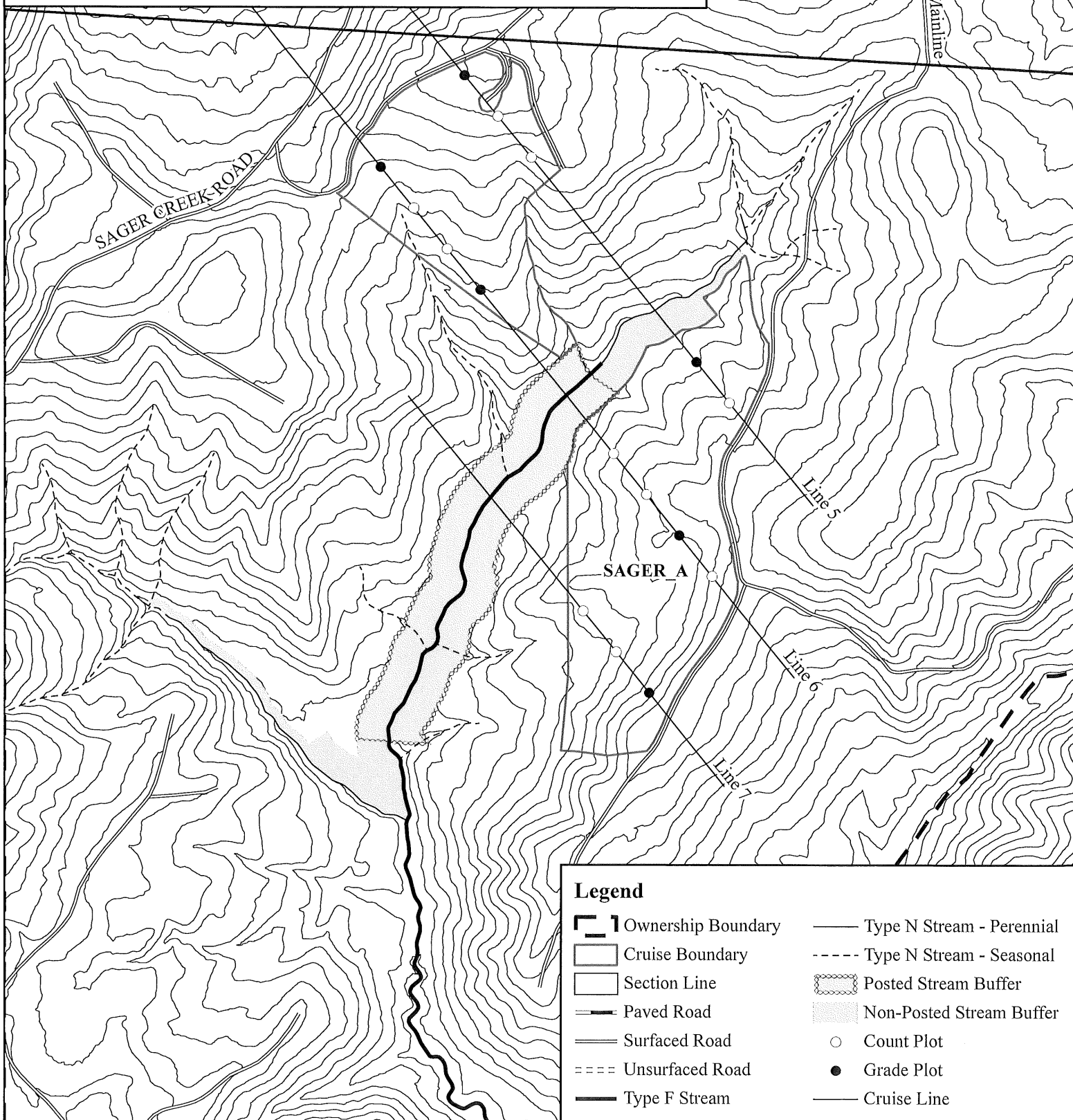
0 250 500 1,000 Feet

1 inch = 500 feet Contour = 20 feet

SAGER_A Cruise

AZ (Lines 1-4): 28°/208°
AZ (Lines 5-7): 141°/321°
BAF: 33.61
Line Spacing: 7ch. (462 ft)
Plot Spacing: 3 ch. (198 ft)
Count Plots: 26
Grade Plots: 14
Total Plots: 40
Approximate Cruise Acres = 79

Page 2 of 2



**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: Sager

Unit SAGER B

Harvest Type: Clearcut

Approx. Cruise Acres: 98 **Estimated CV%** 46 Net BF/Acre **SE% Objective** 8% Net BF/Acre

Planned Sale Volume: 5,292 MBF **Estimated Sale Area Value/Acre:** \$27,000/Acre

A. Cruise Goals: (a) Grade minimum 100 conifer trees and 50 hardwood trees.
(b) Sample 67 plots (25 grade/ 42 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: 54.45 (Conifer)
BAF: 33.61 (Hardwood)
Cruise Line Direction (Lines 1 - 7): 0°/180°
Cruise Line Direction (Lines 8 - 12): 136°/316°
Cruise Line Spacing 5 (chains) 330 (Feet)
Cruise Plot Spacing 3 (chains) 198 (Feet)
Grade/Count Ratio 1:2

Take plots as marked on cruise map using BOTH BAFs on each plot, recording "Zero" counts if there are no qualifying trees for either BAF.

Grade minor species (true fir, cedar, maple, spruce, 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 < 15" 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); GF (Grand 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

- **Oversize Spruce (2-Saw or better): Measure bole height to 27" outside bark. Record separately.**
Bars = : 4"at 66', 3"at 50', and 2"at 33'.

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: Justin Bush

Approved by: 

Date: 4/26/26

TIMBER CRUISE MAP

OF TIMBER SALE

SAGER

PORTIONS OF SECTION 1,

T5N, R6W, AND SECTIONS

23 & 34, T6N, R6W, W.M.,

CLATSOP COUNTY, OREGON

SAGER B Cruise

AZ (Lines 1-7): 0°/180°

AZ (Lines 8-12): 136°/316°

BAF: 54.45 (CON)

33.61 (HDWD)

Line Spacing: 5 ch. (330 ft)

Plot Spacing: 3 ch. (198 ft)

Count Plots: 42

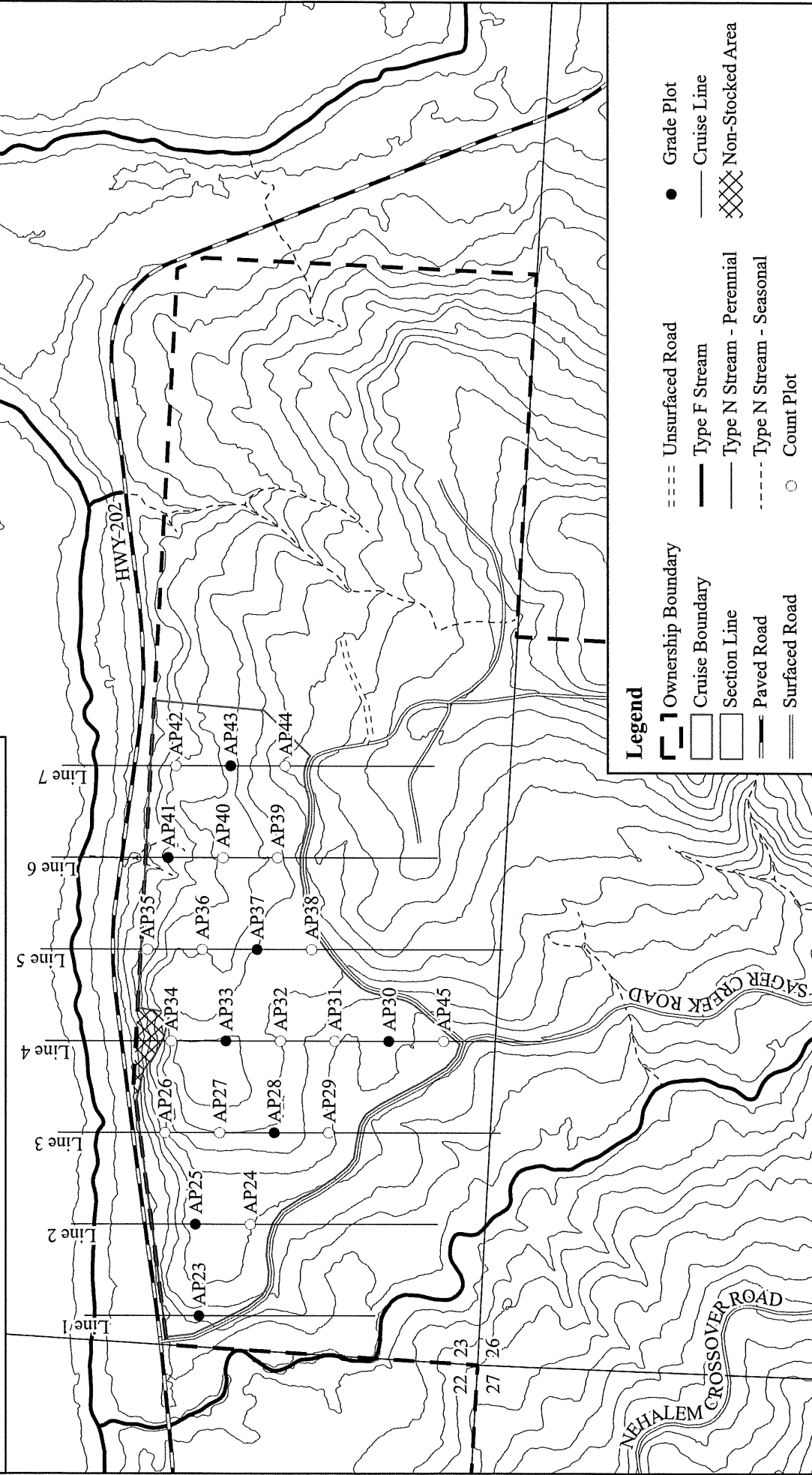
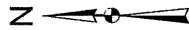
Grade Plots: 25

Total Plots: 67

Approximate Cruise Acres = 98



1 inch = 500 feet Contour = 20 feet



TIMBER CRUISE MAP

OF TIMBER SALE
SAGER
PORTIONS OF SECTION 1,
T5N, R6W, AND SECTIONS
23 & 34, T6N, R6W, W.M.,
CLATSOP COUNTY, OREGON

0 250 500 1,000
Feet

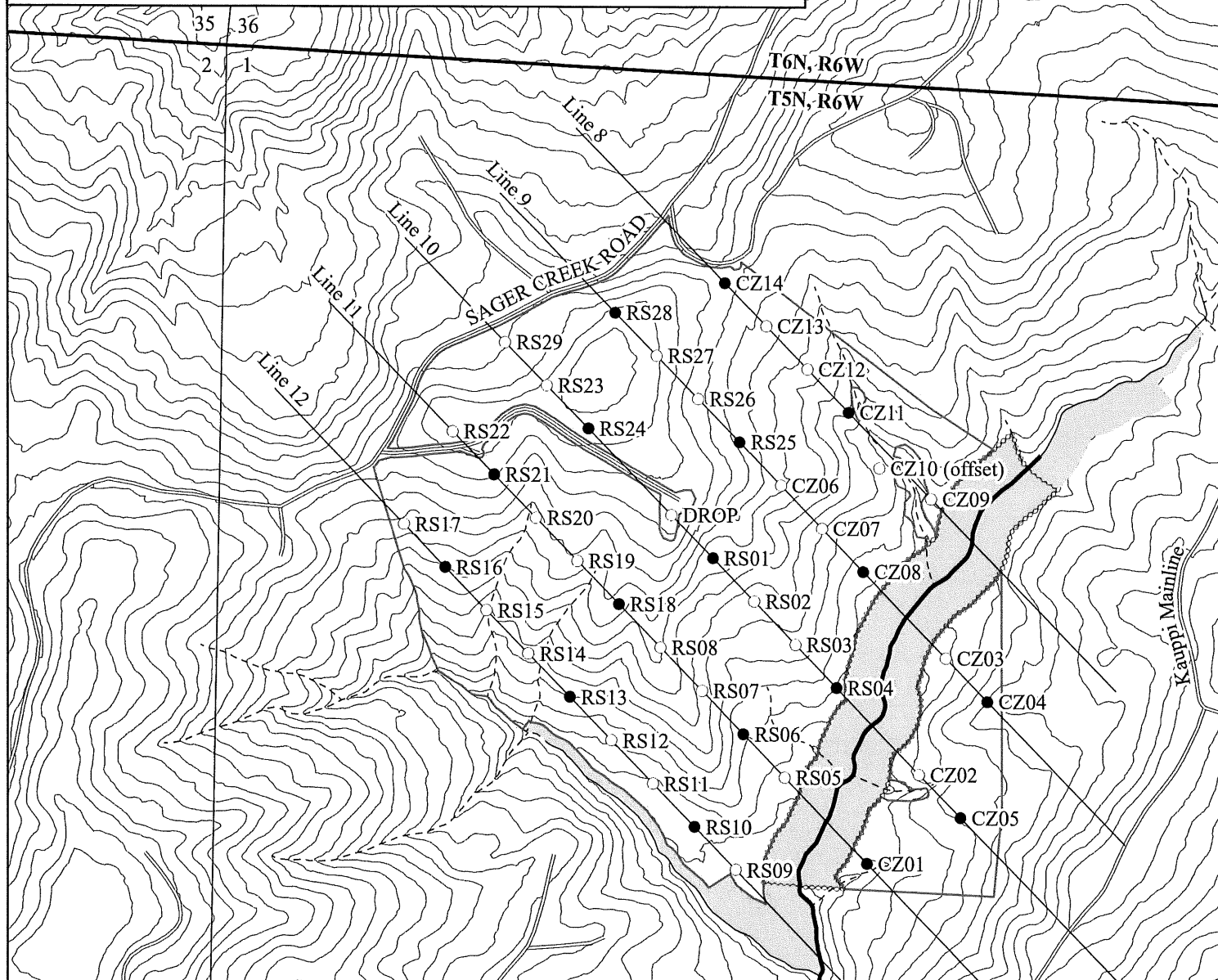
1 inch = 500 feet Contour = 20 feet



SAGER B Cruise

AZ (Lines 1-7): 0°/180°
AZ (Lines 8-12): 136°/316°
BAF: 54.45 (CON)
33.61 (HDWD)
Line Spacing: 5 ch. (330 ft)
Plot Spacing: 3 ch. (198 ft)
Count Plots: 42
Grade Plots: 25
Total Plots: 67
Approximate Cruise Acres = 98

Page 2 of 2



Legend

- | | |
|--------------------|---------------------------|
| Ownership Boundary | Type N Stream - Perennial |
| Cruise Boundary | Type N Stream - Seasonal |
| Section Line | Posted Stream Buffer |
| Paved Road | Non-Posted Stream Buffer |
| Surfaced Road | Count Plot |
| Unsurfaced Road | Grade Plot |
| Type F Stream | Cruise Line |

CRUISE DESIGN ASTORIA DISTRICT

Sale Name: SagerUnit SAGER C

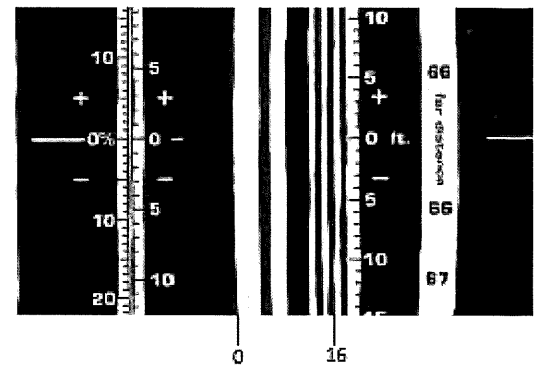
Harvest Type: Clearcut

Approx. Cruise Acres: 35 Estimated CV% 43 Net BF/Acre SE% Objective 9% Net BF/AcrePlanned Sale Volume: 2,765 MBF Estimated Sale Area Value/Acre: \$41,475/Acre

- A. **Cruise Goals:** (a) Grade minimum 60 conifer trees and 25 hardwoods trees.
 (b) Sample 36 plots (18 grade/ 18 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: 71.11 (Conifer)
 BAF: 33.61 (Hardwood)
 Cruise Line Direction: 9°/189°
 Cruise Line Spacing 5 (chains) 330 (Feet)
 Cruise Plot Spacing 2 (chains) 132 (Feet)
 Grade/Count Ratio 1:1



BAF 71.11 = 16 bars

Take plots as marked on cruise map using BOTH BAFs on each plot, recording "Zero" counts if there are no qualifying trees for either BAF.

Grade minor species (true fir, cedar, maple, spruce, 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 < 15" DBH or record snag measurements on count plots.

C. Tree Measurements:

- Diameter:** Minimum DBH to cruise is 8" for conifers and 8" for hardwoods.
 Record dbh to nearest $\frac{1}{2}$ " 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.
- 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.
- 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.
- 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.
- 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); GF (Grand 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

- **Oversize Spruce (2-Saw or better): Measure bole height to 27" outside bark. Record separately.**
Bars = : 4"at 66', 3"at 50', and 2"at 33'.

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: Justin Bush

Approved by: 

Date: 1/29/20

TIMBER CRUISE MAP

OF TIMBER SALE

SAGER

PORTIONS OF SECTION 1,
T5N, R6W, AND SECTIONS
23 & 34, T6N, R6W, W.M.,
CLATSOP COUNTY, OREGON

SAGER_C Cruise

AZ: 9°/189°

BAF: 71.11 (CON)

33.61 (HDWD)

Line Spacing: 5 ch. (330 ft)

Plot Spacing: 2 ch. (132 ft)

Count Plots: 18

Grade Plots: 18

Total Plots: 36

Approximate Cruise Acres = 35

0 250 500 1,000 Feet
1 inch = 500 feet Contour = 20 feet



WEST SAGER CREEK ROAD

Line 2

Line 1

Legend

- Ownership Boundary
- Cruise Boundary
- Section Line
- Paved Road
- Surfaced Road
- Unsurfaced Road
- Type F Stream
- Type N Stream - Perennial
- Type N Stream - Seasonal
- Count Plot
- Grade Plot
- Cruise Line

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																	
T06N R06W S23 Ty00CC78.00 T06N R06W S23 Ty00CC95.00 T06N R06W S34 Ty00CC34.00		Project: SAGER														Page1					
		Acres207.00														Date2/27/2026					
																Time1:37:15PM					
S Spp	So Gr T rt ad	%	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre		
		Net BdFt	Def%	Gross	Net		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	DOCU															12	19		0.00	1.0	
D	DO2S	64	.4	26,744	26,645	5,310			31	69	2	2	4	92	37	17	500	2.73	53.3		
D	DO3S	10	.7	4,240	4,211	864		96	1	2	5	6	17	72	35	9	101	0.83	41.9		
D	DO4S	2		482	482	99		100			69	31			19	6	24	0.41	20.2		
D	DO1P	7		3,095	3,095	565				100	3		24	72	37	33	2111	8.94	1.5		
D	DO2P	1		286	286	59				100			100		34	30	1452	7.72	.2		
D	DO3P	9		3,670	3,670	676				100	10	7	44	39	32	27	1127	5.72	3.3		
D	DOSM	6		2,530	2,530	506			5	95	2	4	17	76	37	20	663	3.38	3.8		
D	DOCP	1		274	274	48				100	12			88	33	26	1277	5.79	.2		
D Totals		79	.3	41,322	41,194	8,127		11	20	69	4	3	12	81	33	13	329	2.03	125.3		
C	DOCU														8	21		0.00	1.1		
C	DO2S	80	.4	2,538	2,528	523			52	48	1	2	7	91	38	15	376	2.97	6.7		
C	DO3S	15	.7	450	447	93		100				6	11	83	38	7	84	0.92	5.3		
C	DO4S	5		156	156	32		100			39	61			21	6	29	0.57	5.3		
C Totals		6	.4	3,144	3,131	648		19	42	38	2	5	7	85	31	11	169	1.75	18.5		
A	DO1S	18	1.5	441	435	90			100			10		90	38	13	254	1.78	1.7		
A	DO2S	16	.7	381	379	78		100				12	11	77	37	10	145	1.08	2.6		
A	DO3S	26		630	630	130		100			1		15	84	36	8	88	0.70	7.2		
A	DO4S	40		949	949	196		100			26	8	10	57	27	6	42	0.51	22.8		
A Totals		5	.4	2,401	2,392	494		82	18		10	7	9	73	30	7	70	0.69	34.3		
M	DO1S	41	.3	584	583	121			92	8	3			97	38	15	325	2.17	1.8		
M	DO2S	34		487	487	101		100					16	84	38	10	157	1.06	3.1		
M	DO4S	25		345	345	71		100			12	16	9	63	31	7	48	0.58	7.2		
M Totals		3	.1	1,415	1,414	293		59	38	3	4	4	8	84	34	9	117	0.99	12.1		
H	DO2S	66	.3	2,774	2,767	573			54	46	0	2	7	91	39	15	346	2.12	8.0		
H	DO3S	22	1.4	942	929	192		100			6	10	11	73	34	8	89	0.83	10.5		
H	DO4S	5		210	210	44		100			47	53			22	6	28	0.46	7.6		
H	DO3P	7		256	256	53				100		42	58		31	29	1149	6.33	.2		
H Totals		8	.5	4,183	4,162	862		27	36	37	4	9	11	77	32	10	158	1.28	26.3		
Totals			0.3	52,465	52,292	10,424		17	23	59	4	4	11	81	33	11	241	1.66	216.6		

T		TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)												Page		1			
				Project: SAGER												Date		2/27/2026			
																Time		1:36:42PM			
T06N R06W S23 T00CC																T06N R06W S23 T00CC					
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		CuFt		BdFt			
06N		06W		23		SAGERA		00CC		78.00		38		71		1		W			
S So Gr T rt ad Spp				% Net BdFt	Bd. Ft. per Acre Def% Gross Net			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre
									Log Scale Dia.				Log Length				Ln Dia Bd CF/ Ft In Ft Lf				
									4-5 6-11 12-16 17+				12-20 21-30 31-35 36-99								
D DO 2S				61	.6 11,638 11,562			902	87 13				100				40 14 286 1.76				40.5
D DO 3S				35	6,596 6,596			515	100				0 1 21 78				37 8 99 0.76				66.4
D DO 4S				4	732 732			57	100				58 42				20 6 24 0.39				31.0
D Totals				70	.4 18,966 18,891			1,473	39 53 8				2 2 7 89				34 9 137 1.06				137.9
A DO 3S				38	1,285 1,285			100	100				20 80				36 8 87 0.68				14.8
A DO 4S				62	2,045 2,045			160	100				19 4 11 66				29 6 46 0.50				44.8
A Totals				12	3,330 3,330			260	100				11 3 14 72				31 7 56 0.56				59.6
C DO 2S				91	.4 1,791 1,783			139	25 75				7 93				37 18 585 4.25				3.0
C DO 3S				6	123 123			10	100				100				40 10 150 1.32				.8
C DO 4S				3	43 43			3	100				38 62				21 6 25 0.62				1.7
C Totals				7	.4 1,957 1,949			152	9 23 69				1 8 91				33 13 350 3.00				5.6
H DO 2S				86	1,470 1,470			115	100				100				40 12 220 1.61				6.7
H DO 3S				5	88 88			7	100				100				34 7 60 0.74				1.5
H DO 4S				9	138 138			11	100				61 39				21 6 27 0.56				5.2
H Totals				6	1,696 1,696			132	13 87				5 3 5 87				32 9 127 1.23				13.4
M DO 1S				31	296 296			23	100				100				40 13 236 1.63				1.3
M DO 2S				29	266 266			21	100				43 57				36 10 148 1.15				1.8
M DO 4S				40	370 370			29	100				20 22 58				29 6 45 0.54				8.1
M Totals				3	932 932			73	68 32				8 21 71				31 8 83 0.81				11.2
Type Totals					.3 26,881 26,798			2,090	44 46 11				4 2 8 86				33 9 118 0.98				227.7

T		TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)												Page		1				
				Project: SAGER												Date		2/27/2026				
																Time		1:14:41PM				
T06N R06W S23 T00CC																T06N R06W S23 T00CC						
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		CuFt		BdFt				
06N		06W		23		SAGERB		00CC		95.00		66		149		1		W				
S So Gr T rt ad Spp				%	Bd. Ft. per Acre			Total	Percent Net Board Foot Volume								Average Log				Logs Per /Acre	
									Log Scale Dia.				Log Length				Ln Dia Bd CF/					
				Net	Def%	Gross	Net	Net MBF	4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99	Ft	In	Ft	Lf		
D				DO	CU												12	19		0.00	2.1	
D				DO	2S	74	.3	34,337	34,225	3,251		22	78	2	3	5	90	37	18	561	3.02	61.0
D				DO	3S	6	1.9	3,245	3,181	302	90	3	7	11	10	15	64	33	9	104	0.94	30.7
D				DO	4S	1		401	401	38	100			81	19			18	6	24	0.43	16.8
D				DO	1P	3		1,419	1,419	135			100			68	32	36	32	1830	8.57	.8
D				DO	2P	2		624	624	59			100			100		34	30	1452	7.72	.4
D				DO	3P	4		2,147	2,147	204			100	13	45	43		35	25	1088	5.06	2.0
D				DO	SM	10		4,243	4,243	403		6	94			11	89	39	20	649	3.23	6.5
D Totals						77	.4	46,417	46,241	4,393	7	17	76	3	4	11	82	33	15	384	2.38	120.3
C				DO	CU												7	20		0.00	2.1	
C				DO	2S	75	.5	3,208	3,193	303		70	30			10	90	39	14	312	2.61	10.2
C				DO	3S	18		800	800	76	100					11	89	38	7	80	0.88	10.0
C				DO	4S	7		255	255	24	100			45	55			20	7	29	0.55	8.7
C Totals						7	.3	4,264	4,249	404	25	53	22	3	3	10	84	31	10	137	1.51	31.1
H				DO	2S	64	.4	4,164	4,148	394		40	60		3	8	89	38	16	409	2.38	10.1
H				DO	3S	22	.7	1,445	1,435	136	100			9	10	3	78	34	8	92	0.87	15.5
H				DO	4S	5		305	305	29	100			35	65			22	6	28	0.42	10.9
H				DO	3P	9		558	558	53			100		42	58		31	29	1149	6.33	.5
H Totals						11	.4	6,472	6,445	612	27	25	48	4	11	11	75	32	10	174	1.35	37.0
A				DO	1S	35	2.4	583	569	54		100			16		84	37	14	263	1.89	2.2
A				DO	2S	35	1.1	567	561	53	100				18		82	37	10	145	1.08	3.9
A				DO	3S	13		209	209	20	100			5			95	37	8	82	0.74	2.5
A				DO	4S	17		259	259	25	100			56	21		23	23	6	30	0.50	8.6
A Totals						3	1.2	1,618	1,598	152	64	36		10	15		75	30	8	93	0.92	17.2
M				DO	1S	40		748	748	71		100				100		40	16	400	2.48	1.9
M				DO	2S	42		767	767	73	100					100		40	10	164	1.06	4.7
M				DO	4S	18		322	322	31	100			34		66		33	6	49	0.58	6.5
M Totals						3		1,837	1,837	175	59	41		6		94		36	9	140	1.06	13.1
Type Totals							.4	60,607	60,370	5,735	14	22	65	3	5	10	82	32	12	276	1.89	218.7

T		TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)										Page		1					
				Project: SAGER										Date		3/2/2026					
														Time		11:34:17AM					
T06N R06W S34 T00CC														T06N R06W S34 T00CC							
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		CuFt		BdFt			
06N		06W		34		SAGERC		00CC		34.00		36		89		1		W			
S So Gr T rt ad Spp			% Net BdFt	Bd. Ft. per Acre Def% Gross Net			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre		
								Log Scale Dia.				Log Length				Ln Dia Bd CF/ Ft In Ft Lf					
D	DO	2S	51	15.3	40,184	40,068	1,157	1362		15	85	2	3	4	91	35	19	653	3.56	61.4	
D	DO	3S	2	15	1,615	1,615	47	55	95	5		17	33		50	30	10	96	0.93	16.8	
D	DO	4S		15	132	132	4		100			100				19	7	27	0.49	4.8	
D	DO	1P	19	15	14,876	14,876	430	506		100		4		13	83	37	33	2201	9.06	6.8	
D	DO	3P	21	15	16,345	16,345	472	556		100		14	5	44	38	31	27	1142	6.02	14.3	
D	DO	SM	4	15	3,550	3,550	103	121		100		7	19	40	34	30	22	717	4.08	5.0	
D	DO	CP	3	15	1,670	1,670	48	57		100		12			88	33	26	1277	5.79	1.3	
D Totals			89	15.2	78,373	78,257	2,261	2,661	2	8	90	6	4	15	75	33	19	709	3.85	110.3	
H	DO	2S	54		1,882	1,882	64		62	38		2		11	87	38	15	377	2.24	5.0	
H	DO	3S	42	3.4	1,496	1,446	49		100				10	19	71	34	8	84	0.76	17.1	
H	DO	4S	4		111	111	4		100			100				18	7	27	0.49	4.2	
H Totals			4	1.4	3,490	3,440	117		45	34	21	4	4	14	77	32	9	131	1.07	26.3	
C	DO	CU														16	28		0.00	.8	
C	DO	2S	87		2,377	2,377	81		33	67		3		8	89	37	17	443	3.30	5.4	
C	DO	3S	8	8.4	224	205	7		100				82	18		26	10	83	1.17	2.5	
C	DO	4S	5		136	136	5		100			10	90			25	6	33	0.60	4.2	
C Totals			3	.7	2,737	2,718	93	92	13	29	59	3	11	8	78	30	13	211	2.07	12.9	
A	DO	1S	43		1,059	1,059	36		100						100	40	13	241	1.65	4.4	
A	DO	2S	30		738	738	25		100					34	66	36	10	144	1.09	5.1	
A	DO	3S	12		304	304	10		100						100	40	9	120	0.78	2.5	
A	DO	4S	15		358	358	12		100			55	30	15		20	6	30	0.53	12.1	
A Totals			3		2,458	2,458	83	84	57	43		8	4	12	75	29	9	102	0.99	24.1	
M	DO	1S	58	1.2	789	779	26		65	35		13			87	33	14	278	2.12	2.8	
M	DO	2S	15		210	210	7		100					100		32	10	120	0.91	1.7	
M	DO	4S	27		349	349	12		100			22	7		70	30	7	50	0.70	6.9	
M Totals			2	.7	1,347	1,337	45		42	38	20	14	2	16	69	31	9	116	1.10	11.5	
Type Totals					.2	88,405	88,211	2,599	2,999	6	11	83	6	4	15	75	32	15	477	2.83	185.1

TC PSTATS				PROJECT STATISTICS				PAGE 1			
				PROJECT SAGER				DATE 2/27/2026			
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
06N	06	23	SAGERA	00CC	207.00	140	758	1	W		
06N	06W	23	SAGERB	00CC							
06N	06W	34	SAGERC	00CC							
				TREES	ESTIMATED		PERCENT				
				PER PLOT	TOTAL		SAMPLE				
				TREES	TREES		TREES				
TOTAL			140	758	5.4						
CRUISE			63	309	4.9	20,501	1.5				
DBH COUNT											
REFOREST											
COUNT			76	428	5.6						
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
DOUG FIR			183	46.1	25.3	94	32.1	161.4	41,322	41,194	8,484
WR CEDAR			32	9.7	24.1	61	6.3	30.8	3,144	3,131	1,010
WHEMLOCK			32	13.9	18.5	63	6.0	25.9	4,183	4,162	1,075
R ALDER			34	21.3	13.4	51	5.7	21.0	2,401	2,392	716
BL MAPLE			17	6.6	17.3	65	2.6	10.8	1,415	1,414	405
SNAG			11	1.4	24.8	99	0.9	4.6			
TOTAL			309	99.0	21.7	75	54.6	254.5	52,465	52,292	11,689
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			85.2	6.3	1,868	1,993	2,119				
WR CEDAR			83.6	14.8	465	546	626				
WHEMLOCK			146.6	25.9	488	658	829				
R ALDER			64.2	11.0	148	166	184				
BL MAPLE			77.5	19.4	203	251	300				
SNAG											
TOTAL			117.6	6.7	1,248	1,337	1,427	552	138	61	
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			74.7	5.5	351	371	392				
WR CEDAR			69.6	12.3	144	164	184				
WHEMLOCK			114.3	20.2	116	145	175				
R ALDER			59.8	10.3	44	49	54				
BL MAPLE			67.8	16.9	60	72	84				
SNAG											
TOTAL			100.3	5.7	246	261	276	402	100	45	
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			90.8	7.7	43	46	50				
WR CEDAR			223.8	18.9	8	10	12				
WHEMLOCK			221.7	18.7	11	14	17				
R ALDER			247.8	20.9	17	21	26				
BL MAPLE			306.8	25.9	5	7	8				
SNAG			389.9	32.9	1	1	2				
TOTAL			67.0	5.7	93	99	105	179	45	20	
CL	68.1	COEFF	BASAL AREA/ACRE					# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15	
DOUG FIR			60.5	5.1	153	161	170				
WR CEDAR			195.9	16.5	26	31	36				
WHEMLOCK			218.8	18.5	21	26	31				

TC PSTATS				PROJECT STATISTICS				PAGE	2	
				PROJECT	SAGER			DATE	2/27/2026	
TWP	RGE	SC	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
06N	06	23	SAGERA	00CC	207.00		140	758	1	W
06N	06W	23	SAGERB	00CC						
06N	06W	34	SAGERC	00CC						
CL	68.1	COEFF		BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.
SD:	1.00	VAR.	S.E.%	LOW	AVG	HIGH		5	10	15
R ALDER		225.8	19.1	17	21	25				
BL MAPLE		288.9	24.4	8	11	13				
SNAG		395.7	33.4	3	5	6				
TOTAL		40.8	3.4	246	254	263		67	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
DOUG FIR		66.0	5.6	38,898	41,194	43,490				
WR CEDAR		192.6	16.3	2,622	3,131	3,640				
WHEMLOCK		232.8	19.7	3,344	4,162	4,980				
R ALDER		216.8	18.3	1,954	2,392	2,830				
BL MAPLE		304.6	25.7	1,050	1,414	1,778				
SNAG										
TOTAL		50.6	4.3	50,057	52,292	54,528		102	26	11

TC TSTATS				STATISTICS				PAGE	1		
				PROJECT	SAGER	DATE 2/27/2026					
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
06N	06W	23	SAGERA	00CC	78.00	38	205	1	W		
				TREES	ESTIMATED	PERCENT					
				PER PLOT	TOTAL	SAMPLE					
					TREES	TREES					
TOTAL		38	205	5.4							
CRUISE		14	71	5.1	8,691			.8			
DBH COUNT											
REFOREST											
COUNT		24	134	5.6							
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		43	56.4	19.1	86	25.7	112.3	18,966	18,891	4,978	4,978
R ALDER		13	39.4	12.0	49	8.9	31.0	3,330	3,330	1,016	1,016
WR CEDAR		4	2.4	34.1	78	2.6	15.0	1,957	1,949	543	543
WHEMLOCK		4	6.7	19.7	67	3.2	14.2	1,696	1,696	529	529
BL MAPLE		6	6.1	15.4	60	2.0	8.0	932	932	283	283
SNAG		1	.4	21.0	66	0.2	.9				
TOTAL		71	111.4	17.3	70	43.6	181.3	26,881	26,798	7,349	7,349
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		53.6	8.2	370	403	435					
R ALDER		29.6	8.5	77	85	92					
WR CEDAR		60.3	34.4	689	1,050	1,411					
WHEMLOCK		24.0	13.7	222	258	293					
BL MAPLE		53.9	24.0	139	183	227					
SNAG											
TOTAL		87.7	10.4	312	348	385	307	77	34		
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		45.3	6.9	97	104	111					
R ALDER		23.2	6.7	25	27	29					
WR CEDAR		54.9	31.4	196	286	376					
WHEMLOCK		16.9	9.6	72	80	88					
BL MAPLE		48.0	21.4	43	55	67					
SNAG											
TOTAL		81.2	9.6	84	93	102	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		64.7	10.5	51	56	62					
R ALDER		157.4	25.5	29	39	49					
WR CEDAR		210.4	34.1	2	2	3					
WHEMLOCK		268.4	43.5	4	7	10					
BL MAPLE		333.5	54.0	3	6	9					
SNAG		616.4	99.9	0	0	1					
TOTAL		43.9	7.1	103	111	119	77	19	9		
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		60.4	9.8	101	112	123					
R ALDER		162.4	26.3	23	31	39					
WR CEDAR		212.4	34.4	10	15	20					
WHEMLOCK		268.4	43.5	8	14	20					

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT SAGER				DATE	2/27/2026	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
06N	06W	23	SAGERA	00CC	78.00	38	205	1	W	
CL: 68.1 %		COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.	
SD: 1.0		VAR.		S.E. %	LOW	AVG	HIGH	5	10	15
BL MAPLE		317.1	51.4		4	8	12			
SNAG		616.4	99.9		0	1	2			
TOTAL		26.8	4.3		173	181	189	29	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		60.3	9.8		17,045	18,891	20,736			
R ALDER		155.8	25.3		2,489	3,330	4,171			
WR CEDAR		212.9	34.5		1,276	1,949	2,622			
WHEMLOCK		268.4	43.5		958	1,696	2,434			
BL MAPLE		314.6	51.0		457	932	1,407			
SNAG										
TOTAL		30.2	4.9		25,484	26,798	28,111	37	9	4

TC TSTATS				STATISTICS				PAGE 1			
				PROJECT SAGER		DATE 2/27/2026					
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
06N	06W	23	SAGERB	00CC	95.00	66	371	1	W		
		PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL		66	371	5.6							
CRUISE		30	149	5.0	9,309	1.6					
DBH COUNT											
REFOREST											
COUNT		35	205	5.9							
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
DOUG FIR		84	42.7	27.3	96	33.2	173.3	46,417	46,241	9,368	9,368
WR CEDAR		20	17.3	22.1	58	9.8	46.2	4,264	4,249	1,473	1,473
WHEMLOCK		20	19.2	18.6	63	8.4	36.3	6,472	6,445	1,581	1,581
R ALDER		13	9.8	16.0	55	3.4	13.7	1,618	1,598	476	476
BL MAPLE		4	6.5	18.5	76	2.8	12.2	1,837	1,837	508	508
SNAG		8	2.5	24.3	103	1.6	7.9				
TOTAL		149	98.0	23.3	78	60.0	289.7	60,607	60,370	13,406	13,406
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		68.1	7.4	1,726	1,864	2,003					
WR CEDAR		67.1	15.4	298	352	406					
WHEMLOCK		139.0	31.9	533	783	1,032					
R ALDER		55.6	16.0	174	207	240					
BL MAPLE		41.8	23.9	253	333	412					
SNAG											
TOTAL		103.5	8.5	1,126	1,230	1,335		427	107	47	
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		60.0	6.5	335	358	382					
WR CEDAR		56.8	13.0	105	121	136					
WHEMLOCK		109.6	25.1	125	167	209					
R ALDER		51.7	14.9	52	61	70					
BL MAPLE		42.2	24.1	70	92	115					
SNAG											
TOTAL		88.2	7.2	230	248	266		310	78	34	
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		84.0	10.3	38	43	47					
WR CEDAR		173.7	21.4	14	17	21					
WHEMLOCK		204.8	25.2	14	19	24					
R ALDER		268.4	33.0	7	10	13					
BL MAPLE		305.3	37.5	4	7	9					
SNAG		302.3	37.2	2	2	3					
TOTAL		57.2	7.0	91	98	105		131	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	
DOUG FIR		65.4	8.0	159	173	187					
WR CEDAR		165.7	20.4	37	46	56					
WHEMLOCK		195.7	24.1	28	36	45					
R ALDER		253.6	31.2	9	14	18					

TC TSTATS				STATISTICS			PAGE	2		
				PROJECT	SAGER		DATE	2/27/2026		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
06N	06W	23	SAGERB	00CC	95.00	66	371	1	W	
CL: 68.1 %		COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.	
SD: 1.0		VAR.	S.E. %	LOW	AVG	HIGH	5	10	15	
BL MAPLE		299.8	36.9	8	12	17				
SNAG		318.3	39.1	5	8	11				
TOTAL		44.7	5.5	274	290	306	80	20	9	
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		66.0	8.1	42,488	46,241	49,994				
WR CEDAR		166.9	20.5	3,377	4,249	5,121				
WHEMLOCK		202.2	24.9	4,842	6,445	8,048				
R ALDER		251.3	30.9	1,104	1,598	2,092				
BL MAPLE		300.6	37.0	1,158	1,837	2,516				
SNAG										
TOTAL		51.9	6.4	56,514	60,370	64,225	108	27	12	

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	SAGER	DATE				2/27/2026
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
06N	06W	34	SAGERC	00CC	34.00	36	182	1	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
					TREES	TREES				
TOTAL		36	182	5.1						
CRUISE		19	89	4.7	2,501		3.6			
DBH COUNT										
REFOREST										
COUNT		17	89	5.2						
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		56	31.8	37.3	119	39.5	241.0	78,373	78,257	14,056
WHEMLOCK		8	15.5	16.7	56	5.8	23.7	3,490	3,440	910
WR CEDAR		8	5.6	27.8	70	4.5	23.7	2,737	2,718	786
R ALDER		8	12.1	16.9	61	4.5	18.7	2,458	2,458	698
BL MAPLE		7	7.9	17.4	49	3.1	13.1	1,347	1,337	395
SNAG		2	.7	32.6	104	0.7	4.0			
TOTAL		89	73.6	28.4	85	60.8	324.1	88,405	88,211	16,845
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		51.1	6.8	3,176	3,408	3,641				
WHEMLOCK		159.2	60.0	219	549	878				
WR CEDAR		68.7	25.9	576	778	979				
R ALDER		41.9	15.8	195	231	268				
BL MAPLE		103.6	42.1	152	263	374				
SNAG										
TOTAL		87.8	9.3	2,091	2,305	2,520	308	77	34	
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		46.2	6.2	559	596	633				
WHEMLOCK		132.9	50.1	62	124	187				
WR CEDAR		63.1	23.8	162	212	262				
R ALDER		42.6	16.0	56	66	77				
BL MAPLE		89.4	36.4	47	74	101				
SNAG										
TOTAL		78.7	8.3	382	417	452	247	62	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		53.4	8.9	29	32	35				
WHEMLOCK		175.2	29.2	11	16	20				
WR CEDAR		240.9	40.1	3	6	8				
R ALDER		252.2	42.0	7	12	17				
BL MAPLE		167.5	27.9	6	8	10				
SNAG		425.3	70.8	0	1	1				
TOTAL		64.3	10.7	66	74	81	165	41	18	
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		49.0	8.2	221	241	261				
WHEMLOCK		160.4	26.7	17	24	30				
WR CEDAR		237.8	39.6	14	24	33				
R ALDER		259.8	43.3	11	19	27				

TC TSTATS				STATISTICS				PAGE	2
				PROJECT SAGER				DATE	2/27/2026
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	06W	34	SAGERC	00CC	34.00	36	182	1	W
CL: 68.1 %				BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0				LOW	AVG	HIGH	5	10	15
BL MAPLE		154.0	25.6	10	13	16			
SNAG		418.2	69.6	1	4	7			
TOTAL		33.8	5.6	306	324	342	46	11	5
CL: 68.1 %				NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0				LOW	AVG	HIGH	5	10	15
DOUG FIR		52.3	8.7	71,444	78,257	85,071			
WHEMLOCK		179.7	29.9	2,410	3,440	4,469			
WR CEDAR		235.8	39.3	1,651	2,718	3,786			
R ALDER		255.7	42.6	1,411	2,458	3,505			
BL MAPLE		161.6	26.9	978	1,337	1,697			
SNAG									
TOTAL		42.6	7.1	81,950	88,212	94,473	73	18	8

[illegible]

TC PLOGSTVB				Log Stock Table - MBF															
T06N R06W S23 Ty00CC				78.00		Project: SAGER				Page 2									
T06N R06W S23 Ty00CC				95.00		Acres 207.00				Date 2/27/2026									
T06N R06W S34 Ty00CC				34.00						Time 1:38:08PM									
S T Spp	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+
D	DO	2P	34	59		59	.7											59	
D	DO	3P	17	77		77	.9											39	38
D	DO	3P	26	52		52	.6											52	
D	DO	3P	34	334		334	3.9											247	87
D	DO	3P	42	296		296	3.5											229	66
D	DO	SM	20	9		9	.1											9	
D	DO	SM	26	23		23	.3											23	
D	DO	SM	32	91		91	1.1								24			68	
D	DO	SM	40	401		401	4.7								159			216	25
D	DO	CP	18	7		7	.1											7	
D	DO	CP	42	50		50	.6											18	32
D	Totals			8,554		8,527	78.8			243	287	408	656	755	1309	1295	1829	1650	94
C	DO	2S	20	3		3	.4						1		2				
C	DO	2S	26	10	5.9	10	1.5						5		5				
C	DO	2S	32	27		27	4.2						15	8	5				
C	DO	2S	34	9		9	1.4						9						
C	DO	2S	36	9		9	1.3								9				
C	DO	2S	40	467		465	71.8						94	103	138	42	54	34	
C	DO	3S	24	6	10.0	6	.9					6							
C	DO	3S	32	4		4	.6			4									
C	DO	3S	34	6		6	.9			6									
C	DO	3S	36	4		4	.6			4									
C	DO	3S	38	3		3	.5			3									
C	DO	3S	40	70		70	10.9			30	5	35							
C	DO	4S	14	1		1	.2				1								
C	DO	4S	16	9		9	1.4			9									
C	DO	4S	18	1		1	.2				1								
C	DO	4S	20	1		1	.2			1									
C	DO	4S	24	15		15	2.3			15									
C	DO	4S	26	2		2	.3			2									
C	DO	4S	28	1		1	.1			1									
C	DO	4S	30	2		2	.2			2									
C	Totals			651		648	6.0			77	7	41	125	110	158	42	54	34	
A	DO	1S	26	10	8.7	9	1.8							9					

Log Stock Table - MBF

T06N R06W S23 Ty00CC	78.00
T06N R06W S23 Ty00CC	95.00
T06N R06W S34 Ty00CC	34.00

Project: SAGER
Acres 207.00

Page 3
Date 2/27/2026
Time 1:38:08PM

S T Spp	So Gr rt	Log de 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+
A	DO	1S	40	82		81	16.4					49	12	21				
A	DO	2S	30	9		9	1.9				9							
A	DO	2S	34	8		8	1.7				8							
A	DO	2S	36	9		9	1.8				9							
A	DO	2S	38	28		28	5.6				28							
A	DO	2S	40	24	2.3	24	4.8				24							
A	DO	3S	18	1		1	.2			1								
A	DO	3S	32	20		20	4.0			20								
A	DO	3S	36	59		59	12.0			59								
A	DO	3S	40	50		50	10.2			50								
A	DO	4S	16	37		37	7.5			37								
A	DO	4S	18	3		3	.5			3								
A	DO	4S	20	10		10	2.1			10								
A	DO	4S	24	2		2	.5			2								
A	DO	4S	26	1		1	.2			1								
A	DO	4S	28	10		10	2.0			10								
A	DO	4S	30	3		3	.5			3								
A	DO	4S	32	2		2	.4			2								
A	DO	4S	34	17		17	3.4			17								
A	DO	4S	36	17		17	3.4			17								
A	DO	4S	38	10		10	2.1			10								
A	DO	4S	40	84		84	17.0			84								
A	Totals			497		495	4.6			196	130	78	49	20	21			
M	DO	1S	20	4	8.3	4	1.2				4							
M	DO	1S	40	117		117	40.0				18	19	71	9				
M	DO	2S	32	16		16	5.5			16								
M	DO	2S	40	85		85	28.9			85								
M	DO	4S	16	1		1	.5			1								
M	DO	4S	18	5		5	1.7			5								
M	DO	4S	20	2		2	.7			2								
M	DO	4S	26	4		4	1.5			4								
M	DO	4S	28	7		7	2.4			7								
M	DO	4S	32	6		6	2.1			6								
M	DO	4S	36	7		7	2.6			7								
M	DO	4S	38	1		1	.2			1								

TC PLOGSTVB				Log Stock Table - MBF																
T06N R06W S23 Ty00CC				78.00		Project: SAGER										Page 4				
T06N R06W S23 Ty00CC				95.00		Acres 207.00										Date 2/27/2026				
T06N R06W S34 Ty00CC				34.00												Time 1:38:08PM				
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+
M		DO	4S	40	37		37	12.7			37									
M		Totals			293		293	2.7			71		101	21	19	71	9			
H		DO	2S	20	1		1	.2						1						
H		DO	2S	24	10		10	1.2						3			7			
H		DO	2S	32	40		40	4.6					3	29			7			
H		DO	2S	40	523		522	60.5					189	60	145	37	44		45	
H		DO	3S	16	2		2	.2					2							
H		DO	3S	20	10		10	1.2				7	3							
H		DO	3S	24	11		11	1.3				11								
H		DO	3S	26	7		7	.9			5	2								
H		DO	3S	32	9		9	1.1			9									
H		DO	3S	34	12		12	1.3			12									
H		DO	3S	36	5		5	.6					5							
H		DO	3S	38	9		9	1.1			9									
H		DO	3S	40	129	2.1	126	14.6			20	6	100							
H		DO	4S	16	4		4	.5			4									
H		DO	4S	20	17		17	1.9			17									
H		DO	4S	24	19		19	2.2			19									
H		DO	4S	26	4		4	.4			4									
H		DO	3P	26	22		22	2.6											22	
H		DO	3P	34	31		31	3.6										31		
H		Totals			866		862	8.0			99	26	111	193	94	145	51	75		67
Total		All Species			10,860		10,825	100.0			686	451	739	1043	999	1704	1398	1958	1752	94

TC		PSTNDSUM		Stand Table Summary										Page		1	
														Date:		2/27/2026	
T06N R06W S23 Ty00CC78.00 T06N R06W S23 Ty00CC95.00 T06N R06W S34 Ty00CC34.00				Project		SAGER		Time:		1:38:47PM							
				Acres		207.00		Grown Year:									
S Spc	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	
D		9	1	85	21	2.143	.95	2.14	5.0	20.0		11	43		22	9	
D		12	1	85	88	1.253	.98	2.51	12.0	45.0		30	113		62	23	
D		13	1	85	113	1.068	.98	2.14	17.5	60.0		37	128		77	27	
D		14	1	86	107	.921	.98	1.84	21.0	75.0		39	138		80	29	
D		15	1	83	74	.771	.95	1.54	19.0	45.0		29	69		61	14	
D		16	5	85	100	3.471	4.85	6.94	25.2	87.3		175	606		363	125	
D		17	3	85	122	1.873	2.95	5.00	26.6	97.5		133	487		275	101	
D		18	8	86	113	4.256	7.52	10.16	31.4	114.7		319	1,166		660	241	
D		19	10	85	107	4.801	9.45	10.94	35.2	122.0		385	1,335		797	276	
D		20	5	85	103	2.256	4.92	5.41	36.5	124.2		198	672		409	139	
D		21	3	86	111	1.097	2.64	2.60	43.5	155.9		113	406		234	84	
D		22	11	86	124	4.030	10.64	11.73	43.0	173.7		505	2,037		1,045	422	
D		23	4	85	122	1.365	3.94	3.75	48.5	189.1		182	710		376	147	
D		24	7	86	128	2.081	6.54	6.24	51.8	210.7		324	1,315		670	272	
D		25	3	85	132	.763	2.60	2.22	57.8	238.7		128	529		265	110	
D		26	4	86	152	1.047	3.86	3.14	69.6	315.1		219	990		453	205	
D		27	3	88	148	.714	2.84	2.14	73.7	340.0		158	728		327	151	
D		28	2	86	167	.443	1.89	1.55	74.1	355.7		115	551		238	114	
D		29	4	84	159	.825	3.79	2.68	79.8	364.6		214	978		443	202	
D		30	5	86	146	.923	4.53	2.96	82.5	390.1		244	1,155		506	239	
D		31	5	87	166	.903	4.73	3.25	88.6	439.4		288	1,428		596	296	
D		32	7	86	155	1.186	6.63	4.07	91.6	457.5		373	1,861		771	385	
D		33	4	86	151	.597	3.55	2.11	92.4	469.5		195	991		404	205	
D		34	3	85	161	.374	2.36	1.35	102.4	540.6		138	728		285	151	
D		35	10	85	153	1.237	8.27	4.31	106.3	564.0		458	2,432		949	503	
D		36	3	87	168	.368	2.60	1.47	107.0	583.5		157	858		326	178	
D		37	4	86	170	.475	3.55	1.90	113.6	608.5		216	1,156		447	239	
D		38	4	86	166	.450	3.55	1.68	120.7	650.8		203	1,094		420	226	
D		39	2	86	176	.228	1.89	.80	147.6	795.7		118	636		244	132	
D		40	5	86	170	.405	3.53	1.70	128.2	734.8		218	1,250		451	259	
D		41	2	85	169	.206	1.89	.83	137.9	772.5		114	638		236	132	
D		42	6	86	164	.491	4.72	1.89	145.6	801.6		275	1,514		569	313	
D		43	7	85	163	.586	5.91	2.25	152.3	827.4		343	1,861		709	385	
D		44	8	85	165	.581	6.13	2.10	171.6	977.6		360	2,053		746	425	
D		45	6	85	172	.427	4.72	1.71	167.8	935.5		287	1,599		594	331	
D		46	6	85	185	.409	4.72	1.64	187.8	1155.4		307	1,890		636	391	
D		47	2	84	167	.137	1.65	.39	170.1	1052.7		67	412		138	85	
D		48	1	85	166	.056	.71	.17	249.3	1506.7		42	254		87	53	
D		49	3	84	165	.180	2.36	.67	205.8	1116.4		137	745		284	154	
D		50	2	84	155	.139	1.89	.42	225.8	1200.0		94	500		195	103	
D		51	2	86	208	.117	1.65	.47	254.4	1485.7		119	693		246	143	
D		52	2	86	196	.096	1.41	.38	251.8	1532.5		97	588		200	122	
D		53	2	86	197	.092	1.41	.37	261.5	1515.0		97	559		200	116	
D		54	2	84	154	.104	1.65	.31	291.2	1528.1		91	477		188	99	
D		55	2	89	184	.086	1.41	.34	277.1	1772.5		95	607		197	126	
D		64	1	86	157	.032	.71	.09	414.0	2230.0		39	212		81	44	
D		Totals	183	85	122	46.064	161.42	124.31	68.2	331.4		8,484	41,194		17,562	8,527	
H		10	1	86	41	1.527	.83	1.53	9.0	30.0		14	46		28	9	
H		12	2	87	42	1.239	.97	1.24	15.0	45.0		19	56		38	12	
H		13	2	86	64	1.807	1.67	2.71	17.3	50.0		47	136		97	28	
H		15	1	86	88	.679	.83	1.36	24.5	90.0		33	122		69	25	
H		16	1	85	91	.597	.83	1.19	27.0	90.0		32	107		67	22	
H		17	2	84	89	.837	1.32	1.67	29.9	97.9		50	164		104	34	

TC		PSTNDSUM		Stand Table Summary										Page		2	
														Date:		2/27/2026	
T06N R06W S23 Ty00CC78.00 T06N R06W S23 Ty00CC95.00 T06N R06W S34 Ty00CC34.00				Project				SAGER				Time:		1:38:47PM			
				Acres				207.00				Grown Year:					
S Spec	T	Sample		Tot		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
		DBH	Trees	FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF	
H		18	3	83	80	1.022	1.81	2.04	31.6	94.8		65	194	134	40		
H		19	2	85	79	1.354	2.67	2.71	36.0	112.5		97	305	202	63		
H		20	6	86	93	2.361	5.15	4.95	42.2	138.9		209	687	432	142		
H		21	1	86	93	.554	1.33	1.11	50.0	175.0		55	194	115	40		
H		22	1	86	116	.184	.49	.55	42.3	176.7		23	98	48	20		
H		23	1	85	127	.289	.83	.87	49.7	203.3		43	176	89	36		
H		26	3	85	114	.678	2.50	1.81	65.1	268.7		118	486	244	101		
H		27	1	85	116	.209	.83	.63	66.0	293.3		41	184	86	38		
H		28	1	83	129	.195	.83	.58	72.3	320.0		42	187	88	39		
H		33	1	89	154	.140	.83	.56	96.5	542.5		54	304	112	63		
H		40	1	81	143	.095	.83	.29	157.3	763.3		45	219	93	45		
H		43	1	85	196	.083	.83	.41	151.4	908.0		63	375	129	78		
H		44	1	86	116	.046	.49	.14	173.7	890.0		24	123	50	25		
H		Totals	32	85	81	13.898	25.89	26.35	40.8	158.0		1,075	4,162	2,225	862		
C		11	1	86	39	1.606	1.06	1.61	11.0	30.0		18	48	37	10		
C		16	1	85	58	.759	1.06	.76	30.0	60.0		23	46	47	9		
C		17	1	83	72	.309	.49	.62	21.0	60.0		13	37	27	8		
C		19	2	82	88	1.077	2.12	1.62	39.0	106.7		63	172	130	36		
C		20	1	82	81	.486	1.06	.97	34.5	105.0		34	102	69	21		
C		21	1	83	109	.441	1.06	.88	47.5	150.0		42	132	87	27		
C		22	2	81	73	.586	1.55	1.17	37.7	105.7		44	124	92	26		
C		24	1	83	105	.337	1.06	.67	64.0	200.0		43	135	89	28		
C		26	4	81	93	1.150	4.24	2.30	65.2	193.8		150	446	311	92		
C		28	4	79	86	.941	4.02	1.88	71.4	198.7		134	374	278	77		
C		29	1	82	120	.309	1.42	.93	68.0	256.7		63	238	130	49		
C		30	3	70	89	.531	2.61	1.06	50.1	150.5		53	160	110	33		
C		31	1	79	121	.202	1.06	.61	76.0	270.0		46	164	95	34		
C		32	2	72	91	.380	2.12	.76	94.2	225.0		72	171	148	35		
C		34	1	80	118	.077	.49	.23	91.0	330.0		21	76	44	16		
C		35	1	72	127	.159	1.06	.48	94.7	323.3		45	154	93	32		
C		41	1	83	90	.154	1.42	.31	158.0	585.0		49	181	101	37		
C		42	1	75	129	.051	.49	.15	139.7	560.0		21	85	44	18		
C		43	1	75	101	.048	.49	.10	185.5	600.0		18	58	37	12		
C		47	1	80	141	.040	.49	.08	109.0	520.0		9	42	18	9		
C		51	1	82	90	.100	1.42	.20	246.5	935.0		49	187	102	39		
C		Totals	32	81	81	9.744	30.76	17.38	58.1	180.1		1,010	3,131	2,090	648		
A		9	1	87	114	2.031	.90	4.06	11.0	45.0		45	183	92	38		
A		10	1	86	66	1.645	.90	1.65	15.0	50.0		25	82	51	17		
A		11	3	86	65	3.455	2.28	4.81	13.5	48.2		65	232	135	48		
A		12	3	86	100	2.903	2.28	5.81	15.9	55.0		92	319	191	66		
A		13	4	86	76	3.336	3.08	5.70	18.9	63.9		108	364	223	75		
A		14	4	86	66	2.972	3.18	3.43	26.9	76.8		92	263	191	54		
A		15	4	87	61	1.752	2.15	2.38	26.7	78.6		63	187	131	39		
A		16	3	86	71	1.043	1.46	2.09	23.7	81.7		49	170	102	35		
A		18	4	86	78	.926	1.64	1.85	32.6	104.4		60	193	125	40		
A		19	2	87	89	.493	.97	.99	39.5	127.5		39	126	81	26		
A		20	1	87	88	.176	.38	.35	43.0	145.0		15	51	31	11		
A		21	1	87	56	.202	.49	.40	34.0	120.0		14	48	28	10		
A		24	1	86	73	.155	.49	.31	54.5	195.0		17	60	35	12		
A		25	2	86	77	.255	.87	.51	62.1	220.0		32	112	65	23		
A		Totals	34	86	78	21.342	21.04	34.33	20.9	69.7		716	2,392	1,482	495		

TC		PSTNDSUM		Stand Table Summary								Page		3				
												Date:		2/27/2026				
T06N R06W S23 Ty00CC78.00 T06N R06W S23 Ty00CC95.00 T06N R06W S34 Ty00CC34.00				Project				SAGER				Time:		1:38:47PM				
				Acres				207.00				Grown Year:						
S	Spec	DBH	Sample Trees	Tot FF 16'	Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Cu.Ft.	Net Bd.Ft.	Tons/ Acre	Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.						Tons	Cunits	MBF
M		11	1	86	110	.758	.50	1.52	13.0	45.0				20	68		41	14
M		12	1	86	65	.390	.31	.39	24.0	70.0				9	27		19	6
M		14	1	87	74	.287	.31	.57	19.0	75.0				11	43		23	9
M		15	2	87	85	1.550	1.90	2.69	26.5	87.0				71	234		148	48
M		16	2	87	98	1.362	1.90	2.72	30.1	110.5				82	301		170	62
M		17	1	87	95	.317	.50	.63	32.5	115.0				21	73		43	15
M		18	1	86	91	.283	.50	.57	36.5	125.0				21	71		43	15
M		19	2	87	38	.312	.61	.31	32.5	85.0				10	26		21	5
M		20	1	86	75	.141	.31	.28	38.0	115.0				11	32		22	7
M		22	1	86	75	.189	.50	.38	47.0	160.0				18	61		37	13
M		23	1	87	80	.106	.31	.21	54.5	200.0				12	43		24	9
M		24	1	86	89	.446	1.40	.89	63.0	230.0				56	205		116	43
M		25	1	87	79	.411	1.40	.82	62.5	220.0				51	181		106	37
M		31	1	87	87	.059	.31	.12	104.0	410.0				12	48		25	10
M		Totals	17	87	87	6.611	10.76	12.11	33.4	116.7				405	1,414		837	293
SN		16	1	86	40	.211	.30											
SN		21	1	88	66	.139	.33											
SN		23	1	88	128	.166	.48											
SN		24	2	88	150	.304	.96											
SN		26	1	88	175	.130	.48											
SN		27	1	89	38	.120	.48											
SN		28	1	88	86	.112	.48											
SN		30	1	89	77	.066	.32											
SN		32	1	89	94	.086	.48											
SN		36	1	88	143	.046	.32											
SN		Totals	11	88	102	1.379	4.62											
Totals			309	85	100	99.038	254.49	214.48	54.5	243.8				11,689	52,292		24,196	10,825

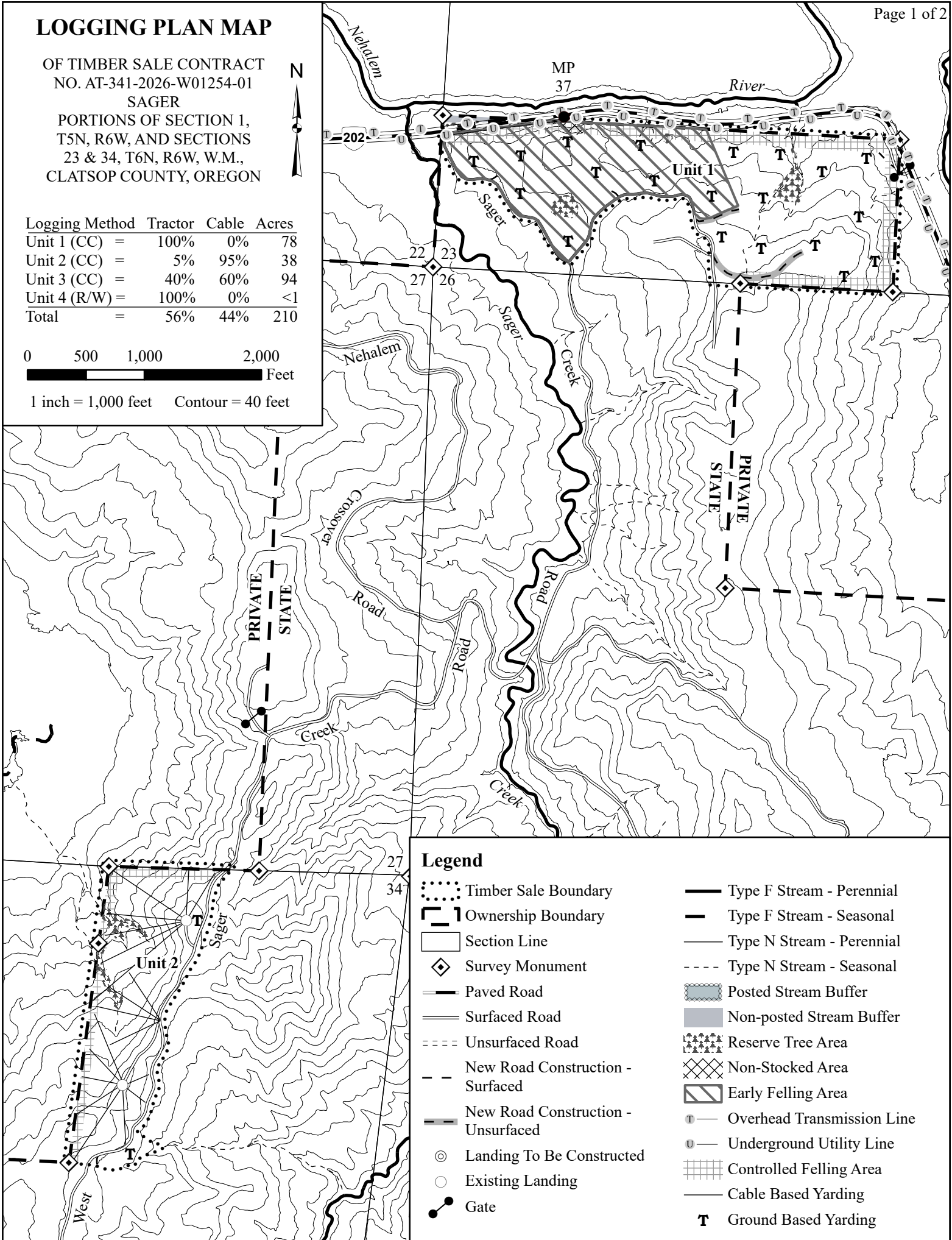
LOGGING PLAN MAP

OF TIMBER SALE CONTRACT
NO. AT-341-2026-W01254-01
SAGER
PORTIONS OF SECTION 1,
T5N, R6W, AND SECTIONS
23 & 34, T6N, R6W, W.M.,
CLATSOP COUNTY, OREGON



Logging Method	Tractor	Cable	Acres
Unit 1 (CC) =	100%	0%	78
Unit 2 (CC) =	5%	95%	38
Unit 3 (CC) =	40%	60%	94
Unit 4 (R/W) =	100%	0%	<1
Total =	56%	44%	210

0 500 1,000 2,000
Feet
1 inch = 1,000 feet Contour = 40 feet

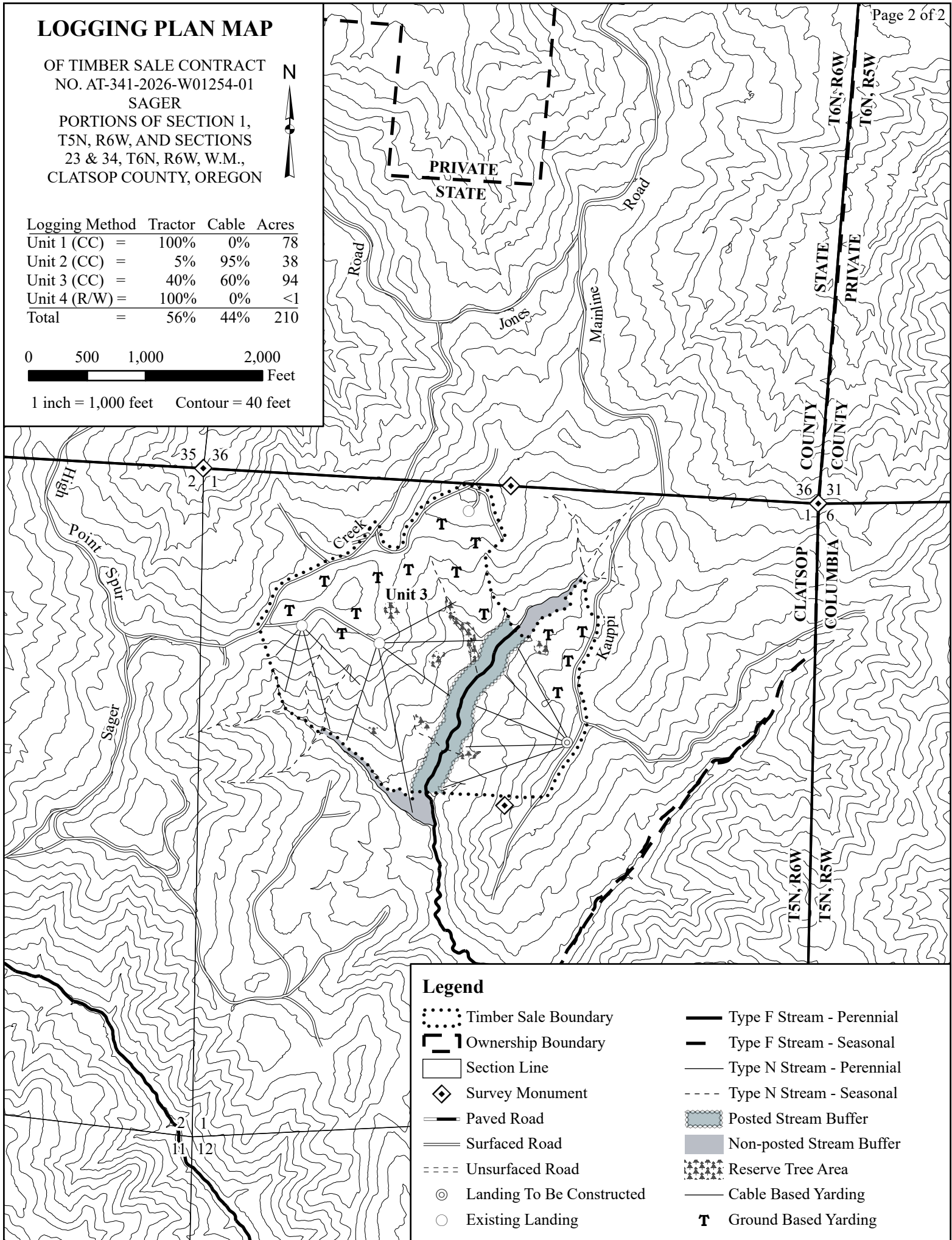


LOGGING PLAN MAP

OF TIMBER SALE CONTRACT
NO. AT-341-2026-W01254-01
SAGER
PORTIONS OF SECTION 1,
T5N, R6W, AND SECTIONS
23 & 34, T6N, R6W, W.M.,
CLATSOP COUNTY, OREGON

Logging Method	Tractor	Cable	Acres
Unit 1 (CC) =	100%	0%	78
Unit 2 (CC) =	5%	95%	38
Unit 3 (CC) =	40%	60%	94
Unit 4 (R/W) =	100%	0%	<1
Total =	56%	44%	210

0 500 1,000 2,000
Feet
1 inch = 1,000 feet Contour = 40 feet



Legend

- Timber Sale Boundary
- Ownership Boundary
- Section Line
- Survey Monument
- Paved Road
- Surfaced Road
- Unsurfaced Road
- Landing To Be Constructed
- Existing Landing
- Type F Stream - Perennial
- Type F Stream - Seasonal
- Type N Stream - Perennial
- Type N Stream - Seasonal
- Posted Stream Buffer
- Non-posted Stream Buffer
- Reserve Tree Area
- Cable Based Yarding
- Ground Based Yarding