"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Seuss Split
Sale AT-341-2021-W00572-01

District: Astoria

Date: December 08, 2020

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$367,905.90	$17,094.84	$385,000.74
		Project Work:	($12,035.00)
		Advertised Value:	$372,965.74

Timber Sale Appraisal
Seuss Split
Sale AT-341-2021-W00572-01

District: Astoria **Date: December 08, 2020**

Timber Description

Location:

Stand Stocking: 60%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	19	0	97
Western Hemlock / Fir	13	0	96
Alder (Red)	15	0	95

Volume by Grade	2S	3S & 4S 6"-11"	3S	4S	12"+	Total
Douglas - Fir	472	214	0	0	0	686
Western Hemlock / Fir	13	91	0	0	0	104
Alder (Red)	28	0	20	28	18	94
Total	513	305	20	28	18	884

Comments: Pond Values Used: Local Pond Values, October, 2020.

Expected Log Markets: Tillamook, Warrenton, Garibaldi, Banks, North Plains, Forest Grove, Mist, Clastkanie, Willamina, Longview, WA.

PRICING:

Western Red Cedar and other Cedars stumpage = pond value - (Douglas-fir) logging cost.
$980/MBF = $1,300/MBF - $320/MBF

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

Machine Washing for Invasive Weed Compliance = $2,000

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

Other Costs (No Profit & Risk added):
None.

SLASH PILING
(See attached appraisal. Includes move-in, pile materials, and end-hauling) = $1,748

ROAD MAINTENANCE
(See attached Road Maintenance Cost Summary Sheet)
TOTAL Road Maintenance: $9,548/884 MBF = $10.80/MBF

Timber Sale Appraisal
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District: Astoria **Date: December 08, 2020**

Logging Conditions

Combination#: 1

Douglas - Fir	21.00%
Western Hemlock / Fir	21.00%
Alder (Red)	21.00%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Manual Falling/Delimbing
yarding distance: Medium (800 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 11 **bd. ft / load:** 4600
cost / mbf: $130.43
machines: Log Loader (A)
Tower Yarder (Medium)

Combination#: 2

Douglas - Fir	3.00%
Western Hemlock / Fir	3.00%
Alder (Red)	3.00%

Logging System: Shovel **Process:** Manual Falling/Delimbing
yarding distance: Short (400 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 10 **bd. ft / load:** 4600
cost / mbf: $85.60
machines: Shovel Logger

Combination#: 3

Douglas - Fir	76.00%
Western Hemlock / Fir	76.00%
Alder (Red)	76.00%

Logging System: Track Skidder **Process:** Manual Falling/Delimbing
yarding distance: Medium (800 ft) **downhill yarding:** No
tree size: Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 7 **bd. ft / load:** 4100
cost / mbf: $155.24
machines: Log Loader (B)
Track Skidder

Timber Sale Appraisal
Seuss Split
Sale AT-341-2021-W00572-01

District: Astoria

Date: December 08, 2020

Logging Costs

Operating Seasons:	2.00	**Profit Risk:**	12%
Project Costs:	$12,035.00	**Other Costs (P/R):**	$2,000.00
Slash Disposal:	$1,748.00	**Other Costs:**	$0.00

Miles of Road

Road Maintenance: $10.80

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

Hauling Costs

Species	$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	$0.00	2.0	4.4
Western Hemlock / Fir	$0.00	2.0	4.3
Alder (Red)	$0.00	2.0	3.9

Timber Sale Appraisal
Seuss Split
Sale AT-341-2021-W00572-01

"STEWARDSHIP IN FORESTRY"

District: Astoria **Date: December 08, 2020**

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
$147.94	$11.12	$9.93	$111.19	$2.26	$33.89	$1.98	$2.00	$0.00	$320.31
Western Hemlock / Fir									
$147.94	$11.23	$9.93	$114.89	$2.26	$34.35	$1.98	$2.00	$0.00	$324.58
Alder (Red)									
$147.94	$11.34	$9.93	$127.88	$2.26	$35.92	$1.98	$2.00	$0.00	$339.25

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$813.08	$492.77	$0.00
Western Hemlock / Fir	$0.00	$611.75	$287.17	$0.00
Alder (Red)	$0.00	$521.11	$181.86	$0.00

Timber Sale Appraisal
Seuss Split
Sale AT-341-2021-W00572-01

District: Astoria **Date: December 08, 2020**

Summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	686	$492.77	$338,040.22
Western Hemlock / Fir	104	$287.17	$29,865.68
Alder (Red)	94	$181.86	$17,094.84

Gross Timber Sale Value

Recovery: $385,000.74

Prepared By: Ryan Simpson **Phone:** 503-338-1391

Site Prep Appraisal

Sale Number: AT-341-2021-W00572-01
Sale Name: Seuss Split
Date: 11/16/2020

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

Sale Area	Harvest Type	Veg Type/Zone	Ground Based Yarding Acres	Estimated Piling Hours/Area	Cost/Hour	Total Cost/Area	
2	MC	B	1	1	$145.00	$188.50	
				FALSE	$145.00	$0.00	
				FALSE	$145.00	$0.00	
				FALSE	$145.00	$0.00	
					In-unit Piling	**Sub Total =**	$188.50

Sale Area	Number of Landings to be Piled	# cable acres per area	Total Cost/Area	Number of In-Unit Piles	Material Cost/Pile	Total Cost/Area	
2	3	6	$232.00	7.5	$5.00	$37.50	
			FALSE	0	$5.00	$0.00	
			FALSE	0	$5.00	$0.00	
			FALSE	0	$5.00	$0.00	
*Cost includes separating firewood					Materials	**Sub Total =**	$37.50
					Landing Piling	**Sub Total =**	$232.00

Additonal Move-in allowance

Move-In Allowance	Number of Move-In's	Total Move-In Allowance		
$1,290.00	1	$1,290.00		
			Move-In	**Sub Total =**	$1,290.00

Slash Endhaul Dump Truck hrs	Cost/Hour	Total	Loader hrs	Cost/Hour	Total		
	$89.00	$0.00		$145.00	$0.00		
						Sub Total =	$0.00
						Grand Total =	**$1,748.00**

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale: **Seuss Split** **MBF:** 884.00
Date: November 13, 2020 **$$/MBF:** $10.80
By: Ryan Simpson

Type	Equipment/Rationale	Move-in Rate	Times	Hours	Rate	Cost	
Interim	Grader 14G	$875	1	4	$113	$1,327	
	Vibratory Roller	$875	1	4	$87	$1,223	
	Dump Truck 12CY	$184	1	4	$89	$540	
	Rubber-Tire Backhoe	$361	1	4	$87	$709	
	Grader 14G	$875	1	8	$113	$1,779	
	Dump Truck 12CY	$184	1	6	$89	$718	
Final Road	Rubber-Tire Backhoe	$361	1	6	$87	$883	
Maintenance	Vibratory Roller	$875	1	8	$87	$1,571	
	Water Truck 2,500 gallon	$214	1	4	$101	$618	
	Labor			4	$45	$180	
Total							**$9,548**

Interim Operations Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	2.5	1.4	0.6	4

Final Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	1.5	1.4	0.9	7
Vibratory Roller	1.5	1.4	0.9	7

Process and compact: All crushed rock roads

Seuss Alley Road 1 Miles
Unnamed Spur 0.07 Miles
Spur 15 0.32
Grade & Process Total = 1.39 Miles

SUMMARY OF ALL PROJECT COSTS

SALE NAME: Seuss Split

Project No. 1: ROAD CONSTRUCTION:

Road segment	*Length (Sta)*	*Length (Mile)*	*Cost*	
1A, 1B, 2A to 2B	1.45	0.03	$5,631.04	
Road Maint.			$678.00	
Move-In			$5,725.50	
TOTALS	1.45	0.03		$12,035

Project No. 2: ROAD IMPROVEMENT:

Road segment	*Length (Sta)*	*Length (Mile)*	*Cost*
Road Maint.			
Move-In			
TOTALS			

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

Description	*Length/Vol.*	*Cost*
TOTAL		

GRAND TOTAL **$12,035**

Compiled By: Ryan Simpson FL Date: 11/25/2020

Move In and Maintenance Calculator for Construction and Improvement

SALE NAME: Seuss Split

Project No. 1: ROAD CONSTRUCTION:

Road segment	Length/Sta	Length/Mile	Cost	
1A, 1B, 2A to 2B	1.45	0.03	$5,631	
TOTALS	1.45	0.03		$5,631

Project No. 2: ROAD IMPROVEMENT:

Road segment	Length/Sta	Length/Mile	Cost
TOTALS			

MOVE IN (Construction & Improvement Only)

Equipment	Length/Mile	Cost	
D6		$875.00	
Dump Truck (12cy) x2		$368.00	
14G Grader		$875.00	
Vibratory Roller		$875.00	
Rubber-Tire Backhoe		$361.00	
C330 Excavator x1.5		$2,371.50	
TOTAL			$5,725.50

ROAD MAINTENANCE (Construction & Improvement Only)

	Length/Mile	Cost	
Final Project Road Maintenance		$678.00	
TOTAL			$678.00

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Seuss Split
ROAD: 2A to 2B (1.45 sta.)
POINTS: 1A & 1B

NEW CONSTRUCTION: 1.45 **STATIONS** 0.03 **MILES**
IMPROVEMENT: **STATIONS** 0.00 **MILES**

CLEARING & GRUBBING

	Method	~~Acres~~/amount	x	Rate	=	Cost
1A, 1B & 2A to 2B	Scatter outside of right-of-way w/ D6 ($/hr)	8.00	x	$128.00	=	$1,024.00

SUB TOTAL FOR CLEARING & GRUBBING $1,024

EXCAVATION

	Material	Cy/amount	x	Rate	=	Cost
2A to 2B	Balanced construction ($/Sta.)	1.45	x	$138.00	=	$200.10
	Landing construction ($/ldg)	1.00	x	$438.00	=	$438.00
			x	$0.79	=	$0.00
			x	$49.00	=	$0.00
1A	Landing construction ($/ldg)	1.00	x	$438.00	=	$438.00
1B	Landing construction ($/ldg)	1.00	x	$438.00	=	$438.00
			x		=	$0.00
			x		=	$0.00

SUB TOTAL FOR EXCAVATION $1,514

CULVERT MATERIALS AND INSTALLATION

Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost
				$0.00					$0.00
				$0.00					$0.00
				$0.00					$0.00
				$0.00					$0.00
				$0.00					$0.00
				$0.00					$0.00
				$0.00					$0.00
				$0.00					$0.00
				$0.00					$0.00
				$0.00					$0.00

	Description	Quantity	Rate	Cost
Other/miscellaneous:				
Culvert stakes & markers:				$0.00

SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION $0

Subtotal of Clearing, Exc., Culv. ***$2,538***

SURFACING

Subgrade prep:

Description	Stations/ amount	x	Rate/ sta/amt	Cost
Grade, Shape and Crown 16'	1.45	x	$20.63	$29.91
Subgrade Compaction	1.45	x	$22.69	$32.91

ROAD SEGMENT	2A to 2B			POINT TO POINT		Sta. to Sta.					
Application	Rock Size and Type	Location	Depth of Rock (inches)	2A to 2B Volume (CY) per		0+00 to 1+45 Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0"Pit-run	0+00 to 1+45	10	station	63	stations	1.45	91	$4.74	$433	
Turnarounds	6"-0"Pit-run	0+50	10	TA	33	TA's	1	33	$4.74	$156	
Junctions	1 1/2"-0" Crushed	0+00	n/a	junction	22	junctions	1	22	$3.89	$86	
Landings	6"-0"Pit-run	1+45	n/a	landing	77	landings	1	77	$4.74	$365	
Total Rock for Road Segment:			2A to 2B					223			$1,040

ROAD SEGMENT	1A			POINT TO POINT		Sta. to Sta.					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Junctions	1 1/2"-0" Crushed	n/a	n/a	junction	22	junctions	1	22	$3.89	$86	
Landings	6"-0"Pit-run	n/a	n/a	landing	77	landings	1	77	$4.74	$365	
Total Rock for Road Segment:			0					99			$451

ROAD SEGMENT	1B			POINT TO POINT		Sta. to Sta.					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Junctions	1 1/2"-0" Crushed	n/a	n/a	junction	22	junctions	1	22	$3.89	$86	
Landings	6"-0"Pit-run	n/a	n/a	landing	77	landings	1	77	$4.74	$365	
Total Rock for Road Segment:			0					99			$451

Processing:

Description	No.sta	Rate/sta	Cost
Compact Base Rock (6"-0"):	$1.45	$35.45	$51.40

		6"-0"pr		1 1/2"-0" crushed		Total		
SUB TOTAL FOR SURFACING		355		66		421	421	**$2,055**

SPECIAL PROJECTS

Description		Cost
Develop Pit-run	$ 2.92 /cy	$1,037.62

SUB TOTAL FOR SPECIAL PROJECTS $1,038

Subtotal of Surfacing & Spec. Proj. *$3,093*

Subtotal of Clearing, Exc.,Culv. *$2,538*

GRAND TOTAL **$5,631**

Compiled By: Ryan Simpson Date: 11/25/2020

Projects Road Maintenance Cost Summary

Sale: Seuss Split
Date: 13-Nov-20
By: Ryan Simpson FL

Type	Equipment/Rationale			Hours	Rate	Cost	
Project Work	Grader 14G			6	$113	$678	
Final Haul						$0	
Road						$0	
Maintenance						$0	
						$0	
Total							$678

Production Rates
Grader

Miles/day	Distance(miles)	Days
5.0	2.00	0.4

NOTE: Maintain road surface used for roack haul from Cole Mtn. Quarry to Seuss Alley Stockpile

		Miles
		Miles
		Miles
TOTAL=	2.00	Miles

PIT RUN ROCK COST

SALE NAME: Seuss Split
PROJECT: New Road Const.
QUARRY: Cole Mtn. Quarry
MATERIAL: 6"-0" Pit Run
DATE: 11/25/2020
BY: Ryan Simpson

Road Segment	Stations	Cubic Yards	ONE WAY HAUL IN MILES							Total Haul
			50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH	
2A to 2B	1.45	201			0.30	0.60	0.50	0.16	0.10	1.66
1A		77			0.30	0.50	0.37	0.16	0.10	1.43
1B		77			0.30	0.60	0.50	0.17	0.10	1.67
TOTAL	1.45	355								AVERAGE HAUL
	STA./NO.	CU. YD.								
CUBIC YARD WEIGHTED HAUL					**0.3**	**0.6**	**0.5**	**0.2**	**0.1**	**1.61**

Average Round Trip Distance (miles) 3.22

ROCK HAUL:

Truck type	Delay min.	No. trucks	Efficiency
D20	8		85%
D12	6	2	85%
D10	5		85%

Ave haul: $2.34 /cy
Load: $0.84 /cy
Spread: $1.56 /cy

Production: cy/day = 540

PIT RUN ROCK HAUL COSTS 355 cy @ **$4.74 /cy**

CRUSHED ROCK COST

SALE NAME: Seuss Split
PROJECT: New Road Const.
Stockpile: Soapstone Stockpile

MATERIAL: 1 1/2"-0" Crushed

DATE: 11/25/2020
BY: Ryan Simpson

Road Segment	Stations	Cubic Yards	50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH	Total Haul
			ONE WAY HAUL IN MILES							
2A to 2B	1.45	22			0.30	0.30	0.11	0.10	0.10	0.91
1A		22			0.30	0.30	0.20	0.13	0.13	1.06
1B		22			0.30	0.30	0.30	0.25	0.13	1.28
TOTAL	1.45	66								AVERAGE HAUL
	STA./NO.	CU. YD.								
CUBIC YARD WEIGHTED HAUL					**0.30**	**0.30**	**0.20**	**0.16**	**0.12**	**1.08**

Average Round Trip Distance (miles) 2.17

ROCK HAUL:

Truck type:	D20	No. trucks:	
Delay min.:	8	Efficiency:	85%
Truck type:	D12	No. trucks:	2
Delay min.:	6	Efficiency:	85%
Truck type:	D10	No. trucks:	
Delay min.:	5	Efficiency:	85%

Ave haul:	$1.91	/cy
Load:	$0.72	/cy
Spread:	$1.26	/cy

Production: cy/day = 663

CRUSHED ROCK HAUL COSTS 66 cy @ **$3.89 /cy**

Seuss Split
TIMBER CRUISE REPORT
FY 2021

1. **Sale Area Location:** Portions of Sections 15 of T4N, R9W, W.M., Clatsop County, OR.

2. **Fund Distribution:** BOF 100% Tax Code: 8-01 (100%)

3. **Sale Acreage by Area:**

Unit	Harvest Type	Gross Acres	Stream Buffer Acres	Existing R/W Acres	New R/W Stocked	Net Acres	Survey Method
1	Partial Cut	24	2	0	0	22	GIS
2	Modified Clearcut	9	2	<1	<1	7	GIS
3	R/W	<1	--	--	--	<1	GIS
TOTALS		**33**	**4**	**<1**	**<1**	**29**	

4. Cruisers and Cruise Dates: Avery Petersen, Justin Bush, John Czarnecki, and Ryan Simpson (10/28/2020 – 10/29/2020)

5. Cruise Method and Computation:

Unit 1: Unit 1 was variable plot cruised with a 33.61 BAF. A total of 49 plots were sampled on a 1.5 by 3 chain spacing with a grade to count ratio of 1:2, resulting in 33 count plots and 15 grade plots. One grade plot was dropped. Due to no take trees present in some of the plots, the number of count and grade plots on the take tree statistics page (PC1_TK) do not equal those of the whole stand. However, the total number of plots on the take tree statistics page do equal that of the whole stand.

Unit 2: Unit 2 was variable plot cruised with a 54.45 BAF. A total of 25 plots were sampled on a 1 by 2.5 chain spacing with a grade to count ratio of 1:1, resulting in 12 count plots and 13 grade plots. One count plot and one grade plot were dropped.

Unit 3 (R/W): Right-of-way in Unit 2 totals less than one acre, of which less than half of an acre is stocked.

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	SSPLIT	PC1	00PC	22
2	SSPLIT	MC1	00MC	7

6. Timber Description:

Unit 1 is a partial cut with an average age of 59 years. The stand consist of Douglas-fir, western hemlock, and red alder, and minor components of Sitka spruce and western redcedar. Average take Douglas-fir is 15 inches DBH and 60 feet to a merchantable top. Average take western hemlock is 13 inches DBH and 40 feet to a merchantable top. Average take red alder is 15 inches DBH and 50 feet to a merchantable top. Average net volume to be harvested per acre is 15 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point. The target basal area is 130 to 150 and the target SDI is 30%.

Unit 2 is a modified clearcut with an average age of 78 years. The stand consist of Douglas-fir and minor components of western hemlock and red alder. Average Douglas-fir is approximately 21 inches DBH and 96 feet to a merchantable top. Average western hemlock is approximately 14 inches DBH and 32 feet to a merchantable top. Average red alder is approximately 16 inches DBH and 62 feet to a merchantable top.

Average net volume to be harvested per acre is 86 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point.

Unit 3 (R/W) contains negligible volume similar to Units 1 and 2.

7. Statistical Analysis and Stand Summary:

Statistics for Stand B.F. volumes

Unit	Estimated CV	Target SE%	Actual CV	Actual SE%
1	60%	12%	34.9%	5.0%
2	50%	10%	30.9%	6.3%

8. Volumes by Species and Log Grade:

Volumes by Species and Grade for Units 1 & 2: (MBF) Volumes do not include "in-growth."

Conifer

Species	DBH	Net Vol.	2 Saw	3 Saw	4 Saw	% D & B	% Sale
Douglas-fir	19	686	472	195	19	0.4%	78%
Western hemlock	13	104	13	65	26	0.5%	12%
TOTALS	--	**790**	**485**	**260**	**45**	--	--

Hardwood

Species	DBH	Net Vol.	12"+	10"-11"	8"-9"	6"-7"	% D & B	% Sale
Red alder	15	94	18	28	20	28	0.9%	10%
TOTALS	--	**94**	**18**	**28**	**20**	**28**	--	--

TOTAL VOLUME	884 MBF

9. Approvals:

Prepared by: Ryan Simpson **Date:** 11/04/2020
Unit Forester Approval: [signature] **Date:** 12/15/2020

10. Attachments: Cruise Design and Map (6 pages)
Volume Reports (3 pages)
Statistics Reports (7 pages)
Stand Table Summary (2 pages)
Log Stock Table (2 pages)
Stand Table Summary (Project) (2 pages)

Revised August, 2002

CRUISE DESIGN
ASTORIA DISTRICT

Sale Name: Seuss Split **Unit** 1

Harvest Type: Partial Cut

Approx. Cruise Acres: 22 **Estimated CV%** 60 Net BF/Acre **SE% Objective** 12 Net BF/Acre

Planned Sale Volume : 315 MBF **Estimated Sale Area Value/Acre:** $5400/Acre

A. Cruise Goals: (a) Grade minimum 100 conifer trees
(b) Sample 49 cruise plots (16 grade/ 33 count); (c) Other goals (____ Determine "automark" thinning standards; X Determine log grades for sale value; X Determine snag and leave tree species and sizes.

B. Cruise Design:

1. Plot Cruises: BAF **33.61** (Full point)
Cruise Line Directions Unit 1: 90°/270°,
Cruise Line Spacing 3 (chains) 198 (Feet)
Cruise Plot Spacing 1.5 (chains) 99 (Feet)
Grade/Count Ratio 1:2

Take plots as marked on cruise map. All cedar will be reserved. Record all snags as SN.

DO NOT RECORD 12', 22' and 32' (for Hardwoods).

DO NOT RECORD 22' LENGTHS.

DO NOT RECORD SNAGS UNDER 12" DBH; DO NOT RECORD SNAGS ON COUNT PLOTS.

All hardwood will be measured to a G, or as appropriate.

Mark trees with dbh > 40" as "leave". Mark all alder with dbh > 10" as "take".

Mark at least 3 "leave" trees per plot.

Mark all cedar as "leave".

Mark all spruce as "leave".

The target basal area for this PC is 130-150.

C. Tree Measurements:

1. Diameter: Minimum DBH to cruise is 8" for conifers and 8" for hardwoods.
Record dbh to nearest ½" 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 redcedar); NF (noble fir); SF (silver fir); A (red alder); M (bigleaf maple); SN (Snag). For "leave trees", add an "L" to the species code (such as DL, HL, CL, etc.)

B. Sort: Use code "1" (Domestic).

C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull
Hardwoods: Alder Grades: 12" + = 1 Sawmill; 10"-12" = 2 Sawmill; 10"-8" = 3 Sawmill; and 8"-6" 4 Sawmill, 0 = Cull.

Grade oversized 3-SAW (DIB ≥ 12", knots > 2½" 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 Douglas-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, Clinometer, Logger's Tape (with dbh on back), Compass, Allegro II Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint.

10. **Attachments:** A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

Cruise Design by: Ryan Simpson
Approved by: [signature]
Date: 12/11/2020

Revised August, 2002

CRUISE DESIGN
ASTORIA DISTRICT

Sale Name: Seuss Split **Unit** 2

Harvest Type: Modified Clearcut

Approx. Cruise Acres: 7 **Estimated CV%** 50 Net BF/Acre **SE% Objective** 10 Net BF/Acre

Planned Sale Volume : 245 MBF **Estimated Sale Area Value/Acre:** $12,600/Acre

A. Cruise Goals: (a) Grade minimum 100 conifer trees
(b) Sample 27 cruise plots (13 grade/ 14 count); (c) Other goals (____ Determine "automark" thinning standards; X Determine log grades for sale value; X Determine snag and leave tree species and sizes.

B. Cruise Design:

1. **Plot Cruises:** BAF **54.45** (Full point)
   Cruise Line Directions Unit 1: 172°/352°,
   Cruise Line Spacing 2.5 (chains) 165 (Feet)
   Cruise Plot Spacing 1 (chains) 66 (Feet)
   Grade/Count Ratio 1:2

Take plots as marked on cruise map. All cedar will be reserved. Record all snags as SN.

DO NOT RECORD 12', 22' and 32' (for Hardwoods).

DO NOT RECORD 22' LENGTHS.

DO NOT RECORD SNAGS UNDER 12" DBH; DO NOT RECORD SNAGS ON COUNT PLOTS.

All hardwood will be measured to a G, or as appropriate.

C. Tree Measurements:

1. **Diameter:** Minimum DBH to cruise is 8" for conifers and 8" for hardwoods.
   Record dbh to nearest ½" 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 redcedar); NF (noble fir); SF (silver fir); A (red alder); M (bigleaf maple); SN (Snag). For "leave trees", add an "L" to the species code (such as DL, HL, CL, etc.)

B. Sort: Use code "1" (Domestic).

C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull
Hardwoods: Alder Grades: 12" + = 1 Sawmill; 10"-12" = 2 Sawmill; 10"-8" = 3 Sawmill; and 8"-6" 4 Sawmill, 0 = Cull.

Grade oversized 3-SAW (DIB ≥ 12", knots > 2½" 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 Douglas-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, Clinometer, Logger's Tape (with dbh on back), Compass, Allegro II Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint.

10. **Attachments:** A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

Cruise Design by: Ryan Simpson
Approved by: [signature]
Date: 12/11/2020

CRUISE MAP

OF TIMBER SALE CONTRACT
NO. AT-341-2021-W00572-01
SEUSS SPLIT
PORTION OF SECTION 15 OF T4N, R7W, W.M.,
CLATSOP COUNTY, OREGON

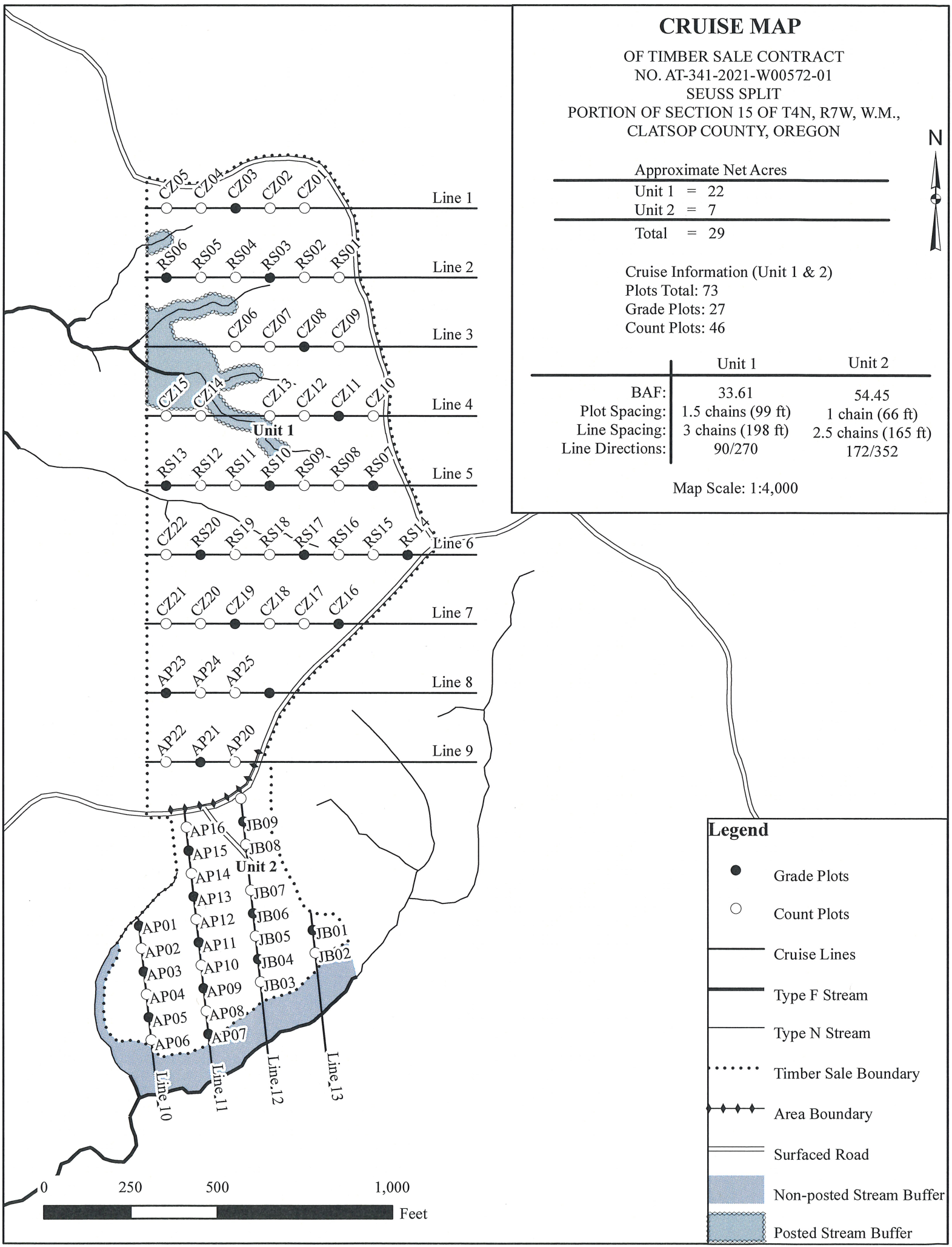
N

Approximate Net Acres	
Unit 1	= 22
Unit 2	= 7
Total	= 29

Cruise Information (Unit 1 & 2)
Plots Total: 73
Grade Plots: 27
Count Plots: 46

	Unit 1	Unit 2
BAF:	33.61	54.45
Plot Spacing:	1.5 chains (99 ft)	1 chain (66 ft)
Line Spacing:	3 chains (198 ft)	2.5 chains (165 ft)
Line Directions:	90/270	172/352

Map Scale: 1:4,000



TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T04N R07W S15 Ty00MC 7.00
T04N R07W S15 Ty00PC 22.00

Project: SSPLIT
Acres 29.00

Page 1
Date 12/11/2020
Time 9:06:01AM

Spp	S T	So Gr rt ad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent of Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log Ln Ft	Dia In	Bd Ft	CF/ Lf	Logs Per /Acre
D		DO2S	68	.4	16,345	16,272	472		1	36	63	0	0	2	97	39	16	424	2.26	38.4
D		DO3S	29	.5	6,769	6,736	195		100			3	8	15	74	35	8	97	0.76	69.7
D		DO4S	3		666	666	19	7	93			41	57		2	22	6	25	0.41	26.4
D	**Totals**		78	.4	23,779	23,674	686 ~~687~~	0	32	24	43	2	4	6	88	34	10	176	1.21	134.5
H		DO2S	12	4.0	467	448	13		28	72			72		28	34	11	136	1.49	3.3
H		DO3S	63		2,238	2,238	65		100				17		83	37	8	91	0.74	24.7
H		DO4S	25		882	882	26	1	99			82	17	1		18	6	20	0.41	44.9
H	**Totals**		12	.5	3,587	3,568	104 ~~103~~	0	91	9		20	24	0	56	25	7	49	0.64	72.9
A		DO1S	18	1.3	615	607	18			100			40		60	32	13	194	1.59	3.1
A		DO2S	30	1.1	967	956	28		91	9			39	35	26	32	11	131	1.10	7.3
A		DO3S	22	1.5	712	702	20		100				56	23	20	31	9	87	0.90	8.0
A		DO4S	30		965	965	28	1	99			17	25	16	42	27	6	38	0.54	25.2
A	**Totals**		~~10~~ ~~11~~	.9	3,259	3,230	94	0	78	22		5	39	20	36	29	8	74	0.80	43.7
Totals				0.5	30,625	30,472	884	0	44	22	34	5	10	7	79	30	9	121	1.01	251.0

T TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: SSPLIT

Page 1
Date 12/8/2020
Time 12:30:30PM

T04N R07W S15 T00MC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt
04N	07W	15	MC1	00MC	7.00	25	79	1	W

T04N R07W S15 T00MC

Spp	ST	Sort	Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log: Ln Ft	Dia In	Bd Ft	CF/ Lf	Logs Per /Acre
D		DO	2S	76	.4	65,090	64,835	454		1	33	66	0	0	2	97	39	16	445	2.33	145.8
D		DO	3S	22	.7	19,286	19,150	134		100			4	7	17	72	35	8	94	0.74	203.1
D		DO	4S	2		1,086	1,086	8	5	95			47	48		5	22	6	25	0.40	44.1
D	**Totals**			99	.5	85,462	85,072	596	0	25	25	50	2	2	5	90	35	11	216	1.38	392.9
A		DO	2S	36		368	368	3			100					100	40	12	200	1.30	1.8
A		DO	3S	55		564	564	4		100				34		66	34	9	91	0.89	6.2
A		DO	4S	9		87	87	1		100			100				15	7	20	0.46	4.4
A	**Totals**			1		1,019	1,019	7		64	36		9	19		73	28	8	82	0.89	12.4
H		DO	4S	100		41	41	0	100						100		32	4	20	0.50	2.0
H	**Totals**			0		41	41	0	100						100		32	4	20	0.50	2.0
Type Totals					.5	86,522	86,132	603	0	25	25	49	2	3	5	90	35	11	211	1.36	407.4

T TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: SSPLIT

Page 1
Date 12/8/2020
Time 12:30:30PM

T04N R07W S15 T00PC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt
04N	07W	15	PC1_TK	00PC	22.00	41	44	1	W

T04N R07W S15 T00PC

Spp	ST	Sort	Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log: Ln Ft	Dia In	Bd Ft	CF/ Lf	Logs Per /Acre
H		DO	2S	12	4.0	720	691	15		28	72			72		28	34	11	136	1.49	5.1
H		DO	3S	63		3,455	3,455	76		100				17		83	37	8	91	0.74	38.1
H		DO	4S	25		1,345	1,345	30		100			83	17			18	6	20	0.41	68.6
H	**Totals**			37	.5	5,520	5,491	121		91	9		20	24		56	25	7	49	0.64	111.8
A		DO	1S	20	1.3	949	937	21			100			40		60	32	13	194	1.59	4.8
A		DO	2S	29	1.2	1,355	1,338	29		100				43	39	19	31	11	127	1.08	10.6
A		DO	3S	19	1.8	890	873	19		100				62	29	9	31	9	87	0.90	10.1
A		DO	4S	32		1,456	1,456	32	1	99			15	26	16	43	27	6	39	0.54	37.3
A	**Totals**			31	1.0	4,650	4,605	101	0	79	20		5	40	22	33	29	8	73	0.79	62.7
D		DO	2S	19	1.8	977	960	21			100					100	40	12	196	1.43	4.9
D		DO	3S	68		3,261	3,261	72		100				11	11	78	37	9	102	0.82	32.0
D		DO	4S	13		623	623	14	8	92			37	63			22	6	26	0.42	24.3
D	**Totals**			32	.4	4,862	4,844	107	1	79	20		5	15	7	73	31	8	79	0.77	61.2
Type Totals					.6	15,032	14,940	329	0	84	16		10	26	9	54	28	7	63	0.72	235.7

TC PSTATS

PROJECT STATISTICS

PROJECT SSPLIT

DATE 12/11/2020

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07	15	MC1	00MC	29.00	73	357	1	W
04N	07W	15	PC1_TK	00PC					

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	73	357	4.9		
CRUISE	23	123	5.3	3,838	3.2
DBH COUNT					
REFOREST					
COUNT	43	228	5.3		
BLANKS	7				
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	85	56.9	19.0	82	25.7	112.2	23,779	23,674	5,509	5,509
WHEMLOCK	12	48.4	12.5	40	11.7	41.4	3,587	3,568	1,181	1,181
R ALDER	23	26.2	15.1	51	8.3	32.4	3,259	3,230	1,008	1,008
SNAG	3	.8	25.1	54	0.5	2.6				
TOTAL	*123*	*132.3*	*16.2*	*60*	*46.9*	*188.7*	*30,625*	*30,472*	*7,697*	*7,697*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

CL 68.1 SD: 1.0

SAMPLE TREES - BF

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
DOUG FIR	96.8	10.5	788	881	973			
WHEMLOCK	79.2	23.9	75	98	122			
R ALDER	53.0	11.3	126	142	158			
SNAG								
TOTAL	*122.9*	*11.1*	*573*	*645*	*716*	*603*	*151*	*67*

CL 68.1 SD: 1.0

TREES/ACRE

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DOUG FIR	115.7	13.5	49	57	65			
WHEMLOCK	208.8	24.4	37	48	60			
R ALDER	209.4	24.5	20	26	33			
SNAG	472.4	55.2	0	1	1			
TOTAL	*74.7*	*8.7*	*121*	*132*	*144*	*223*	*56*	*25*

CL 68.1 SD: 1.0

BASAL AREA/ACRE

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DOUG FIR	113.9	13.3	97	112	127			
WHEMLOCK	206.0	24.1	31	41	51			
R ALDER	202.6	23.7	25	32	40			
SNAG	444.0	51.9	1	3	4			
TOTAL	*60.7*	*7.1*	*175*	*189*	*202*	*147*	*37*	*16*

CL 68.1 SD: 1.0

NET BF/ACRE

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DOUG FIR	125.1	14.6	20,209	23,674	27,138			
WHEMLOCK	207.9	24.3	2,700	3,568	4,436			
R ALDER	206.4	24.1	2,451	3,230	4,010			
SNAG								
TOTAL	*86.0*	*10.1*	*27,409*	*30,472*	*33,534*	*295*	*74*	*33*

TC TSTATS

STATISTICS

PROJECT SSPLIT

DATE 12/11/2020

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07W	15	MC1	00MC	7.00	25	174	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	25	174	7.0		
CRUISE	13	79	6.1	1,112	7.1
DBH COUNT					
REFOREST					
COUNT	12	89	7.4		
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	72	147.5	21.1	96	77.8	357.2	85,462	85,072	18,879	18,879
SNAG	3	3.2	25.1	54	2.2	10.9				
R ALDER	3	6.2	16.0	62	2.2	8.7	1,019	1,019	312	312
WHEMLOCK	1	2.0	14.0	32	0.6	2.2	41	41	33	33
TOTAL	*79*	*158.9*	*20.9*	*93*	*82.9*	*379.0*	*86,522*	*86,132*	*19,223*	*19,223*

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	86.2	10.1	905	1,007	1,109			
SNAG								
R ALDER	48.1	33.3	118	177	236			
WHEMLOCK								
TOTAL	*94.1*	*10.6*	*827*	*924*	*1,022*	*353*	*88*	*39*

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	42.7	8.7	135	147	160			
SNAG	267.7	54.6	1	3	5			
R ALDER	239.1	48.8	3	6	9			
WHEMLOCK	500.0	102.0		2	4			
TOTAL	*34.0*	*6.9*	*148*	*159*	*170*	*48*	*12*	*5*

CL: 68.1 %	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	33.0	6.7	333	357	381			
SNAG	250.0	51.0	5	11	16			
R ALDER	233.9	47.7	5	9	13			
WHEMLOCK	500.0	102.0		2	4			
TOTAL	*26.1*	*5.3*	*359*	*379*	*399*	*28*	*7*	*3*

CL: 68.1 %	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	32.5	6.6	79,426	85,072	90,717			
SNAG								
R ALDER	242.8	49.5	515	1,019	1,524			
WHEMLOCK	500.0	102.0		41	82			
TOTAL	*30.9*	*6.3*	*80,709*	*86,132*	*91,555*	*40*	*10*	*4*

TC TSTATS

STATISTICS

PAGE 1
PROJECT SSPLIT DATE 12/11/2020

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07W	15	PC1 TK	00PC	22.00	48	183	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	48	183	3.8		
CRUISE	10	44	4.4	2,725	1.6
DBH COUNT					
REFOREST					
COUNT	31	139	4.5		
BLANKS	7				
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
WHEMLOCK	11	63.2	12.5	40	15.2	53.9	4,715	4,690	1,546	1,546
R ALDER	20	32.5	15.0	50	10.3	39.9	3,972	3,933	1,230	1,230
DOUG FIR	13	28.1	15.0	60	8.9	34.3	4,153	4,138	1,255	1,255
TOTAL	*44*	*123.9*	*13.8*	*47*	*34.5*	*128.1*	*12,840*	*12,762*	*4,030*	*4,030*

CONFIDENCE LIMITS OF THE SAMPLE
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

SAMPLE TREES - BF

CL: 68.1 % SD: 1.0	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
WHEMLOCK	73.5	23.2	81	105	130			
R ALDER	54.6	12.5	120	137	154			
DOUG FIR	57.0	16.4	153	183	213			
TOTAL	*61.8*	*9.3*	*129*	*143*	*156*	*152*	*38*	*17*

TREES/ACRE

CL: 68.1 % SD: 1.0	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	161.4	23.3	48	63	78			
R ALDER	171.9	24.8	24	33	41			
DOUG FIR	191.3	27.6	20	28	36			
TOTAL	*82.5*	*11.9*	*109*	*124*	*139*	*272*	*68*	*30*

BASAL AREA/ACRE

CL: 68.1 % SD: 1.0	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	159.4	23.0	42	54	66			
R ALDER	167.2	24.1	30	40	50			
DOUG FIR	192.2	27.7	25	34	44			
TOTAL	*76.1*	*11.0*	*114*	*128*	*142*	*231*	*58*	*26*

NET BF/ACRE

CL: 68.1 % SD: 1.0	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	159.2	23.0	3,614	4,690	5,767			
R ALDER	172.7	24.9	2,954	3,933	4,913			
DOUG FIR	192.9	27.8	2,987	4,138	5,289			
TOTAL	*78.0*	*11.2*	*11,326*	*12,762*	*14,197*	*243*	*61*	*27*

TC TSTATS

STATISTICS

PROJECT SSPLIT

DATE 12/8/2020

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07W	15	PC1 WHOLE	00PC	22.00	48	404	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	48	404	8.4		
CRUISE	15	124	8.3	3,588	3.5
DBH COUNT					
REFOREST					
COUNT	33	280	8.5		
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
HEMLEAV	39	17.2	27.0	86	13.2	68.6	13,600	13,198	3,215	3,215
WHEMLOCK	11	63.2	12.5	40	15.2	53.9	4,715	4,690	1,546	1,546
SPRUCELV	14	5.3	37.4	76	6.6	40.6	9,420	8,997	1,970	1,929
R ALDER	20	32.5	15.0	50	10.3	39.9	3,972	3,933	1,230	1,230
DOUGLEAV	18	11.8	23.3	84	7.3	35.0	6,652	6,639	1,599	1,599
DOUG FIR	13	28.1	15.0	60	8.9	34.3	4,153	4,138	1,255	1,255
CEDLEAV	3	1.0	32.9	52	1.0	5.6	728	666	187	187
SNAG	5	2.6	17.3	61	1.0	4.2				
ALDRLEAV	1	1.3	10.0	56	0.2	.7	116	116	30	30
TOTAL	*124*	*163.1*	*17.8*	*55*	*67.0*	*282.9*	*43,355*	*42,377*	*11,031*	*10,990*

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
HEMLEAV	92.2	14.8	1,018	1,194	1,370			
WHEMLOCK	73.5	23.2	81	105	130			
SPRUCELV	77.9	21.6	2,702	3,445	4,188			
R ALDER	54.6	12.5	120	137	154			
DOUGLEAV	88.0	21.3	825	1,049	1,273			
DOUG FIR	57.0	16.4	153	183	213			
CEDLEAV	103.4	71.5	727	2,553	4,380			
SNAG								
ALDRLEAV								
TOTAL	*151.4*	*13.6*	*890*	*1,030*	*1,170*	*915*	*229*	*102*

CL: 68.1 %	COEFF		TREES/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
HEMLEAV	69.5	10.0	16	17	19			
WHEMLOCK	161.4	23.3	48	63	78			
SPRUCELV	108.9	15.7	4	5	6			
R ALDER	171.9	24.8	24	33	41			
DOUGLEAV	141.1	20.3	9	12	14			
DOUG FIR	191.3	27.6	20	28	36			
CEDLEAV	302.8	43.7	1	1	1			
SNAG	321.5	46.4	1	3	4			
ALDRLEAV	692.8	99.9	0	1	3			
TOTAL	*64.6*	*9.3*	*148*	*163*	*178*	*167*	*42*	*19*

CL: 68.1 %	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
HEMLEAV	69.2	10.0	62	69	75			
WHEMLOCK	159.4	23.0	42	54	66			
SPRUCELV	106.6	15.4	34	41	47			
R ALDER	167.2	24.1	30	40	50			

STATISTICS

PROJECT SSPLIT

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07W	15	PC1 WHOLE	00PC	22.00	48	404	1	W

CL: 68.1% SD: 1.0	COEFF VAR.	S.E.%	BASAL AREA/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DOUGLEAV	138.6	20.0	28	35	42			
DOUG FIR	192.2	27.7	25	34	44			
CEDLEAV	285.8	41.2	3	6	8			
SNAG	314.2	45.3	2	4	6			
ALDRLEAV	692.8	99.9	0	1	1			
TOTAL	*36.0*	*5.2*	*268*	*283*	*298*	*52*	*13*	*6*

CL: 68.1% SD: 1.0	COEFF VAR.%	S.E.%	NET BF/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
HEMLEAV	76.5	11.0	11,743	13,198	14,653			
WHEMLOCK	159.2	23.0	3,614	4,690	5,767			
SPRUCELV	117.3	16.9	7,474	8,997	10,519			
R ALDER	172.7	24.9	2,954	3,933	4,913			
DOUGLEAV	146.8	21.2	5,234	6,639	8,044			
DOUG FIR	192.9	27.8	2,987	4,138	5,289			
CEDLEAV	309.4	44.6	369	666	963			
SNAG								
ALDRLEAV	692.8	99.9	0	116	231			
TOTAL	*34.9*	*5.0*	*40,244*	*42,377*	*44,509*	*49*	*12*	*5*

TC TSTATS

STATISTICS

PROJECT SSPLIT

DATE 12/8/2020

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07W	15	PC1 LV	00PC	22.00	48	221	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	48	221	4.6		
CRUISE	15	80	5.3	863	9.3
DBH COUNT					
REFOREST					
COUNT	33	141	4.3		
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
HEMLEAV	39	17.2	27.0	86	13.2	68.6	13,600	13,198	3,215	3,215
SPRUCELV	14	5.3	37.4	76	6.6	40.6	9,420	8,997	1,970	1,929
DOUGLEAV	18	11.8	23.3	84	7.3	35.0	6,652	6,639	1,599	1,599
CEDLEAV	3	1.0	32.9	52	1.0	5.6	728	666	187	187
SNAG	5	2.6	17.3	61	1.0	4.2				
ALDRLEAV	1	1.3	10.0	56	0.2	.7	116	116	30	30
TOTAL	*80*	*39.2*	*26.9*	*81*	*29.8*	*154.7*	*30,516*	*29,615*	*7,001*	*6,960*

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
HEMLEAV	92.2	14.8	1,018	1,194	1,370			
SPRUCELV	77.9	21.6	2,702	3,445	4,188			
DOUGLEAV	88.0	21.3	825	1,049	1,273			
CEDLEAV	103.4	71.5	727	2,553	4,380			
SNAG								
ALDRLEAV								
TOTAL	*116.0*	*13.0*	*1,321*	*1,518*	*1,715*	*537*	*134*	*60*

CL: 68.1 %	COEFF		TREES/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
HEMLEAV	69.5	10.0	16	17	19			
SPRUCELV	108.9	15.7	4	5	6			
DOUGLEAV	141.1	20.3	9	12	14			
CEDLEAV	302.8	43.7	1	1	1			
SNAG	321.5	46.4	1	3	4			
ALDRLEAV	692.8	99.9	0	1	3			
TOTAL	*61.1*	*8.8*	*36*	*39*	*43*	*149*	*37*	*17*

CL: 68.1 %	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
HEMLEAV	69.2	10.0	62	69	75			
SPRUCELV	106.6	15.4	34	41	47			
DOUGLEAV	138.6	20.0	28	35	42			
CEDLEAV	285.8	41.2	3	6	8			
SNAG	314.2	45.3	2	4	6			
ALDRLEAV	692.8	99.9	0	1	1			
TOTAL	*39.5*	*5.7*	*146*	*155*	*164*	*62*	*16*	*7*

CL: 68.1 %	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
HEMLEAV	76.5	11.0	11,743	13,198	14,653			
SPRUCELV	117.3	16.9	7,474	8,997	10,519			
DOUGLEAV	146.8	21.2	5,234	6,639	8,044			
CEDLEAV	309.4	44.6	369	666	963			
SNAG								
ALDRLEAV	692.8	99.9	0	116	231			

TC TSTATS

STATISTICS

PAGE 1

PROJECT SSPLIT

DATE 12/8/2020

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07W	15	MC1	00MC	7.00	25	174	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	25	174	7.0		
CRUISE	13	79	6.1	1,112	7.1
DBH COUNT					
REFOREST					
COUNT	12	89	7.4		
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	72	147.5	21.1	96	77.8	357.2	85,462	85,072	18,879	18,879
SNAG	3	3.2	25.1	54	2.2	10.9				
R ALDER	3	6.2	16.0	62	2.2	8.7	1,019	1,019	312	312
WHEMLOCK	1	2.0	14.0	32	0.6	2.2	41	41	33	33
TOTAL	*79*	*158.9*	*20.9*	*93*	*82.9*	*379.0*	*86,522*	*86,132*	*19,223*	*19,223*

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	86.2	10.1	905	1,007	1,109			
SNAG								
R ALDER	48.1	33.3	118	177	236			
WHEMLOCK								
TOTAL	*94.1*	*10.6*	*827*	*924*	*1,022*	*353*	*88*	*39*

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	42.7	8.7	135	147	160			
SNAG	267.7	54.6	1	3	5			
R ALDER	239.1	48.8	3	6	9			
WHEMLOCK	500.0	102.0		2	4			
TOTAL	*34.0*	*6.9*	*148*	*159*	*170*	*48*	*12*	*5*

CL: 68.1 %	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	33.0	6.7	333	357	381			
SNAG	250.0	51.0	5	11	16			
R ALDER	233.9	47.7	5	9	13			
WHEMLOCK	500.0	102.0		2	4			
TOTAL	*26.1*	*5.3*	*359*	*379*	*399*	*28*	*7*	*3*

CL: 68.1 %	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR	32.5	6.6	79,426	85,072	90,717			
SNAG								
R ALDER	242.8	49.5	515	1,019	1,524			
WHEMLOCK	500.0	102.0		41	82			
TOTAL	*30.9*	*6.3*	*80,709*	*86,132*	*91,555*	*40*	*10*	*4*

TC TSTNDSUM

Stand Table Summary

Project SSPLIT

T04N R07W S15 T00PC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
04N	07W	15	PC1_LV	00PC	22.00	48	80

T04N R07W S15 T00PC

Date: 12/08/20

Time: 12:55:22PM

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
HL		17	1	86	91	1.116	1.76	2.23	32.0	115.0		71	257		16	6
HL		20	3	84	118	2.419	5.28	7.26	36.7	133.3		266	968		59	21
HL		21	2	84	96	1.463	3.52	3.66	40.0	138.0		146	505		32	11
HL		22	3	83	87	2.000	5.28	4.00	50.3	158.3		201	633		44	14
HL		23	2	82	89	1.220	3.52	2.44	56.0	165.0		137	402		30	9
HL		24	2	84	103	1.120	3.52	2.80	56.0	200.0		157	560		35	12
HL		25	2	82	89	1.032	3.52	2.06	68.0	215.0		140	444		31	10
HL		26	1	83	107	.477	1.76	1.43	55.3	216.7		79	310		17	7
HL		27	2	82	97	.885	3.52	2.21	67.6	250.0		150	553		33	12
HL		28	2	85	108	.823	3.52	2.06	78.8	334.0		162	687		36	15
HL		29	1	81	99	.384	1.76	.77	93.0	315.0		71	242		16	5
HL		30	2	85	119	.717	3.52	1.79	98.8	432.0		177	774		39	17
HL		31	1	80	92	.336	1.76	.67	100.0	320.0		67	215		15	5
HL		33	2	82	115	.592	3.52	1.78	92.8	403.3		165	717		36	16
HL		35	3	83	134	.790	5.28	2.37	120.4	550.0		285	1,304		63	29
HL		36	1	92	152	.249	1.76	.75	151.0	833.3		113	622		25	14
HL		37	2	84	123	.471	3.52	1.18	152.6	694.0		180	818		40	18
HL		39	1	80	106	.212	1.76	.64	122.0	556.7		78	354		17	8
HL		41	1	80	106	.192	1.76	.58	136.7	650.0		79	374		17	8
HL		43	1	83	118	.174	1.76	.52	162.7	673.3		85	352		19	8
HL		44	2	86	151	.333	3.52	1.17	186.6	1008.6		218	1,176		48	26
HL		51	1	83	135	.124	1.76	.37	254.3	1286.7		95	479		21	11
HL		54	1	82	131	.111	1.76	.33	278.3	1360.0		92	451		20	10
HL		Totals	39	83	105	17.241	68.62	43.06	74.6	306.5		3,215	13,198		707	290
SL		20	1	83	50	1.330	2.90	1.33	48.0	70.0		64	93		14	2
SL		27	2	83	84	1.459	5.80	2.92	77.8	255.0		227	744		50	16
SL		28	1	83	74	.678	2.90	1.36	75.0	245.0		102	332		22	7
SL		42	1	77	79	.302	2.90	.60	178.0	620.0		107	374		24	8
SL		44	1	82	160	.275	2.90	1.10	170.8	912.5		188	1,003		41	22
SL		49	1	71	94	.222	2.90	.44	226.5	800.0		100	354		22	8
SL		52	1	86	153	.197	2.90	.59	239.3	1466.7		141	865		31	19
SL		56	1	83	178	.170	2.90	.68	299.2	1710.0		203	1,160		45	26
SL		57	1	82	202	.164	2.90	.65	341.3	2005.0		223	1,313		49	29
SL		58	1	81	130	.158	2.90	.47	326.3	1593.3		155	756		34	17
SL		64	1	81	106	.130	2.90	.39	341.0	1673.3		133	652		29	14
SL		65	1	85	102	.126	2.90	.25	513.5	2350.0		129	592		28	13
SL		67	1	82	130	.118	2.90	.36	440.0	2133.3		156	758		34	17
SL		Totals	14	82	91	5.327	40.61	11.14	173.1	807.3		1,929	8,997		424	198
DL		14	2	84	85	3.639	3.89	7.28	17.0	52.5		124	382		27	8
DL		19	1	83	87	.988	1.95	1.98	34.5	105.0		68	207		15	5
DL		20	1	85	120	.892	1.95	2.67	32.0	116.7		86	312		19	7
DL		21	1	83	109	.809	1.95	2.43	33.3	116.7		81	283		18	6
DL		22	1	83	103	.737	1.95	1.47	53.0	175.0		78	258		17	6
DL		24	2	86	131	1.238	3.89	3.71	52.3	216.7		194	805		43	18
DL		25	1	89	158	.571	1.95	1.71	66.7	303.3		114	519		25	11
DL		26	3	86	136	1.583	5.84	4.22	70.5	307.5		298	1,298		65	29
DL		29	1	83	122	.424	1.95	1.27	69.7	290.0		89	369		19	8
DL		38	1	83	138	.247	1.95	.74	127.0	596.7		94	442		21	10
DL		43	1	80	130	.193	1.95	.58	156.7	726.7		91	420		20	9
DL		44	2	82	136	.368	3.89	1.11	170.3	793.3		188	877		41	19
DL		49	1	85	132	.149	1.95	.45	214.0	1046.7		95	466		21	10

TC TSTNDSUM

Stand Table Summary

Project SSPLIT

T04N R07W S15 T00PC

T04N R07W S15 T00PC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
04N	07W	15	PC1_LV	00PC	22.00	48	80

Date: 12/08/20

Time: 12:55:22PM

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DL		Totals	18	84	111	11.836	35.01	29.62	54.0	224.2		1,599	6,639		352	146
CL		21	1	81	59	.776	1.87	1.55	27.5	60.0		43	93		9	2
CL		55	1	83	93	.113	1.87	.23	293.0	1090.0		66	247		15	5
CL		75	1	76	125	.061	1.87	.18	429.3	1786.7		78	326		17	7
CL		Totals	3	81	67	.950	5.60	1.96	95.5	339.6		187	666		41	15
AL		10	1	87	112	1.284	.70	2.57	11.5	45.0		30	116		6	3
AL		Totals	1	87	112	1.284	.70	2.57	11.5	45.0		30	116		6	3
SN		12	1	88	60	1.070	.84									
SN		15	1	89	83	.685	.84									
SN		19	1	88	75	.427	.84									
SN		26	1	88	16	.228	.84									
SN		30	1	89	16	.171	.84									
SN		Totals	5	88	62	2.580	4.20									
Totals			80	84	101	39.219	154.75	88.35	78.8	335.2		6960	29,615		1,531	652

TC PLOGSTVB

Log Stock Table - MBF

T04N R07W S15 Ty00MC 7.00
T04N R07W S15 Ty00PC 22.00

Project: SSPLIT
Acres 29.00

Page 1
Date 12/11/2020
Time 9:57:45AM

Spp	ST	Sort	Grade	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
D		DO	2S	16	1		1	.2						1						
D		DO	2S	20	1		1	.1							1					
D		DO	2S	24	2		2	.2						2						
D		DO	2S	32	9		9	1.4						4	4	1				
D		DO	2S	36	3		3	.5							2	2				
D		DO	2S	38	2		2	.2							2					
D		DO	2S	40	457		454	66.2					6	92	39	123	99	83	13	
D		DO	3S	16	4		4	.5			2		2							
D		DO	3S	20	1		1	.2			0	0	0							
D		DO	3S	24	1		1	.1				1								
D		DO	3S	26	4		4	.6			1	3								
D		DO	3S	28	2		2	.3				2								
D		DO	3S	30	9		9	1.3			1	7	1							
D		DO	3S	32	28		27	4.0			2	18	7							
D		DO	3S	34	2		2	.3				2	1							
D		DO	3S	36	3		3	.5			1		3							
D		DO	3S	38	15		15	2.2			7	6	2							
D		DO	3S	40	127		127	18.5			18	24	85							
D		DO	4S	12	1		1	.1			1									
D		DO	4S	14	0		0	.1			0									
D		DO	4S	18	0		0	.1			0									
D		DO	4S	20	6		6	.9			6									
D		DO	4S	24	8		8	1.1			7	0								
D		DO	4S	28	2		2	.3			2									
D		DO	4S	30	1		1	.1		1										
D		DO	4S	36	0		0	.1		0										
D		Totals			690		687	77.7		1	49	64	107	98	47	126	99	83	13	
H		DO	2S	30	10	5.6	9	9.0						9						
H		DO	2S	40	4		4	3.6				4								
H		DO	3S	26	8		8	7.6					8							
H		DO	3S	30	3		3	2.9			3									
H		DO	3S	40	54		54	52.1			31		23							
H		DO	4S	12	4		4	4.2			4									
H		DO	4S	18	6		6	5.7			6									
H		DO	4S	20	11		11	10.2			11									
H		DO	4S	24	2		2	1.6			2									

TC PLOGSTVB

Log Stock Table - MBF

T04N R07W S15 Ty00MC 7.00
T04N R07W S15 Ty00PC 22.00

Project: SSPLIT
Acres 29.00

Date 12/11/2020
Time 9:57:45AM

Spp	ST	Sort	Grade	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
H		DO	4S	30	3		3	2.6			3									
H		DO	4S	32	0		0	.3		0										
H		Totals			104		103	11.7		0	59	4	31	9						
A		DO	1S	26	7	3.1	7	7.4						7						
A		DO	1S	40	11		11	11.4						5	5					
A		DO	2S	26	7	4.5	7	7.0					7							
A		DO	2S	30	4		4	4.4					4							
A		DO	2S	32	4		4	4.7					4							
A		DO	2S	34	5		5	5.7					5							
A		DO	2S	40	7		7	7.8					5	3						
A		DO	3S	28	7		7	7.1				7								
A		DO	3S	30	5		5	5.1				1	3							
A		DO	3S	34	5		5	5.1				5								
A		DO	3S	36	2		2	2.0					2							
A		DO	3S	38	1		1	.8			1									
A		DO	3S	40	2	16.7	2	1.6				2								
A		DO	4S	14	0		0	.4			0									
A		DO	4S	16	2		2	2.6		0	2									
A		DO	4S	20	2		2	2.1			2									
A		DO	4S	24	6		6	6.7			6									
A		DO	4S	26	1		1	.9			1									
A		DO	4S	32	4		4	4.7			4									
A		DO	4S	38	4		4	4.3			4									
A		DO	4S	40	8		8	8.2			8									
A		Totals			95		94	10.6		0	28	14	30	15	5					
Total		All Species			888		884	100.0		2	136	82	168	122	52	126	99	83	13	

TC PSTNDSUM

Stand Table Summary

Page 1
Date: 12/11/2020

T04N R07W S15 Ty00MC 7.00
T04N R07W S15 Ty00PC 22.00

Project SSPLIT
Acres 29.00

Time: 9:15:23AM
Grown Year:

Spc	S T	DBH	Sample Trees	FF 16'	Tot Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
D		11	2	87	48	4.848	3.20	4.85	12.9	41.2		62	200		18	6
D		12	2	86	51	4.074	3.20	5.60	12.1	38.2		68	214		20	6
D		13	3	83	93	5.643	5.20	9.11	20.1	62.4		184	568		53	16
D		14	3	84	112	4.113	4.40	9.35	19.4	70.8		182	662		53	19
D		15	4	86	122	3.903	4.79	8.78	24.3	96.7		214	849		62	25
D		16	3	86	113	3.149	4.40	8.01	24.4	88.9		196	713		57	21
D		17	6	84	122	6.090	9.60	16.24	26.7	96.1		434	1,560		126	45
D		18	9	87	131	7.009	12.39	19.22	32.1	122.7		616	2,358		179	68
D		19	6	86	117	4.467	8.79	11.17	34.7	124.0		387	1,384		112	40
D		20	3	86	124	1.647	3.59	4.39	38.8	143.7		170	631		49	18
D		21	2	87	126	.996	2.39	2.99	39.7	163.3		118	488		34	14
D		22	1	89	144	.454	1.20	1.36	50.0	216.7		68	295		20	9
D		23	1	89	136	.415	1.20	1.25	48.3	206.7		60	257		17	7
D		24	3	91	146	1.144	3.59	3.43	61.4	283.3		211	972		61	28
D		25	7	87	144	2.459	8.38	7.38	60.8	258.6		449	1,907		130	55
D		26	2	90	150	.650	2.39	1.95	69.5	321.7		135	627		39	18
D		27	3	88	138	.904	3.59	2.71	70.7	320.0		192	867		56	25
D		28	2	88	147	.560	2.39	1.68	79.2	385.0		133	647		39	19
D		29	2	88	147	.522	2.39	1.57	84.3	411.7		132	645		38	19
D		30	1	91	153	.244	1.20	.73	94.0	480.0		69	351		20	10
D		31	2	87	164	.457	2.39	1.60	89.3	434.3		143	695		41	20
D		32	4	88	154	.858	4.79	2.79	98.5	490.0		275	1,366		80	40
D		33	4	89	163	.806	4.79	2.82	101.8	527.9		287	1,490		83	43
D		34	1	82	163	.190	1.20	.57	115.7	550.0		66	313		19	9
D		35	1	89	167	.179	1.20	.72	105.7	590.0		76	423		22	12
D		36	2	89	163	.339	2.39	1.19	123.3	661.4		146	784		42	23
D		37	2	90	171	.321	2.39	1.28	119.4	681.3		153	874		44	25
D		40	2	85	142	.274	2.39	.82	153.8	778.3		127	641		37	19
D		43	1	86	178	.119	1.20	.47	158.8	872.5		75	414		22	12
D		44	1	89	187	.113	1.20	.45	179.5	1052.5		81	477		24	14
D		Totals	85	86	113	56.946	112.25	134.47	41.0	176.0		5,509	23,674		1,598	687
H		9	1	89	35	8.417	3.72	8.42	7.0	20.0		59	168		17	5
H		10	2	87	28	13.635	7.44	13.63	8.0	25.0		109	341		32	10
H		11	1	82	104	5.634	3.72	11.27	12.5	40.0		141	451		41	13
H		12	2	82	92	9.469	7.44	18.94	14.0	40.0		265	757		77	22
H		14	1	92	36	.492	.53	.49	16.0	20.0		8	10		2	0
H		15	1	85	63	3.030	3.72	6.06	17.5	55.0		106	333		31	10
H		17	1	86	92	2.359	3.72	4.72	32.0	110.0		151	519		44	15
H		18	1	82	93	2.104	3.72	4.21	34.5	115.0		145	484		42	14
H		19	1	86	68	1.888	3.72	3.78	31.5	100.0		119	378		35	11
H		22	1	88	49	1.409	3.72	1.41	55.0	90.0		77	127		22	4
H		Totals	12	85	61	48.436	41.43	72.92	16.2	48.9		1,181	3,568		342	103
A		11	1	86	64	2.294	1.51	2.29	18.0	60.0		41	138		12	4
A		12	1	87	61	1.928	1.51	1.93	22.0	60.0		42	116		12	3
A		13	4	86	70	6.570	6.06	11.50	15.9	52.9		182	608		53	18
A		14	2	87	78	2.072	2.21	4.14	19.4	68.9		80	286		23	8
A		15	1	86	52	1.234	1.51	1.23	30.0	60.0		37	74		11	2
A		16	7	87	64	7.590	10.60	14.10	23.1	73.8		325	1,041		94	30
A		17	2	86	78	1.405	2.21	2.81	28.0	95.8		79	269		23	8
A		18	1	86	65	.397	.70	.79	27.5	90.0		22	71		6	2
A		19	2	86	74	1.538	3.03	3.08	34.3	117.5		105	361		31	10
A		21	1	86	88	.629	1.51	1.26	48.5	170.0		61	214		18	6

TC PSTNDSUM

Stand Table Summary

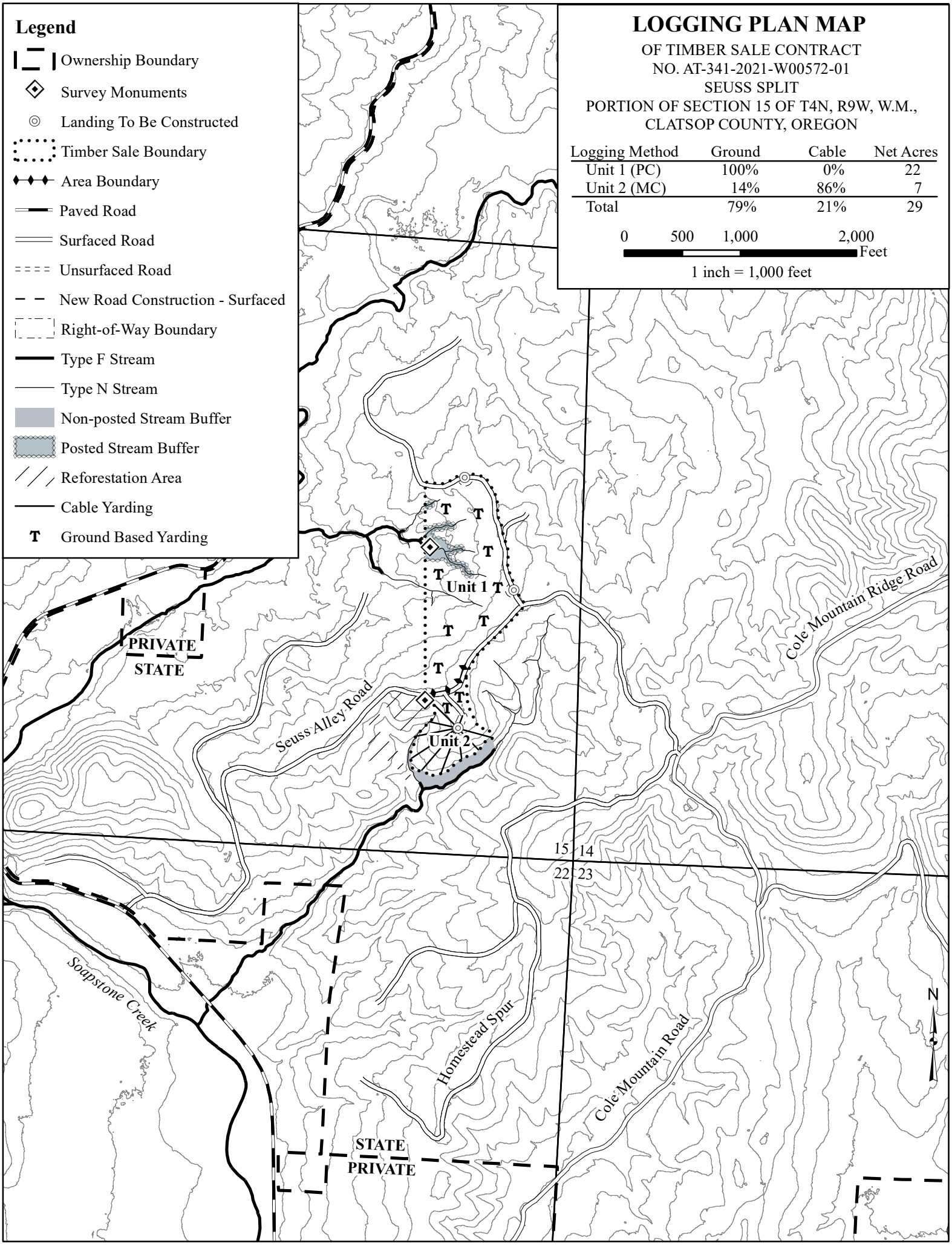
Page 2
Date: 12/11/2020

T04N R07W S15 Ty00MC 7.00
T04N R07W S15 Ty00PC 22.00

Project SSPLIT
Acres 29.00

Time: 9:15:23AM
Grown Year:

Spc	S T	DBH	Sample Trees	FF 16'	Tot Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
A		23	1	87	51	.525	1.51	.52	62.0	100.0		33	52		9	2
A		Totals	23	86	68	26.180	32.38	43.65	23.1	74.0		1,008	3,230		292	94
SN		19	1	88	49	.445	.88									
SN		28	1	89	53	.205	.88									
SN		37	1	89	73	.117	.88									
SN		Totals	3	88	54	.767	2.63									
Totals			123	86	84	132.330	188.68	251.05	30.7	121.4		7,697	30,472		2,232	884


Legend
Ownership Boundary
Survey Monuments
Landing To Be Constructed
Timber Sale Boundary
Area Boundary
Paved Road
Surfaced Road
Unsurfaced Road
New Road Construction - Surfaced
Right-of-Way Boundary
Type F Stream
Type N Stream
Non-posted Stream Buffer
Posted Stream Buffer
Reforestation Area
Cable Yarding
T Ground Based Yarding
LOGGING PLAN MAP
OF TIMBER SALE CONTRACT
NO. AT-341-2021-W00572-01
SEUSS SPLIT
PORTION OF SECTION 15 OF T4N, R9W, W.M.,
CLATSOP COUNTY, OREGON
Logging Method | Ground | Cable | Net Acres
Unit 1 (PC) | 100% | 0% | 22
Unit 2 (MC) | 14% | 86% | 7
Total | 79% | 21% | 29
0 500 1,000 2,000
Feet
1 inch = 1,000 feet
Unit 1
Unit 2
PRIVATE
STATE
STATE
PRIVATE
Seuss Alley Road
Cole Mountain Ridge Road
Cole Mountain Road
Homestead Spur
Soapstone Creek
15
14
22
23
N