



Timber Sale Appraisal
Threes Company
Sale AT-341-2022-W00573-01

District: Astoria

Date: April 07, 2021

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$3,531,476.36	\$116,325.50	\$3,647,801.86
		Project Work:	(\$121,234.00)
		Advertised Value:	\$3,526,567.86



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Date: April 07, 2021

Timber Description

Location:

Stand Stocking: 80%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	27	0	97
Western Hemlock / Fir	12	0	96
Alder (Red)	14	0	95

Volume by Grade	2S	3S & 4S 6"-11"	3S 12"+	8" - 9"	10" - 11"	12"+	6" - 7"	Total
Douglas - Fir	5,708	611	105	0	0	0	0	6,424
Western Hemlock / Fir	0	54	0	0	0	0	0	54
Alder (Red)	0	0	0	24	108	133	100	365
Total	5,708	665	105	24	108	133	100	6,843

Comments: Pond Values Used: Local Pond Values, March, 2021.

Expected Log Markets: Mist, Willamina, Banks, North Plains, Clatskanie, Tillamook, Wauna, Forest Grove, Warrenton, Eugene, Monroe, Noti, Longview, WA, Elma, WA, Chehalis, WA, and Vancouver, WA.

PRICING:

Western Red Cedar and other Cedars stumpage = pond value - (Douglas-fir) logging cost.

\$881.42/MBF = \$1,159/MBF - \$277.58/MBF

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

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

Ditch Filters:

12 bales of straw @ \$12.06/bale = \$144.72

3 hours of labor @ \$45/hr = \$135

RE-OPEN UNSURFACED ROADS:

Clear, Brush, and Unblock Spurs in Units 2 and 3:

8 Hours w/C315 Excavator @ \$114/Hr = \$912

8 Hours w/D6 Dozer @ \$128/Hr = \$1,024

Apply Pit-Run on Unsurfaced Road Approaches:

44cy Pit-Run/Road Approach x 3 Roads @ \$14.96/cy = \$1,974.72

Waterbar and Block Unsurfaced Roads:

6 Hours w/C315 Excavator @ \$114/Hr = \$684

TOTAL Other Costs (with Profit & Risk to be added):\$6,874

Other Costs (No Profit & Risk added): None

SLASH PILING

(See attached appraisal. Includes move-in, pile materials, end-hauling from Unit 1) = \$12,389

ROAD MAINTENANCE

(See attached Road Maintenance Cost Summary Sheet)

TOTAL Road Maintenance: \$19,666/6,843 MBF = \$2.87/MBF



"STEWARDSHIP IN FORESTRY"

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Logging Conditions

Combination#: 1 Douglas - Fir 53.00%
 Western Hemlock / Fir 53.00%
 Alder (Red) 53.00%

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

cost / mbf: \$179.35

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

Combination#: 2 Douglas - Fir 47.00%
 Western Hemlock / Fir 47.00%
 Alder (Red) 47.00%

Logging System: Shovel **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: 10 **bd. ft / load:** 4450

cost / mbf: \$88.48

machines: Shovel Logger



"STEWARDSHIP IN FORESTRY"

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Logging Costs

Operating Seasons: 3.00	Profit Risk: 10%
Project Costs: \$121,234.00	Other Costs (P/R): \$6,874.00
Slash Disposal: \$12,389.00	Other Costs: \$0.00

Miles of Road

Road Maintenance: \$2.87

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	4.6
Western Hemlock / Fir	\$0.00	3.0	4.5
Alder (Red)	\$0.00	2.0	3.4



"STEWARDSHIP IN FORESTRY"

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Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
\$136.64	\$2.96	\$1.92	\$106.36	\$1.00	\$24.89	\$1.81	\$2.00	\$0.00	\$277.58
Western Hemlock / Fir									
\$136.64	\$2.98	\$1.92	\$73.18	\$1.00	\$21.57	\$1.81	\$2.00	\$0.00	\$241.10
Alder (Red)									
\$136.64	\$3.01	\$1.92	\$146.70	\$1.00	\$28.93	\$1.81	\$2.00	\$0.00	\$322.01

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$824.32	\$546.74	\$0.00
Western Hemlock / Fir	\$0.00	\$597.00	\$355.90	\$0.00
Alder (Red)	\$0.00	\$640.71	\$318.70	\$0.00



"STEWARDSHIP IN FORESTRY"

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Summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	6,424	\$546.74	\$3,512,257.76
Western Hemlock / Fir	54	\$355.90	\$19,218.60
Alder (Red)	365	\$318.70	\$116,325.50

Gross Timber Sale Value

Recovery: \$3,647,801.86

Prepared By: Justin Bush

Phone: 503-325-5451

Site Prep/Machine Piling Appraisal

Sale Number: AT-341-2022-W00573-01

Sale Name: Threes Company

Date: 03/30/2021

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	5.0	10
Hemlock	D	1.8	5.0	8
Conifer/Hardwood	E	1.0	2.0	8
Whole Tree Yarding	F	0.5	0.5	12

Unit	Harvest Type	Veg Type/Zone	Ground Based Yarding Acres	Estimated Piling Hours/Area	Cost/Hour	Total Cost/Area
1	MC	A	0	0	\$145	\$0
2	MC	A	51	26	\$145	\$3,698
3	MC	A	18	9	\$145	\$1,305
In-unit Piling						Sub Total = \$5,003
Sale Area	Number of Landings to be Piled	Harvested acres per area	Total Cost/Area	Number of In-Unit Piles	Material Cost/Pile	Total Cost/Area
1	1	24	\$696	1	\$5	\$5
2	7	53	\$1,537	33	\$5	\$163
3	8	70	\$2,030	17	\$5	\$85
*Cost includes separating firewood						Materials Sub Total = \$253
Additional Move-in allowance						Landing Piling Sub Total = \$4,263
Move-In Allowance	Number of Move-In's	Total Move-In Allowance				
\$1,290.00	1.5	\$1,935				
Move-In						Sub Total = \$1,935
Slash Endhaul	Dump Truck hrs	Cost/Hour	Total	Loader hrs	Cost/Hour	Total
	4	\$89.00	\$356	4	\$145	\$580
						Sub Total = \$936
Grand Total =						\$12,389

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale: Threes Company
Date: March 30, 2021
By: Michele Huffman CB

MBF: 6,843.00
\$/MBF: \$2.87

Type	Equipment/Rationale	Move-in Rate	Times	Hours	Rate	Cost
Interim Operations	Grader 14G	\$875	1	8	\$113	\$1,779
	Dump Truck 12CY	\$184	1	4	\$89	\$540
	Rubber tired backhoe	\$361	1	4	\$87	\$709
	Vibratory Roller	\$875	1	4	\$87	\$1,223
Interim Operations	Grader 14G	\$875	1	8	\$113	\$1,779
Final Road Maintenance	Grader 14G	\$875	1	28	\$113	\$4,039
	Dump Truck 12CY	\$184	2	14	\$89	\$1,614
	FE Loader C966	\$875	1	8	\$94	\$1,627
	Vibratory Roller	\$875	1	28	\$87	\$3,311
	Water Truck 2,500 gallon	\$214	1	14	\$101	\$1,628
	Rubber tired backhoe	\$361	1	8	\$87	\$1,057
	Labor			8	\$45	\$360
Total						\$19,666

Interim Operations Road Maintenance

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

Final Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	1.5	5.3	3.5	28
Vibratory Roller	1.5	5.3	3.5	28

Process and compact: All crushed rock roads

Sager Ridge Road 1.1 Miles

Sager Creek Road 1.6 Miles

Jones Road 1.3 Miles

Unnamed Spurs: 1.3 Miles

Grade & Process Total = 5.3 Miles

SUMMARY OF ALL PROJECT COSTS

SALE NAME: Threes Company

Project No. 1: ROAD CONSTRUCTION:

<u>Road segment</u>	<u>Length (Sta)</u>	<u>Length (Mile)</u>	<u>Cost</u>
1A to 1B, 3A to 3B,	7.50	0.14	\$26,447.00
3C to 3D			
Road Maint.			\$5,330.59
Move-In			\$2,375.69
TOTALS	7.50	0.14	\$34,153

Project No. 2: ROAD IMPROVEMENT:

<u>Road segment</u>	<u>Length (Sta)</u>	<u>Length (Mile)</u>	<u>Cost</u>
I1 to I2, I3 to I4	118.95	2.25	\$67,432.00
I5 to I6, I7 to I8			
Road Maint.			\$13,591.41
Move-In			\$6,057.31
TOTALS		2.25	\$87,081

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

<u>Description</u>	<u>Length/Vol.</u>	<u>Cost</u>
TOTAL		

GRAND TOTAL **\$121,234**

Compiled By: Kraig Kirkpatrick CB

Date: 04/05/2021

Move In and Maintenance Calculator for Construction and Improvement

SALE NAME: Threes Company

Project No. 1: ROAD CONSTRUCTION:

<u>Road segment</u>	<u>Length/Sta</u>	<u>Length/Mile</u>	<u>Cost</u>
1A to 1B, 3A to 3B,	7.50	0.14	\$26,447
3C to 3D			
TOTALS	7.50	0.14	\$26,447

Project No. 2: ROAD IMPROVEMENT:

<u>Road segment</u>	<u>Length/Sta</u>	<u>Length/Mile</u>	<u>Cost</u>
I1 to I2, I3 to I4	118.95	2.25	\$67,432
I5 to I6, I7 to I8			
TOTALS		2.25	\$67,432

MOVE IN (Construction & Improvement Only)

<u>Equipment</u>	<u>Length/Mile</u>	<u>Cost</u>
D8 Dozer		\$1,581.00
C330 Excavator		\$1,581.00
C315 Excavator		\$905.00
14G Grader		\$875.00
C966 Loader		\$875.00
Water Truck (2,500 gal)		\$214.00
Vibratory Roller		\$875.00
C580 Backhoe		\$361.00
20cy Highway Dump w/pup trailer (X2)		\$430.00
10-12cy Highway Dump (X4)		\$736.00
TOTAL		\$8,433.00

ROAD MAINTENANCE (Construction & Improvement Only)

	<u>Length/Mile</u>	<u>Cost</u>
Project Road Maintenance	11	\$18,922.00
TOTAL		\$18,922.00

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Threes Company
 ROAD: 1A to 1B (3.0), 3A to 3B (1.7), & 3C to 3D (2.8)
 POINTS: NEW CONSTRUCTION: 7.50 STATIONS 0.14 MILES
 IMPROVEMENT: STATIONS 0.00 MILES

CLEARING & GRUBBING				
Method	Acres/amount	x	Rate	= Cost
1A to 1B Scatter outside of R/W	0.45	x	\$ 1,503	\$676.35
3A to 3B Scatter outside of R/W	0.20	x	\$ 1,503	\$300.60
3C to 3D Scatter outside of R/W	0.50	x	\$ 1,503	\$751.50
				\$0.00
SUB TOTAL FOR CLEARING & GRUBBING				\$1,728

EXCAVATION				
Material	Cy/amount	x	Rate	= Cost
1A to 1B Full Design, Common Drift (\$\cy)	1,010	x	\$2.02	\$2,040.20
Embankment Compaction (\$\cy)	1,010	x	\$0.79	\$797.90
Landing Construction	1.00	x	\$438	\$438.00
3A to 3B Balanced Construction (\$\Sta.)	1.70	x	\$214	\$363.80
Landing Construction	1.00	x	\$438	\$438.00
3C to 3D Full Design, Common Drift (\$\cy)	1,315	x	\$2.02	\$2,656.30
Embankment Compaction (\$\cy)	1,315	x	\$0.79	\$1,038.85
Cutslope Rounding (\$\Sta.)	1.6	x	\$49.00	\$78.40
Landing Construction	1.00	x	\$438	\$438.00
SUB TOTAL FOR EXCAVATION				\$8,289

CULVERT MATERIALS AND INSTALLATION				
Location	Dia/type	Lineal ft.	Rate	Cost
				\$0.00
				\$0.00
CULVERT MATERIALS & INSTALLATION				
Description	Quantity	Rate	Cost	
Other/miscellaneous:				
Culvert stakes & markers:			\$0.00	
SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION				\$0

Subtotal of Clearing, Exc., Culv.

\$10,018

SURFACING		Description		Stations/ amount	Rate/ sta/amt	Cost
Subgrade prep:		Grade, Shape and Ditch 16'		7.50	x	\$27.91
		Subgrade Compaction		7.50	x	\$22.69
						\$170.18

ROAD SEGMENT		1A to 1B		POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost
Application	Rock Size and Type	Location	Depth of Rock (inches)	1A to 1B Volume (CY) per	station	0+00 to 3+00 Number of	stations			
Base Rock	4"-0"crushed	0+00 to 1+00	10	station	63	stations	1.00	63	\$10.35	\$652
Junction Rock	4"-0"crushed	0+00	10	Junctions	22	Junctions	1	22	\$10.35	\$228
Base Rock	6"-0" pit run	1+00 to 3+00	10	station	63	stations	2.00	126	\$14.96	\$1,885
Landings	6"-0" pit run		N/A	Landing	200	Landings	1	200	\$14.96	\$2,992
Total Rock for Road Segment:		1A to 1B						411		\$5,757
ROAD SEGMENT		3A to 3B		POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost
Application	Rock Size and Type	Location	Depth of Rock (inches)	3A to 3B Volume (CY) per	station	0+00 to 1+70 Number of	stations			
Base Rock	4"-0"crushed	0+00 to 0+50	10	station	63	stations	0.50	32	\$10.35	\$326
Junction Rock	4"-0"crushed	0+00	10	Junctions	22	Junctions	1	22	\$10.35	\$228
Junction Rock	1 1/2"-0" crushed	0+00	10	Junctions	22	Junctions	1	22	\$10.35	\$228
Base Rock	6"-0" pit run	0+50 to 1+70	10	station	63	stations	1.20	76	\$14.96	\$1,131
Landings	6"-0" pit run		N/A	Landing	88	Landings	1	88	\$14.96	\$1,316
Total Rock for Road Segment:		3A to 3B						239		\$3,229
ROAD SEGMENT		3C to 3D		POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost
Application	Rock Size and Type	Location	Depth of Rock (inches)	3C to 3D Volume (CY) per	station	0+00 to 2+80 Number of	stations			
Base Rock	4"-0"crushed	0+00 to 1+00	10	station	63	stations	1.00	63	\$10.35	\$652
Junction Rock	4"-0"crushed	0+00	10	Junctions	22	Junctions	1	22	\$10.35	\$228
Junction Rock	1 1/2"-0" crushed	0+00	10	Junctions	22	Junctions	1	22	\$10.35	\$228
Turnout	6"-0" pit run	1+30	10	turnout	33	turnout	1	33	\$14.96	\$494
Base Rock	6"-0" pit run	1+00 to 2+80	10	station	63	stations	1.80	113	\$14.96	\$1,696
Landings	6"-0" pit run		N/A	Landing	88	Landings	1	88	\$14.96	\$1,316
Total Rock for Road Segment:		3C to 3D						341		\$4,614

Processing:		Description	No.sta	Rate/sta	Cost
		Water, Process & Compact Base Rock (4"-0"):	2.5	\$63.48	\$158.70
		Spread and Compact Pit Run w\D8	5	\$35.45	\$177.25

SUB TOTAL FOR SURFACING		6"-0"pr crushed	4"-0" crushed	1 1/2"-0" crushed	Total	
		724	224	44	992	\$14,315

SUMMARY OF CONSTRUCTION COSTS

SALE NAME:	Threes Company	NEW CONSTRUCTION:	STATIONS
ROAD:	I1 to I2, I3 to I4, I5 to I6, & I7 to I8	IMPROVEMENT:	118.95 STATIONS
POINTS:			0.00 MILES
			2.25 MILES

CLEARING & GRUBBING	Method	Acres/amount	X	Rate	=	Cost
I1 to I2						
13+95 (Landing)	Scatter outside of R-of-W w/315 (\$/hr)	1	X	114	=	\$114.00
			X		=	\$0.00
			X		=	\$0.00
			X		=	\$0.00
			X		=	\$0.00
SUB TOTAL FOR CLEARING & GRUBBING						\$114

EXCAVATION	Material	Cy/amount	X	Rate	=	Cost
			X		=	\$0.00
			X		=	\$0.00
			X		=	\$0.00
			X		=	\$0.00
			X		=	\$0.00
			X		=	\$0.00
			X		=	\$0.00
			X		=	\$0.00
			X		=	\$0.00
SUB TOTAL FOR EXCAVATION						\$0

CULVERT MATERIALS AND INSTALLATION	Location	Dia/type	Lineal ft.	Rate	Cost
I3 to I4					
1+70	18" cpp	30	\$21.95		\$658.50
10+20	18" cpp	50	\$21.95		\$1,097.50
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION					

Other/miscellaneous:	Description	Quantity	Rate	Cost
Culvert stakes & markers:	6' x 2 1/2" fiberglass post	7	\$23.00	\$161.00
SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION				

Subtotal of Clearing, Exc., Culv. **\$1,917**
\$2,031

SPECIAL PROJECTS				
Description		Cy/Amount	Rate	Cost
pit-run development		724	\$2.92	\$2,114.08
riprap development				\$0.00
SUB TOTAL FOR SPECIAL PROJECTS				\$2,114
				<i>Subtotal of Surfacing & Spec. Proj.</i> \$16,429
				<i>Subtotal of Clearing, Exc., Culv.</i> \$10,018
GRAND TOTAL				\$26,447

Compiled By: Kraig Kirkpatrick

Date: 03/30/2021

SURFACING									
Subgrade prep: All "i" segments All "j" segments 11 to 12 (33+50-42+90)		Description Grade, Shape and Ditch 16' Subgrade Compaction Sod Removal (\$/sta) Grader & Excavator (315)		Stations/ amount		Rate/ sta./amt		Cost	
				x		x		\$3,319.89	
				x		x		\$2,698.98	
				x		x		\$406.74	
				x		x		\$0.00	
				x		x		\$0.00	
ROAD SEGMENT									
Application	Rock Size and Type	11 to 12	Depth of Rock (inches)	POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Cost
				11 to 12 Volume (CY) per	load	0+00 to 42+90 Number of	loads		
Surface Leveling Rock	1 1/2"-0" crushed		N/A	11	load	10	loads	110	\$1,139
Surface Rock	1 1/2"-0" crushed	0+00 to 7+00,	3	19	station	40.9	stations	777	\$8,043
Surface Rock (Base)	4"-0" crushed	7+00 to 9+00	4	25	station	2	stations	50	\$518
Turnouts	1 1/2"-0" crushed	1+45, 11+05, 15+55 18+95, 23+25, 27+	3	22	turnout	6	turnouts	132	\$1,366
Turnarounds	1 1/2"-0" crushed	11+05, 18+95	3	22	turnarounds	2	turnarounds	44	\$455
Junctions	1 1/2"-0" crushed	0+00, 30+65, 33+50 36+25,	3	22	junction	4	junctions	88	\$911
Junctions	4"-0" crushed	13+95	8	55	junction	1	junctions	55	\$569
Landings	6"-0" pit run	8+00, 13+95	N/A	88	Landing	2	Landings	176	\$2,633
Total Rock for Road Segment:				11 to 12				1,432	\$15,634
ROAD SEGMENT									
Application	Rock Size and Type	13 to 14	Depth of Rock (inches)	POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Cost
				13 to 14 Volume (CY) per	culvert	0+00 to 57+60 Number of	culverts		
Culvert Bedding and Backfill	1 1/2"-0" crushed		N/A	see spec. instr.	culvert	2	culverts	77	\$797
Traction Rock	1 1/2"-0" crushed	0+00 to 3+90, 5+90 to 9+95, 17+30 to 19+50, 25+45 to 33+95	2	13	station	18.65	stations	242	\$2,509
Turnouts	1 1/2"-0" crushed	25+65, 29+65, 31+9 5	2	11	turnout	6	turnouts	66	\$683
Junctions	1 1/2"-0" crushed	0+00	2	11	junction	1	junctions	11	\$114
"Y" Junction	1 1/2"-0" crushed	1+40	2	22	junction	1	junctions	22	\$228
"Y" Junction	4"-0" crushed	1+40	4	44	junction	1	junctions	44	\$455
Subgrade Leveling Rock	4"-0" crushed		N/A	11	load	4	loads	44	\$455
Surfacing	4"-0" crushed	0+00 to 57+60	4	25	station	57.6	stations	1,440	\$14,904
Turnouts	4"-0" crushed	2+75, 17+30, 25+65 29+65, 31+95, 36+ 00, 40+60	4	22	turnout	7	turnouts	154	\$1,594
Turnarounds	4"-0" crushed	25+65, 40+60, 57+6 0	4	22	turnarounds	3	turnarounds	66	\$683
Curve Widening Surface	4"-0" crushed		4	11	curve	4	curves	44	\$455
Total Rock for Road Segment:				13 to 14				2,210	\$22,878

ROAD SEGMENT										
Application	I5 to I6		Depth of Rock (inches)	POINT TO POINT		Sta. to Sta. 0+00 to 13+25 Number of	TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
	Rock Size and Type	Location		I5 to I6	Volume (CY) per					
Traction Rock	1 1/2"-0" crushed	0+00 to 10+95	2	station	13	stations	10.95	142	\$10.35	\$1,473
Turnouts	1 1/2"-0" crushed	3+80	2	turnout	11	turnouts	1	11	\$10.35	\$114
Junctions	1 1/2"-0" crushed	0+00,5+05	2	junction	11	junctions	2	22	\$10.35	\$228
"Y" Junction	1 1/2"-0" crushed	0+90	2	junction	33	junctions	1	33	\$10.35	\$342
Subgrade Leveling Rock	4"-0" crushed		N/A	load	11	loads	2	22	\$10.35	\$228
Junctions	4"-0" crushed	0+00,5+05	4	junction	22	junctions	2	44	\$10.35	\$455
"Y" Junction	4"-0" crushed	0+90	4	junction	25	junctions	1	25	\$10.35	\$259
Surfacing	4"-0" crushed	0+00 to 13+25	4	station	25	stations	13.25	331	\$10.35	\$3,428
Turnouts	4"-0" crushed	3+80,12+20	4	turnout	22	turnouts	3	66	\$10.35	\$683
Turnarounds	4"-0" crushed	12+20	4	turnarounds	44	turnarounds	1	44	\$10.35	\$455
Total Rock for Road Segment:				I5 to I6				741	\$7,665	
ROAD SEGMENT										
Application	I7 to I8		Depth of Rock (inches)	POINT TO POINT		Sta. to Sta. 0+00 to 5+20 Number of	TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
	Rock Size and Type	Location		I7 to I8	Volume (CY) per					
Surfacing	1 1/2"-0" crushed	0+00 to 5+20	3	station	19	stations	5.2	99	\$10.35	\$1,023
Junctions	1 1/2"-0" crushed	0+00,5+20	3	junction	22	junctions	2	44	\$10.35	\$455
Landings	6"-0" pit run	2+80	N/A	Landing	77	Landings	1	77	\$14.96	\$1,152
Total Rock for Road Segment:				I7 to I8				220	\$2,630	
				Processing:				No.sta	Rate/sta	Cost
				Description						
				Water, Process & Compact (All "I" segments):				118.95	\$63.48	\$7,551
				Water, Process & Compact (Traction Rock)				29.60	\$63.48	\$1,879

Projects Road Maintenance Cost Summary

Sale: Threes Company
Date: 05-Apr-21
By: Kraig Kirkpatrick CB

Type	Equipment/Rationale			Hours	Rate	Cost
Project Work	Grader 14G			58	\$113	\$6,554
Final Haul	Dump Truck 12CY			8	\$89	\$712
Road	FE Loader C966			8	\$94	\$752
Maintenance	Vibratory Roller			58	\$87	\$5,046
	Water Truck 2,500 gallon			58	\$101	\$5,858
Total						\$18,922

Production Rates

Grader

Vibratory Roller

Miles/day	Distance(miles)	Days
1.5	11.00	7.3
1.5	11.00	7.3

NOTE: From Jones Rd, East Sager Rd, Green Mountain Rd 11.00 Miles
Miles
Miles
Miles
TOTAL= 11.00 Miles

CRUSHED ROCK COST

SALE NAME:	Threes Company
PROJECT:	No. 1 and 2
Stockpile:	Slaughters Creek

MATERIAL: 1 1/2"-0" and 4"0"

DATE: 04/05/2021
BY: Kraig Kirkpatrick

[illegible]

ROCK HAUL:

Truck type: D20 No. trucks: 2
 Delay min.: 8 Efficiency: 85%

Ave haul:	\$7.95	/cy
Load:	\$0.84	/cy
Spread:	\$1.56	/cy

Truck type: D12 No. trucks: 4
 Delay min.: 6 Efficiency: 85%

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

Production: cy/day = 519

CRUSHED ROCK HAUL COSTS 4,618 cy @ \$10.35 /cy

PIT RUN ROCK COST

SALE NAME:	Threes Company
PROJECT:	No. 1 and 2
QUARRY:	Green Mountain

MATERIAL: Pit Run

DATE: 04/05/2021
BY: Kraig Kirkpatrick

[illegible]

ROCK HAUL:

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

Ave haul:	\$10.87	/cy
Load:	\$2.16	/cy
Spread:	\$1.92	/cy

Truck type: D12 No. trucks: 4
 Delay min.: 6 Efficiency: 85%

Production: cy/day = 232

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

PIT RUN ROCK HAUL COSTS

977 cy @ \$14.96 /cy

Three's Company
TIMBER CRUISE REPORT
FY 2022

1. **Sale Area Location:** Portions of Sections 1, 2, & 3 of T5N, R6W and Section 35 of T6N, R6W, 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 Non-Stocked	New R/W Stocked	Net Acres	Survey Method
1	Modified Clearcut	29	5	<1	-	<1	24	GIS
2	Modified Clearcut	63	8	2	-	-	53	GIS
3	Modified Clearcut	78	6	1	-	1	70	GIS
4	R/W	1	-	-	-	-	1	GIS
TOTALS		171	19	3	-	1	148	

4. Cruisers and Cruise Dates: Avery Petersen, Justin Bush, Kevin Berry, John Choate, and Ryan Simpson (03/25/2021 – 03/26/2021)

5. Cruise Method and Computation:

Units 1, 2 and 3: Units 1, 2, and 3 were variable plot cruised with a 40 BAF. A total of 75 plots were sampled on a 2.5 by 8 chain spacing with a grade to count ratio of 1:2, resulting in 26 grade plots and 49 count plots.

Unit 4 (R/W): In-unit Right-of-way consists of new spur roads and landings within Units 1 and 3, and volumes from these units will be applied to Unit 4.

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, 2, and 3	TCOMP	U123	00MC	148

6. Timber Description:

Units 1, 2, and 3 are modified clearcuts with an average age of 86 years. The stands consist of Douglas-fir, red alder, and a minor component of western hemlock. The average take Douglas-fir is approximately 27 inches DBH and 110 feet to a merchantable top. The average take red alder is approximately 14 inches DBH and 47 feet to a merchantable top. The average take western hemlock is approximately 12 inches DBH and 31 feet to a merchantable top. Average net volume to be harvested per acre is 46 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point.

Unit 4 (R/W) is similar to the timber description above in Units 1, 2, and 3. Average net volume to be harvested per acre is 46 MBF.

7. Statistical Analysis and Stand Summary:

Statistics for Stand B.F. volumes

Unit	Estimated CV	Target SE%	Actual CV	Actual SE%
1, 2, & 3	42.0%	8.0%	41.2%	4.8%

8. Volumes by Species and Log Grade:

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

Conifer

Species	DBH	Net Vol.	2 Saw	3 Saw	4 Saw	% D & B	% Sale
Douglas-fir	27"	6,424	5,708	654*	62	0.6%	94%
Western hemlock	12"	54	-	34	20	0%	1%
TOTALS	--	6,478	5,708	688	82	--	--

*This sale includes approximately 105 MBF of 12"+ 3-saw Douglas-fir.

Hardwood

Species	DBH	Net Vol.	12"+	10"-11"	8"-9"	6"-7"	% D & B	% Sale
Red alder	14"	365	133	108	24	100	0.5%	5%
TOTALS	--	365	133	108	24	100	--	--

TOTAL VOLUME	6,843 MBF
---------------------	------------------

9. Approvals:

Prepared by:

Michele Huffman

Date: 03/30/2021

Unit Forester Approval:



Date: 4/23/2021

10. **Attachments:** Cruise Design and Map (3 pages)
Volume Report (1 pages)
Statistics Report (4 pages)
Log Stock Table (2 pages)
Stand Table Summary (1 page)

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: Three's Company

Units 1, 2, & 3

Harvest Type: Modified Clearcut

Approx. Cruise Acres: 148 **Estimated CV%** 42 Net BF/Acre **SE% Objective** 8% Net BF/Acre

Planned Sale Volume : 5,800 MBF **Estimated Sale Area Value/Acre:** \$17,200/Acre

A. Cruise Goals: (a) Grade minimum 100 conifer trees.

(b) Sample 76 cruise plots (27 grade/ 49 count); (c) Other goals (Determine "automark" thinning standards; X Determine log grades for sale value; Determine snag and leave tree species and sizes.

B. Cruise Design:

1. Plot Cruises: BAF 40 (Full point)

Cruise Line Direction: Unit 1: 224°/44°, Unit 2: 22°/202°, Unit 3: 163°,343°

Cruise Line Spacing 8 (chains) 528 (Feet)

Cruise Plot Spacing 2.5 (chains) 165 (Feet)

Grade/Count Ratio 1:2

Take plots as marked on cruise map.

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

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

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

C. Tree Measurements:

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

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

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

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

4. Form Factors: (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area, and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.

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

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

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

B. Sort: Use code “1” (Domestic).

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

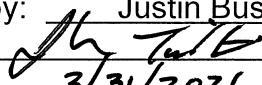
Grade oversized 3-SAW (DIB $\geq$ 12”, knots $> 2\frac{1}{2}$ ” inside scaling cylinder affecting $> 50\%$ of log)

7. **Deductions:** Estimate visible defect or damage as a “length deduction” (most often), or as a “diameter deduction,” as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a “per tree” basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.

8. **Standard Field Procedures:** Plot Type Cruises: Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at inter-visible points, not to exceed 100’ apart. On “measure/grade” plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.

9. **Cruising Equipment:** Relaskop, Rangefinder, Logger’s Tape (with dbh on back), Compass, Allegro II Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint, Permanent Marker.

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

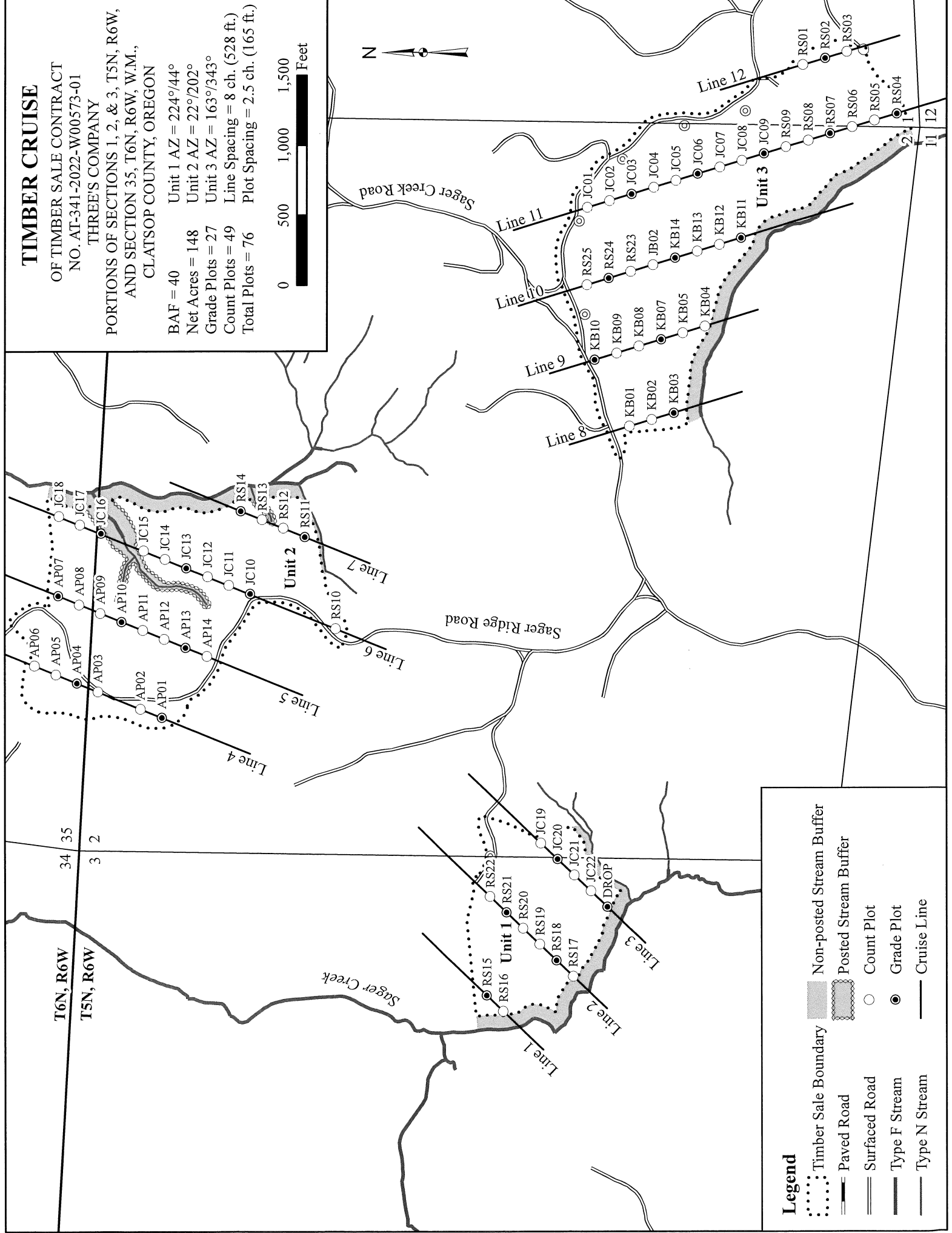
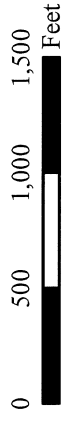
Cruise Design by: Justin Bush
Approved by: 
Date: 3/31/2021

TIMBER CRUISE

OF TIMBER SALE CONTRACT
NO. AT-341-2022-W00573-01
THREE'S COMPANY

PORTIONS OF SECTIONS 1, 2, & 3, T5N, R6W,
AND SECTION 35, T6N, R6W, W.M.,
CLATSOP COUNTY, OREGON

BAF = 40 Unit 1 AZ = 224°/44°
Net Acres = 148 Unit 2 AZ = 22°/202°
Grade Plots = 27 Unit 3 AZ = 163°/343°
Count Plots = 49 Line Spacing = 8 ch. (528 ft.)
Total Plots = 76 Plot Spacing = 2.5 ch. (165 ft.)



Legend

- Timber Sale Boundary
- Paved Road
- Surfaced Road
- Type F Stream
- Type N Stream
- Non-posted Stream Buffer
- Posted Stream Buffer
- Count Plot
- Grade Plot
- Cruise Line

T TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)												Page 1								
Project: TCOMP														Date	3/31/2021							
														Time	10:38:14AM							
T05N R06W S02 T00MC										T05N R06W S02 T00MC												
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt													
05N	06W	02	U123TAKE	00MC	148.00	75	114	1	W													
S So Gr T rt ad Spp			% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre		
			Def%	Gross	Net	Log Scale Dia.				Log Length				Ln	Dia	Bd	CF/ Lf					
										4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99	Ft	In	Ft		
D	DO	CU																7	33		0.00	.8
D	DO	2S	88	.5	38,772	38,564	5,708					24	76	0	1	2	97	39	18	569	2.84	67.7
D	DO	3S	11	.8	4,458	4,420	654				84	5	11	11	12	16	61	32	10	117	0.98	37.7
D	DO	4S	1		419	419	62				100			66	34			20	7	29	0.54	14.3
D Totals			94	.6	43,649	43,404	6,424			10	21	69		2	2	4	92	34	14	360	2.13	120.5
A	DO	1S	36		898	898	133					100			13		87	38	12	214	1.56	4.2
A	DO	2S	29	1.8	742	728	108				100			13			87	35	11	146	1.16	5.0
A	DO	3S	7		165	165	24				100				17		83	34	9	89	0.85	1.9
A	DO	4S	28		676	676	100				100			27	41		32	27	6	35	0.48	19.4
A Totals			5	.5	2,481	2,468	365			64	36			11	17		72	30	8	81	0.82	30.4
H	DO	CU																16	11		0.00	1.3
H	DO	3S	62		233	233	34				100					61	39	35	8	81	0.74	2.9
H	DO	4S	38		138	138	20				100			59	41			20	6	28	0.37	5.0
H Totals			1		371	371	54			100				22	15	38	25	24	7	40	0.50	9.2
Type Totals				.6	46,501	46,243	6,844			13	22	65		3	3	4	91	33	13	289	1.83	160.1

TC TSTATS				STATISTICS				PAGE 1			
				PROJECT		TCOMP		DATE 3/31/2021			
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
05N	06W	02	U123TAKE	00MC	148.00	75	349	1	W		
				TREES	ESTIMATED						
				PER PLOT	TOTAL						
					TREES	PERCENT					
						SAMPLE					
						TREES					
TOTAL		75	349	4.7							
CRUISE		26	114	4.4	9,840	1.2					
DBH COUNT											
REFOREST											
COUNT		49	235	4.8							
BLANKS											
100 %											
STAND SUMMARY											
		SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
		TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR		91	38.8	27.3	110	30.2	157.9	43,649	43,404	8,815	8,815
R ALDER		16	20.1	14.3	47	5.9	22.4	2,481	2,468	751	751
WHEMLOCK		7	7.6	11.9	31	1.7	5.9	371	371	110	110
TOTAL		114	66.5	22.7	82	39.1	186.1	46,501	46,243	9,677	9,677
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		67.6	7.1	1,485	1,598	1,711					
R ALDER		61.1	15.8	148	176	203					
WHEMLOCK		92.5	37.6	42	67	92					
TOTAL		86.6	8.1	1,199	1,304	1,410	300	75	33		
CL:	68.1 %	COEFF	SAMPLE TREES - CF					# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5 10		15		
DOUG FIR		59.6	6.2	293	312	331					
R ALDER		56.8	14.7	45	53	60					
WHEMLOCK		89.4	36.4	14	22	30					
TOTAL		77.0	7.2	239	258	276	237	59	26		
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		61.3	7.1	36	39	42					
R ALDER		208.9	24.1	15	20	25					
WHEMLOCK		308.4	35.6	5	8	10					
TOTAL		69.7	8.0	61	66	72	194	48	22		
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		51.5	5.9	148	158	167					
R ALDER		210.1	24.2	17	22	28					
WHEMLOCK		290.0	33.5	4	6	8					
TOTAL		39.1	4.5	178	186	195	61	15	7		
CL:	68.1 %	COEFF	NET BF/ACRE					# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5 10		15		
DOUG FIR		50.5	5.8	40,876	43,404	45,932					
R ALDER		225.3	26.0	1,826	2,468	3,110					
WHEMLOCK		334.5	38.6	228	371	514					
TOTAL		43.2	5.0	43,939	46,243	48,547	74	19	8		
CL:	68.1 %	COEFF	NET CUFT FT/ACRE					# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5 10		15		
DOUG FIR		51.0	5.9	8,297	8,815	9,334					
R ALDER		220.9	25.5	560	751	943					
WHEMLOCK		329.7	38.0	68	110	152					

TC TSTATS				STATISTICS				PAGE	2
				PROJECT		TCOMP		DATE	3/31/2021
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
05N	06W	02	U123TAKE	00MC	148.00	75	349	1	W
CL: 68.1 %				COEFF			NET CUFT FT/ACRE		# OF PLOTS REQ.
SD: 1.0				VAR.			S.E.%		INF. POP.
				LOW	AVG	HIGH			
TOTAL				41.2	4.8	9,216	9,677	10,137	68
									17
									8

TC TSTATS				STATISTICS				PAGE 1	
				PROJECT	TCOMP	DATE 3/31/2021			
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
05N	06W	02	U123	00MC	148.00	75	365	1	W
				TREES	ESTIMATED	PERCENT			
				PER PLOT	TOTAL	SAMPLE			
					TREES	TREES			

TC TSTATS				STATISTICS				PAGE	2
				PROJECT		TCOMP		DATE	3/31/2021
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
05N	06W	02	U123	00MC	148.00	75	365	1	W
CL: 68.1 %		COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0		VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
DOUGLEAV		493.2	56.9	1	3	5			
CEDLEAV		866.0	99.9	0	1	1			
TOTAL		35.8	4.1	186	194	202	51	13	6
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		50.5	5.8	40,876	43,404	45,932			
R ALDER		225.3	26.0	1,826	2,468	3,110			
WHEMLOCK		334.5	38.6	228	371	514			
SNAG									
DOUGLEAV		516.6	59.6	247	612	977			
CEDLEAV		866.0	99.9	0	41	81			
TOTAL		42.2	4.9	44,614	46,896	49,177	71	18	8
CL: 68.1 %		COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0		VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DOUG FIR		51.0	5.9	8,297	8,815	9,334			
R ALDER		220.9	25.5	560	751	943			
WHEMLOCK		329.7	38.0	68	110	152			
SNAG									
DOUGLEAV		529.5	61.1	51	130	209			
CEDLEAV		866.0	99.9	0	15	29			
TOTAL		40.1	4.6	9,367	9,821	10,275	64	16	7

TC TLOGSTVB				Log Stock Table - MBF Project: TCOMP																
T05N R06W S02 T00MC												T05N R06W S02 T00M								
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	1											
05N	06W	02	U123TAKE	00MC	148.00	75	114	Date	3/31/2021											
										Time	10:38:02AM									
S	So	Gr	Log	Gross	%	Net	%	Net Volume by Scaling Diameter in Inches												
Spp	T	rt	de	Len	MBF	Def	MBF	Spc	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	CU	6																	
D	DO	CU	8																	
D	DO	CU	12																	
D	DO	2S	16	9			9	.1						6	3					
D	DO	2S	24	8			8	.1						8						
D	DO	2S	26	8			8	.1						8						
D	DO	2S	28	9			9	.1						9						
D	DO	2S	30	27			27	.4						10	17					
D	DO	2S	32	117			117	1.8						28	62	26				
D	DO	2S	34	10			10	.1						10						
D	DO	2S	36	82			82	1.3						15	27	41				
D	DO	2S	40	5,468	.6		5,438	84.6						267	544	1180	1564	1376	457	49
D	DO	3S	12	2			2	.0							2					
D	DO	3S	16	21			21	.3					21							
D	DO	3S	18	3			3	.1					3							
D	DO	3S	20	43			43	.7				9	13	6	14					
D	DO	3S	24	15			15	.2				7	8							
D	DO	3S	26	25			25	.4				25								
D	DO	3S	28	19			19	.3			10	4	5							
D	DO	3S	30	22			22	.3									22			
D	DO	3S	32	64			64	1.0				27	37							
D	DO	3S	34	38			38	.6			8	11	6				13			
D	DO	3S	36	63	7.1		59	.9			8		24				13	14		
D	DO	3S	38	68			68	1.1				22	33				13			
D	DO	3S	40	275	.4		274	4.3			13	36	217	8						
D	DO	4S	12	2			2	.0					2							
D	DO	4S	14	4			4	.1				2	2							
D	DO	4S	16	11			11	.2			7	5								
D	DO	4S	20	24			24	.4			18	6								
D	DO	4S	22	4			4	.1				4								
D	DO	4S	24	13			13	.2			10	4								
D	DO	4S	28	4			4	.1			4									
D	Totals			6,460			6,424	93.9			77	162	371	375	669	1308	1578	1376	457	49
A	DO	1S	30	18			18	4.8					18							
A	DO	1S	40	115			115	31.6					92	24						
A	DO	2S	20	16	12.5		14	3.7					14							
A	DO	2S	40	94			94	25.8					94							
A	DO	3S	24	4			4	1.2			4									
A	DO	3S	40	20			20	5.5			20									
A	DO	4S	16	6			6	1.6			6									
A	DO	4S	20	21			21	5.9			21									
A	DO	4S	28	28			28	7.7			28									
A	DO	4S	30	13			13	3.4			13									
A	DO	4S	36	9			9	2.4			9									
A	DO	4S	40	23			23	6.3			23									
A	Totals			367			365	5.3			100	24	108	109	24					
H	DO	CU	8																	
H	DO	CU	20																	

TC TLOGSTVB				Log Stock Table - MBF Project: TCOMP															
T05N R06W S02 T00MC										T05N R06W S02 T00M									
Twp	Rge	Sec	Tract		Type	Acres	Plots	Sample Trees				Page	2						
05N	06W	02	U123TAKE		00MC	148.00	75	114				Date	3/31/2021						
										Time	10:38:02AM								
S Spp	So T	Gr rt	Log de Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
								2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
H	DO	3S	34	21		21	38.2			9	12								
H	DO	3S	36	13		13	24.6			3		10							
H	DO	4S	16	10		10	17.6			10									
H	DO	4S	20	2		2	4.2			2									
H	DO	4S	24	8		8	15.3			8									
H Totals				55		55	.8			33	12	10							
Total All Species				6,882		6,844	100.0			211	198	489	484	693	1308	1578	1376	457	49

TC TSTNDSUM				Stand Table Summary												
Project								TCOMP								
T05N R06W S02 T00MC												T05N R06W S02 T00MC				
Twp	Rge	Sec	Tract	Type				Acres		Plots	Sample Trees		Page: 1			
05N	06W	02	U123TAKE	00MC				148.00		75	114		Date: 03/31/20			
												Time: 10:38:45AM				
S Spc	T	Sample		FF	Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	T o t a l s		
		DBH	Trees	16'	Tot				Net Cu.Ft.	Net Bd.Ft.		Cu.Ft.	Bd.Ft.			Tons
D		16	3	89	77	3.727	5.20	7.45	21.3	71.7		159	534		235	79
D		17	1	92	99	1.101	1.73	2.20	31.5	115.0		69	253		103	37
D		18	1	88	134	.982	1.73	2.95	30.7	123.3		90	363		134	54
D		19	3	88	156	2.643	5.20	8.81	34.6	145.0		305	1,278		451	189
D		20	1	89	160	.795	1.73	3.18	32.0	135.0		102	429		151	64
D		21	5	89	145	3.606	8.67	11.54	41.5	178.7		479	2,063		709	305
D		22	1	85	121	.657	1.73	1.97	41.0	176.7		81	348		120	52
D		23	4	91	140	2.405	6.94	7.22	53.5	235.0		386	1,696		571	251
D		24	3	89	126	1.657	5.20	4.42	57.5	241.3		254	1,066		376	158
D		25	6	89	143	3.053	10.41	9.16	61.8	278.3		566	2,550		838	377
D		27	4	90	160	1.745	6.94	6.54	64.5	332.0		422	2,173		625	322
D		28	2	90	149	.811	3.47	2.43	81.2	401.7		198	978		292	145
D		29	10	89	148	3.782	17.35	12.10	81.2	398.1		982	4,818		1,454	713
D		30	4	88	167	1.414	6.94	4.59	92.9	453.8		427	2,085		632	309
D		31	5	89	140	1.655	8.67	5.30	88.5	439.4		469	2,327		694	344
D		32	1	85	133	.311	1.73	.93	78.7	390.0		73	363		108	54
D		33	9	89	162	2.629	15.61	9.35	101.2	538.4		946	5,032		1,401	745
D		34	4	88	158	1.101	6.94	3.85	105.1	546.4		405	2,105		599	312
D		35	7	90	154	1.818	12.14	5.45	128.4	678.6		700	3,700		1,036	548
D		37	3	89	159	.697	5.20	2.32	133.0	716.0		309	1,664		457	246
D		38	1	88	181	.220	1.73	.88	128.8	725.0		113	639		168	95
D		42	3	87	175	.541	5.20	2.16	150.9	836.7		327	1,810		483	268
D		43	3	89	152	.516	5.20	1.72	168.9	914.0		291	1,572		430	233
D		44	1	85	120	.164	1.73	.49	125.3	676.7		62	334		91	49
D		45	2	89	170	.314	3.47	1.10	195.1	1075.7		215	1,183		318	175
D		48	2	86	189	.276	3.47	1.10	205.6	1096.2		227	1,211		336	179
D		55	1	91	107	.105	1.73	.21	266.5	1195.0		56	251		83	37
D		57	1	88	157	.098	1.73	.29	349.0	1973.3		102	580		152	86
D		Totals	91	89	141	38.823	157.87	119.74	73.6	362.5		8,815	43,404		13,047	6,424
A		9	2	86	58	6.338	2.80	6.34	11.0	30.0		70	190		103	28
A		11	1	86	47	2.121	1.40	2.12	13.0	40.0		28	85		41	13
A		14	2	86	41	2.619	2.80	3.93	14.7	43.3		58	170		85	25
A		15	1	86	77	1.141	1.40	2.28	21.5	70.0		49	160		73	24
A		16	2	87	107	2.005	2.80	4.01	32.2	120.0		129	481		191	71
A		17	2	87	90	1.776	2.80	3.55	31.8	107.5		113	382		167	57
A		18	2	86	71	1.584	2.80	3.17	29.3	95.0		93	301		137	45
A		19	2	86	93	1.422	2.80	2.84	40.7	135.0		116	384		172	57
A		20	1	86	74	.642	1.40	1.28	37.5	110.0		48	141		71	21
A		24	1	87	71	.446	1.40	.89	54.5	195.0		49	174		72	26
A		Totals	16	86	68	20.095	22.40	30.42	24.7	81.1		751	2,468		1,112	365
H		9	2	89	36	3.794	1.68	3.79	7.0	30.0		27	114		39	17
H		11	1	89	54	1.270	.84	1.27	15.0	50.0		19	63		28	9
H		13	1	83	29	.909	.84									
H		14	1	88	76	.784	.84	1.57	17.0	60.0		27	94		39	14
H		19	1	88	75	.426	.84	.85	26.0	90.0		22	77		33	11
H		20	1	86	43	.384	.84	.38	40.0	60.0		15	23		23	3
H		Totals	7	88	45	7.567	5.87	7.87	14.0	47.2		110	371		162	55
Totals		114		88	108	66.485	186.13	158.03	61.2	292.6		9677	46,243		14,321	6,844

LOGGING PLAN MAP

OF TIMBER SALE CONTRACT
NO. AT-341-2022-W00573-01
THREES COMPANY
PORTIONS OF SECTIONS 1, 2, & 3, T5N, R6W,
AND SECTION 35, T6N, R6W, W.M.,
CLATSOP COUNTY, OREGON

Logging Method	Ground	Cable	Approximate Net Acres
Unit 1 (MC)	0%	100%	24
Unit 2 (MC)	96%	4%	53
Unit 3 (MC)	26%	74%	70
Unit 4 (R/W)	100%	0%	1
Total	47%	53%	148



1 inch = 1,000 feet Contours = 40 feet

