"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Long John

Sale WO-341-2022-W00902-01

District: West Oregon

Date: July 25, 2022

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$2,310,049.50	$32,035.12	$2,342,084.62
		Project Work:	($83,442.00)
		Advertised Value:	$2,258,642.62

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Sale WO-341-2022-W00902-01

District: West Oregon **Date: July 25, 2022**

Timber Description

Location: Portions of Sections 3 & 4, T12S, R8W, and portions of Section 34, T11S, R8W, W.M., Lincoln County, Oregon

Stand Stocking: 40%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	16	0	97
Alder (Red)	13	0	95
Maple	12	0	95

Volume by Grade	2S	3S & 4S 6"-11"	Camprun	Total
Douglas - Fir	1,425	2,240	0	3,665
Alder (Red)	0	0	97	97
Maple	0	0	48	48
Total	1,425	2,240	145	3,810

Comments: Pond Values Used: Local Pond Values, May, 2022

Other Conifers Stumpage Price = Pond Value minus Logging Cost:
$215.30/MBF = $535.00/MBF - $319.70/ MBF

Western redcedar and Other Cedars Stumpage Price = Pond Value minus Logging Cost:
$660.30/MBF = $1,130/MBF - ($319.70/MBF + $150/MBF(Extra Haul Cost))

PULP (Conifer and Hardwood Price) = $2.5/TON

Other Costs (with Profit & Risk to be added):
Intermediate Support/Tail Trees: 12 supports @ $100/support = $1,200
Additional Ground Yarding for Unit 3: 13.2 MBF (2 acres @ 6.6 MBF/acre)
$50/MBF x 13.2 MBF = $660
TOTAL Other Costs (with Profit & Risk to be added) = $1,860

Other Costs (No Profit & Risk added):
Equipment Cleaning (Invasive Species): $2,000
Landing Slash piling: 9 Landings @ $100/Landing = $900
Landing Slash Piling and sorting out firewood: 10 Landings @ $180/Landing = $1800
Water Bar and Block Dirt Roads: 72 stations @ $15.96/station = $1,149
TOTAL Other Costs (No Profit & Risk added) = $5,849

ROAD MAINTENANCE
Move-in: (Grader) $875
Final Road Maintenance: $15,160.31
TOTAL Road Maintenance: $16,035.31/3,810 MBF = $4.21/MBF

SLASH DISPOSAL
Project Work: 58 hrs @ $170/hr = $9,860
Weed Wash: $300
Move-in: $1,325
TOTAL Slash Disposal = $11,485

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District: West Oregon **Date: July 25, 2022**

Logging Conditions

Combination#: 1

Douglas - Fir	20.40%
Alder (Red)	6.60%
Maple	10.67%

Logging System: Cable: Large Tower >=70 **Process:** Harvester Head Delimbing

yarding distance: Long (1,500 ft) **downhill yarding:** No

tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 7 **bd. ft / load:** 4200

cost / mbf: $271.44

machines:
Log Loader (A)
Forwarder
Harvester
Tower Yarder (Large)

Combination#: 2

Douglas - Fir	38.15%
Alder (Red)	32.09%
Maple	34.00%

Logging System: Cable: Large Tower >=70 **Process:** Harvester Head Delimbing

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

tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 9 **bd. ft / load:** 4200

cost / mbf: $213.29

machines:
Log Loader (A)
Forwarder
Harvester
Tower Yarder (Large)

Combination#: 3

Douglas - Fir	40.00%
Alder (Red)	61.31%
Maple	55.33%

Logging System: Track Skidder **Process:** Feller Buncher

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

tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 11 **bd. ft / load:** 4200

cost / mbf: $88.51

machines:
Log Loader (B)
Stroke Delimber (B)
Feller Buncher w/ Delimber
Track Skidder

Combination#: 4

Douglas - Fir	1.45%

Logging System: Cable: Large Tower >=70 **Process:** Harvester Head Delimbing

yarding distance: Short (400 ft) **downhill yarding:** No

tree size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF

loads / day: 5 **bd. ft / load:** 3800

cost / mbf: $424.33

machines: Log Loader (A)
Forwarder
Harvester
Tower Yarder (Large)

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Long John
Sale WO-341-2022-W00902-01

District: West Oregon **Date: July 25, 2022**

Logging Costs

Operating Seasons:	3.00	**Profit Risk:**	10%
Project Costs:	$83,442.00	**Other Costs (P/R):**	$1,860.00
Slash Disposal:	$11,485.00	**Other Costs:**	$5,849.00

Miles of Road

Road Maintenance: $4.21

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

Hauling Costs

Species	$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	$0.00	3.0	4.2
Alder (Red)	$0.00	2.0	3.8
Maple	$0.00	2.0	3.8

Timber Sale Appraisal
Long John

Sale WO-341-2022-W00902-01

District: West Oregon

Date: July 25, 2022

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
$178.29	$4.34	$3.46	$98.10	$0.49	$28.47	$3.01	$2.00	$1.54	$319.70
Alder (Red)									
$140.62	$4.42	$3.46	$165.78	$0.49	$31.48	$3.01	$2.00	$1.54	$352.80
Maple									
$150.45	$4.42	$3.46	$165.78	$0.49	$32.46	$3.01	$2.00	$1.54	$363.61

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$950.00	$630.30	$0.00
Alder (Red)	$0.00	$670.00	$317.20	$0.00
Maple	$0.00	$390.00	$26.39	$0.00

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Long John
Sale WO-341-2022-W00902-01

District: West Oregon **Date: July 25, 2022**

Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	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	3,665	$630.30	$2,310,049.50
Alder (Red)	97	$317.20	$30,768.40
Maple	48	$26.39	$1,266.72

Gross Timber Sale Value

Recovery: $2,342,084.62

Prepared By: Zane Sandborg **Phone:** 541-929-3266

SUMMARY OF ALL PROJECT COSTS

Sale Name: Long John

Date: March 2022
Time: 9:33

Project #1 - New Construction

Road Segment	Length	Cost
A to B	1.4 sta	$883
C to D	2.6 sta	$1,214
Fuel Cost Increase		$210
TOTALS	4.0 sta	$2,307

Project #2 - Improvements

Road Segment	Length	Cost
1 to 2	56.6 sta	$8,839
3 to 4	5.1 sta	$218
5 to 6	167.9 sta	$10,165
7 to 8	9.1 sta	$1,296
9 to 10	4.9 sta	$1,954
11 to 12	173.3 sta	$21,654
Fuel Cost Increase		$4,413
TOTALS	416.9 sta	$48,539

Project #3 - Brushing	Length	Cost
Brushing	4.0 mi	$3,602
Sod and Brush Removal	7.9 mi	$6,415
Fuel Cost Increase		$1,002
TOTAL		$11,019

Project #4 - Gate Installation	Quantity	Cost
Gate Install	1	$856
Fuel Cost Increase		$86
TOTAL		$942

Project #5 - Stock Pile Restocking	Quantity	Cost
Stockpile Rock	500 CY	$11,833
Fuel Cost Increase		$1,183
TOTAL		$13,016

Project #6 - Move in	Cost
Excavator, C325 or equiv.	$1,450
(extra move-in cost)	$500
Backhoe, C580 or equiv.	$375
Grader, Cat 14-G or equiv.	$875
(extra move-in cost)	$73
Dozer, D6 or equiv.	$875
(extra move-in cost)	$250
Vibratory roller	$875
Front end loader	$875
Road brusher	$778
Fuel Cost Increase	$693
TOTAL	$7,619

GRAND TOTAL **$83,442**

Compiled by: Zane Sandborg Date 03/29/2022

SUMMARY OF CONSTRUCTION COST

SALE Long John Project # 1 LENGTH const 1.4 sta
ROAD A to B (Unsurfaced)

CLEARING AND GRUBBING

			Rate			
0.15	ac	@	$1,337.00	/ac	=	$201

TOTAL CLEARING AND GRUBBING COST = $201

CONSTRUCTION

			Rate			
Construct road (w/ D6)	1.4 sta	@	$138.00	/sta	=	$193
Construct Landing (w/ D6) (Pt. B)	1 Ldg	@	$438.00	/Ldg	=	$438
Shape subgrade (w/ road grader)	1.4 sta	@	$20.63	/sta	=	$29
Compact subgrade (w/ vibratory roller)	1.4 sta	@	$16.00	/sta	=	$22

TOTAL CONSTRUCTION COST = $682

Compiled by: Zane Sandborg
Date: Mar 29, 2022

GRAND TOTAL =====> $883

SUMMARY OF CONSTRUCTION COST

SALE Long John Project # 1 LENGTH const 2.6 sta
ROAD Fuel Cost Increa (Unsurfaced)

CLEARING AND GRUBBING			Rate			
	0.24	ac	@ $1,337.00	/ac	=	$321
			TOTAL CLEARING AND GRUBBING COST =			$321

CONSTRUCTION			Rate			
Construct road (w/ D6)	2.6	sta	@ $138.00	/sta	=	$359
Construct Landing (w/ D6) (Pt. D)	1	Ldg	@ $438.00	/Ldg	=	$438
Shape subgrade (w/ road grader)	2.6	sta	@ $20.63	/sta	=	$54
Compact subgrade (w/ vibratory roller)	2.6	sta	@ $16.00	/sta	=	$42
			TOTAL CONSTRUCTION COST =			$893

Compiled by: Zane Sandborg
Date: Mar 29, 2022

GRAND TOTAL =====> $1,214

SUMMARY OF CONSTRUCTION COST

SALE Long John Project # 2 LENGTH improve 56.6 sta
ROAD 1 to 2 (Unsurfaced)

CLEARING AND GRUBBING				Rate				
(Sta. 7+00 and 51+80)	0.05	ac	@	$1,337.00	/ac	=	$67	
						TOTAL CLEARING AND GRUBBING COST =		$67
RE-CONSTRUCTION				Rate				
Sidecast removal (w/ C325) (Sta. 21+25 to Sta. 25+10)	3	hrs	@	$145.00	/hr	=	$435	
Sidecast endhaul (expanded 20%) (Sta. 21+25 to Sta. 25+10)	100	CY	@	$2.50	/CY	=	$250	
Cutbank excavation (w/ C325) (Sta. 21+70 to Sta. 22+60)	2	hrs	@	$145.00	/hr	=	$290	
Road realignment endhaul (expanded 20%) (Sta. 21+70 to Sta. 22+60)	220	CY	@	$2.50	/CY	=	$550	
Construct Landing (w/ C325) (Sta. 7+00 & Sta. 48+70)	2	Ldg	@	$438.00	/Ldg	=	$876	
Construct waste area (w/ grader) (Sta. 20+60)	0.5	hrs	@	$145.00	/hr	=	$73	
Shape subgrade (Sta. 21+70 to Sta. 22+60) (w/ road grader)	2.0	sta	@	$20.63	/sta	=	$41	
Compact subgrade (Sta. 21+70 to Sta. 22+60) (w/ vibratory roller)	2.0	sta	@	$16.00	/sta	=	$32	
Compact waste	450	CY	@	$0.45	/CY	=	$203	
						TOTAL CONSTRUCTION COST =		$2,750
IMPROVEMENT				Rate				
Re-open road (w/ grader) (Sta. 2+60 to Pt. 2)	54	sta	@	$15.40	/sta	=	$832	
Re-open landings (w/ C325) (Sta. 11+90 & Sta. 20+60)	1	hr	@	$145.00	/hr	=	$145	
Re-open landings (w/ grader) (Pt. 2)	0.5	hrs	@	$114.00	/hr	=	$57	
Compact subgrade (Sta. 2+60 to Pt. 2)	54	sta	@	$16.00	/sta	=	$864	
						TOTAL IMROVEMENT COST =		$1,898
SURFACING		Size		Rate				
Spot rock (Pt. 1 to Sta. 2+60)	20	CY	1½" - 0"	@	$26.02	/CY	=	$520
Turnout Rock (Sta. 2+60)	20	CY	3"-0"	@	$24.67	/CY	=	$493
Transition rock (Sta. 2+60 to Sta. 3+10)	20	CY	Jaw-Run	@	$23.66	/CY	=	$473
Base rock (Sta. 7+00 to Sta. 7+90)	40	CY	Jaw-Run	@	$23.66	/CY	=	$946
Process surfacing (w/ road grader) (Pt.1 to Sta. 2+60)	2.5	sta		@	$20.63	/sta	=	$52
Spread surfacing (w/ dozer) (Sta. 2+60 to Sta. 3+10 & Sta. 7+00 to 7+90)	1.5	sta		@	$20.63	/sta	=	$31
Compact surface (w/ vibratory roller)	4.0	sta		@	$16.00	/sta	=	$64
							TOTAL SURFACING COST =	$2,579
SPECIAL PROJECTS		Size		Rate				
Culvert removal (Sta. 21+95)	0.5	hrs		@	$145.00	/hr	=	$73
Install culverts (Sta. 12+95 & Sta. 21+95)	3	hrs		@	$145.00	/hr	=	$435
Culvert 18"x30' (Sta. 12+95)	30	ft		@	$13.75	/ft	=	$413
Site dewatering (Sta. 12+95)	2.5	hrs		@	$12.00	/hr	=	$30
Bedding compaction (with handheld tamper)	2	hrs		@	$57.00	/hr	=	$114
Bedding & backfill rock (Sta. 12+95)	10	CY	1½" - 0"	@	$26.02	/CY	=	$260
Dissipater rock (Sta. 21+95)	10	CY	Pit-Run	@	$21.97	/CY	=	$220
							TOTAL SPECIAL PROJECTS COST =	$1,545

Compiled by: Zane Sandborg
Date: Mar 29, 2022

GRAND TOTAL =====> $8,839

SUMMARY OF CONSTRUCTION COST

SALE Long John Project # 2 LENGTH improve 5.1 sta
ROAD 3 to 4 (Unsurfaced)

IMPROVEMENT			Rate			
Re-open road (w/ grader)	5.1 sta	@	$15.40	/sta	=	$79
Re-open Landing (w/ grader)	0.5 hrs	@	$114.00	/hr	=	$57
Compact subgrade (w/ vibratory roller)	5.1 sta	@	$16.00	/sta	=	$82

TOTAL IMPROVEMENT COST = $218

Compiled by: Zane Sandborg
Date: Mar 29, 2022

GRAND TOTAL =====> $218

SUMMARY OF CONSTRUCTION COST

SALE Long John Project # 2 LENGTH improve 167.9 sta
ROAD 5 to 6 (Johnson Creek Road) (Surfaced)

IMPROVEMENT				Rate				
Re-establish ditch (w/ grader) (Sta. 56+70 to Sta. 112+65)	56	sta	@	$44.00	/sta	=	$2,464	
Daylight road cutting (Sta. 132+45 to Sta. 154+10)	4	hrs	@	$45.00	/hr	=	$180	
Daylight road cleaning (w/ C325) (Sta. 132+45 to Sta. 154+10)	3	hrs	@	$145.00	/hr	=	$435	
Round cutslope (w/ C325) (Sta. 143+00 to Sta. 149+20)	6.2	sta	@	$49.00	/sta	=	$304	
Slough endhaul (w/C325) (Sta. 143+00 to Sta. 149+20)	10	CY	@	$2.00	/CY	=	$20	
Re-open Landings (w/ grader) (Sta. 152+85, Sta. 154+10 & Pt. 6)	0.5	hrs	@	$114.00	/hr	=	$57	
						TOTAL IMPROVEMENT COST =		$3,460

SURFACING			Size		Rate				
Spot rock (Pt. 5 to Pt. 6)	160	CY	1½"-0"	@	$26.02	/CY	=	$4,163	
Landing rock (Sta. 152+85, Sta. 154+10 & Pt. 6)	60	CY	Jaw-Run	@	$23.66	/CY	=	$1,420	
Fill repair placement (Sta. 24+45) (w/ excavator)	0.5	hrs		@	$145.00	/hr	=	$73	
Fill repair rock (Sta. 24+45)	10	CY	Jaw-Run	@	$23.66	/CY	=	$237	
Fill repair compaction (w/ handheld tamper)	0.5	hrs		@	$57.00	/hr	=	$29	
Process surface (w/ road grader)	20.0	sta		@	$20.63	/sta	=	$413	
Compact surface (w/ vibratory roller)	20.0	sta		@	$16.00	/sta	=	$320	
							TOTAL SURFACING COST =		$6,655

SPECIAL PROJECTS								
Clean out culverts	2	culverts	@	$25.00	/ea	=	$50	
						TOTAL SPECIAL PROJECTS COST =		$50

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Date: Mar 29, 2022

GRAND TOTAL =====> $10,165

SUMMARY OF CONSTRUCTION COST

SALE Long John Project # 2 LENGTH improve 9.1 sta
ROAD 7 to 8 (Unsurfaced)

CONSTRUCTION				Rate			
Road realignment (w/ D6) (Sta. 3+90 to Sta. 4+70)	1.5	hrs	@	$128.00	/hr	=	$192
Headwall stabilization (w/ C325) (Sta. 4+30)	0.5	hrs	@	$145.00	/hr	=	$73
Construct Landing (Sta. 3+10)	1	Ldg	@	$438.00	/Ldg	=	$438
Shape subgrade (w/ road grader)	2.5	sta	@	$20.63	/sta	=	$52
					TOTAL CONSTRUCTION COST =		$755

IMPROVEMENT				Rate			
Re-open road (w/ grader)	9.1	sta	@	$15.40	/sta	=	$140
Compact subgrade (w/ vibratory roller)	9.1	sta	@	$16.00	/sta	=	$146
					TOTAL IMPROVEMENT COST =		$286

SURFACING			Size		Rate			
Junction rock (Sta. 0+00 to Sta. 0+50)	10	CY	Jaw-Run	@	$23.66	/CY	=	$237
Process surface (w/ road grader)	0.5	sta		@	$20.63	/sta	=	$10
Compact surface (w/ vibratory roller)	0.5	sta		@	$16.00	/sta	=	$8
						TOTAL SURFACING COST =		$255

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GRAND TOTAL =====> $1,296

SUMMARY OF CONSTRUCTION COST

SALE Long John Project # 2 LENGTH improve 4.9 sta
ROAD 9 to 10 (Unsurfaced)

IMPROVEMENT				Rate			
Re-open road (w/ C325)	2.5 hrs		@	$145.00	/hr	=	$363
Re-open Landings (w/ C325) (Sta. 3+85)	0.5 hrs		@	$145.00	/hr	=	$73
					TOTAL IMPROVEMENT COST =		$436

SURFACING		Size		Rate			
Surface rock- 4" Lift	110 CY	3"-0"	@	$5.72	/CY	=	$629
Landing rock (Sta. 3+85)	30 CY	Jaw-Run	@	$23.66	/CY	=	$710
Process surface (w/ grader)	4.9 sta		@	$20.63	/sta	=	$101
Compact surface (w/ vibratory roller)	4.9 sta		@	$16.00	/sta	=	$78
					TOTAL SURFACING COST =		$1,518

Compiled by: Zane Sandborg
Date: Mar 29, 2022

GRAND TOTAL =====> $1,954

SUMMARY OF CONSTRUCTION COST

SALE Long John Project # 2 LENGTH improve 173.3 sta
ROAD 11 to 12 (Goat Ridge Road) (Surfaced)

CLEARING AND GRUBBING					Rate			
Sta. 172+70 to Sta. 173+30	0.17	ac	@	$1,337.00	/ac	=	$227	
TOTAL CLEARING AND GRUBBING COST =								$227
CONSTRUCTION					Rate			
Cutbank excavation (w/ C325) (Sta. 121+30 to Sta. 123+75)	16	hrs	@	$145.00	/hr	=	$2,320	
Excavation endhaul (expanded 20%)	1920	CY	@	$2.50	/CY	=	$4,800	
Sidecast removal (w/ C325) (Sta. 121+30 to Sta. 123+75)	2.5	hrs	@	$145.00	/hr	=	$363	
Sidecast endhaul (expanded 20%)	70	CY	@	$2.50	/CY	=	$175	
Slough removal (w/ C325) (Sta. 121+30)	0.5	hrs	@	$145.00	/hr	=	$73	
Slough endhaul (expanded 20%)	20	CY	@	$2.50	/CY	=	$50	
Shape subgrade (w/ road grader)	2.5	sta	@	$20.63	/sta	=	$52	
Compact subgrade (w/ vibratory roller)	2.5	sta	@	$16.00	/sta	=	$40	
Create waste area (WA3)	1	hr	@	$145.00	/hr	=	$145	
Compact waste area	2010	CY	@	$0.45	/CY	=	$905	
Extend Landing (w/ C325) (Pt. 12)	0.5	hrs	@	$145.00	/hr	=	$73	
Mound removal (w/ C325) (Sta. 172+70)	0.5	hrs	@	$145.00	/hr	=	$73	
TOTAL CONSTRUCTION COST =								$9,069
IMPROVEMENT					Rate			
Re-establish ditch (Sta. 46+30 to Sta. 69+80 & Sta. 113+20 to Sta. 127+35)	24.2	sta	@	$44.00	/sta	=	$1,065	
Re-open Landing (w/ C325) (Pt. 12)	0.5	hrs	@	$145.00	/hr	=	$73	
TOTAL IMPROVEMENT COST =								$1,138

SURFACING			Size		Rate			
Spot rock (Pt. 11 to Sta. 167+85)	200	CY	1½" - 0"	@	$26.66	/CY	=	$5,332
Base layer rock - 8" lift (Sta. 121+30 to Sta. 123+75)	40	CY	Jaw-Run	@	$24.30	/CY	=	$972
Surface rock - 8" lift (Sta. 121+30 to Sta. 123+75)	40	CY	1½" - 0"	@	$26.66	/CY	=	$1,066
Surface rock- 4" Lift (Sta. 167+85 to Pt. 12)	110	CY	3" - 0"	@	$5.72	/CY	=	$629
Landing rock (Sta. 172+70 & Pt. 12)	80	CY	Jaw-Run	@	$24.30	/CY	=	$1,944
Process surface (w/ road grader)	36.0	sta		@	$20.63	/sta	=	$743
Compact surface (w/ vibratory roller)	16.0	sta		@	$16.00	/sta	=	$256
TOTAL SURFACING COST =								$10,942
SPECIAL PROJECTS								
Grass seed (WA3, cutbank and sidecast pullback)	25	lbs		@	$1.80	/lb	=	$45
Mulch	10	bales		@	$12.00	/bale	=	$120
Labor	2.5	hrs		@	$45.00	/hr	=	$113
TOTAL SPECIAL PROJECTS COST =								$278

Compiled by: Zane Sandborg
Date: Mar 29, 2022

GRAND TOTAL =====> $21,654

SUMMARY OF BRUSHING COST

SALE Long John Project # 3 LENGTH maintain 4.0 Miles
ROAD All (Surfaced/unsurfaced)

LIGHT BRUSHING				Rate			
Sta. 30+10 to Pt. 6	2.60	mi	@	$800.00	/mi	=	$2,080
(Pt. 5 to Pt. 6)							
Pt. 7 to Pt. 8	0.17	mi	@	$800.00	/mi	=	$136
TOTAL LENGTH =	2.77	mi				TOTAL LIGHT BRUSHING COST =	$2,216

MEDIUM BRUSHING				Rate			
Pt. 1 to Pt. 2	1.07	mi	@	$1,100.00	/mi	=	$1,177
Pt. 3 to Pt. 4	0.10	mi	@	$1,100.00	/mi	=	$110
Pt. 9 to Pt. 10	0.09	mi	@	$1,100.00	/mi	=	$99
TOTAL LENGTH =	1.26	mi				TOTAL MEDIUM BRUSHING COST =	$1,386

BRUSHING GRAND TOTAL =====> $3,602

SOD AND DEBRIS REMOVAL				Rate			
All brushing segments	4.61	mi	@	$813.12	/mi	=	$3,748
Sta. 127+35 to Pt. 12	3.28	mi	@	$813.12	/mi	=	$2,667
(Pt. 11 to Pt. 12)							
TOTAL LENGTH =	7.89	mi				**TOTAL SOD AND DEBRIS REMOVAL =====>**	**$6,415**

Compiled by: Zane Sandborg
Date: Mar 29, 2022

SUMMARY OF GATE INSTALLMENT COST

SALE Long John Project # 4
ROAD 1 to 2 (Sta. 0+75)

GATE INSTALLATION				Rate			
8' Farm Gate	2	gates	@	$200.00	/ea	=	$400
Transport gate	1	trip	@	$100.00	/trip	=	$100
50 lbs concrete bags	14	bags	@	$6.00	/bag	=	$84
4"x4"x12' pressure treated post	2	posts	@	$40.00	/post	=	$80
Installation	4	hrs	@	$45.00	/hr	=	$180
Grade 30 chain	3	ft	@	$4.00	/ft	=	$12

TOTAL GATE INSTALLATION COST= $856

Compiled by: Zane Sandborg
Date: Mar 29, 2022

GRAND TOTAL =====> $856

SUMMARY OF STOCKPILE RESTOCK COST

SALE Long John Project # 5
ROAD Stockpile (Goat Ridge Road)

IMPROVEMENT

Clear brush around stockpile (W/ C325)	2 hrs		@	$145.00	/hr	=	$290

TOTAL IMPROVEMENT COST = $290

RESTOCKING

		Size		Rate				
Stockpile rock (using 18 CY truck)	500 CY	1½" - 0"	@	$22.47	/CY	=	$11,235	
Front end Loader	4 hrs		@	$77.00	/hr	=	$308	

TOTAL RESTOCKING COST = $11,543

Compiled by: Zane Sandborg
Date: Mar 29, 2022

GRAND TOTAL =====> $11,833

SUMMARY OF MAINTENANCE COST

SALE: Long John — Final log haul Maintenance Cost Estimate
(Costed in appraisal, not in project costs)

Move-in — Grader — $ 875

Road Segment	Length	Cost/Sta	Cost	Mileage
5 to 6	167.9 sta	$20.63	$3,463.78	3.18
9 to 10	4.9 sta	$20.63	$101.09	0.09
11 to 12	173.3 sta	$20.63	$3,575.18	3.28
Total	346.1		$7,140.05	6.55

Maintenance Rock:

	Volume	Cost/CY	Cost
1½"-0"	250	$26.25	$6,562.50
Fuel increase			$1,457.76
Grand Total			$ 16,035.31
TS Volume	3,810	MBF	
Cost / MBF =			$4.21

NOTES:

Rock Haul Cost Computation

SALE NAME: Long John — DATE: Mar 29, 2022
ROAD NAME: Johnson Creek Road — CLASS: Medium
ROCK SOURCE: Rickard Rock Quarry — 10 CY truck
Route: Hwy 20, Harlan-Burnt Woods Road
Johnson Creek Road

TIME Computation:
Road speed time factors:

1.	55 MPH	24.6	MRT	26.8	minutes
2.	50 MPH		MRT	0.0	minutes
3.	45 MPH		MRT	0.0	minutes
4.	40 MPH		MRT	0.0	minutes
5.	35 MPH	11.2	MRT	19.2	minutes
6.	30 MPH		MRT	0.0	minutes
7.	25 MPH		MRT	0.0	minutes
8.	20 MPH	2.0	MRT	6.0	minutes
9.	15 MPH		MRT	0.0	minutes
10.	10 MPH	3.0	MRT	18.0	minutes
11.	05 MPH		MRT	0.0	minutes

Dump or spread time per RT		0.50	minutes
Total hauling cycle time for this setting (100% efficiency)		70.50	minutes
Operator efficiency correction	0.85	82.94	minutes
Job efficiency correction	0.90	92.16	minutes
Truck capacity (CY)	10.00	9.22	min/CY
Loading time, delay time per CY		0.25	min/CY
TIME (minutes) per cubic yard		9.47	min/CY

COST per CY computation

Cost of truck and operator per hour	$90.00	/hr.
Cost of truck and operator per minute	$1.50	/min
Cost per CY	$14.21	/CY
Spread and compact — Water truck, Grader & Roller	$1.50	/CY

Size	Cost/Yd (Pit)	Cost Delivered w/o processing	Cost Delivered with processing
1½" - 0"	$ 11.81	$26.02	$27.52
3" - 0"	$ 10.46	$24.67	$26.17
Jaw-Run	$ 9.45	$23.66	$25.16
Pit-Run	$ 7.76	$21.97	$23.47
Riprap	$ 24.98	$39.19	

Note: Pit costs March, 2020 Rickard Rock Quarry
Riprap costs November, 2020 Hardrock Rock Quarry

Rock Haul Cost Computation

SALE NAME: Long John — DATE: Mar 29, 2022
ROAD NAME: Goat Ridge Road — CLASS: Medium
ROCK SOURCE: Rickard Rock Quarry — 10 CY truck
Route: Hwy 20, Harlan-Burnt Woods Road
Goat Ridge Road

TIME Computation:
Road speed time factors:

1.	55 MPH	24.6	MRT	26.8	minutes
2.	50 MPH		MRT	0.0	minutes
3.	45 MPH		MRT	0.0	minutes
4.	40 MPH		MRT	0.0	minutes
5.	35 MPH	4.0	MRT	6.9	minutes
6.	30 MPH		MRT	0.0	minutes
7.	25 MPH		MRT	0.0	minutes
8.	20 MPH	4.0	MRT	12.0	minutes
9.	15 MPH		MRT	0.0	minutes
10.	10 MPH	4.6	MRT	27.6	minutes
11.	05 MPH		MRT	0.0	minutes

Dump or spread time per RT		0.50	minutes
Total hauling cycle time for this setting (100% efficiency)		73.80	minutes
Operator efficiency correction	0.85	86.82	minutes
Job efficiency correction	0.90	96.47	minutes
Truck capacity (CY)	10.00	9.65	min/CY
Loading time, delay time per CY		0.25	min/CY
TIME (minutes) per cubic yard		9.90	min/CY

COST per CY computation

Cost of truck and operator per hour	$90.00	/hr.
Cost of truck and operator per minute	$1.50	/min
Cost per CY	$14.85	/CY
Spread and compact — Water truck, Grader & Roller	$1.50	/CY

Size	Cost/Yd (Pit)	Cost Delivered w/o processing	Cost Delivered with processing
1½" - 0"	$ 11.81	$26.66	$28.16
3" - 0"	$ 10.46	$25.31	$26.81
Jaw-Run	$ 9.45	$24.30	$25.80
Pit-Run	$ 7.76	$22.61	$24.11
Riprap	$ 24.98	$39.83	

Note: Pit costs March, 2020 Rickard Rock Quarry
Riprap costs November, 2020 Hardrock Rock Quarry

Rock Haul Cost Computation

SALE NAME: Long John — DATE: Mar 29, 2022
ROAD NAME: Johnson Creek Road — CLASS: Medium
ROCK SOURCE: Rickard Rock Quarry — 18 CY truck
Route: Hwy 20, Harlan-Burnt Woods Road
Goat Ridge Road

TIME Computation:
Road speed time factors:

1.	55 MPH	24.6	MRT	26.8	minutes
2.	50 MPH		MRT	0.0	minutes
3.	45 MPH		MRT	0.0	minutes
4.	40 MPH		MRT	0.0	minutes
5.	35 MPH	4.0	MRT	6.9	minutes
6.	30 MPH		MRT	0.0	minutes
7.	25 MPH		MRT	0.0	minutes
8.	20 MPH	4.0	MRT	12.0	minutes
9.	15 MPH		MRT	0.0	minutes
10.	10 MPH	4.6	MRT	27.6	minutes
11.	05 MPH		MRT	0.0	minutes

Dump or spread time per RT		0.50	minutes
Total hauling cycle time for this setting (100% efficiency)		73.80	minutes
Operator efficiency correction	0.85	86.82	minutes
Job efficiency correction	0.90	96.47	minutes
Truck capacity (CY)	18.00	5.36	min/CY
Loading time, delay time per CY		0.25	min/CY
TIME (minutes) per cubic yard		5.61	min/CY

COST per CY computation

Cost of truck and operator per hour	$114.00	/hr.
Cost of truck and operator per minute	$1.90	/min
Cost per CY	$10.66	/CY
Spread and compact — Water truck, Grader & Roller	$1.50	/CY

Size	Cost/Yd (Pit)	Cost Delivered w/o processing	Cost Delivered with processing
1½" - 0"	$ 11.81	$22.47	$23.97
3" - 0"	$ 10.46	$21.12	$22.62
Jaw-Run	$ 9.45	$20.11	$21.61
Pit-Run	$ 7.76	$18.42	$19.92

Note: Pit costs March, 2020 Rickard Rock Quarry

Rock Haul Cost Computation

SALE NAME: Long John DATE: Mar 29, 2022
ROAD NAME: Goat Ridge Road CLASS: Medium
ROCK SOURCE: WOGOAT292 stockpile 10 CY truck
Route: Goat Ridge Road, Harlan-Burnt Woods Road, Johnson Creek Road

TIME Computation:
Road speed time factors:

1.	55 MPH		MRT	0.0	minutes
2.	50 MPH		MRT	0.0	minutes
3.	45 MPH		MRT	0.0	minutes
4.	40 MPH	4.2	MRT	6.3	minutes
5.	35 MPH		MRT	0.0	minutes
6.	30 MPH		MRT	0.0	minutes
7.	25 MPH		MRT	0.0	minutes
8.	20 MPH	3.6	MRT	10.8	minutes
9.	15 MPH		MRT	0.0	minutes
10.	10 MPH	1.6	MRT	9.6	minutes
11.	05 MPH		MRT	0.0	minutes

Dump or spread time per RT		0.50	minutes
Total hauling cycle time for this setting (100% efficiency)		27.20	minutes
Operator efficiency correction	0.85	32.00	minutes
Job efficiency correction	0.90	35.56	minutes
Truck capacity (CY)	10.00	3.56	min/CY
Loading time, delay time per CY		0.25	min/CY
TIME (minutes) per cubic yard		3.81	min/CY

COST per CY computation

Cost of truck and operator per hour	$90.00	/hr.
Cost of truck and operator per minute	$1.50	/min
Cost per CY	$5.72	/CY
Spread and compact — Water truck, Grader & Roller	$1.50	/CY

Size	Cost/Yd (Pit)	Cost Delivered w/o processing	Cost Delivered with processing
3" - 0"	-	$5.72	$7.22

TIMBER CRUISE REPORT

Long John
(WO-341-2022-W00902-01)
FY 2022

1. **Sale Area Location:** Portions of Sections 3 & 4, T12S, R8W and portions of Section of 34, T11S, R8W, W.M. Lincoln County, Oregon.

2. **Fund Distribution:**
   a. **Fund** BOF 60%
   CSL 40%

3. **Sale Acreage by Area:**

Unit	Treatment	Gross Acres	Stream Buffers	Existing Roads	No Harvest - Other	No Harvest- Slope	Net Sale Acres	Acreage Comp. Method
1	Modified Clearcut	50	2	2	<1	-	46	GIS
2	Modified Clearcut	94	22	4	-	<1	68	GIS
3	Partial Cut	8	-	<1	-	-	8	GIS
Total		152	24	6	<1	<1	122	

4. **Cruisers and Cruise Dates:** This sale was cruised by Zane Sandborg, David Bailey, Jacob Ruhl and Jessica Westcott in November of 2021.

5. **Cruise Method and Computation:** The sale consists of two Modified clearcut units that were cruised using variable radius plot sampling. The timber sale area was cruised using a basal area factor of 33.61. Plots were spaced on a 3x4 chain grid for Unit 1 and a 4x5 chain grid for Unit 2. Unit 2 data was imputed onto Unit 3, a light thinning unit. On Unit 1, a total of 37 plots were taken: 13 measure plots and 24 count plots. On Unit 2, a total of 32 plots were taken: 13 measure plots and 19 count plots.

   Measure plots were measured for DBH, height, form factor, grade, and defect. Data was entered into the Atterbury Super ACE cruise program to determine stand statistics and net board foot volume. Additional volume was removed to account for hidden defect and breakage.

   Digital ortho photos, Lidar data, and GPS data were used to map the boundaries for the sale, and ArcPro GIS was used to determine gross and net acreage.

6. **Measurement Standards:** Tree heights were measured to the nearest foot, to a top diameter of 6 inches inside bark or to 40% of form factor. Diameters at breast height (DBH) were measured to the nearest inch, and a form point of 16 feet was used to calculate form factor. Form factors were measured or estimated on every tree. Most trees were graded in 40 foot log segments unless breakage, defect, or length to top of grade cruise diameter warranted otherwise.

7. **Timber Description:** Timber is primarily 45 year-old Douglas-fir for Unit 1 and 48-year old Douglas-fir for Units 2 and 3. All Units possess small amounts of bigleaf maple, red alder and Western redcedar. For Unit 1 the average Douglas-fir to be removed is approximately 17 inches DBH, with an average height of 80 feet to a merchantable top. For Unit 2, the average Douglas-fir to be removed is approximately 16 inches DBH, with an average height of 75 feet to a merchantable top. For Unit 3, the average Douglas-fir to be removed is approximately 13 inches DBH, with an average height of 59 feet to a merchantable top. The average volume per

acre to be harvested (net) is approximately 29.5 MBF for Unit 1, 35.3 MBF for Unit 2 and 6.6 MBF for Unit 3. Conifer trees other than Douglas-fir are reserved from cutting, unless present in yarding corridors, Landings or between R/W tags.

8. **Statistical Analysis and Stand Summary:** (See attached "Statistics").

Unit	Target CV	Target SE	Actual CV	Actual SE
1	45%	9%	33.1%	5.4%
2	40%	9%	24.6%	4.3%

Note: Statistics shown are for conifer and hardwood trees combined. Percentages are for net board foot volume.

9. **Total Volume (MBF) by Species and Grade:** (See attached volume report "Species, Sort Grade – Board Foot Volumes - Project").

Unit	Species	Gross Cruise Volume	Cruised D & B	Cruised D & B (MBF)	Hidden D & B	Hidden D & B (MBF)	Net Sale Volume
1	Douglas-fir	1309	1.6%	(21)	1%	(13)	1275
	Red Alder	79	0%	(0)	2%	(2)	77
	Big-leaf Maple	6	0%	(0)	2%	(<1)	6
2	Douglas-fir	2385	1.0%	(24)	1%	(24)	2337
	Red Alder	20	0%	(0)	2%	(<1)	20
	Big-leaf Maple	43	0%	(0)	2%	(1)	42
3	Douglas-fir	55	1.0%	(1)	1%	(1)	53
Total		**3,897**	**1%**	**(46)**	**1%**	**(41)**	**3,810**

Unit	Species	Avg. DBH	Tot. Net Vol.	2-Saw	3-Saw	4-Saw	Camp Run
1	Douglas-fir	17	Grade %	45%	49%	6%	-
			1275	574	625	76	-
	Red Alder	12	Grade %	-	-	-	100%
			77	-	-	-	77
	Big-leaf Maple	12	Grade %	-	-	-	100%
			6	-	-	-	6
2	Douglas-fir	16	Grade %	36%	58%	6%	-
			2337	841	1356	140	-
	Red Alder	12	Grade %	-	-	-	100%
			20	-	-	-	20
	Big-leaf Maple	12	Grade %	-	-	-	100%
			42	-	-	-	42
3	Douglas-fir	13	Grade %	19%	70%	11%	-
			53	10	37	6	-
Total	**Total**		3810	1,425	2,018	222	145

Attachments: -Cruise Design
-Cruise Maps
-Statistics
-Species, Sort, Grade – Board Foot Volume
-Stand Table Summary
-Log Stock Table – MBF

Prepared by: Zane Sandborg Date: 03/24/2022

Unit Forester: Evelyn Hukari Date: 3/28/2022

Revised August, 2002

CRUISE DESIGN
WEST OREGON DISTRICT

Sale Name: Long John **Unit** 1

Harvest Type: MC Net BF Net BF
Approx. Cruise Acres: 49 **Estimated CV%** 45 /Acre **SE% Objective** 9 /Acre

Planned Sale Volume: 4.014 MMBF **Estimated Sale Area Value/Acre:** $15,200

A. Cruise Goals: (a) Grade minimum 70 conifer and 0 hardwood trees:
(b) Sample 37 cruise plots (13 grade: 24 count); (c) Other goals X Determine log grades for sale value; __ Determine take and leave tree species and sizes.

Take plots as shown on map. Do not take plots in buffers.

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

DO NOT RECORD 22' LENGTHS.

B. Cruise Design:

1. **Plot Cruises:** BAF 33.61 Full point
   Cruise Line Directions 90/270
   Cruise Line Spacing 4/264 (chains / feet)
   Cruise Plot Spacing 3/198 (chains / feet)
   Grade/Count Ratio 1:2

C. Tree Measurements:

1. **Diameter:** Minimum DBH to cruise is 8" for conifers and 10" 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 for conifer is 7", 7" for hardwoods or 40% of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for trees > 18" 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. log segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.

6. **Species, Sort, and Grade Codes:** A. Species: Record as DF (Douglas-fir); WH (Western hemlock); SS (Sitka Spruce); RC (Western red cedar); NF (Noble fir); SF (Silver fir); RA (Red alder); BM (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DFL, 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; K = Camp Run; 0 = Cull ;
   Hardwoods: K = Camprun; #1 Sawmill = 12"+ scaling diameter; #2 Sawmill = 10" and 11"; #3 Sawmill = 8" and 9"; #4 Sawmill = 6" and 7"

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 points with red flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie red flagging above eye level near plot center and another red flagging around a sturdy wooden stake marking plot center. On red flagging, write the plot identification number. On "measure/grade" plots write the tree number and/or tree diameter on all measured trees (clockwise from the line direction) in yellow paint. Mark leave trees with an L for leave.
   ITS and 100% Cruises: Mark cruise "strips" with various colored flagging (not pink). Mark trees measured and graded with yellow paint.

9. **Cruising Equipment:** Relaskop, Rangefinder or Lazer, Logger's Tape (with dbh on back), Biltmore Stick, Compass, Cruise Cards or 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: _____ _____
Approved by: _____
Date: _____

Revised August, 2002

CRUISE DESIGN
WEST OREGON DISTRICT

Sale Name: Long John **Unit** 2

Harvest Type: MC Net BF Net BF
Approx. Cruise Acres: 67 **Estimated CV%** 40 /Acre **SE% Objective** 9 /Acre

Planned Sale Volume: 4.014 MMBF **Estimated Sale Area Value/Acre:** $18,050

A. Cruise Goals: (a) Grade minimum 70 conifer and 0 hardwood trees:
(b) Sample 32 cruise plots (11 grade : 21 count); (c) Other goals X Determine log grades for sale value; __ Determine take and leave tree species and sizes.

Take plots as shown on map. Do not take plots in buffers.

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

DO NOT RECORD 22' LENGTHS.

B. Cruise Design:

1. **Plot Cruises:** BAF 33.61 Full point
   Cruise Line Directions 90/270
   Cruise Line Spacing 5/330 (chains / feet)
   Cruise Plot Spacing 4/264 (chains / feet)
   Grade/Count Ratio 1:2

C. Tree Measurements:

1. **Diameter:** Minimum DBH to cruise is 8" for conifers and 10" 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 for conifer is 7", 7" for hardwoods or 40% of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for trees > 18" 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. log segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.

6. **Species, Sort, and Grade Codes:** A. Species: Record as DF (Douglas-fir); WH (Western hemlock); SS (Sitka Spruce); RC (Western red cedar); NF (Noble fir); SF (Silver fir); RA (Red alder); BM (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DFL, 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; K = Camp Run; 0 = Cull ;
   Hardwoods: K = Camprun; #1 Sawmill = 12"+ scaling diameter; #2 Sawmill = 10" and 11"; #3 Sawmill = 8" and 9"; #4 Sawmill = 6" and 7"

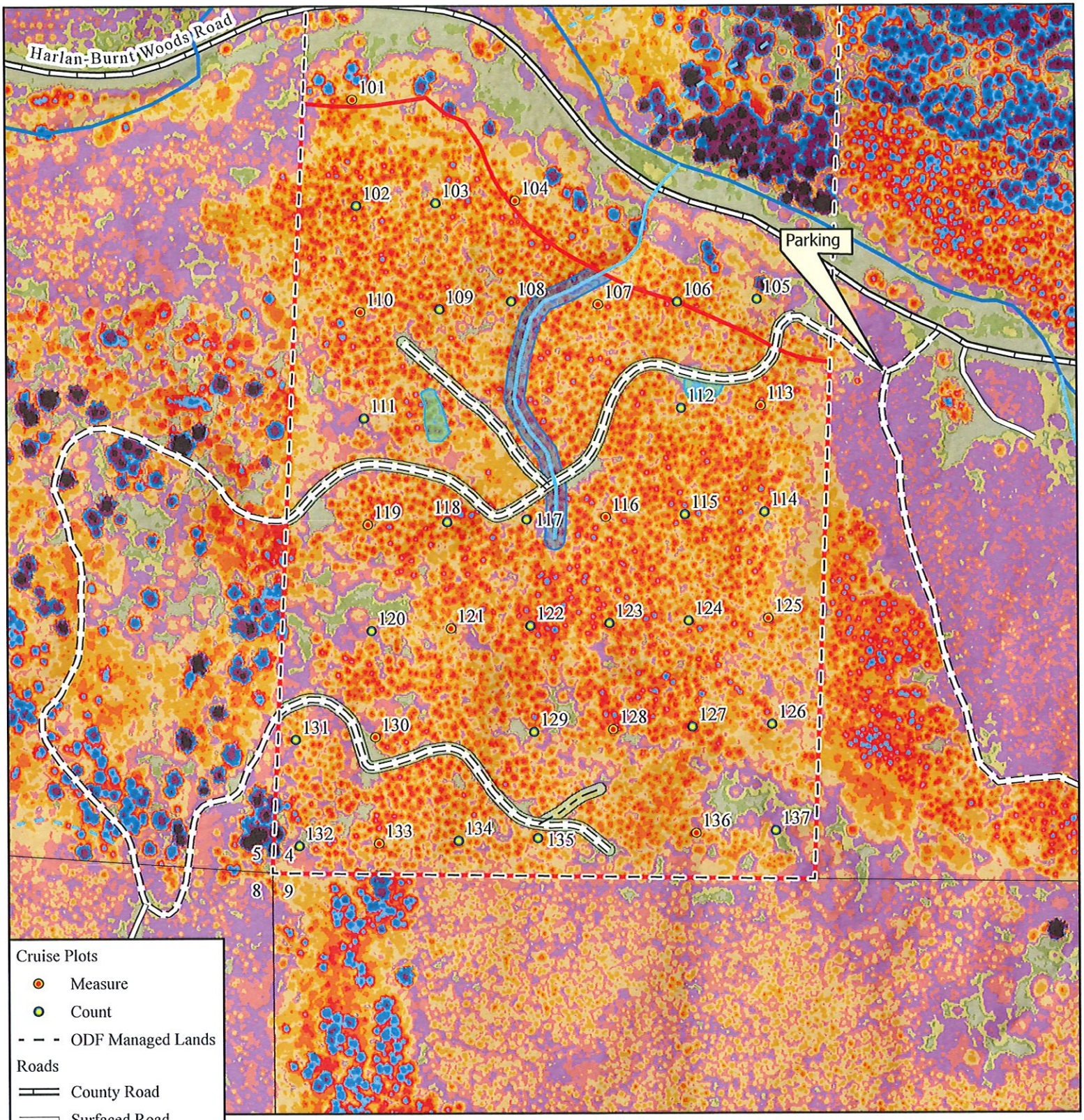
7. **Deductions:** Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally 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 points with red flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie red flagging above eye level near plot center and another red flagging around a sturdy wooden stake marking plot center. On red flagging, write the plot identification number. On "measure/grade" plots write the tree number and/or tree diameter on all measured trees (clockwise from the line direction) in yellow paint. Mark leave trees with an L for leave.
   ITS and 100% Cruises: Mark cruise "strips" with various colored flagging (not pink). Mark trees measured and graded with yellow paint.

9. **Cruising Equipment:** Relaskop, Rangefinder or Lazer, Logger's Tape (with dbh on back), Biltmore Stick, Compass, Cruise Cards or 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: _____ _____
Approved by: _____
Date: _____



Cruise Plots
- Measure
- Count
- ODF Managed Lands

Roads
- County Road
- Surfaced Road
- Unsurfaced Road
- New Construction
- Gross Boundary
- Stream Buffers
- Equipment Exclusion

Fish Presence Streams
- Fish
- Nonfish
- Unknown;

Long John Cruise Map
Unit 1

Portions of Section 4 of T12S, R8W, W.M.
Lincoln County, Oregon

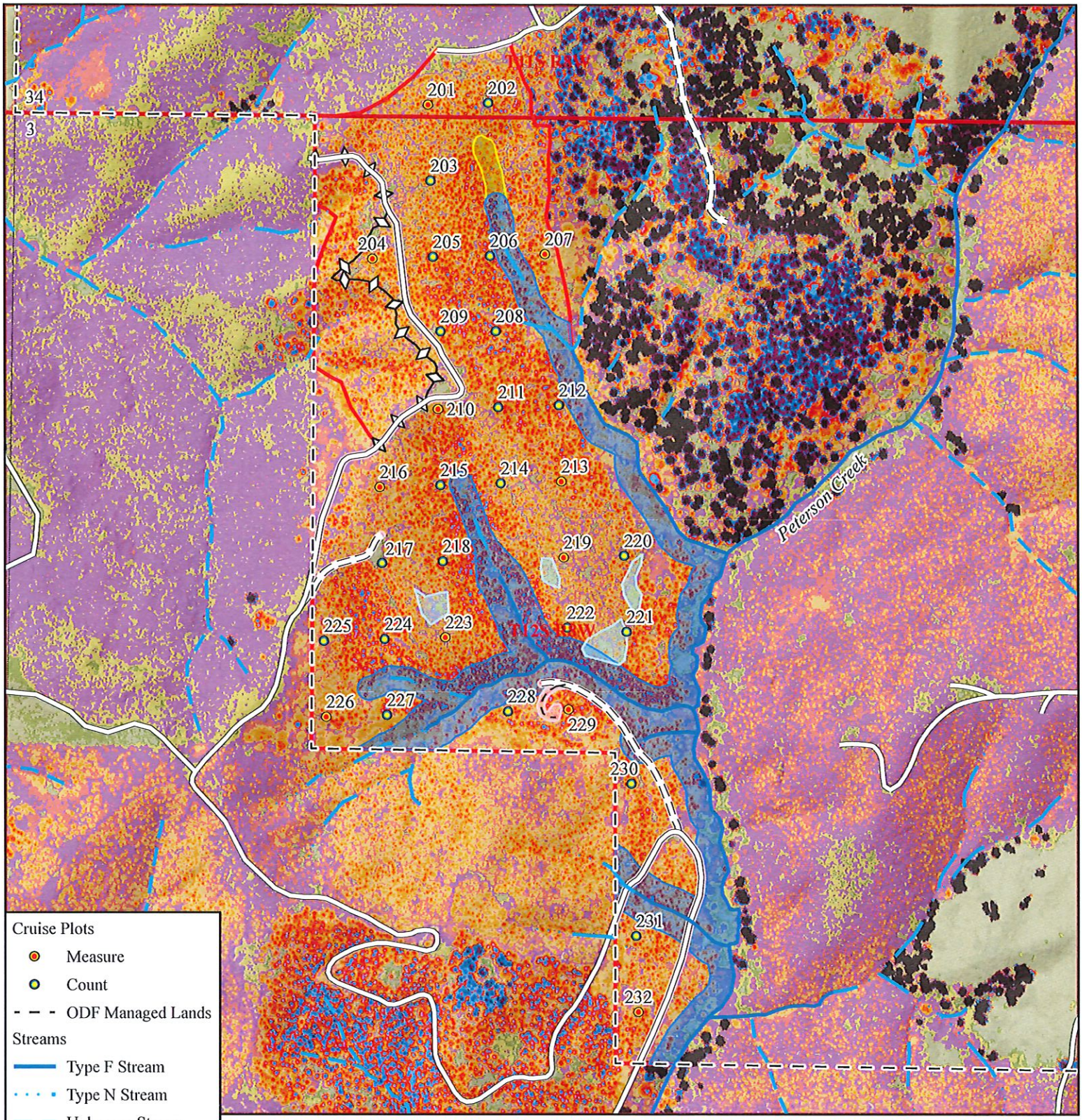
BAF: 33
Spacing: 3 X 4 Chains
Line Bearing: 90/270

Scale: 1:4,000

0 300 600 1200 Feet

N

03/29/2022



Cruise Plots
- Measure
- Count
- ODF Managed Lands

Streams
- Type F Stream
- Type N Stream
- Unknown Stream

Roads
- Surfaced Road
- Unsurfaced Road
- New Construction

- Gross Boundary
- Unit Boundary
- Stream Buffers
- No Harvest - Slope
- Road Buffers
- Known Root Rot

Long John Cruise Map
Unit 2

Portions of Section 3 of T12S, R8W,
& Section 34 of T11S, R8W, W.M.
Lincoln County, Oregon

BAF: 33
Spacing: 4 X 5 Chains
Line Bearing: 90/270

Identify unknown root rot pockets when walking between plots

N

Scale: 1:7,000

0 500 1000 2000 Feet

11/12/2021

TC PSTATS

PROJECT STATISTICS

PROJECT LONGJOHN

DATE 3/9/2022

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
012	008	04	U1	00MC	46.00	37	201	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	37	201	5.4		
CRUISE	16	79	4.9	5,622	1.4
DBH COUNT					
REFOREST					
COUNT	20	110	5.5		
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
DF	73	103.0	17.3	80	40.2	167.1	28,449	27,997	7,355	7,355
R ALDER	2	15.1	11.5	54	3.2	10.9	1,719	1,719	445	445
BL MAPLE	2	2.2	12.2	35	0.5	1.8	134	134	45	45
CHERRY	2	1.9	13.1	35	0.5	1.8	116	116	40	40
TOTAL	*79*	*122.2*	*16.5*	*75*	*44.7*	*181.7*	*30,418*	*29,966*	*7,885*	*7,885*

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
DF	46.3	5.4	318	336	355			
R ALDER	68.1	63.8	49	135	221			
BL MAPLE			60	60	60			
CHERRY			60	60	60			
TOTAL	*51.9*	*5.8*	*299*	*317*	*336*	*108*	*27*	*12*

SAMPLE TREES - CF

CL 68.1 SD: 1.0

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
DF	40.8	4.8	83	87	91			
R ALDER	63.5	59.5	14	35	55			
BL MAPLE			20	20	20			
CHERRY	6.7	6.3	20	21	22			
TOTAL	*46.2*	*5.2*	*78*	*83*	*87*	*85*	*21*	*9*

TREES/ACRE

CL 68.1 SD: 1.0

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	52.5	8.6	94	103	112			
R ALDER	242.8	39.9	9	15	21			
BL MAPLE	424.1	69.7	1	2	4			
CHERRY	424.2	69.7	1	2	3			
TOTAL	*39.8*	*6.5*	*114*	*122*	*130*	*63*	*16*	*7*

BASAL AREA/ACRE

CL 68.1 SD: 1.0

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	42.8	7.0	155	167	179			
R ALDER	241.6	39.7	7	11	15			
BL MAPLE	424.1	69.7	1	2	3			
CHERRY	424.1	69.7	1	2	3			
TOTAL	*31.0*	*5.1*	*172*	*182*	*191*	*38*	*10*	*4*

NET BF/ACRE

CL 68.1 SD: 1.0

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	41.8	6.9	26,074	27,997	29,920			
R ALDER	242.0	39.8	1,036	1,719	2,403			
BL MAPLE	424.1	69.7	41	134	228			
CHERRY	424.2	69.7	35	116	196			

TC PSTATS

PROJECT STATISTICS

PROJECT LONGJOHN

DATE 3/9/2022

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
012	008	04	U1	00MC	46.00	37	201	1	W

CL 68.1	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.00	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
TOTAL	*33.1*	*5.4*	*28,337*	*29,966*	*31,596*	*44*	*11*	*5*

CL 68.1	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	42.1	6.9	6,846	7,355	7,863			
R ALDER	241.9	39.7	268	445	621			
BL MAPLE	424.1	69.7	14	45	76			
CHERRY	424.2	69.7	12	40	69			
TOTAL	*32.8*	*5.4*	*7,460*	*7,885*	*8,309*	*43*	*11*	*5*

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T012 R008 S04 Ty00MC 46.00

Project: **LONGJOHN**

Acres **46.00**

Page **1**

Date **3/9/2022**

Time **3:32:00PM**

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
DF		DO 2M	45	2.2	13,068	12,785	588			87	13				100	40	14	277	1.68	46.1
DF		DO 3M	49	1.1	13,808	13,655	628		98	2			2	13	85	38	9	105	0.78	129.8
DF		DO 4M	6	1.0	1,573	1,557	72		100			85	4		12	17	6	22	0.38	71.0
DF	**Totals**		93	1.6	28,449	27,997	1,288		53	41	6	5	1	6	88	32	9	113	0.92	246.9
RA		DO CR	100		1,719	1,719	79		100				15		85	37	8	85	0.60	20.2
RA	**Totals**		6		1,719	1,719	79		100				15		85	37	8	85	0.60	20.2
BM		DO CR	100		134	134	6		100					100		34	7	60	0.59	2.2
BM	**Totals**		0		134	134	6		100					100		34	7	60	0.59	2.2
CH		DO CR	100		116	116	5		100					100		34	7	60	0.62	1.9
CH	**Totals**		0		116	116	5		100					100		34	7	60	0.62	1.9
Totals				1.5	30,418	29,966	1,378		56	38	5	4	2	7	87	33	9	110	0.89	271.2

TC PSTNDSUM

Stand Table Summary

Page 1
Date: 3/9/2022

T012 R008 S04 Ty00MC 46.00

Project LONGJOHN
Acres 46.00

Time: 3:32:01PM
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
DF		8	1	86	26	6.559	2.29	6.56	5.0	20.0		33	131		15	6
DF		11	1	90	112	3.469	2.29	6.94	12.5	45.0		87	312		40	14
DF		12	2	85	96	5.830	4.58	11.66	13.5	45.0		157	525		72	24
DF		13	2	89	92	4.968	4.58	7.45	21.7	80.0		161	596		74	27
DF		14	1	88	117	2.142	2.29	4.28	22.5	90.0		96	386		44	18
DF		15	6	86	114	11.194	13.74	24.25	23.9	89.2		580	2,164		267	100
DF		16	5	87	111	8.199	11.45	16.40	29.5	110.0		484	1,804		223	83
DF		17	12	87	118	17.431	27.48	43.58	28.1	103.7		1,225	4,517		563	208
DF		18	9	89	119	11.661	20.61	33.69	28.1	103.8		947	3,498		436	161
DF		19	6	88	117	6.977	13.74	20.93	29.6	106.7		619	2,233		285	103
DF		20	6	87	117	6.297	13.74	18.89	32.6	122.2		615	2,309		283	106
DF		21	6	89	127	5.711	13.74	17.13	38.9	157.8		667	2,703		307	124
DF		22	5	88	121	4.337	11.45	12.14	42.9	172.9		521	2,099		240	97
DF		23	5	87	117	3.968	11.45	10.32	49.9	194.6		515	2,008		237	92
DF		24	5	89	123	3.644	11.45	10.93	50.1	210.7		547	2,303		252	106
DF		27	1	88	117	.576	2.29	1.73	57.7	236.7		100	409		46	19
DF		Totals	73	87	109	102.964	167.14	246.89	29.8	113.4		7,355	27,997		3,383	1,288
RA		10	1	86	94	9.993	5.45	9.99	19.0	70.0		190	700		87	32
RA		14	1	86	113	5.098	5.45	10.20	25.0	100.0		255	1,020		117	47
RA		Totals	2	86	100	15.091	10.90	20.19	22.0	85.2		445	1,719		205	79
BM		12	2	86	61	2.238	1.82	2.24	20.0	60.0		45	134		21	6
BM		Totals	2	86	61	2.238	1.82	2.24	20.0	60.0		45	134		21	6
CH		13	2	86	55	1.927	1.82	1.93	21.0	60.0		40	116		19	5
CH		Totals	2	86	55	1.927	1.82	1.93	21.0	60.0		40	116		19	5
Totals			79	87	106	122.220	181.68	271.24	29.1	110.5		7,885	29,966		3,627	1,378

TC PLOGSTVB

Log Stock Table - MBF

T012 R008 S04 Ty00MC 46.00

Project: LONGJOHN
Acres 46.00

Page 1
Date 3/9/2022
Time 3:32:00PM

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+
DF		DO	2M	40	601	2.2	588	45.7						254	218	116				
DF		DO	3M	28	4	14.3	4	.3				4								
DF		DO	3M	30	8		8	.6				8								
DF		DO	3M	32	36	4.4	34	2.6			4	25	5							
DF		DO	3M	34	47		47	3.6			11	26	10							
DF		DO	3M	36	76		76	5.9			20	51	6							
DF		DO	3M	38	19	2.3	19	1.4				14	5							
DF		DO	3M	40	445		441	34.2			80	69	279	13						
DF		DO	4M	12	6		6	.4			4	1								
DF		DO	4M	14	3		3	.2			3									
DF		DO	4M	16	38		38	2.9			38									
DF		DO	4M	18	6		6	.5			6									
DF		DO	4M	20	9		9	.7			9									
DF		DO	4M	28	3		3	.2			3									
DF		DO	4M	36	9	8.3	8	.6			8									
DF		Totals			1,309	1.6	1,288	93.4			185	198	303	267	218	116				
RA		DO	CR	28	12		12	14.8			12									
RA		DO	CR	40	67		67	85.2			32		35							
RA		Totals			79		79	5.7			44		35							
BM		DO	CR	34	6		6	100.0			6									
BM		Totals			6		6	.4			6									
CH		DO	CR	34	5		5	100.0			5									
CH		Totals			5		5	.4			5									
Total		All Species			1,399	1.5	1,378	100.0			241	198	339	267	218	116				

TC PSTATS

PROJECT STATISTICS

PROJECT LONGJOHN

DATE 3/18/2022

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
012	008	03	U2	00MC	68.00	32	215	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	32	215	6.7		
CRUISE	13	93	7.2	11,191	.8
DBH COUNT					
REFOREST					
COUNT	19	122	6.4		
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
DF	80	146.4	16.2	75	52.2	210.1	35,052	34,708	9,028	9,028
BL MAPLE	5	7.8	12.2	35	1.8	6.3	628	628	175	175
SNAG	4	5.5	13.2	56	1.4	5.3				
R ALDER	3	3.8	12.3	42	0.9	3.2	294	294	94	94
CHERRY	1	1.1	13.0	35	0.3	1.1	68	68	23	23
TOTAL	*93*	*164.6*	*15.9*	*72*	*56.7*	*225.8*	*36,043*	*35,699*	*9,319*	*9,319*

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
DF	54.8	6.1	286	305	323			
BL MAPLE	62.7	31.1	67	98	129			
SNAG								
R ALDER	27.2	18.8	62	77	91			
CHERRY								
TOTAL	*65.7*	*6.8*	*252*	*270*	*289*	*172*	*43*	*19*

CL 68.1	COEFF		**SAMPLE TREES - CF**			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	49.8	5.6	74	78	83			
BL MAPLE	59.4	29.5	19	27	35			
SNAG								
R ALDER	13.0	9.0	22	25	27			
CHERRY								
TOTAL	*60.5*	*6.3*	*65*	*70*	*74*	*146*	*37*	*16*

CL 68.1	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	35.3	6.2	137	146	155			
BL MAPLE	477.7	84.4	1	8	14			
SNAG	308.8	54.5	2	5	8			
R ALDER	565.7	99.9	0	4	8			
CHERRY	565.7	99.9	0	1	2			
TOTAL	*35.3*	*6.2*	*154*	*165*	*175*	*50*	*12*	*6*

CL 68.1	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	26.6	4.7	200	210	220			
BL MAPLE	477.7	84.4	1	6	12			
SNAG	286.6	50.6	3	5	8			
R ALDER	565.7	99.9	0	3	6			
CHERRY	565.7	99.9	0	1	2			
TOTAL	*25.7*	*4.5*	*216*	*226*	*236*	*26*	*7*	*3*

PROJECT STATISTICS

PROJECT **LONGJOHN**

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
012	008	03	U2	00MC	68.00	32	215	1	W

CL 68.1 SD: 1.0

NET BF/ACRE

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	25.7	4.5	33,134	34,708	36,283			
BL MAPLE	477.7	84.4	98	628	1,158			
SNAG								
R ALDER	565.7	99.9	0	294	587			
CHERRY	565.7	99.9	0	68	137			
TOTAL	*24.6*	*4.3*	*34,146*	*35,699*	*37,251*	*24*	*6*	*3*

CL 68.1 SD: 1.0

NET CUFT FT/ACRE

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	25.7	4.5	8,618	9,028	9,438			
BL MAPLE	477.7	84.4	27	175	322			
SNAG								
R ALDER	565.7	99.9	0	94	188			
CHERRY	565.7	99.9	0	23	46			
TOTAL	*24.9*	*4.4*	*8,909*	*9,319*	*9,729*	*25*	*6*	*3*

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T012 R008 S03 Ty00MC 68.00

Project: **LONGJOHN**

Acres **68.00**

Page **1**

Date **3/18/2022**

Time **8:28:47AM**

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
DF		DO 2M	36	1.5	12,873	12,678	862			89	11		1	1	98	40	14	281	1.70	45.1
DF		DO 3M	58	.7	20,112	19,964	1,358		100				6	7	88	38	8	103	0.73	193.5
DF		DO 4M	6		2,067	2,067	141		100			62	38			19	6	24	0.38	84.7
DF	**Totals**		97	1.0	35,052	34,708	2,360		63	32	4	4	6	4	86	33	9	107	0.84	323.3
RA		DO CR	100		294	294	20		100			14		32	54	31	7	57	0.59	5.2
RA	**Totals**		1		294	294	20		100			14		32	54	31	7	57	0.59	5.2
CH		DO CR	100		68	68	5		100					100		34	7	60	0.59	1.1
CH	**Totals**		0		68	68	5		100					100		34	7	60	0.59	1.1
BM		DO CR	100		628	628	43		100			9	31	60		27	8	65	0.66	9.7
BM	**Totals**		2		628	628	43		100			9	31	60		27	8	65	0.66	9.7
Totals				1.0	36,043	35,699	2,428		64	32	4	4	6	5	84	33	9	105	0.83	339.3

TC PSTNDSUM

Stand Table Summary

Page 1
Date: 3/18/2022

T012 R008 S03 Ty00MC 68.00

Project LONGJOHN
Acres 68.00

Time: 8:28:48AM
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
DF		9	1	86	48	5.944	2.63	5.94	8.0	30.0		48	178		32	12
DF		10	2	88	102	9.629	5.25	14.44	12.3	50.0		178	722		121	49
DF		11	1	81	82	3.979	2.63	3.98	19.0	60.0		76	239		51	16
DF		12	3	88	102	10.030	7.88	20.06	14.7	55.0		294	1,103		200	75
DF		13	3	86	98	8.546	7.88	14.24	20.2	72.0		288	1,026		196	70
DF		14	7	88	106	17.194	18.38	34.39	21.7	80.7		747	2,776		508	189
DF		15	6	85	114	12.838	15.75	27.82	24.4	91.5		678	2,546		461	173
DF		16	14	88	116	26.328	36.76	58.30	27.6	107.7		1,612	6,281		1,096	427
DF		17	6	89	120	9.995	15.75	26.65	26.9	101.2		716	2,699		487	184
DF		18	5	89	118	7.429	13.13	19.32	30.2	110.0		582	2,125		396	144
DF		19	9	88	113	12.002	23.63	33.34	31.6	120.4		1,055	4,014		717	273
DF		20	5	89	123	6.018	13.13	18.05	34.3	130.7		619	2,359		421	160
DF		21	4	88	129	4.367	10.50	13.10	38.5	151.7		504	1,987		343	135
DF		22	5	88	115	4.973	13.13	13.93	41.9	172.9		583	2,407		396	164
DF		23	3	90	121	2.730	7.88	8.19	45.3	192.2		371	1,574		252	107
DF		24	2	88	112	1.672	5.25	4.18	55.2	224.0		231	936		157	64
DF		25	1	86	127	.770	2.63	2.31	55.0	220.0		127	508		86	35
DF		26	2	85	104	1.424	5.25	3.56	58.8	214.0		209	762		142	52
DF		31	1	83	109	.501	2.63	1.50	73.3	310.0		110	466		75	32
DF		Totals	80	87	109	146.369	210.06	323.30	27.9	107.4		9,028	34,708		6,139	2,360
BM		10	1	87	56	2.311	1.26	2.31	14.0	50.0		32	116		22	8
BM		11	1	87	66	1.910	1.26	1.91	17.0	60.0		32	115		22	8
BM		12	1	87	45	1.605	1.26	1.60	15.0	50.0		24	80		16	5
BM		15	1	87	88	1.027	1.26	2.05	21.5	80.0		44	164		30	11
BM		16	1	87	70	.903	1.26	1.81	23.0	85.0		42	153		28	10
BM		Totals	5	87	62	7.755	6.30	9.68	18.0	64.9		175	628		119	43
RA		12	2	87	83	2.675	2.10	4.01	16.0	53.3		64	214		44	15
RA		13	1	87	68	1.139	1.05	1.14	26.0	70.0		30	80		20	5
RA		Totals	3	87	78	3.814	3.15	5.15	18.2	57.0		94	294		64	20
CH		13	1	87	55	1.139	1.05	1.14	20.0	60.0		23	68		15	5
CH		Totals	1	87	55	1.139	1.05	1.14	20.0	60.0		23	68		15	5
SN		10	1	98	49	2.407	1.31									
SN		13	1	98	18	1.424	1.31									
SN		17	2	98	97	1.666	2.63									
SN		Totals	4	98	56	5.497	5.25									
Totals			93	88	103	164.575	225.82	339.28	27.5	105.2		9,319	35,699		6,337	2,428

TC PLOGSTVB

Log Stock Table - MBF

T012 R008 S03 Ty00MC 68.00

Project: LONGJOHN
Acres 68.00

Page 1
Date 3/18/2022
Time 8:28:47AM

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+
DF		DO	2M	28	7	5.0	6	.3				6		
DF		DO	2M	32	8		8	.3			8			
DF		DO	2M	40	861	1.5	848	35.9			328	284 213	24	
DF		DO	3M	28	19		19	.8		13	7			
DF		DO	3M	30	57		57	2.4		49	8			
DF		DO	3M	32	40	3.7	39	1.6		20 6	12			
DF		DO	3M	34	50		50	2.1		8 41				
DF		DO	3M	36	113	1.9	111	4.7		45 26	40			
DF		DO	3M	38	66	1.2	65	2.8		10 44	11			
DF		DO	3M	40	1,022		1,017	43.1		182 287	548			
DF		DO	4M	16	67		67	2.9		60 7				
DF		DO	4M	18	17		17	.7		17				
DF		DO	4M	20	2		2	.1		2				
DF		DO	4M	24	24		24	1.0		24				
DF		DO	4M	26	18		18	.7		18				
DF		DO	4M	28	12		12	.5		12				
DF		Totals			2,384		2,360	97.2		399 473	626 336	290 213	24	
RA		DO	CR	16	3		3	13.7		3				
RA		DO	CR	32	6		6	31.9		6				
RA		DO	CR	36	5		5	27.3		5				
RA		DO	CR	40	5		5	27.2		5				
RA		Totals			20		20	.8		14 6				
CH		DO	CR	34	5		5	100.0		5				
CH		Totals			5		5	.2		5				
BM		DO	CR	16	4		4	9.2		2 2				
BM		DO	CR	28	13		13	31.2		13				
BM		DO	CR	32	16		16	38.4		8	9			
BM		DO	CR	34	9		9	21.3			9			
BM		Totals			43		43	1.8		23 2	18			
Total		All Species			2,451		2,428	100.0		440 482	643 336	290 213	24	

TC PSTATS

PROJECT STATISTICS

PROJECT LONGJOHN

DATE 3/18/2022

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
012	008	03	U3	00PC	8.00	32	215	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	32	215	6.7		
CRUISE	13	93	7.2	1,330	7.0
DBH COUNT					
REFOREST					
COUNT	19	122	6.4		
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
DF-L	63	97.1	17.5	83	38.7	161.7	28,108	27,825	7,171	7,171
DF-T	17	51.0	13.2	59	13.3	48.3	6,846	6,787	1,840	1,840
BL MAPLE	5	7.8	12.2	35	1.8	6.3	628	628	175	175
SNAG	4	5.5	13.2	56	1.4	5.3				
R ALDER	3	3.8	12.3	42	0.9	3.2	294	294	94	94
CHERRY	1	1.1	13.0	35	0.3	1.1	68	68	23	23
TOTAL	*93*	*166.2*	*15.8*	*71*	*56.8*	*225.8*	*35,945*	*35,603*	*9,302*	*9,302*

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
DF-L	48.4	6.1	318	339	360			
DF-T	60.9	15.2	151	178	205			
BL MAPLE	62.7	31.1	67	98	129			
SNAG								
R ALDER	27.2	18.8	62	77	91			
CHERRY								
TOTAL	*65.8*	*6.8*	*252*	*271*	*289*	*173*	*43*	*19*

CL 68.1 SD: 1.0 — **SAMPLE TREES - CF**

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
DF-L	43.6	5.5	82	87	91			
DF-T	58.2	14.5	41	48	55			
BL MAPLE	59.4	29.5	19	27	35			
SNAG								
R ALDER	13.0	9.0	22	25	27			
CHERRY								
TOTAL	*60.6*	*6.3*	*66*	*70*	*74*	*147*	*37*	*16*

CL 68.1 SD: 1.0 — **TREES/ACRE**

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF-L	23.1	4.1	93	97	101			
DF-T	99.8	17.6	42	51	60			
BL MAPLE	477.7	84.4	1	8	14			
SNAG	308.8	54.5	2	5	8			
R ALDER	565.7	99.9	0	4	8			
CHERRY	565.7	99.9	0	1	2			
TOTAL	*39.2*	*6.9*	*155*	*166*	*178*	*61*	*15*	*7*

CL 68.1 SD: 1.0 — **BASAL AREA/ACRE**

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF-L	9.8	1.7	159	162	165			
DF-T	98.3	17.4	40	48	57			
BL MAPLE	477.7	84.4	1	6	12			
SNAG	286.6	50.6	3	5	8			

PROJECT STATISTICS

PROJECT LONGJOHN

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
012	008	03	U3	00PC	8.00	32	215	1	W

BASAL AREA/ACRE

CL 68.1 SD: 1.00

	COEFF VAR.	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
R ALDER	565.7	99.9	0	3	6			
CHERRY	565.7	99.9	0	1	2			
TOTAL	*25.7*	*4.5*	*216*	*226*	*236*	*26*	*7*	*3*

NET BF/ACRE

CL 68.1 SD: 1.0

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF-L	9.8	1.7	27,341	27,825	28,309			
DF-T	100.2	17.7	5,586	6,787	7,988			
BL MAPLE	477.7	84.4	98	628	1,158			
SNAG								
R ALDER	565.7	99.9	0	294	587			
CHERRY	565.7	99.9	0	68	137			
TOTAL	*22.6*	*4.0*	*34,181*	*35,603*	*37,024*	*20*	*5*	*2*

NET CUFT FT/ACRE

CL 68.1 SD: 1.0

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF-L	9.4	1.7	7,052	7,171	7,290			
DF-T	99.9	17.6	1,515	1,840	2,164			
BL MAPLE	477.7	84.4	27	175	322			
SNAG								
R ALDER	565.7	99.9	0	94	188			
CHERRY	565.7	99.9	0	23	46			
TOTAL	*23.4*	*4.1*	*8,918*	*9,302*	*9,686*	*22*	*5*	*2*

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T012 R008 S03 Ty00PC 8.00

Project: **LONGJOHN**

Acres **8.00**

Page **1**

Date **3/18/2022**

Time **9:07:25AM**

Spp	S T	So Grad	% 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
DF	L	DO 2M	40	1.4	11,352	11,190	90			88	12		1	1	98	40	14	289	1.74	38.7
DF	L	DO 3M	54	.8	15,355	15,234	122		100				6	7	87	38	9	109	0.77	139.1
DF	L	DO 4M	6		1,402	1,402	11		100			69	31			19	6	24	0.40	57.6
DF	**Totals**		78	1.0	28,108	27,825	223		60	35	5	3	5	4	87	33	9	118	0.91	235.5
DF	T	DO 2M	19	2.4	1,368	1,335	11			100					100	40	13	224	1.42	6.0
DF	T	DO 3M	70	.6	4,793	4,766	38		100				5	5	90	38	8	86	0.61	55.4
DF	T	DO 4M	11		686	686	5		100			44	56			21	6	25	0.33	27.9
DF	**Totals**		19	.9	6,846	6,787	54		80	20		4	9	3	83	33	7	76	0.62	89.3
RA		DO CR	100		294	294	2		100			14		32	54	31	7	57	0.59	5.2
RA	**Totals**		1		294	294	2		100			14		32	54	31	7	57	0.59	5.2
CH		DO CR	100		68	68	1		100					100		34	7	60	0.59	1.1
CH	**Totals**		0		68	68	1		100					100		34	7	60	0.59	1.1
BM		DO CR	100		628	628	5		100			9	31	60		27	8	65	0.66	9.7
BM	**Totals**		2		628	628	5		100			9	31	60		27	8	65	0.66	9.7
Totals				1.0	35,945	35,603	285		65	31	4	4	6	5	84	33	8	104	0.82	340.7

TC PSTNDSUM

Stand Table Summary

Page 1
Date: 3/18/2022

T012 R008 S03 Ty00PC 8.00

Project LONGJOHN
Acres 8.00

Time: 9:07:26AM
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.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF	L	12	1	87	94	3.269	2.57	6.54	13.5	50.0		88	327		7	3
DF	L	13	2	88	111	5.571	5.13	11.14	18.7	72.5		209	808		17	6
DF	L	14	5	87	106	12.008	12.84	24.02	22.0	82.0		528	1,969		42	16
DF	L	15	5	86	114	10.461	12.84	23.01	24.2	91.8		557	2,113		45	17
DF	L	16	12	88	116	22.065	30.81	47.81	28.3	110.4		1,355	5,277		108	42
DF	L	17	5	88	122	8.144	12.84	22.80	26.1	98.6		595	2,248		48	18
DF	L	18	3	89	122	4.359	7.70	11.62	29.9	112.5		347	1,308		28	10
DF	L	19	8	88	112	10.432	20.54	28.69	32.0	121.8		917	3,495		73	28
DF	L	20	4	88	123	4.707	10.27	14.12	34.1	128.3		481	1,812		39	14
DF	L	21	4	88	129	4.270	10.27	12.81	38.5	151.7		493	1,943		39	16
DF	L	22	5	88	115	4.863	12.84	13.62	42.3	174.3		576	2,373		46	19
DF	L	23	3	90	121	2.670	7.70	8.01	45.3	192.2		363	1,539		29	12
DF	L	24	2	88	112	1.634	5.13	4.09	55.2	224.0		226	915		18	7
DF	L	25	1	85	127	.753	2.57	2.26	55.0	220.0		124	497		10	4
DF	L	26	2	84	104	1.393	5.13	3.48	58.8	214.0		205	745		16	6
DF	L	31	1	83	109	.490	2.57	1.47	73.3	310.0		108	456		9	4
DF	L	Totals	63	88	115	97.088	161.75	235.48	30.5	118.2		7,171	27,825		574	223
DF	T	9	1	86	48	6.433	2.84	6.43	8.0	30.0		51	193		4	2
DF	T	10	2	87	102	10.422	5.68	15.63	12.3	50.0		193	782		15	6
DF	T	11	1	81	82	4.306	2.84	4.31	19.0	60.0		82	258		7	2
DF	T	12	2	88	106	7.237	5.68	14.47	15.3	57.5		221	832		18	7
DF	T	13	1	83	73	3.083	2.84	3.08	26.0	70.0		80	216		6	2
DF	T	14	2	88	105	5.317	5.68	10.63	21.0	77.5		223	824		18	7
DF	T	15	1	82	114	2.316	2.84	4.63	25.5	90.0		118	417		9	3
DF	T	16	2	87	113	4.071	5.68	10.18	24.0	94.0		244	957		20	8
DF	T	17	1	91	107	1.803	2.84	3.61	32.5	120.0		117	433		9	3
DF	T	18	2	89	111	3.217	5.68	8.04	30.6	106.0		246	852		20	7
DF	T	19	1	87	118	1.443	2.84	4.33	29.3	110.0		127	476		10	4
DF	T	20	1	90	123	1.303	2.84	3.91	35.0	140.0		137	547		11	4
DF	T	Totals	17	86	96	50.951	48.31	89.26	20.6	76.0		1,840	6,787		147	54
BM		10	1	87	56	2.311	1.26	2.31	14.0	50.0		32	116		3	1
BM		11	1	87	66	1.910	1.26	1.91	17.0	60.0		32	115		3	1
BM		12	1	87	45	1.605	1.26	1.60	15.0	50.0		24	80		2	1
BM		15	1	87	88	1.027	1.26	2.05	21.5	80.0		44	164		4	1
BM		16	1	87	70	.903	1.26	1.81	23.0	85.0		42	153		3	1
BM		Totals	5	87	62	7.755	6.30	9.68	18.0	64.9		175	628		14	5
RA		12	2	87	83	2.675	2.10	4.01	16.0	53.3		64	214		5	2
RA		13	1	87	68	1.139	1.05	1.14	26.0	70.0		30	80		2	1
RA		Totals	3	87	78	3.814	3.15	5.15	18.2	57.0		94	294		8	2
CH		13	1	87	55	1.139	1.05	1.14	20.0	60.0		23	68		2	1
CH		Totals	1	87	55	1.139	1.05	1.14	20.0	60.0		23	68		2	1
SN		10	1	98	49	2.407	1.31									
SN		13	1	98	18	1.424	1.31									
SN		17	2	98	97	1.666	2.63									
SN		Totals	4	98	56	5.497	5.25									
Totals			93	88	103	166.245	225.82	340.72	27.3	104.5		9,302	35,603		744	285

TC PLOGSTVB

Log Stock Table - MBF

T012 R008 S03 Ty00PC 8.00

Project: LONGJOHN
Acres 8.00

Date 3/18/2022
Time 9:07:25AM

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+
DF	L	DO	2M	28	1	5.0	1	.3				1		
DF	L	DO	2M	32	1		1	.4			1			
DF	L	DO	2M	40	89	1.4	88	39.5			31	30 24	3	
DF	L	DO	3M	28	2		2	1.0		1	1			
DF	L	DO	3M	30	5		5	2.2		4	1			
DF	L	DO	3M	32	4	4.7	3	1.6		1 1	1			
DF	L	DO	3M	34	5		5	2.2		1 4				
DF	L	DO	3M	36	10	2.6	10	4.3		3 3	3			
DF	L	DO	3M	38	7	1.4	6	2.9		1 4	1			
DF	L	DO	3M	40	91		90	40.5		11 22	57			
DF	L	DO	4M	16	7		7	3.0		6 1				
DF	L	DO	4M	18	1		1	.3		1				
DF	L	DO	4M	20	0		0	.2		0				
DF	L	DO	4M	24	1		1	.6		1				
DF	L	DO	4M	26	1		1	.3		1				
DF	L	DO	4M	28	1		1	.6		1				
DF		Totals			225	1.0	223	78.2		29 40	65 32	31 24	3	
DF	T	DO	2M	40	11	2.4	11	19.7			8	3		
DF	T	DO	3M	30	2		2	3.5		2				
DF	T	DO	3M	32	1		1	2.0		1				
DF	T	DO	3M	34	1		1	1.5		1				
DF	T	DO	3M	36	2		2	3.8		2				
DF	T	DO	3M	38	1		1	2.1		1				
DF	T	DO	3M	40	31		31	57.4		11 12	8			
DF	T	DO	4M	16	1		1	1.9		1				
DF	T	DO	4M	18	1		1	2.6		1				
DF	T	DO	4M	24	2		2	2.8		2				
DF	T	DO	4M	26	2		2	2.8		2				
DF		Totals			55		54	19.1		19 16	8 8	3		
RA		DO	CR	16	0		0	13.7		0				
RA		DO	CR	32	1		1	31.9		1				
RA		DO	CR	36	1		1	27.3		1				
RA		DO	CR	40	1		1	27.2		1				
RA		Totals			2		2	.8		2 1				
CH		DO	CR	34	1		1	100.0		1				

TC PLOGSTVB

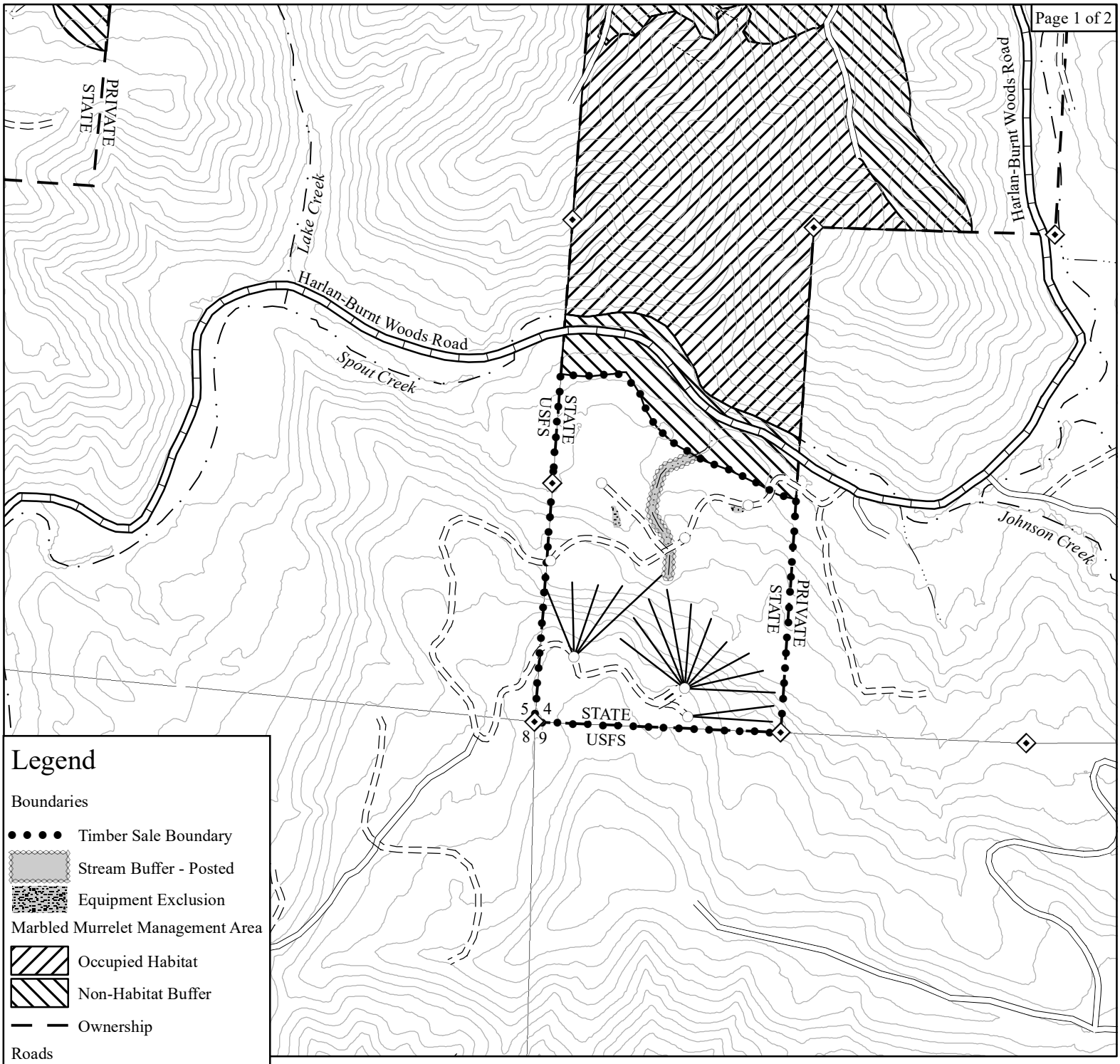
Log Stock Table - MBF

T012 R008 S03 Ty00PC 8.00

Project: LONGJOHN
Acres 8.00

Date 3/18/2022
Time 9:07:25AM

Spp	ST	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+
CH		Totals			1		1	.2			1									
BM		DO	CR	16	0		0	9.2			0	0								
BM		DO	CR	28	2		2	31.2			2									
BM		DO	CR	32	2		2	38.4			1		1							
BM		DO	CR	34	1		1	21.3					1							
BM		Totals			5		5	1.8			3	0	2							
Total		All Species			288		285	100.0			53	57	75	39	34	24	3			



Legend

Boundaries
- Timber Sale Boundary
- Stream Buffer - Posted
- Equipment Exclusion

Marbled Murrelet Management Area
- Occupied Habitat
- Non-Habitat Buffer
- Ownership

Roads
- Paved Road
- Surfaced Road
- Unsurfaced Road
- New Construction
- Right-of-Way (Posted)

Streams
- Type F Stream
- Type N Stream
- Unknown Stream
- Cable Corridor
- Landing
- Land Survey Monument

LOGGING PLAN

OF TIMBER SALE CONTRACT NO. WO-341-2022-W00902-01
LONG JOHN
PORTIONS OF SECTIONS 3 & 4 T12S, R8W, W.M., &
PORTIONS OF SECTION 34 T11S, R8W, W.M.,
LINCOLN COUNTY, OREGON.

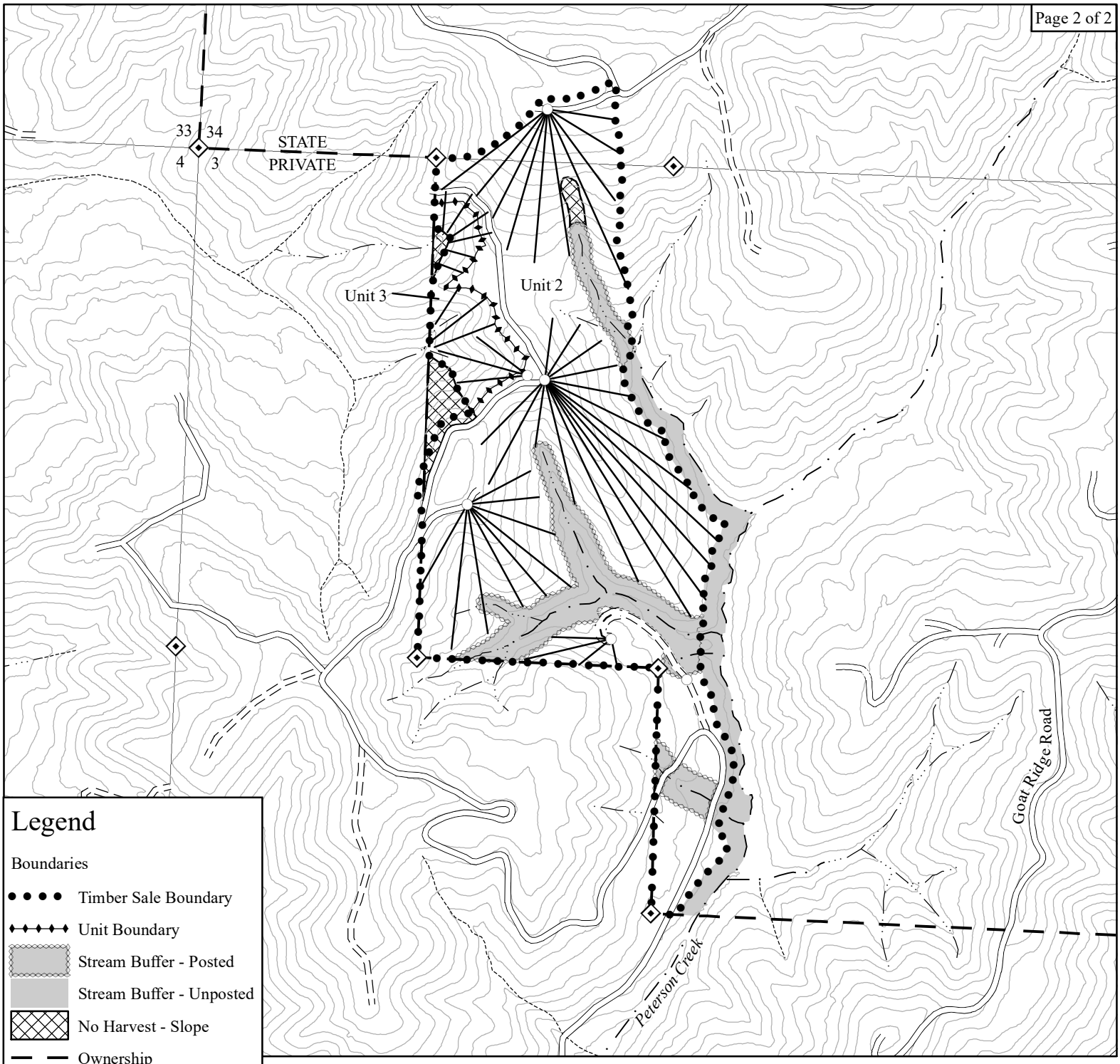
UNIT	NET CABLE ACRES	NET GROUND ACRES
1 (MC)	13	33
2 (MC)	52	16
3 (PC)	8	0
TOTAL	73	49

1:9,000

500 250 0 500 1,000 1,500 2,000 Feet

N

Date: 03/28/2022



Legend

Boundaries
- Timber Sale Boundary
- Unit Boundary
- Stream Buffer - Posted
- Stream Buffer - Unposted
- No Harvest - Slope
- Ownership

Roads
- Surfaced Road
- Unsurfaced Road
- New Construction
- Right-of-Way (Posted)

Streams
- Type F Stream
- Type N Stream
- Unknown Stream
- Cable Corridor
- Landing
- Land Survey Monument

LOGGING PLAN

OF TIMBER SALE CONTRACT NO. WO-341-2022-W00902-01
LONG JOHN
PORTIONS OF SECTIONS 3 & 4 T12S, R8W, W.M., &
PORTIONS OF SECTION 34 T11S, R8W, W.M.,
LINCOLN COUNTY, OREGON.

This product is for informational use and may not have been prepared for or be suitable for legal, engineering or survey purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of this information.

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