



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Lusignan
Sale AT-341-2024-W01055-01

District: Astoria

Date: February 21, 2024

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$2,133,366.06	\$1,615.28	\$2,134,981.34
		Project Work:	(\$72,689.00)
		Advertised Value:	\$2,062,292.34



Timber Sale Appraisal
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District: Astoria

Date: February 21, 2024

Timber Description

Location:

Stand Stocking: 80%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	24	0	97
Western Hemlock / Fir	34	0	95
Alder (Red)	14	0	95
Maple	18	0	95

Volume by Grade	2S	3S & 4S 6"-11"	3S 12"+	Camprun	Total
Douglas - Fir	3,399	645	190	0	4,234
Western Hemlock / Fir	10	0	2	0	12
Alder (Red)	0	0	0	4	4
Maple	0	0	0	20	20
Total	3,409	645	192	24	4,270

Comments: Pond Values Used: Local Pond Values, February, 2024.

Expected Log Markets: Tillamook, Warrenton, North Plains, Forest Grove, Mist, Eugene, Longview, WA, and Vancouver, WA.

PRICING:

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

\$1,071.43/MBF = \$1,300/MBF - \$228.57/MBF

Sitka spruce stumpage = pond value - (Douglas-fir) logging cost.

\$221.43/MBF = \$450/MBF - \$228.57/MBF

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

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

Ditch Filters:

6 bales of straw @ \$12/bale = \$72

2 hours of labor @ \$45/hr = \$90

TOTAL Other Costs (with Profit & Risk to be added):\$2,162.00

Other Costs (No Profit & Risk added):

None.

ROAD MAINTENANCE

(See attached Road Maintenance Cost Summary Sheet)

TOTAL Road Maintenance: \$/MBF = \$3.26/MBF

Slash Piling

(See attached site prep appraisal sheet)

Total: \$6,706



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Logging Conditions

Combination#: 1

Douglas - Fir	82.00%
Western Hemlock / Fir	82.00%
Alder (Red)	82.00%
Maple	82.00%

Logging System: Shovel **Process:** Manual Delimbing

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

tree size: Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF

loads / day: 19 **bd. ft / load:** 5000

cost / mbf: \$105.27

machines: Shovel Logger

Combination#: 2

Douglas - Fir	18.00%
Western Hemlock / Fir	18.00%
Alder (Red)	18.00%
Maple	18.00%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Manual Delimbing

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

tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF

loads / day: 11 **bd. ft / load:** 5000

cost / mbf: \$145.06

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



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Logging Costs

Operating Seasons: 2.00	Profit Risk: 12%
Project Costs: \$72,689.00	Other Costs (P/R): \$2,162.00
Slash Disposal: \$6,706.00	Other Costs: \$0.00

Miles of Road

Road Maintenance: \$3.26

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	5.2
Western Hemlock / Fir	\$0.00	3.0	5.0
Alder (Red)	\$0.00	2.0	4.5
Maple	\$0.00	2.0	4.3



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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									
\$112.43	\$3.36	\$2.06	\$82.53	\$0.51	\$24.11	\$1.57	\$2.00	\$0.00	\$228.57
Western Hemlock / Fir									
\$112.43	\$3.42	\$2.06	\$87.50	\$0.51	\$24.71	\$1.57	\$2.00	\$0.00	\$234.20
Alder (Red)									
\$112.43	\$3.42	\$2.06	\$145.83	\$0.51	\$31.71	\$1.57	\$2.00	\$0.00	\$299.53
Maple									
\$112.43	\$3.42	\$2.06	\$152.62	\$0.51	\$32.52	\$1.57	\$2.00	\$0.00	\$307.13

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$731.70	\$503.13	\$0.00
Western Hemlock / Fir	\$0.00	\$493.67	\$259.47	\$0.00
Alder (Red)	\$0.00	\$499.00	\$199.47	\$0.00
Maple	\$0.00	\$348.00	\$40.87	\$0.00



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Summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	4,234	\$503.13	\$2,130,252.42
Western Hemlock / Fir	12	\$259.47	\$3,113.64
Alder (Red)	4	\$199.47	\$797.88
Maple	20	\$40.87	\$817.40

Gross Timber Sale Value

Recovery: \$2,134,981.34

Prepared By: Michele Huffman

Phone: 503-325-5451

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale: Lusignan
Date: February 21, 2024
By: Michele Huffman CB

MBF: 4,270
\$/MBF: \$3.26

Type	Equipment/Rationale	Move-in Rate	Times	Hours	Rate	Cost
Interim Road Maintenance	Grader 14G	\$972	1	8	\$126	\$1,980
	Grader 14G	\$972	1	24	\$126	\$3,996
Final Road Maintenance	Dump Truck 12CY	\$205	1	8	\$99	\$997
	Rubber tired backhoe	\$401	1	4	\$97	\$789
	Vibratory Roller	\$972	1	24	\$97	\$3,300
	Water Truck 2,500 gallon	\$238	1	8	\$113	\$1,142
	C315 Excavator	\$1,005	1	4	\$127	\$1,513
	Labor			4	\$50	\$200
Total						\$13,917

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	4.6	3.1	25
Vibratory Roller	1.5	4.6	3.1	25

Process and compact: All crushed rock roads

Cow Ridge Road 3.0 Miles

Northrup Creek Road 0.4 Miles

Unnamed Spurs 1.2 Miles

Grade & Process Total = 4.6 Miles

Site Prep Appraisal

Sale Number: AT-341-2024-W01055-01

Sale Name: Lusignan

Date: 02/01/2024

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

Sale Area	Harvest Type	Veg Type/Zone	Ground Based Yarding Acres	Estimated Piling Hours/Area	Cost/Hour	Total Cost/Area
1	MC	A	66	33	\$145.00	\$4,785.00
					In-unit Piling	Sub Total = \$4,785.00
Sale Area	Number of Landings to be Piled	# cable acres per area	Total Cost/Area	Number of In-Unit Piles	Material Cost/Pile	Total Cost/Area
1	12	14	\$406.00	45	\$5.00	\$225.00
*Cost includes separating firewood					Materials	Sub Total = \$225.00
Additional Move-in allowance					Landing Piling	Sub Total = \$406.00
Move-In Allowance	Number of Move-In's	Total Move-In Allowance				
\$1,290.00	1	\$1,290.00	Brush Piler			
					Move-In	Sub Total = \$1,290.00
Slash Endhaul						
Dump Truck hrs	Cost/Hour	Total	Loader hrs	Cost/Hour	Total	
0	\$99.00	\$0.00	0	\$161.00	\$0.00	
						Sub Total = \$0.00
						Grand Total = \$6,706.00

SUMMARY OF ALL PROJECT COSTS

SALE NAME: Lusignan

Project No. 1: ROAD CONSTRUCTION:

<u>Road segment</u>	<u>Length (Sta)</u>	<u>Length (Mile)</u>	<u>Cost</u>
Surfaced			
1A to 1B, 1E to 1F, 1G to 1H	8.05	0.15	\$10,790
Unsurfaced			
1C to 1D	4.50	0.09	\$2,992
Road Maint.			\$1,393
Move-In			\$2,117
TOTALS	12.55	0.24	\$17,292

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	214.4	4.06	\$44,152
I5 to I6, I7 to I8			
Road Maint.			\$4,463
Move-In			\$6,782
TOTALS		4.06	\$55,397

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 \$72,689

Compiled By: D. Farner

Date: 02/07/2024

Move In and Maintenance Calculator for Construction and Improvement

SALE NAME Lusignan

Project No. 1: ROAD CONSTRUCTION:

<u>Road segment</u>	<u>Length/Sta</u>	<u>Length/Mile</u>	<u>Cost</u>
Surfaced			
1A to 1B, 1E to 1F, 1G to 1H	8.05	0.15	\$10,790
Unsurfaced			
1C to 1D	4.50	0.09	\$2,992
TOTALS	12.55	0.24	\$13,782

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	214.40	4.06	\$44,152
I5 to I6, I7 to I8			
TOTALS	214.40	4.06	\$44,152

MOVE IN (Construction & Improvement Only)

<u>Equipment</u>	<u>Length/Mile</u>	<u>Cost</u>
Grader (14G)		\$972
Dump Truck (6 trucks)		\$1,230
Front End Loader (966)		\$972
Vibratory Roller		\$972
Water Truck		\$238
Large Excavator (330)		\$1,755
Small Excavator (315)		\$1,005
Dozer Large (D8)		\$1,755
TOTAL		\$8,899

ROAD MAINTENANCE (Construction & Improvement Only)

	<u>Length/Mile</u>	<u>Cost</u>
Cow Ridge to Northrup Quarry	3.1	\$5,856
TOTAL		\$5,856

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Lusignan
ROAD: 1A to 1B (1.75), 1C to 1D (4.50), 1E to 1F (1.50),
POINTS: 1G to 1H (4.80)

NEW CONSTRUCTION: 12.55 STATIONS 0.24 MILES
IMPROVEMENT: STATIONS 0.00 MILES

CLEARING & GRUBBING

	Method	Acres/amount	x	Rate	=	Cost
Surfaced			x		=	\$0.00
1A to 1B, 1E to 1F, 1G to 1H	Scatter outside of right of way	0.84		\$ 1,669		\$1,401.96
Unsurfaced						
1C to 1D	Scatter outside of right of way	0.31		\$ 1,669		\$517.39

SUB TOTAL FOR CLEARING & GRUBBING

\$1,919

EXCAVATION

	Material	Sta/amount	x	Rate	=	Cost
1A to 1B						
0+00 to 1+75	Balanced Construction (\$/sta)	1.75	x	\$154.00	=	\$269.50
1C to 1D						
0+00 to 4+50	Balanced Construction (\$/sta)	4.50	x	\$154.00	=	\$693.00
	Drift earth up to 200' (\$/sta)	4.50	x	\$238.00	=	\$1,071.00
2+20	Construct Turnaround (C330/hr)	1.00	x	\$195.00	=	\$195.00
1E to 1F						
0+00 to 1+50	Balanced Construction (\$/sta)	1.50	x	\$154.00	=	\$231.00
	Landing Construction (\$/ldg)	1.00	x	\$487.00	=	\$487.00
						\$0.00
1G to 1H						
0+00 to 4+80	Common drift (≤ 50% slopes) (\$/cy)	392.00	x	\$2.25	=	\$882.00
	Cutslope rounding (\$/sta)	1.00	x	\$54.39	=	\$54.39
0+58	Construct Turnaround (C330/hr)	1.00	x	\$195.00	=	\$195.00
3+45	Construct Turnaround (C330/hr)	1.00	x	\$195.00	=	\$195.00
	Landing Construction (\$/ldg)	1.00	x	\$487.00	=	\$487.00

SUB TOTAL FOR EXCAVATION

\$4,760

CULVERT MATERIALS AND INSTALLATION

Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost
1G to 1H									
0+90	18" CPP	30	\$24.37	\$731.10					

	Description	Quantity	Rate	Cost
Other/miscellaneous:				
Culvert stakes & markers:	6' x 2 1/2" white fiberglass posts	1	\$25.53	\$25.53

SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION

\$757

Subtotal of Clearing, Exc., Culv.

\$7,436

SURFACING						Stations/ amount		Rate/ sta/amt	Cost
Subgrade prep:		Description					x		
Grade, Shape and Ditch 16':		1A to 1B(1.75 sta.), 1E to 1F(1.5 sta.),				8.05	x	\$30.98	\$249.39
		1G to 1H(4.8 sta.)							
Subgrade Compaction		All Segments				12.55	x	\$25.19	\$316.13
Grade, Shape, and Outslope 1		1C to 1D(4.5 sta.)				4.50	x	\$22.89	\$103.01

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		0+00 to 1+75					
				Volume (CY) per		Number of					
Base Rock	6"-0" jaw-run	0+00 to 0+75	10	station	63	stations	0.75	47	\$5.58	\$264	
Base Rock	6"-0" jaw-run	0+75 to 1+75	12	station	86	stations	1.00	86	\$5.58	\$480	
Junction Rock	3/4"-0" crushed	0+00	N/A	junction	11	junctions	1	11	\$5.58	\$61	
Total Rock for Road Segment:			1A to 1B		144						\$805
ROAD SEGMENT 1C to 1D				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Application	Rock Size and Type	Location	Depth of Rock (inches)	1C to 1D		0+00 to 4+50					
				Volume (CY) per		Number of					
Base Rock	4"-0" crushed	0+00 to 1+00	10	station	63	stations	1	63	\$5.58	\$352	
Junction Rock	4"-0" crushed	0+00	N/A	junction	11	junctions	1	11	\$5.58	\$61	
Total Rock for Road Segment:			1C to 1D		74						\$413
ROAD SEGMENT 1E to 1F				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Application	Rock Size and Type	Location	Depth of Rock (inches)	1E to 1F		0+00 to 1+50					
				Volume (CY) per		Number of					
Base Rock	6"-0" jaw-run	0+00 to 0+50	10	station	63	stations	0.50	32	\$5.58	\$176	
Base Rock	6"-0" jaw-run	0+50 to 1+50	12	station	86	stations	1.00	86	\$5.58	\$480	
Junction Rock	1 1/2"-0" crushed	0+00	N/A	junction	11	Junctions	1	11	\$5.58	\$61	
Landings	6"-0" pit-run	1+50	N/A	landing	88	landings	1	88	\$5.58	\$491	
Total Rock for Road Segment:			1E to 1F		217						\$1,208

ROAD SEGMENT 1G to 1H			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost		
Application	Rock Size and Type	Location	Depth of Rock (inches)	1G to 1H		0+00 to 4+80					
				Volume (CY) per		Number of					
Base Rock	4"-0" crushed	0+00 to 3+80	10	station	63	stations	3.80	239	\$5.58	\$1,336	
Base Rock	6"-0" jaw- run	3+80 to 4+80	12	station	86	stations	1.00	86	\$5.58	\$480	
Junction Rock	1 1/2"-0" crushed	0+00	N/A	junction	11	junctions	1	11	\$5.58	\$61	
Turnaround	4"-0" crushed	0+60, 3+45	12	turnaround	22	turnaround	2	44	\$5.58	\$246	
Landings	6"-0" pit- run	4+80	N/A	landing	88	landings	1	88	\$5.58	\$491	
Total Rock for Road Segment:			1G to 1H				468			\$2,614	
Processing:											
				Description				No.sta	Rate/sta	Cost	
				Water, Process & Compact Base Rock				1A to 1B(1.75 sta.), 1C to 1D(1 sta.), 1E to 1F(1.5 sta.), 1G to 1H(4.8 sta.)	9.05	\$70.47	\$637.75
								</			

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Lusignan
ROAD: I1 to I2(161.3 sta.), I3 to I4(8.65 sta.),
POINTS: I5 to I6(13.7 sta), I7 to I8(30.75 sta.)

NEW CONSTRUCTION: STATIONS 0.00 MILES
IMPROVEMENT: 214.40 STATIONS 4.06 MILES

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

EXCAVATION						
Material	Cy/amount	x	Rate	=	Cost	
I1 to I2						
133+55 Improve turnout						
Construct turnaround (scatter debris)						
Improve ditchout C315/hr.	1.0	x	\$127.00	=	\$127.00	
		x		=	\$0.00	
SUB TOTAL FOR EXCAVATION						\$127

CULVERT MATERIALS AND INSTALLATION									
Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost
				\$0.00					
				Description	Quantity	Rate	Cost		
Other/miscellaneous:									
Culvert stakes & markers:					3	\$25.53	\$76.59		
SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION									\$77
Subtotal of Clearing, Exc., Culv.									\$204

SURFACING								Stations/ amount	x	Rate/ sta/amt	Cost	
Subgrade prep: Description												
Grade, Shape and Ditch 16'								11 to I2(161.3 sta.), I3 to I4(8.65 sta.),	214.40	x	\$30.98	\$6,642.11
								I5 to I6(13.7 sta), I7 to I8(30.75 sta.)				
Subgrade Compaction								I1 to I2 (139.65 sta.), I7 to I18(30.75 sta.)	170.40	x	\$25.19	\$4,292.38
Sod Removal								I3 to I4(8.65 sta.), I5 to I6(13.7 sta),	53.10	x	\$29.08	\$1,544.15
								I7 to I8(30.75 sta.)				
Scatter Debris								I3 to I4(8.65 sta.), I5 to I6(13.7 sta),	53.10	x	\$11.19	\$594.19
								I7 to I8(30.75 sta.)				
ROAD SEGME I1 to I2				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost		
Application	Rock Size and Type	Location	Depth of Rock (inches)	I1 to I2		0+00 to 161+30						
				Volume (CY) per		Number of						
Surfacing	3/4"-0" crushed	21+65 to 161+30	2	station	13	stations	139.65	1,815	\$5.58	\$10,130		
Surface Leveling Rock	3/4"-0" crushed	93+60, 96+00, 108+00	N/A	load	11	loads	3	33	\$5.58	\$184		
		20+20, 27+45, 28+10, 34+70, 53+25, 60+15, 87+75,										
Junctions	3/4"-0" crushed	146+00	N/A	junction	11	junctions	8	88	\$5.58	\$491		
		24+10, 41+10, 47+30, 63+25, 70+20,										
Turnouts	3/4"-0" crushed	101+65	N/A	turnout	11	turnouts	6	66	\$5.58	\$368		
Turnouts	4"-0" crushed	133+55, 145+15	N/A	turnout	44	turnouts	2	88	\$5.58	\$491		
Turnaround	4"-0" crushed	133+55, 145+15	N/A	turnaround	22	turnaround	2	44	\$5.58	\$246		
Total Rock for Road Segment: I1 to I2								2,134			\$11,910	
ROAD SEGME I3 to I4				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost		
Application	Rock Size and Type	Location	Depth of Rock (inches)	I3 to I4		0+00 to 8+65						
				Volume (CY) per		Number of						
Surface Leveling Rock	4"-0" crushed	0+00 to 4+50	N/A	load	11	loads	3	33	\$5.58	\$184		
Junctions	3/4"-0" crushed	0+00	N/A	station	11	stations	1	11	\$5.58	\$61		
Total Rock for Road Segment: I3 to I4								44			\$246	

ROAD SEGME I5 to I6				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost
Application	Rock Size and Type	Location	Depth of Rock (inches)	I5 to I6		0+00 to 13+70				
				Volume (CY) per		Number of				
Surface Leveling Rock	4"-0" crushed	0+00 to 13+70	N/A	load	11	loads	4	44	\$5.58	\$246
Junctions	3/4"-0" crushed	0+00	N/A	station	11	stations	1	11	\$5.58	\$61
Turnaround	4"-0" crushed	10+50	N/A	turnaround	33	turnaround	1	33	\$5.58	\$184
Total Rock for Road Segment: I5 to I6								88		\$491
ROAD SEGME I7 to I8				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost
Application	Rock Size and Type	Location	Depth of Rock (inches)	I7 to I8		0+00 to 30+75				
				Volume (CY) per		Number of				
Surfacing	1 1/2"-0" crushed	0+00 to 25+00	N/A	station	13	stations	25	325	\$5.58	\$1,814
Surface Leveling Rock	1 1/2"-0" crushed	25+00 to 30+75	N/A	load	11	loads	6	66	\$5.58	\$368
Junctions	3/4"-0" crushed	0+00	N/A	station	22	stations	1	22	\$5.58	\$123
Turnouts	1 1/2"-0" crushed	6+15, 25+00	N/A	turnout	22	turnouts	2	44	\$5.58	\$246
Total Rock for Road Segment: I7 to I8								457		\$2,550

Processing: Description										No.sta	Rate/sta	Cost
Water, Process & Compact: I1 to I2(161.3 sta.), I3 to I4(8.65 sta.),										214.40	\$70.47	\$15,109
I5 to I6(13.7 sta), I7 to I8(30.75 sta.)												
SUB TOTAL FOR	24"-12" rr	24"-6" rr	12"-6" rr	6"-0" jaw-run	6"-0"pr	4"-0" crushed	1 1/2"- 0" crushed	2"-1" drainroc k	3/4"-0" crushed	Total		
						242	435		2,046	2,723	\$43,378	

SPECIAL PROJECTS					Description	Cy/Amount	Rate	Cost
pit-run development						176	\$3.24	\$570.24
SUB TOTAL FOR SPECIAL PROJECTS								\$570
Subtotal of Surfacing & Spec. Proj.								\$43,949
Subtotal of Clearing, Exc., Culv.								\$204
GRAND TOTAL								\$44,152

Compiled By: D. Farner

Date: 02/07/2024

CRUSHED ROCK COST

SALE NAME:	Lusignan
PROJECT:	1 and 2
Stockpile:	Cow Cr. and Northrup

MATERIAL: 3/4"-0", 1-1/2"-0", 4"-0", JR, PR DATE: 02/13/2024
BY: d. Farner

Road Segment	Stations	Cubic Yards	ONE WAY HAUL IN MILES							Total Haul
			50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH	
1A to 1B	1.75	133			3.60	1.00	0.30	0.10	0.02	5.02
	1.75	11			2.40	0.50	0.20	0.10	0.08	3.28
1C to 1D	4.50	74			2.50	0.50	0.30	0.15	0.10	3.55
1E to 1F	1.50	206			4.17	1.00	0.40	0.10	0.10	5.77
	1.50	11			3.79	1.00	0.30	0.10	0.08	5.27
1G to 1H	4.80	283			3.40	0.60	0.30	0.14	0.12	4.56
	4.80	174			4.30	1.00	0.40	0.16	0.13	5.99
	4.80	11			3.79	1.00	0.40	0.20	0.10	5.49
I1 to I2	161.30	2,134			1.90	0.50	0.10	0.06	0.05	2.61
I3 to I4	8.65	44			2.30	0.50	0.20	0.11	0.10	3.21
I5 to I6	13.70	88			2.60	0.50	0.23	0.15	0.10	3.58
I7 to I8	30.75	435			3.79	1.00	0.40	0.12	0.10	5.41
	30.75	22			3.40	0.50	0.27	0.15	0.10	4.42
TOTAL	270.55	3,626								AVERAGE
	STA./NO.	CU. YD.								HAUL
CUBIC YARD WEIGHTED HAUL					2.61	0.64	0.20	0.09	0.07	3.61
Average Round Trip Distance (miles)										7.22

ROCK HAUL:

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

Ave haul:	\$4.18	/cy
Load:	\$0.53	/cy
Spread:	\$0.87	/cy

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

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

Production: cy/day = 1,137

CRUSHED ROCK HAUL COSTS 3,626 cy @ \$5.58 /cy

Projects Road Maintenance Cost Summary

Sale: Lusignan
 Date: 07-Feb-24
 By: D. Farner

Type	Equipment/Rationale			Hours	Rate	Cost
Project Work	Grader 14G			15	\$126	\$1,890
Final Haul	Dump Truck 12CY			4	\$99	\$396
Road	FE Loader C966			4	\$105	\$420
Maintenance	Vibratory Roller			15	\$97	\$1,455
	Water Truck 2,500 gallon			15	\$113	\$1,695
Total						\$5,856

Production Rates

Grader

Vibratory Roller

Miles/day	Distance(miles)	Days
1.5	2.70	1.8
1.5	2.70	1.8

NOTE:

		Miles
Northrup Cr. to Foster Mainline	0.90	Miles
Foster Mainline to Northrup Quarry Rd.	0.90	Miles
Northrup Quarry Rd. to Northrup Quarry	0.90	Miles
TOTAL=	2.70	Miles

**Lusignan
TIMBER CRUISE REPORT
FY 2024**

1. **Sale Area Location:** Portions of Sections 9, 10, & 15 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	Reserve Tree Area	Existing R/W Acres	New R/W	Net Acres	Survey Method
1	Modified Clearcut	89	2	3	4	1	79	GIS
2	R/W	1	-	-	-	-	1	LxW
TOTAL		90	2	3	4	1	80	

4. **Cruisers and Cruise Dates:** Avery Petersen, John Czarnecki, Michele Huffman, and Justin Bush (01/23/2024)

5. Cruise Method and Computation:

Unit 1: Unit 1 was variable plot cruised with a 40 BAF for conifers and hardwoods. A total of 47 plots were sampled on a six by three chain spacing with a count to grade ratio of 2:1, resulting in 17 grade plots and 30 count plots. One count plot was dropped that was located partially within a road prism. Plot numbers differ from those in the statistics due to trees being graded on two count plots and one blank count plot.

Unit 2 (R/W): In-unit Right-of-Way consists of new spur roads and landings within Unit 1. Cruise data for Unit 2 was obtained from the U1 cruise and acreages have been adjusted accordingly.

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
Unit 1	LUSIGNAN	U1	00MC	79
2 (R/W)	LUSIGNAN	RW	00MC	1

6. Timber Description:

Unit 1 is a modified clearcut with an average age of 77 years. Approximately 2/3 of the total acreage on the south side of the unit has been previously thinned. This has resulted in slightly higher TPA in unthinned portions of the unit. The stand consists of Douglas-fir, with minor components of western hemlock, red alder, and bigleaf maple. The average take Douglas-fir is approximately 23 inches DBH and 91 feet to a merchantable top. The average take western hemlock is approximately 34 inches DBH and 84 feet to a merchantable top. The average take red alder is approximately 14 inches DBH and 42 feet to a merchantable top. The average take bigleaf maple is approximately 18 inches DBH and 38 feet to a merchantable top. Average net volume to be harvested per acre is 54 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point.

Unit 2 (R/W) is similar to the timber description in Unit 1. Average net volume to be harvested per acre is 54 MBF.

7. Statistical Analysis and Stand Summary:

Statistics for Stand B.F. volumes

Type	Estimated CV	Target SE%	Actual CV	Actual SE%
U1	50.0%	9.0%	42.2%	6.1%

8. Volumes by Species and Log Grade:

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

Conifer

Species	DBH	Net Vol.	2 Saw	3 Saw	4 Saw	% D & B	% Sale
Douglas-fir	24"	4,234	3,399	721*	114	0.4%	99%
Western hemlock	34"	12	10	2	-	0.0%	<1%
TOTALS	--	4,246	3,409	723	114	--	--

*This sale includes approximately 189 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"	4	-	-	-	4	0.0%	<1%
Bigleaf maple	18"	20	6	4	3	7	8.2%	<1%
TOTALS	--	24	6	4	3	11	--	--

TOTAL VOLUME	4,270 MBF
---------------------	------------------

9. Approvals:

Prepared by: Michele Huffman Date: 01/29/2024
Unit Forester Approval: [Signature] Date: 2/23/2024

- 10. Attachments:** Cruise Design and Map (3 pages)
Volume Report (3 pages)
Statistics Report (8 pages)
Log Stock Table (2 pages)
Stand Table Summary (1 page)

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: Lusignan

Units U1

Harvest Type: Modified Clearcut

Approx. Cruise Acres: 80 **Estimated CV%** 50 Net BF/Acre **SE% Objective** 9% Net BF/Acre

Planned Sale Volume: 4,100 MBF **Estimated Sale Area Value/Acre:** 27,502/Acre

A. Cruise Goals: (a) Grade minimum 75 conifer trees.

(b) Sample 46 plots (16 grade/30 count); (c) Other goals (Determine "automark" thinning standards; X Determine log grades for sale value; X Determine snag and leave tree species and sizes.

B. Cruise Design:

1. Plot Cruises: BAF: 40

Unit 1:

Cruise Line Direction: Unit 1: 0°/180°

Cruise Line Spacing 6 (chains) 396 (feet)

Cruise Plot Spacing 3 (chains) 198 (feet)

Grade/Count Ratio 1:2

Take plots as marked on cruise map.

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

C. Tree Measurements:

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

Record dbh to nearest ½" for trees < 16", to nearest 1" for trees 16" - 24", and to nearest 2" for trees > 24". If tree diameters are estimated (only estimate on variable plot cruises), then record to closest estimate.

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

3. Top Cruise Diameter (TCD): Minimum top outside bark is 7" for conifers and 7" for hardwoods or 40 % of dob at 16' form point. Generally, use 6" outside bark for trees < 20" dbh and 40% of dob @ FP for conifer trees > 20" dbh.

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

5. Tree Segments: Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum merchantable segment length is 12'; for

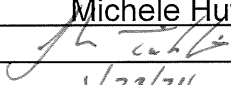
hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree. Hardwoods shall be recorded in 8' and 10' multiples.

6. Species, Sort, and Grade Codes:

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

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: Michele Huffman
Approved by: 
Date: 4/23/24

TIMBER CRUISE MAP

OF TIMBER SALE CONTRACT

NO AT-341-2024-W01055-01

LUSIGNAN

PORTIONS OF SECTIONS

9, 10, & 15

OF T6N, R6W, W.M.,
CLATSOP COUNTY, OREGON

BAF: 40

Line Azimuth: 0°/180°

Line Spacing: 6 ch. (396 ft.)

Plot Spacing: 3 ch. (198 ft.)

Count Plots: 30

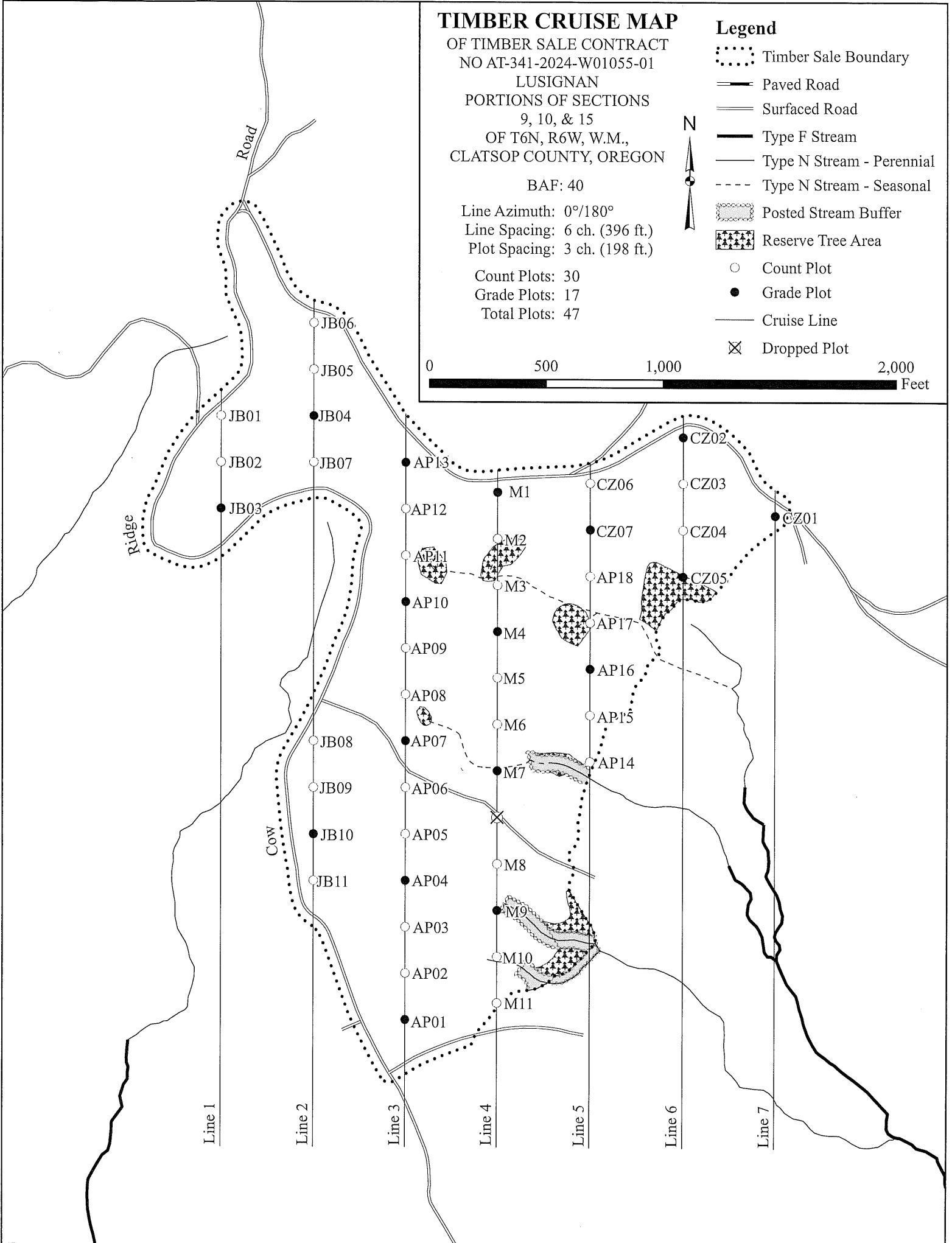
Grade Plots: 17

Total Plots: 47

Legend

- Timber Sale Boundary
- Paved Road
- Surfaced Road
- Type F Stream
- Type N Stream - Perennial
- Type N Stream - Seasonal
- Posted Stream Buffer
- Reserve Tree Area
- Count Plot
- Grade Plot
- Cruise Line
- Dropped Plot

0 500 1,000 2,000 Feet



TC PSCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																	
T06N R06W S10 Ty00MC1.00 T06N R06W S10 Ty00MC79.00						Project: LUSIGNAN Acres80.00										Page1 Date2/1/2024 Time2:37:16PM			
S Spp	So Gr T rt ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre
							Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf	
			Def%	Gross	Net		4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
D	DOCU														12	8		0.00	4.5
D	DO2S	80	.5	42,683	42,486	3,399			37	63	0	1	1	98	39	16	451	2.46	94.2
D	DO3S	17	.2	9,036	9,014	721		74	6	21	3	6	13	78	35	10	137	0.99	65.8
D	DO4S	3	.8	1,436	1,425	114		100			52	26		23	22	7	34	0.53	41.9
D Totals		99	.4	53,155	52,925	4,234		15	31	54	2	2	3	92	34	12	256	1.70	206.5
C	DO2S	76		3	3	0				100				100	40	20	700	3.75	.0
C	DO3S	20		1	1	0		100						100	40	11	180	1.50	.0
C	DO4S	4		0	0	0		100			100				16	7	30	0.56	.0
C Totals		0		4	4	0		23		77	3			97	32	13	303	2.28	.0
H	DO2S	82		127	127	10				100				100	40	23	940	4.82	.1
H	DO3S	18		27	27	2			100					100	40	12	200	1.90	.1
H Totals		0		154	154	12			18	82				100	40	18	570	3.36	.3
M	DOCU														7	13		0.00	2.2
M	DO1S	30	10.0	85	77	6			100		100				20	12	90	1.15	.9
M	DO2S	20	7.7	54	50	4		100				100			30	11	120	1.63	.4
M	DO3S	17		44	44	3		100						100	36	8	80	1.47	.5
M	DO4S	33	10.7	91	81	7		100					40	60	35	6	54	0.82	1.5
M Totals		0	8.2	274	251	20		69	31		31	20	13	37	21	10	45	0.95	5.6
A	DO4S	100		56	56	4		100						100	40	7	70	0.72	.8
A Totals		0		56	56	4		100						100	40	7	70	0.72	.8
Totals			0.5	53,642	53,390	4,270 4,271		16	31	54	2	3	3	92	34	12	250	1.68	213.2

T TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)												Page 1								
Project: LUSIGNAN												Date	2/1/2024									
												Time	2:37:17PM									
T06N R06W S10 T00MC										T06N R06W S10 T00MC												
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt													
06N	06W	10	RW	00MC	1.00	47	104	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	Lf	
D	DO	CU																12	8		0.00	4.5
D	DO	2S	80	.5	42,683	42,486	42					37	63	0	1	1	98	39	16	451	2.46	94.2
D	DO	3S	17	.2	9,036	9,014	9				74	6	21	3	6	13	78	35	10	137	0.99	65.8
D	DO	4S	3	.8	1,436	1,425	1				100			52	26		23	22	7	34	0.53	41.9
D Totals			99	.4	53,155	52,925	53				15	31	54	2	2	3	92	34	12	256	1.70	206.5
M	DO	CU																7	13		0.00	2.2
M	DO	1S	30	10.0	85	77	0				100			100				20	12	90	1.15	.9
M	DO	2S	20	7.7	54	50	0				100				100			30	11	120	1.63	.4
M	DO	3S	17		44	44	0				100					100		36	8	80	1.47	.5
M	DO	4S	33	10.7	91	81	0				100					40	60	35	6	54	0.82	1.5
M Totals			0	8.2	274	251	0				69	31		31	20	13	37	21	10	45	0.95	5.6
C	DO	2S	76		243	243	0					100				100		40	20	700	3.75	.3
C	DO	3S	20		62	62	0				100					100		40	11	180	1.50	.3
C	DO	4S	4		10	10	0				100			100				16	7	30	0.56	.3
C Totals			1		316	316	0				23	77		3		97		32	13	303	2.28	1.0
H	DO	2S	82		127	127	0					100				100		40	23	940	4.82	.1
H	DO	3S	18		27	27	0					100				100		40	12	200	1.90	.1
H Totals			0		154	154	0				18	82				100		40	18	570	3.36	.3
A	DO	4S	100		56	56	0				100					100		40	7	70	0.72	.8
A Totals			0		56	56	0				100					100		40	7	70	0.72	.8
Type Totals				.5	53,953	53,701	54				16	30	54	2	3	3	92	34	12	251	1.69	214.2

T		TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)										Page		1					
				Project: LUSIGNAN										Date		2/1/2024					
														Time		2:37:17PM					
T06N R06W S10 T00MC										T06N R06W S10 T00MC											
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		CuFt		BdFt			
06N		06W		10		U1 TAKE		00MC		79.00		47		101		1		W			
S So Gr T rt ad Spp				% Net BdFt	Bd. Ft. per Acre Def% Gross Net			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre
									Log Scale Dia. 4-5 6-11 12-16 17+				Log Length 12-20 21-30 31-35 36-99				Ln Dia Bd CF/ Ft In Ft Lf				
D DO CU				80	.5	42,683	42,486	3,356		37	63	0	1	1	98	12	8		0.00	4.5	
D DO 2S				17	.2	9,036	9,014	712		74	6	21	3	6	13	78	39	16	451	2.46	94.2
D DO 3S				3	.8	1,436	1,425	113		100			52	26		23	35	10	137	0.99	65.8
D DO 4S																	22	7	34	0.53	41.9
D Totals				99	.4	53,155	52,925	4,181		15	31	54	2	2	3	92	34	12	256	1.70	206.5
M DO CU																	7	13		0.00	2.2
M DO 1S				30	10.0	85	77	6		100			100				20	12	90	1.15	.9
M DO 2S				20	7.7	54	50	4		100				100			30	11	120	1.63	.4
M DO 3S				17		44	44	3		100					100		36	8	80	1.47	.5
M DO 4S				33	10.7	91	81	6		100					40	60	35	6	54	0.82	1.5
M Totals				0	8.2	274	251	20		69	31		31	20	13	37	21	10	45	0.95	5.6
H DO 2S				82		127	127	10		100					100		40	23	940	4.82	.1
H DO 3S				18		27	27	2		100					100		40	12	200	1.90	.1
H Totals				0		154	154	12		18	82				100		40	18	570	3.36	.3
A DO 4S				100		56	56	4		100					100		40	7	70	0.72	.8
A Totals				0		56	56	4		100					100		40	7	70	0.72	.8
Type Totals					.5	53,638	53,386	4,217		16	31	54	2	3	3	92	34	12	250	1.68	213.2

TC TSTATS				STATISTICS				PAGE	1		
				PROJECT LUSIGNAN				DATE	2/9/2024		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
06N	06W	10	U1	00MC	79.00	47	290	1	W		
				TREES	ESTIMATED	PERCENT					
				PER PLOT	TOTAL	SAMPLE					
					TREES	TREES					
TOTAL		47	290	6.2							
CRUISE		19	104	5.5	6,854	1.5					
DBH COUNT											
REFOREST											
COUNT		27	175	6.5							
BLANKS		1									
100 %											
STAND SUMMARY											
SAMPLE		TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET	
TREES		/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC	
DOUG FIR		94	80.0	23.0	91	48.2	231.5	53,155	52,925	11,875	
BL MAPLE		5	3.3	18.1	38	1.4	6.0	274	251	113	
SNAG		2	2.1	14.9	56	0.7	2.6				
WR CEDAR		1	.3	30.0	101	0.3	1.7	316	316	76	
WHEMLOCK		1	.1	34.0	84	0.1	.9	154	154	36	
R ALDER		1	.8	14.0	42	0.2	.9	56	56	23	
TOTAL		104	86.8	22.7	87	51.1	243.4	53,953	53,701	12,123	
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		74.8	7.7	997	1,080	1,163					
BL MAPLE		34.2	17.0	66	80	94					
SNAG											
WR CEDAR											
WHEMLOCK											
R ALDER											
TOTAL		81.5	8.0	921	1,000	1,080	265	66	29		
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		64.0	6.6	215	230	246					
BL MAPLE		37.0	18.4	31	37	44					
SNAG											
WR CEDAR											
WHEMLOCK											
R ALDER											
TOTAL		70.0	6.9	200	215	230	195	49	22		
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		61.4	8.9	73	80	87					
BL MAPLE		432.7	63.1	1	3	5					
SNAG		389.5	56.8	1	2	3					
WR CEDAR		479.5	69.9	0	0	1					
WHEMLOCK		685.6	99.9	0	0	0					
R ALDER		685.6	99.9	0	1	2					
TOTAL		56.8	8.3	80	87	94	129	32	14		
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		47.4	6.9	216	231	247					
BL MAPLE		419.5	61.1	2	6	10					
SNAG		387.1	56.4	1	3	4					
WR CEDAR		479.5	69.9	1	2	3					

TC TSTATS				STATISTICS				PAGE	2
				PROJECT LUSIGNAN				DATE	2/9/2024
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	06W	10	U1	00MC	79.00	47	290	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	
WHEMLOCK	685.6	99.9	0	1	2				
R ALDER	685.6	99.9	0	1	2				
TOTAL	42.6	6.2	228	243	259	73	18	8	
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	44.4	6.5	49,500	52,925	56,350				
BL MAPLE	445.9	65.0	88	251	415				
SNAG									
WR CEDAR	479.5	69.9	95	316	536				
WHEMLOCK	685.6	99.9	0	154	308				
R ALDER	685.6	99.9	0	56	111				
TOTAL	42.0	6.1	50,413	53,701	56,990	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	45.5	6.6	11,088	11,875	12,662				
BL MAPLE	425.3	62.0	43	113	183				
SNAG									
WR CEDAR	479.5	69.9	23	76	129				
WHEMLOCK	685.6	99.9	0	36	73				
R ALDER	685.6	99.9	0	23	46				
TOTAL	42.2	6.1	11,378	12,123	12,868	71	18	8	

TC PSTATS				PROJECT STATISTICS				PAGE	1			
				PROJECT	LUSIGNAN			DATE	2/1/2024			
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt		
06N	06	10	RW	00MC		80.00	94	571	1	W		
06N	06W	10	UI TAKE	00MC								
				TREES		ESTIMATED	PERCENT					
				PER PLOT		TOTAL	SAMPLE					
				PLOTS	TREES	TREES	TREES					
TOTAL			94	571	6.1							
CRUISE			37	205	5.5	6,747		3.0				
DBH COUNT												
REFOREST												
COUNT			55	352	6.4							
BLANKS			2									
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			188	80.0	23.0	91	48.2	231.5	53,155	52,925	11,875	11,875
BL MAPLE			10	3.3	18.1	38	1.4	6.0	274	251	113	113
SNAG			2	.0	14.9	56	0.0	.0				
WHEMLOCK			2	.1	34.0	84	0.1	.9	154	154	36	36
WR CEDAR			1	.0	30.0	101	0.0	.0	4	4	1	1
R ALDER			2	.8	14.0	42	0.2	.9	56	56	23	23
TOTAL			205	84.3	22.8	88	50.1	239.2	53,642	53,390	12,048	12,048
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		74.6	5.4	1,021	1,080	1,139						
BL MAPLE		32.3	10.7	71	80	89						
SNAG												
WHEMLOCK				1,140	1,140	1,140						
WR CEDAR												
R ALDER				70	70	70						
TOTAL		80.4	5.6	954	1,011	1,067		258	65	29		
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		63.8	4.6	220	230	241						
BL MAPLE		34.9	11.6	33	37	42						
SNAG												
WHEMLOCK				269	269	269						
WR CEDAR												
R ALDER				29	29	29						
TOTAL		68.9	4.8	207	217	227		190	47	21		
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		129.9	13.4	69	80	91						
BL MAPLE		609.0	62.8	1	3	5						
SNAG		557.1	57.4	0	0	0						
WHEMLOCK		957.4	98.7	0	0	0						
WR CEDAR		681.9	70.3	0	0	0						
R ALDER		957.4	98.7	0	1	2						
TOTAL		124.5	12.8	74	84	95		619	155	69		
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		118.1	12.2	203	231	260						
BL MAPLE		590.9	60.9	2	6	10						
SNAG		553.7	57.1	0	0	0						
WHEMLOCK		957.4	98.7	0	1	2						

TC PSTATS			PROJECT STATISTICS					PAGE	2	
			PROJECT		LUSIGNAN		DATE	2/1/2024		
TWP	RGE	SC	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
06N	06	10	RW	00MC	80.00		94	571	1	W
06N	06W	10	U1 TAKE	00MC						
CL	68.1		COEFF	BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.00		VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
WR CEDAR			681.9	70.3	0	0	0			
R ALDER			957.4	98.7	0	1	2			
TOTAL			114.9	11.8	211	239	268	527	132	59
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			115.8	11.9	46,608	52,925	59,242			
BL MAPLE			627.1	64.6	89	251	414			
SNAG										
WHEMLOCK			957.4	98.7	2	154	306			
WR CEDAR			681.9	70.3	1	4	7			
R ALDER			957.4	98.7	1	56	111			
TOTAL			114.8	11.8	47,076	53,390	59,704	526	131	58
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			116.6	12.0	10,448	11,875	13,302			
BL MAPLE			598.8	61.7	43	113	183			
SNAG										
WHEMLOCK			957.4	98.7	0	36	72			
WR CEDAR			681.9	70.3	0	1	2			
R ALDER			957.4	98.7	0	23	46			
TOTAL			114.9	11.8	10,621	12,048	13,474	527	132	59

TC TSTATS				STATISTICS				PAGE	1			
				PROJECT LUSIGNAN				DATE	2/1/2024			
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt			
06N	06W	10	RW	00MC	1.00	47	290	1	W			
			TREES	ESTIMATED		PERCENT						
			PER PLOT	TOTAL		SAMPLE						
PLOTS			TREES	TREES		TREES						
TOTAL			47	290		6.2						
CRUISE			19	104		5.5		87		119.9		
DBH COUNT												
REFOREST												
COUNT			27	175		6.5						
BLANKS			1									
100 %												
STAND SUMMARY												
SAMPLE			TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET	
TREES			/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC	
DOUG FIR			94	80.0	23.0	91	48.2	231.5	53,155	52,925	11,875	11,875
BL MAPLE			5	3.3	18.1	38	1.4	6.0	274	251	113	113
SNAG			2	2.1	14.9	56	0.7	2.6				
WR CEDAR			1	.3	30.0	101	0.3	1.7	316	316	76	76
WHEMLOCK			1	.1	34.0	84	0.1	.9	154	154	36	36
R ALDER			1	.8	14.0	42	0.2	.9	56	56	23	23
TOTAL			104	86.8	22.7	87	51.1	243.4	53,953	53,701	12,123	12,123
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			74.8	7.7	997	1,080	1,163					
BL MAPLE			34.2	17.0	66	80	94					
SNAG												
WR CEDAR												
WHEMLOCK												
R ALDER												
TOTAL			81.5	8.0	921	1,000	1,080	265	66	29		
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			64.0	6.6	215	230	246					
BL MAPLE			37.0	18.4	31	37	44					
SNAG												
WR CEDAR												
WHEMLOCK												
R ALDER												
TOTAL			70.0	6.9	200	215	230	195	49	22		
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			61.4	8.9	73	80	87					
BL MAPLE			432.7	63.1	1	3	5					
SNAG			389.5	56.8	1	2	3					
WR CEDAR			479.5	69.9	0	0	1					
WHEMLOCK			685.6	99.9	0	0	0					
R ALDER			685.6	99.9	0	1	2					
TOTAL			56.8	8.3	80	87	94	129	32	14		
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			47.4	6.9	216	231	247					
BL MAPLE			419.5	61.1	2	6	10					
SNAG			387.1	56.4	1	3	4					
WR CEDAR			479.5	69.9	1	2	3					

TC TSTATS				STATISTICS				PAGE	2
				PROJECT	LUSIGNAN			DATE	2/1/2024
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	06W	10	RW	00MC	1.00	47	290	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	
WHEMLOCK	685.6	99.9	0	1	2				
R ALDER	685.6	99.9	0	1	2				
TOTAL	42.6	6.2	228	243	259	73	18	8	
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	44.4	6.5	49,500	52,925	56,350				
BL MAPLE	445.9	65.0	88	251	415				
SNAG									
WR CEDAR	479.5	69.9	95	316	536				
WHEMLOCK	685.6	99.9	0	154	308				
R ALDER	685.6	99.9	0	56	111				
TOTAL	42.0	6.1	50,413	53,701	56,990	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	45.5	6.6	11,088	11,875	12,662				
BL MAPLE	425.3	62.0	43	113	183				
SNAG									
WR CEDAR	479.5	69.9	23	76	129				
WHEMLOCK	685.6	99.9	0	36	73				
R ALDER	685.6	99.9	0	23	46				
TOTAL	42.2	6.1	11,378	12,123	12,868	71	18	8	

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	LUSIGNAN	DATE 2/1/2024				
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
06N	06W	10	U1 TAKE	00MC	79.00	47	281	1	W	
		PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES				
TOTAL		47	281	6.0						
CRUISE		18	101	5.6	6,660	1.5				
DBH COUNT										
REFOREST										
COUNT		28	177	6.3						
BLANKS		1								
100 %										
STAND SUMMARY										
	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	94	80.0	23.0	91	48.2	231.5	53,155	52,925	11,875	11,875
BL MAPLE	5	3.3	18.1	38	1.4	6.0	274	251	113	113
WHEMLOCK	1	.1	34.0	84	0.1	.9	154	154	36	36
R ALDER	1	.8	14.0	42	0.2	.9	56	56	23	23
TOTAL	101	84.3	22.8	88	50.1	239.1	53,638	53,386	12,047	12,047
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	74.8	7.7	997	1,080	1,163					
BL MAPLE	34.2	17.0	66	80	94					
WHEMLOCK										
R ALDER										
TOTAL	79.8	7.9	940	1,021	1,102	254	64	28		
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	64.0	6.6	215	230	246					
BL MAPLE	37.0	18.4	31	37	44					
WHEMLOCK										
R ALDER										
TOTAL	68.2	6.8	204	219	234	186	46	21		
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	61.4	8.9	73	80	87					
BL MAPLE	432.7	63.1	1	3	5					
WHEMLOCK	685.6	99.9	0	0	0					
R ALDER	685.6	99.9	0	1	2					
TOTAL	55.4	8.1	78	84	91	122	31	14		
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	47.4	6.9	216	231	247					
BL MAPLE	419.5	61.1	2	6	10					
WHEMLOCK	685.6	99.9	0	1	2					
R ALDER	685.6	99.9	0	1	2					
TOTAL	43.2	6.3	224	239	254	75	19	8		
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	44.4	6.5	49,500	52,925	56,350					
BL MAPLE	445.9	65.0	88	251	415					
WHEMLOCK	685.6	99.9	0	154	308					
R ALDER	685.6	99.9	0	56	111					
TOTAL	43.0	6.3	50,042	53,386	56,730	74	18	8		

TC TSTATS				STATISTICS				PAGE	2
				PROJECT	LUSIGNAN			DATE	2/1/2024
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	06W	10	U1 TAKE	00MC	79.00	47	281	1	W
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
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		45.5	6.6	11,088	11,875	12,662			
BL MAPLE		425.3	62.0	43	113	183			
WHEMLOCK		685.6	99.9	0	36	73			
R ALDER		685.6	99.9	0	23	46			
TOTAL		43.2	6.3	11,289	12,047	12,805	74	19	8

TC PLOGSTVB			Log Stock Table - MBF																
T06N R06W S10 Ty00MC 1.00				Project: LUSIGNAN										Page 1					
T06N R06W S10 Ty00MC 79.00				Acres 80.00										Date 2/1/2024					
														Time 2:37:19PM					
S T Spp	So Gr rt	Log de Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches												
							2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+	
D	DO 2S	12	3	11.7	3	.1						2	1						
D	DO 2S	16	2		2	.1							2						
D	DO 2S	20	2		2	.0						2							
D	DO 2S	24	12		12	.3						6	6						
D	DO 2S	30	18		18	.4						18							
D	DO 2S	32	36		36	.8						22	14						
D	DO 2S	36	30		30	.7						15			15				
D	DO 2S	40	3,311		3,296	77.8						365	593	1063	770	378	127		
D	DO 3S	16	9		9	.2					6	2							
D	DO 3S	18	4		4	.1					2	2							
D	DO 3S	20	7		7	.2				2	5								
D	DO 3S	24	26		26	.6				3	23								
D	DO 3S	26	5		5	.1				5									
D	DO 3S	30	14		14	.3			4	3	6								
D	DO 3S	32	83		83	2.0			9	16	49			8					
D	DO 3S	34	8		8	.2			5	4									
D	DO 3S	36	43		43	1.0			10	8	15		9						
D	DO 3S	38	5		5	.1					5								
D	DO 3S	40	519		517	12.2			33	124	192	19		12	48	89			
D	DO 4S	12	4		4	.1			4										
D	DO 4S	14	2		2	.1			1	1									
D	DO 4S	16	31	2.9	30	.7			16	14									
D	DO 4S	18	2		2	.0				2									
D	DO 4S	20	20		20	.5			6	12	2								
D	DO 4S	24	14		14	.3			9	5									
D	DO 4S	28	3		3	.1			3										
D	DO 4S	30	12		12	.3			12										
D	DO 4S	38	13		13	.3			13										
D	DO 4S	40	13		13	.3			13										
D	Totals		4,252		4,234	99.1			139	199	306	454	626	1083	833	467	127		
C	DO 2S	40	0		0	76.9									0				
C	DO 3S	40	0		0	19.8					0								
C	DO 4S	16	0		0	3.3			0										
C	Totals		0		0	.0			0		0				0				
H	DO 2S	40	10		10	82.5									10				

TC PLOGSTVB		Log Stock Table - MBF																	
T06N R06W S10 Ty00MC T06N R06W S10 Ty00MC		1.00 79.00		Project: LUSIGNAN Acres 80.00		Page 2 Date 2/1/2024 Time 2:37:19PM													
S T Spp	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
								2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
H	DO	3S	40	2		2	17.5				2								
H	Totals			12		12	.3				2				10				
M	DO	1S	20	7	10.0	6	30.6				6								
M	DO	2S	30	4	7.7	4	19.7				4								
M	DO	3S	36	3		3	17.4			3									
M	DO	4S	34	3		3	13.0			3									
M	DO	4S	36	5	16.7	4	19.3			4									
M	Totals			22	8.2	20	.5			7	3	4	6						
A	DO	4S	40	4		4	100.0			4									
A	Totals			4		4	.1			4									
Total	All Species			4,291		4,271	100.0			150	202	311	462	626	1083	843	467	127	

TC		PSTNDSUM		Stand Table Summary										Page		1	
														Date:		2/1/2024	
T06N R06W S10 Ty00MC1.00 T06N R06W S10 Ty00MC79.00				ProjectLUSIGNAN										Time:		2:37:20PM	
				Acres80.00										Grown Year:			
S Spec	T	Tot							Average Log		Net		Net		Totals		
		DBH	Sample Trees	FF 16'	Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Net Cu.Ft.	Net Bd.Ft.	Tons/ Acre	Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF	
D		10	2	83	17	4.515	2.46										
D		11	2	88	49	3.732	2.46	3.73	13.0	40.0		49	149		39	12	
D		12	2	83	76	3.414	2.46	3.41	19.0	60.0		65	205		52	16	
D		13	4	85	59	5.343	4.93	5.34	21.5	60.0		115	321		92	26	
D		14	2	88	67	2.304	2.46	4.61	15.5	60.0		71	276		57	22	
D		17	4	86	82	3.125	4.93	6.25	26.0	87.5		162	547		130	44	
D		18	2	85	152	1.394	2.46	4.18	31.7	120.0		132	502		106	40	
D		19	8	86	132	5.003	9.85	15.01	33.1	130.0		497	1,951		397	156	
D		20	10	86	126	5.644	12.31	14.67	39.8	150.0		585	2,201		468	176	
D		21	10	85	126	5.119	12.31	15.36	37.9	148.0		582	2,273		465	182	
D		22	6	87	135	2.799	7.39	8.40	44.7	185.6		375	1,558		300	125	
D		23	12	86	134	5.121	14.78	14.51	50.8	208.8		737	3,030		590	242	
D		24	14	86	146	5.487	17.24	18.03	51.8	219.1		934	3,951		747	316	
D		25	12	87	156	4.335	14.78	15.17	56.4	253.3		855	3,843		684	307	
D		26	10	85	144	3.340	12.31	10.02	65.3	278.0		655	2,785		524	223	
D		27	10	85	139	3.097	12.31	9.29	67.7	288.7		629	2,682		503	215	
D		28	10	86	146	2.880	12.31	9.21	73.3	334.4		676	3,081		540	246	
D		29	8	86	152	2.148	9.85	6.98	78.2	363.1		546	2,534		437	203	
D		30	4	86	168	1.003	4.93	3.51	84.0	401.4		295	1,410		236	113	
D		31	10	86	150	2.349	12.31	7.52	89.5	421.9		673	3,171		538	254	
D		32	10	85	148	2.205	12.31	7.05	95.0	451.9		670	3,188		536	255	
D		33	6	85	163	1.244	7.39	4.56	94.3	466.4		430	2,127		344	170	
D		34	4	88	169	.781	4.93	2.73	111.6	591.4		305	1,617		244	129	
D		35	2	85	179	.369	2.46	1.47	105.7	562.5		156	829		125	66	
D		37	2	88	174	.330	2.46	1.32	118.0	657.5		156	867		125	69	
D		38	6	87	163	.938	7.39	3.13	140.4	740.0		439	2,314		351	185	
D		39	2	86	158	.297	2.46	.89	158.3	793.3		141	707		113	57	
D		40	6	84	148	.847	7.39	2.54	155.9	770.0		396	1,956		317	156	
D		43	4	87	149	.488	4.93	1.71	158.3	821.4		271	1,404		216	112	
D		47	2	83	184	.204	2.46	.82	187.7	1017.5		154	832		123	67	
D		48	2	82	148	.196	2.46	.59	215.0	1043.3		126	613		101	49	
D		Totals	188	86	118	80.049	231.49	202.02	58.8	262.0		11,875	52,925		9,500	4,234	
M		15	2	86	52	.971	1.19	.97	24.0	50.0		23	49		19	4	
M		16	2	86	42	.853	1.19	.85	23.0	90.0		20	77		16	6	
M		20	4	80	45	1.092	2.38	1.09	45.5	70.0		50	76		40	6	
M		23	2	87	45	.413	1.19	.41	49.0	120.0		20	50		16	4	
M		Totals	10	84	46	3.329	5.96	3.33	33.9	75.5		113	251		90	20	
H		34	2	85	102	.135	.85	.27	134.5	570.0		36	154		29	12	
H		Totals	2	85	102	.135	.85	.27	134.5	570.0		36	154		29	12	
A		14	2	87	56	.796	.85	.80	29.0	70.0		23	56		18	4	
A		Totals	2	87	56	.796	.85	.80	29.0	70.0		23	56		18	4	
C		30	1	86	121	.004	.02	.01	73.0	303.3		1	4		1	0	
C		Totals	1	86	121	.004	.02	.01	73.0	303.3		1	4		1	0	
SN		14	1	89	52	.015	.02										
SN		16	1	89	61	.011	.02										
SN		Totals	2	89	56	.026	.03										
Totals			205	86	114	84.340	239.20	206.43	58.4	258.6		12,048	53,390		9,638	4,271	

LOGGING PLAN MAP

OF TIMBER SALE CONTRACT

NO AT-341-2024-W01055-01

LUSIGNAN

PORTIONS OF SECTIONS

9, 10, & 15

OF T6N, R6W, W.M.,

CLATSOP COUNTY, OREGON

Logging Breakdown	Tractor	Cable	Acres
Unit 1 (MC)	82%	18%	79
Unit 2 (R/W)	100%	0%	1
Total	82%	18%	80

0 500 1,000 2,000 Feet

1 inch equals 1,000 feet

Contours = 40 feet

Legend

-----	Timber Sale Boundary	———	Type N Stream
=====	Surfaced Road	----	Seasonal Stream
- - -	New Road Construction -Surfaced	■	Non-Posted Stream Buffer
- - -	New Road Construction -Unsurfaced	▨	Posted Stream Buffer
R	Landing to be Constructed	▨	Reserve Tree Area
(	Existing Landing	▨	Reforestation Area
:	Ground Based Yarding		Northrup Horse Trail
—	Cable Based Yarding	□	Section Line
—	Type F Stream	↗	Survey Monument