



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Juno Bay
Sale 341-08-041

District: Tillamook

Date: June 29, 2007

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sales Value	\$201,945.20	\$342,646.20	\$544,591.40
		Project Work:	\$(154,900.00)
		Advertised Value:	\$389,691.40



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
 Juno Bay
 Sale 341-08-041

District: Tillamook

Date: June 29, 2007

Timber Description

Location: Portions of Sections 30, 31 and 32, T1N, R9W, Sections 25 and 36, T1N, R10W, Sections 5 & 17, T1S, R9W, W.M., Tillamook County, Oregon.

Stand Stocking: 60%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	13	0	95
Western Hemlock / Fir	15	0	95
Sitka Spruce	16	0	95
Alder (Red)	14	0	95

Volume by Grade	2S	3S	4S	Camprur	Total
Douglas - Fir	55	189	213	0	457
Western Hemlock / Fir	133	354	137	0	624
Sitka Spruce	81	233	118	0	432
Alder (Red)	0	0	0	810	810
Total	269	776	468	810	2,323



Timber Sale Appraisal
Juno Bay
Sale 341-08-041

"STEWARDSHIP IN FORESTRY"

District: Tillamook

Date: June 29, 2007

Comments: Pond Values Used: 2nd Quarter Calendar Year 2007.

Western Red Cedar Stumpage Price = Pond Value minus Logging Cost
 $\$712.03/\text{MBF} = \$1,025/\text{MBF} - \$312.97/\text{MBF}$

HAULING

Hauling costs equivalent to \$700 daily truck cost.

Other Costs (Profit and Risk to be added):

Brand and Paint: $\$2/\text{MBF} \times 2,323 \text{ MBF} = \$ 4,646$

Snag creation by topping at 40': $40 \text{ snags} \times \$75/\text{snag} = \$3,000$

Extra rigging costs in Area 5: $\$ 5/\text{MBF} \times 575 \text{ MBF} = \$ 2,875$

Tractor Swing

Area 1: $10 \text{ acres} \times 8 \text{ MBF/acre} \times \$50/\text{MBF} = \$ 4,000$

Area 2: $11 \text{ acres} \times 9 \text{ MBF/acre} \times \$50/\text{MBF} = \$ 4,950$

Area 3A: $10 \text{ acres} \times 8.3 \text{ MBF/acre} \times \$44/\text{MBF} = \$ 3,652$

Truck Assist (Area 3A & 3B): $\$35/\text{MBF} \times 92\text{MBF} = \$ 3,220$

Yarder assist in and out of Area 1 swing road: $\$ 300$

TOTAL Other Costs (Profit and Risk to be added) = $\$26,643$

OTHER COSTS (No Profit and Risk added):

Slash piling and sorting cable harvest on Areas 1, 2 and 4:

$\$2.50/\text{acre} \times 110 \text{ acres} = \$ 275$

Helicopter landing clearing, Area 4: $2 \text{ hr w/excavator} \times \$120/\text{hr} = \$ 240$

Equipment moving between Areas 1, 2, 3 and 4/5: $\text{Lowboy } 15 \text{ hrs} \times 100/\text{hr} = \$ 1,500$

Block Non-Project Roads in Areas 1 and 3 with "tank traps": $2 @ \$ 75 = \$ 150$

Block Swing Roads in Areas 1, 2A and 3A: $3 @ \$ 75 = \$ 225$

Road vacating Area 2

Pull back and remove culvert: $\$ 3,143$

Tank trap and water bar: $\$ 1,275$

Grass seed, mulch, and rip: $\$ 1,611$

Move-in: $\$ 668$

Total: $\$ 6,697$

Non-Project Roads - (Seeding included):

Non-Project Road #1 (Area 1): $2 \text{ Stations} \times \$150.00 = \$ 300$

Non-Project Road #2 (Areas 3A and 3B): $29 \text{ Stations} \times \$150.00 = \$ 4,350$

Surfacing non-project road junctions: $4 \text{ stations} \times 50 \text{ yards pit run/ sta} \times \$8.22/\text{yard} = \$ 1,644$

TOTAL Other Costs (No Profit and Risk added) = $\$15,381$

ROAD MAINTENANCE:

BLM License Agreement (rock wear): $\$43.04/ 2323 \text{ MBF} = \$.02$

Areas 1, 2, 3, 4 and 5

Grading all roads 1 time $\$500/\text{Mile} \times 9 \text{ miles}/ 2323 \text{ MBF} = \$ 1.94$

Grader re-location between units $\$200/ 2323 \text{ MBF} = \$.09$

Maintenance rock ($\$15.00/\text{cy} \times 9 \text{ miles} \times 10 \text{ cy}/\text{MMBF}/\text{mile} \times 2.3\text{MMBF}/2323 \text{ MBF} = \1.34)



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Juno Bay
Sale 341-08-041

District: Tillamook

Date: June 29, 2007

Compaction Doty Ridge and Patterson Creek Roads: 258 Stations x
\$18/ Station + \$ 319/ move-in = \$ 4,963/ 2323 MBF = \$ 2.14
TOTAL ROAD MAINTENANCE COST: \$ 5.53/MBF



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Juno Bay
Sale 341-08-041

District: Tillamook

Date: June 29, 2007

Logging Conditions

Combination#: 1

Douglas - Fir	65.10%
Western Hemlock / Fir	3.17%
Sitka Spruce	15.21%
Alder (Red)	60.17%

Yarding Distance: Short (400 ft) **Downhill Yarding:** No
Logging System: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber
Tree Size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
Loads / Day: 6.0 **Bd. Ft / Load:** 3,200
Cost / MBF: \$174.17

Machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Medium)

Combination#: 2

Douglas - Fir	4.33%
Western Hemlock / Fir	65.56%
Sitka Spruce	48.33%
Alder (Red)	12.22%

Yarding Distance: Short (400 ft) **Downhill Yarding:** No
Logging System: Cable: Medium Tower >40 - <70 **Process:** Manual Delimiting
Tree Size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
Loads / Day: 5.0 **Bd. Ft / Load:** 3,500
Cost / MBF: \$197.72

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

Combination#: 3

Douglas - Fir	27.68%
Western Hemlock / Fir	0.35%
Sitka Spruce	7.94%
Alder (Red)	19.46%

Yarding Distance: Short (400 ft) **Downhill Yarding:** No
Logging System: Shovel **Process:** Manual Delimiting
Tree Size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
Loads / Day: 8.0 **Bd. Ft / Load:** 3,500
Cost / MBF: \$89.45

Machines: Shovel Logger

Combination#: 4

Douglas - Fir	2.89%
Western Hemlock / Fir	30.91%
Sitka Spruce	28.52%
Alder (Red)	8.15%



Timber Sale Appraisal
Juno Bay
Sale 341-08-041

"STEWARDSHIP IN FORESTRY"

District: Tillamook

Date: June 29, 2007

Yarding Distance	Short (400 ft)	Downhill Yarding:	No
Logging System:	Track Skidder	Process:	Manual Falling/Delimiting
Tree Size:	Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF		
Loads / Day:	10.0	Bd. Ft / Load:	3,500
Cost / MBF:	\$98.30		
Machines:	Log Loader (B) Track Skidder		



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
 Juno Bay
 Sale 341-08-041

District: Tillamook

Date: June 29, 2007

Logging Costs

Operating Seasons:	2.00	Profit Risk:	15.00%
Project Costs:	\$154,900.00	Other Costs (P/R):	\$26,643.00
Slash Disposal:	\$0.00	Other Costs:	\$15,381.00

Miles of Road

Road Maintenance: \$5.53

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

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$89.60	2.0	3.4
Western Hemlock / Fir	\$53.40	3.0	3.8
Sitka Spruce	\$59.70	3.0	3.4
Alder (Red)	\$63.40	3.0	3.2



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
 Juno Bay
 Sale 341-08-041

District: Tillamook

Date: June 29, 2007

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$149.55	\$5.81	\$3.78	\$94.04	\$11.47	\$39.70	\$0.00	\$2.00	\$6.62	\$312.97
Western Hemlock / Fir									
\$165.86	\$5.81	\$3.78	\$56.09	\$11.47	\$36.45	\$0.00	\$2.00	\$6.62	\$288.08
Sitka Spruce									
\$157.19	\$5.81	\$3.78	\$62.70	\$11.47	\$36.14	\$0.00	\$2.00	\$6.62	\$285.71
Alder (Red)									
\$154.38	\$5.81	\$3.78	\$66.61	\$11.47	\$36.31	\$0.00	\$2.00	\$6.62	\$286.98

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$530.49	\$217.52	\$0.00
Western Hemlock / Fir	\$0.00	\$377.04	\$88.96	\$0.00
Sitka Spruce	\$0.00	\$394.57	\$108.86	\$0.00
Alder (Red)	\$0.00	\$710.00	\$423.02	\$0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Juno Bay
Sale 341-08-041

District: Tillamook

Date: June 29, 2007

Summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	457	\$217.52	\$99,406.64
Western Hemlock / Fir	624	\$88.96	\$55,511.04
Sitka Spruce	432	\$108.86	\$47,027.52
Alder (Red)	810	\$423.02	\$342,646.20

Gross Timber Sale Value

Recovery: \$544,591.40

Prepared by: David Wells

Phone: 503-842-2545



"STEWARDSHIP IN FORESTRY"

PROJECT SUMMARY SHEET

Sale: JUNO BAY

CONSTRUCTION

Point	A to B	54+85	stations =	\$54,258.21
Point	C to D	8+50	stations =	\$2,828.43
Point	K to L	8+05	stations =	\$1,636.25
Point	G to H	3+00	stations =	\$24,236.98
SUBTOTAL CONSTRUCTION				\$82,959.87

IMPROVEMENT

Point	A to B	28+25	stations =	\$27,945.20
Point	E to F	42+25	stations =	\$9,720.49
Point	I to J	56+55	stations =	\$22,504.33
Point	K to L	6+50	stations =	\$1,321.19
SUBTOTAL IMPROVEMENT				\$61,491.21

SPECIAL PROJECTS

Point	M to N	1+30	stations	
Place 32 cubic yards of riprap along road edge				\$466.24
SUBTOTAL SPECIAL PROJECTS				\$466.24

MOVE IN #1

SUBTOTAL MOVE IN #1 **\$2,302.89**

MOVE IN #2

SUBTOTAL MOVE IN #2 **\$7,679.79**

GRAND TOTAL **\$154,900.00**

SUMMARY OF CONSTRUCTION COST

Sale: JUNO BAY

Road: A to B

Construction - 54+85 stations
1.04 miles

Improvement - 28+25 stations
0.54 miles

CLEARING AND GRUBBING -

Scattering	5.0 acres @	\$980.00 per acre =	\$4,900.00	
Crib Material Placement	0.7 acres @	\$980.00 per acre =	\$686.00	
		TOTAL CLEARING AND GRUBBING		\$5,586.00

EXCAVATION -

Road Earthwork	14.40 sta. @	\$90.00 per sta. =	\$1,296.00	
Excavation w/ Sidecast	13686 cy. @	\$1.40 per c.y. =	\$19,160.40	
Excavation w/ Drift/Haul&Fill	4470 cy. @	\$1.40 per c.y. =	\$6,258.00	
1 Turnaround	1 T.A. @	\$75.00 per T.A. =	\$75.00	
7 Turnouts	7 Turnouts @	\$60.00 per T.O. =	\$420.00	
		TOTAL EXCAVATION		\$27,209.40

ENDHAUL -

Full Bench	5863 cy. @	\$3.63 per c.y. =	\$21,282.69	
Spread & compact	5864 cy. @	\$0.25 per c.y. =	\$1,466.00	
		TOTAL ENDHAUL		\$22,749.62

CULVERTS - MATERIALS & INSTALLATION

<u>Culverts</u>				
36	LF of 18"	\$612.00	0	LF of 24" \$0.00
		\$612.00		\$0.00
<u>Half Rounds</u>				
10	LF of 21"	\$177.80	0	LF of 30" \$0.00
		\$177.80		\$0.00
<u>Culvert Stakes & Markers</u>				
2	stakes	\$16.00		
1	markers	\$8.00		
		\$24.00		
			TOTAL CULVERTS	\$813.80

ROCK

28+25 to 47+30	1,304 cy. of	Pit-Run	@	\$8.08 per c.y. =	\$10,536.32
Spot Rock:					
0+00 to 28+25	400 cy. of	Pit-Run	@	\$7.34 per c.y. =	\$2,936.00
Gate Protection 1+50	20 cy. of	Rip Rap	@	\$21.69 per c.y. =	\$433.80
				TOTAL ROCK	\$13,966.72

SPECIAL PROJECTS

Grade and shape road -	83.10 stations @	\$15.50 per station	\$1,288.05	
Gate Acquisition & Shipment	1.00 gate @	\$6,221.50 per gate	\$6,221.50	
Concrete Bases For Gate Posts	6.00 c.y. @	\$100.00 per c.y.	\$600.00	
Gate Installation	4.00 hours @	\$187.50 each	\$750.00	
Roll subgrade w/ vibratory roller prior to rocking -	83.10 stations @	\$13.20 per station	\$1,096.92	
Grass seed and fertilize -	3.53 acres @	\$220.00 per acre	\$776.60	
		TOTAL SPECIAL PROJECTS		\$11,877.87

GRAND TOTAL **\$82,203.41**

SUMMARY OF CONSTRUCTION COST

Sale:	<u>JUNO BAY</u>		Road: <u>C to D</u>
Construction -	<u>8+50</u> stations <u>0.16</u> miles		Improvement - <u>0+00</u> stations <u>0.00</u> miles
CLEARING AND GRUBBING -			
Scattering	0.820 acres @	\$980.00 per acre =	<u>\$803.60</u>
		TOTAL CLEARING AND GRUBBING	\$803.60
EXCAVATION -			
Road Earthwork	8.50 sta. @	\$90.00 per sta. =	\$765.00
Fill from A - B	1686 cy. @	\$0.45 per c.y. =	\$758.70
1 Turnaround	1 T.A. @	\$75.00 per T.A. =	\$75.00
1 Turnout	1 T.O. @	\$60.00 per T.O. =	<u>\$60.00</u>
		TOTAL EXCAVATION	\$1,658.70
SPECIAL PROJECTS			
Grade and shape road -	8.50 stations @	\$15.50 per station	\$131.75
Roll subgrade w/ vibratory roller prior to rocking -	8.50 stations @	\$13.20 per station	\$112.20
Grass seed and fertilize -	0.55 acres @	\$220.00 per acre	<u>\$121.00</u>
		TOTAL SPECIAL PROJECTS	\$364.95
		GRAND TOTAL	\$2,828.43

SUMMARY OF CONSTRUCTION COST

Sale:	<u>JUNO BAY</u>		Road:	<u>E to F</u>
Construction -	<u>0+00</u> stations <u>0.00</u> miles		Improvement -	<u>42+25</u> stations <u>0.80</u> miles
CLEARING AND GRUBBING -				
Scattering	0.580 acres @		\$980.00 per acre =	<u>\$568.40</u>
			TOTAL CLEARING AND GRUBBING	\$568.40
EXCAVATION -				
Road Earthwork	42.25 sta. @		\$35.00 per sta. =	\$1,478.75
Road Widening	166.00 C.Y. @		\$2.78 per c.y.=	\$461.48
Remove Grade Irregularity: Sta. 40+65 - 41+25	1 hr. Cat		\$145.00 per hr.=	\$145.00
6 Turnouts	6 T.O. @		\$60.00 per T.O.=	\$360.00
1 Turnaround	1 T.A. @		\$75.00 per T. A.=	<u>\$75.00</u>
			TOTAL EXCAVATION	\$2,520.23
CULVERTS - MATERIALS & INSTALLATION				
<u>Culverts</u>				
30 LF of 18"	<u>\$510.00</u>		0 LF of 24"	<u>\$0.00</u>
	\$510.00			\$0.00
<u>Half Rounds</u>				
10 LF of 21"	<u>\$177.80</u>		0 LF of 30"	<u>\$0.00</u>
	\$177.80			\$0.00
<u>Culvert Stakes & Markers</u>				
2 stakes	\$16.00			
1 markers	<u>\$8.00</u>			
	\$24.00		TOTAL CULVERTS	\$711.80
SPOT ROCK				
0+00 to 42+25	400 cy. of Pit-Run	@	\$9.15 per c.y.=	<u>\$3,660.00</u>
			TOTAL ROCK	\$3,660.00
SPECIAL PROJECTS				
Grade and shape road -	42.25 stations @		\$15.50 per station	\$654.88
Brush Road: Sta. 0+00 to 26+40	0.50 miles @		\$1,300.00 per mile	\$650.00
Roll subgrade w/ vibratory roller -	42.25 stations @		\$13.20 per station	\$557.70
Remove culverts from state lands	1.00 @		\$182.90 total	\$182.90
Grass seed and fertilize -	0.97 acres @		\$220.00 per acre	<u>\$213.40</u>
			TOTAL SPECIAL PROJECTS	\$2,258.88
GRAND TOTAL				\$9,720.49

SUMMARY OF CONSTRUCTION COST

Sale:	<u>JUNO BAY</u>		Road: <u>G to H</u>
Construction -	<u>3+00</u> stations <u>0.06</u> miles		Improvement - <u>0+00</u> stations <u>0.00</u> miles
CLEARING AND GRUBBING - Scattering	0.280 acres @	\$980.00 per acre =	<u>\$274.40</u> \$274.40
		TOTAL CLEARING AND GRUBBING	
EXCAVATION - Road Earthwork	3.00 sta. @	\$90.00 per sta. =	<u>\$270.00</u> \$270.00
		TOTAL EXCAVATION	
ROCK			
0+00 to 3+00	92 cy. of	Crushed @ \$5.42 per c.y. =	\$498.64
Culvert Bedding Rock 1+50	92 cy. of	Crushed @ \$3.57 per c.y. =	\$328.44
In-Stream Structure 1+50	8 cy. of	Riprap @ \$15.50 per c.y. =	\$124.00
Fill Armor 1+50	30 cy. of	Riprap @ \$15.50 per c.y. =	<u>\$465.00</u>
		TOTAL ROCK	\$1,416.08
SPECIAL PROJECTS-- Pipe Arch For Fish Passage 137" x 87" x 64'	64.00 Feet @	\$226.60 per foot	\$14,502.40
Rubber Gaskets	2.00 Gaskets @	\$90.90 ea.	\$181.80
Bands	2.00 Bands @	\$305.05 per band	\$610.10
Delivery	2.00 Trucks	\$530.00 per truck	\$1,060.00
Excavator	20.00 Hours @	\$145.00 per hour	\$2,900.00
Cat	15.00 Hours @	\$145.00 per hour	\$2,175.00
Laborer	15.00 Hours @	\$30.00 per hour	\$450.00
Grade and shape road -	3.00 Stations @	\$15.50 per station	\$46.50
Hand Held Vibratory Compactor	1.00 Day	\$45.00 per day	\$45.00
Roil subgrade w/ vibratory roller prior to rocking -	3.00 stations @	\$13.20 per station	\$39.60
Remove culverts from state lands	1.00 @	\$182.90 ea.	\$182.90
Grass seed and fertilize -	0.19 acres @	\$220.00 per acre	\$41.80
Mulching -	0.069 acres @	\$600.00 per acre	<u>\$41.40</u>
		TOTAL SPECIAL PROJECTS	\$22,276.50
		GRAND TOTAL	\$24,236.98

SUMMARY OF CONSTRUCTION COST

Sale:	<u>JUNO BAY</u>				Road: <u>I to J</u>
Construction -	<u>0+00</u>	stations		<u>56+55</u>	stations
	<u>0.00</u>	miles		<u>1.07</u>	miles
CLEARING AND GRUBBING -					
Scattering		0.520 acres @		\$980.00 per acre =	<u>\$509.60</u>
				TOTAL CLEARING AND GRUBBING	
					\$509.60
EXCAVATION -					
Road Earthwork		56.55 sta. @		\$10.00 per sta. =	\$565.50
8 Turnouts		8 T.O. @		\$60.00 per c.y. =	\$480.00
1 Turnaround		1 T.A. @		\$70.00 per c.y. =	<u>\$70.00</u>
				TOTAL EXCAVATION	
					\$1,115.50
CULVERTS - MATERIALS & INSTALLATION					
	<u>Culverts</u>				
	0 LF of 18"	<u>\$0.00</u>		126 LF of 24"	\$3,024.00
		\$0.00			\$3,024.00
	<u>Half Rounds</u>				
	0 LF of 21"	\$0.00		60 LF of 30"	\$1,357.20
		\$0.00			\$1,357.20
	<u>Culvert Stakes & Markers</u>				
	12 stakes	\$96.00			
	3 markers	<u>\$24.00</u>			
		\$120.00			
				TOTAL CULVERTS	
					\$4,501.20
SPOT ROCK					
Stockpile S1					
0+00 to 42+10	700 cy. of	Crushed	@	\$5.48 per c.y. =	\$3,836.00
42+40 to 56+55	150 cy. of	Crushed	@	\$5.48 per c.y. =	\$822.00
Culvert Bedding	15 cy. of	Crushed	@	\$5.48 per c.y. =	\$82.20
Culvert Bedding	15 cy. of	Crushed	@	\$2.93 per c.y. =	\$82.20
Culvert Bedding	15 cy. of	Crushed	@	\$2.53 per c.y. =	\$37.95
Gate Protection	20 cy. of	Riprap	@	\$5.67 per c.y. =	<u>\$113.40</u>
				TOTAL ROCK	
					\$4,973.75
SPECIAL PROJECTS					
Gate Acquisition & Shipment	1.00 gate @			\$6,221.50 per gate	\$6,221.50
Concrete Bases For Gate Posts	6.00 c.y. @			\$100.00 per c.y.	\$600.00
Gate Installation	4.00 hr.s @			\$187.50 per hr.	\$750.00
Road Brushing: 0+00 to 56+55	1.10 miles @			\$800.00 per mile	\$880.00
Grade and shape road -	56.55 stations @			\$15.50 per station	\$876.53
Roll subgrade w/ vibratory roller -	56.55 stations @			\$13.20 per station	\$746.46
Remove culverts from state lands	3.00 @			\$88.33 total	\$264.99
Grass seed and fertilize -	1.30 acres @			\$220.00 per acre	\$286.00
Mulching -	1.298 acres @			\$600.00 per acre	<u>\$778.80</u>
				TOTAL SPECIAL PROJECTS	
					\$11,404.28
GRAND TOTAL					\$22,504.33

SUMMARY OF CONSTRUCTION COST

Sale:	<u>JUNO BAY</u>	Road:	<u>K to L</u>
Construction -	<u>8+05</u> stations <u>0.15</u> miles	Improvement -	<u>6+50</u> stations <u>0.12</u> miles
 CLEARING AND GRUBBING -			
Scattering	1.190 acres @	\$980.00 per acre =	<u>\$1,166.20</u>
		TOTAL CLEARING AND GRUBBING	\$1,166.20
 EXCAVATION -			
Road Earthwork	14.55 sta. @	\$75.00 per sta. =	\$1,091.25
1 Turnaround	1 T.A. @	\$75.00 per T.A. =	\$75.00
1 Turnout	1 T.O. @	\$60.00 per T.O. =	<u>\$60.00</u>
		TOTAL EXCAVATION	\$1,226.25
 SPECIAL PROJECTS			
Grade and shape road -	14.55 stations @	\$15.50 per station	\$225.53
Roll subgrade w/ vibratory roller -	14.55 stations @	\$13.20 per station	\$192.06
Grass seed and fertilize -	0.67 acres @	\$220.00 per acre	<u>\$147.40</u>
		TOTAL SPECIAL PROJECTS	\$564.99
		GRAND TOTAL	\$2,957.44

ROCK DEVELOPMENT COST SUMMARY

Pit:	Shirley Creek	Location:	SE1/4 NE14Sec.34 , T1N, R9W, W.M.
Sale:	JUNO BAY	Rip Rap	78 c.y.
Shrinkage	1.16	Total Truck Loads:	78 c.y.
Drill Pct.:	0%	In Place Total:	56 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact.	\$0.00
Rip Rock	\$2.25 /cu.yd. x 56 cu.yds. = \$126.00
Load Dump Truck:	\$1.40 /cu.yd. x 78 cu.yds. = \$109.20

Subtotal \$235.20

TOTAL PRODUCTION COSTS \$235.20

Base Cost= \$3.02 Per Cu.Yd.

Road Segment	Haul Cost /cu.yd.	Place Riprap /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST
A to B						
Gate Protection	\$17.27	\$1.40	\$3.02	\$21.69	20	\$433.80
G to H						
In-Stream Structure	\$11.08	\$1.40	\$3.02	\$15.50	8	\$124.00
Fill Armor	\$11.08	\$1.40	\$3.02	\$15.50	30	\$465.00
I to J						
Gate Protection	\$1.25	\$1.40	\$3.02	\$5.67	20	\$113.40
M to N						
Construct Riprap Barrier	\$10.15	\$1.40	\$3.02	\$14.57	32	\$466.24

Total C.Y. 78 Sub Total \$1,602.44

	TOTAL ROCKING COSTS	\$1,602.44
--	---------------------	------------

ROCK DEVELOPMENT COST SUMMARY

Pit:	Pit Run	Location:	NW1/4 NE1/4 Sec.29, T1N, R9W, W.M.
Sale:	JUNO BAY	Road:	2104 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	2104 c.y.
Drill Pct.:	0%	In Place Total:	1503 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$500.00

Rip Rock \$1.90 /cu.yd. x 1503 cu.yds. = \$2,855.70

Load Dump Truck: \$0.70 /cu.yd. x 2104 cu.yds. = \$1,472.80

Subtotal \$4,828.50

TOTAL PRODUCTION COSTS \$4,828.50

Base Cost= \$2.29 Per Cu.Yd.

Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST
A to B	\$4.09	\$1.70	\$2.29	\$8.08	1304	\$10,536.32
A to B	\$3.35	\$1.70	\$2.29	\$7.34	400	\$2,936.00
E to F	\$5.16	\$1.70	\$2.29	\$9.15	400	\$3,660.00
				Total C.Y.	2104	Sub Total \$17,132.32

	TOTAL ROCKING COSTS	\$17,132.32
--	----------------------------	--------------------

STOCKPILE CRUSHED ROCK COST SUMMARY

Sale: JUNO BAY Road: 1332 c.y.
 Load Dump Truck: \$0.70 /cu.yd. x 1332 cu.yds. = \$932.40

Subtotal \$932.40

Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Load Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	ROCK COST
STOCKPILE S2 I to J	2.33	2.45	0.70	5.48	700	3,836.00
STOCKPILE S1 42+40 to 56+55	2.33	2.45	0.70	5.48	150	822.00
Culvert Bedding	2.33	2.45	0.70	5.48	45	246.60
STOCKPILE S3 G to H	2.27	2.45	0.70	5.42	92	498.64
G to H Culvert Bedding Rock	2.27	0.60	0.70	3.57	92	328.44
				Total C.Y.	1332	Sub Total 6,423.77

TOTAL ROCKING COSTS	6,423.77
----------------------------	-----------------

Move-In #1 Calculations

Sale: JUNO BAY

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
13.0	Pavement	30
9.0	Main Lines	7
0.0	Steep Grades	2

No.	EQUIPMENT DESCRIPTION	Move in Cost	Pilot Cars	Within Area Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
1	Graders	\$309.43		\$3.65	0.00	0.00	0	\$0.00	\$309.43
1	Rollers (smooth/grid) & Compactors	\$317.02		\$5.00	0.00	0.00	0	\$0.00	\$319.71
1	Excavators (Large)	\$448.61	1	\$44.80	0.00	3.00	3	\$0.00	\$446.88
1	Tractor (D8)	\$428.95	2	\$15.10	0.00	0.00	0	\$45.30	\$475.91
5	Dump Truck (10 cy +)	\$601.67		\$2.85	0.00	3.00	3	\$42.75	\$644.42
1	Water Truck (1500 Gal)	\$97.99		\$2.85	0.00	3.00	3	\$8.55	\$106.54
TOTAL MOVE-IN COSTS:									\$2,302.89

Move-In #2 Calculations

Sale: JUNO BAY

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
13.0	Pavement	30
16.1	Main Lines	7
0.0	Steep Grades	2

No.	EQUIPMENT DESCRIPTION	Move in Cost	Pilot Cars	Within Area Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
1	Brush Cutter	\$440.07		\$4.00	0.00	0.00	0	\$0.00	\$440.47
2	Graders	\$984.00		\$3.65	0.00	3.00	3	\$21.90	\$1,005.90
1	Loader (Med. & Large)	\$573.70	1	\$9.00	0.00	0.00	0	\$0.00	\$574.22
2	Rollers (smooth/grid) & Compactors	\$960.63		\$5.00	0.00	0.00	0	\$0.00	\$960.63
2	Excavators (Large)	\$1,337.07	2	\$44.80	0.00	4.00	4	\$179.84	\$1,514.11
2	Tractor (D8)	\$1,236.48	2	\$15.10	0.00	4.00	4	\$120.80	\$1,357.28
5	Dump Truck (10 cy +)	\$956.67		\$2.85	0.00	0.00	0	\$0.00	\$956.67
2	Water Truck (1500 Gal)	\$311.60		\$2.85	0.00	6.00	6	\$34.20	\$345.80
TOTAL MOVE-IN COSTS:									\$7,679.79



OREGON DEPARTMENT OF FORESTRY

CRUISE REPORT

Juno Bay

1. Type of Sale

Regeneration Harvest (Modified Clearcut); Partial Cut: Conifer and hardwood – recovery.

2. Legal Description

Area 1: Portions of Sections 25 and 36 T1N, R10W; Area 2; Portions of Sections 30, 31 and 32 T1N, R9W; Area 3: Portions of Section 17 T1S R9W; Areas 4 and 5: Portions of Section 5 T1S, R9W W.M. Tillamook County, Oregon

3. Sale Acreage

The sale boundaries were plotted on a digital ortho photograph and the acreage was calculated with GIS.

		ACRES	
		<u>Sale</u>	<u>Net</u>
Area 1	(Modified Clearcut)	37	34
Area 2	(Modified Clearcut)	92	85
Area 3A	(Partial Cut)	44	42
Area 3B	(Partial Cut)	9	9
Area 4	(Modified Clearcut)	36	33
Area 5	(Partial Cut)	50	42
Total		268	245

Sale Acres

Area within the Timber Sale Boundary signs

Net acres

Used for calculating the advertised volume.

Clearcut - Sale acres, less green tree retention, roads, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

Partial Cut – Sale acres less areas of low stocking, hardwoods, roads and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

4. Cruising Procedures

A. Cruise Method

A total of 137 variable radius plots, all measured and graded, were taken across the sale area. All plots in all areas were spaced on a square grid pattern.

Area	Grid Pattern	# Plots
1	200 x 200	30
2	270 x 270	39
3	275 x 275	28
4	275 x 275	17
5	260 x 260	23

All conifers 8 inches and greater and all hardwoods 10 inches DBH and greater were recorded on all plots. Species were recorded on all trees and they were graded and measured for merchantable height, diameter and form factor.

B. Plot size

A BAF of 20 was used for all trees in Areas 1 and 4. A BAF of 40 was used for all trees in Areas 3 and 5. A basal area factor of 40 was used for conifers and 20 for hardwoods in Area 2. The point of observation was at 4.5 feet.

C. Grading System

All conifer trees were graded according to the Columbia River Log Scaling and Grading Rules. Hardwoods were graded camp run. Tree heights were recorded to a 7 inch top outside bark for hemlock, Sitka spruce and cedar; six inch outside bark for Douglas-fir; nine inch top outside bark for hardwoods; or three tenths (0.3) of DBH for all species, whichever was greater. Log lengths all favored 40 feet. Height and diameter measurement standards were to the nearest foot or inch respectively.

All diameters were taken at a height of 4.5 feet. Conifers less than 20 board feet and hardwoods less than 30 board feet were not recorded.

5. Computation Procedure

Plot data was entered into the SuperAce program for computation of basal area, stand tables, board foot volumes and grades for each species. This data was then entered into the Volume Summary Worksheet to compute the sale volumes.

Statistics for the cruise were computed using Atterbury Consultants, Inc. SuperAce 98 program. The coefficient of variation and standard error are as follows: Area 1: 44.3 and 8.2; Area 2: 69.8 and 11.2; Area 3: 76.7 and 14.8; Area 4: 66.9 and 16.7; and Area 5: 36.4 and 7.8.

6. Hidden Defect and Breakage

Hidden defect and breakage was 5% for conifers and 10% for hardwoods on all of the areas.

7. Timber Description

Areas 1, 2, 3 and 5 were naturally regenerated about 50-60 years ago and have had no stand management. Area 4 is a 35 year old Douglas-fir plantation.

Area 1: Good quality naturally regenerated alder 55 years old.

Area 2: Good quality naturally regenerated alder and scattered conifer growing primarily on the ridge crests about 55 years old.

Area 3A: Medium quality naturally regenerated alder and scattered conifer about 55 years old.

Area 3B: A hemlock/ spruce stand on the ridge crest approximately 55 years old.

Area 4: A 35 year old Swiss Needle Cast infected Douglas-fir plantation.

Area 5: A 65 year old good quality hemlock stand.

8. Cruiser Names/Dates

Savage, Luttrell, Winslow, Goetz, Yau, Wells/ November-December 2006

9. Revenue Distribution

FDF: 88%

FRA: 12%

Tax Code: 9-2=79%, 9-5=9%, 59=12%

Deed Numbers: 168, 186 and 442

10. Attachments

Volume by grade

Log Stock table composite for entire sale

Stand Table (partial cut)

Volume Summaries

Logging Plan

T1N R9W S36 T220 T1N R9W S36 T220
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 1N 9W 36 AREA 1 220 34.00 30 259 S W

Spp	S T	So rt	Gr ad	% 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 Ft	Bd Ft	CF/ Lf		
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
RA		DO	4M			22	22	1	100				100				38	80	1.38	.3	
RA		DO	CR	100	1.1	7,970	7,881	268	92	8			14	23	23	39	29	66	0.82	120.0	
RA	Totals			67	1.1	7,992	7,904	269	92	8			14	23	23	39	29	66	0.82	120.3	
DL		DO	SM	8		133	133	5			100					100	40	3180	11.40	.0	
DL		DO	2M	36		538	538	18		37	63				2	98	40	505	2.98	1.1	
DL		DO	3M	45		685	685	23	2	43	55			2	17	81	37	308	2.32	2.2	
DL		DO	4M	11		158	158	5	16	49	35			9	26	30	35	29	58	0.80	2.7
DL	Totals			13		1,514	1,514	51	2	6	36	56		1	4	11	84	34	251	1.95	6.0
SS		DO	2M	4	8.3	43	40	1			100					100	40	220	2.30	.2	
SS		DO	3M	56	7.2	500	464	16	21	63	16					40	60	36	225	1.92	2.1
SS		DO	4M	31		262	262	9	71	29			11	26	33	29	27	54	0.84	4.9	
SS		DO	CR	9	10.5	80	72	2	100							18	82	30	85	0.84	.8
SS	Totals			7	5.4	886	838	28	42	49	9			4	10	33	54	30	105	1.22	8.0
DF		DO	3M	54		555	555	19	65	35					8	92	39	153	1.13	3.6	
DF		DO	4M	46		471	471	16	34	53	13			4	25	5	66	30	56	0.59	8.4
DF	Totals			9		1,026	1,026	35	16	59	25			2	12	6	80	32	85	0.78	12.0
OH		DO	CR	100	4.0	476	457	16	38	62				7	13	42	38	27	124	1.91	3.7
OH	Totals			4	4.0	476	457	16	38	62				7	13	42	38	27	124	1.91	3.7
WH		DO	4M	100		38	38	1	100							100		21	20	0.20	1.9
WH	Totals			0		38	38	1	100							100		21	20	0.20	1.9
Type Totals					1.3	11,932	11,777	400	2	72	18	8		10	19	22	49	29	78	0.91	151.9

RA
TAKE

DF
LEAVE

DF
TAKE

OH = ALDER LEAVE

T1N R9W S36 T270 T1N R9W S36 T270
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 1N 9W 36 AREA 2 270 85.00 39 266 S W

Spp	S T	So rt	Gr ad	% 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 Ft	Bd Ft	CF/ Lf		
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
RA		DO	3M			43	43	4		100				34		66	34	81	1.25	.5	
RA		DO	4M	3		116	116	10		100			100				16	26	0.52	4.5	
RA		DO	CR	97	2.7	5,116	4,976	423	92	8			19	28	24	29	26	58	0.76	85.4	
RA Totals				39	2.7	5,275	5,135	436	92	8			21	27	24	29	26	57	0.76	90.4	
DF		DO	2M	12	3.0	461	447	38		100				15		85	37	224	1.78	2.0	
DF		DO	3M	53	.6	1,941	1,929	164	77	23				4	23	74	37	117	0.96	16.5	
DF		DO	4M	35	1.8	1,298	1,275	108	56	44			15	23	22	41	28	36	0.48	35.0	
DF Totals				28	1.3	3,700	3,652	310	20	56	25			5	12	20	63	31	68	0.71	53.4
SS		DO	2M	9		96	96	8		100					100		40	400	2.84	.2	
SS		DO	3M	38	5.6	415	392	33	24	30	46		3	22	43	32	29	154	1.74	2.5	
SS		DO	4M	53	5.1	572	543	46	100				15	16	22	47	28	45	0.66	12.1	
SS Totals				8	4.8	1,083	1,030	88	62	21	18			9	17	28	46	29	69	0.90	14.9
NL		DO	2M	48	3.7	759	731	62		100					100		40	1717	8.62	.4	
NL		DO	3M	14	5.5	218	206	18		24	76		21		6	73	34	613	6.29	.3	
NL		DO	4M	38	2.3	575	562	48	1	32	67		17	3	14	66	30	389	3.92	1.4	
NL Totals				11	3.5	1,553	1,499	127	0	15	84			9	1	6	84	33	679	5.41	2.2
DL		DO	2M	81	1.1	878	869	74		51	49		6		11	84	35	433	2.93	2.0	
DL		DO	3M	15		166	166	14		38	62		12		74	14	30	124	1.29	1.3	
DL		DO	4M	4		34	34	3	17	83			15	85			23	30	0.62	1.1	
DL Totals				8	.9	1,078	1,068	91	1	8	52	40		7	3	20	70	30	240	2.02	4.4
WL		DO	2M	36		324	324	28		100					100		40	1105	5.20	.3	
WL		DO	3M	50	2.8	462	449	38		83	17				100		40	132	0.86	3.4	
WL		DO	4M	14		122	122	10		100			26		74		27	37	0.34	3.3	
WL Totals				7	1.4	907	894	76		55	8	36		4		10	86	34	128	0.88	7.0
Type Totals					2.3	13,596	13,278	1,129	5	60	18	17		12	15	20	53	28	77	0.87	172.3

SPRUCE
TACK

SPRUCE
LEAVE

DF
LEAVE

HEMLOCK
LEAVE

T1N R9W S36 T240 T1N R9W S36 T240
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 IN 9W 36 AREA3A 240 42.00 23 115 S W

Spp	So	Gr	% 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 Ft	Bd Ft	CF/Lf	
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99				
RA	DO	3M	20	2.2	885	865	36	84	16				42	58	35	96	0.93	9.1	
RA	DO	4M	8	5.3	367	348	15	100				46	54	22	39	0.72	8.8		
RA	DO	CR	72		3,046	3,046	128	87	13			10	54	9	27	66	0.77	45.8	
RA	Totals		25	.9	4,297	4,258	179	87	13			11	43	15	31	27	67	0.79	63.7
OH	DO	3M	6		118	118	5	100				100		28	50	0.57	2.4		
OH	DO	4M	28		543	543	23	100			100			16	27	0.49	20.1		
OH	DO	CR	66		1,250	1,250	52	100			35	53	12	21	36	0.51	34.3		
OH	Totals		11		1,911	1,911	80	100			51	41	8	19	34	0.51	56.7		
NL	DO	2M	33	5.4	1,394	1,320	55			100			100	40	1076	6.12	1.2		
NL	DO	3M	46	.9	1,788	1,772	74	36	9	55		1	6	93	38	189	1.19	9.4	
NL	DO	4M	21		806	806	34	21	76	3		34	45	21	23	30	0.43	26.8	
NL	Totals		23	2.3	3,988	3,897	164	4	32	5	59	7	10	7	76	27	104	0.97	37.4
WL	DO	2M	35		663	663	28			100			100	40	711	4.02	.9		
WL	DO	3M	42		785	785	33	100				12	49	39	35	80	0.84	9.9	
WL	DO	4M	23		409	409	17	31	69			14	14	72	27	36	0.44	11.3	
WL	Totals		11		1,857	1,857	78	7	57		36	3	8	36	52	31	84	0.84	22.1
SS	DO	2M	32	4.9	727	692	29			32	68			100	40	449	2.55	1.5	
SS	DO	3M	56	.4	1,179	1,174	49	63	37				18	6	76	36	170	1.52	6.9
SS	DO	4M	12		239	239	10	100				20	20	33	27	26	38	0.60	6.2
SS	Totals		13	1.9	2,145	2,105	88	47	31	22		2	12	7	78	32	143	1.34	14.7
WH	DO	2M	52	3.4	1,029	995	42			78	22			100	40	297	1.85	3.3	
WH	DO	3M	39	4.5	768	734	31	42	58					22	78	37	155	1.26	4.7
WH	DO	4M	9	4.9	167	159	7	100				49	26	26	22	27	0.61	5.8	
WH	Totals		11	3.9	1,965	1,888	79	25	63	12		4	2	8	85	31	136	1.25	13.9
DF	DO	2M	61	2.5	514	501	21			64	36			36	64	39	253	1.80	2.0
DF	DO	3M	33	7.2	289	268	11	100						100	40	89	0.79	3.0	
DF	DO	4M	6		42	42	2	100						100	38	40	0.34	1.0	
DF	Totals		5	4.0	845	811	34	5	33	39	23			23	77	39	134	1.04	6.1
Type Totals				1.6	17,008	16,728	703	2	58	17	23	11	21	13	55	26	78	0.87	214.7

RA TAKE

RA LEAVE

SPRUCE LEAVE

HEM LEAVE

SPRUCE TAKE

HEM TAKE

DF TAKE

T1N R9W S36 T210 T1N R9W S36 T210
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 1N 9W 36 AREA3B 210 9.00 5 48 S W

Spp	So	Gr	%	Bd. Ft. per Acre			Total	Percent Net Board Foot Volume								Average Log			Logs Per /Acre	
				Net	Def%	Gross		Net	Log Scale Dia.				Log Length				Ln	Bd		CF/Lf
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99				
SS	DO	2M	31	6.5	6,098	5,704	51		52	48		14			86	37	370	2.26	15.4	
SS	DO	3M	48	3.8	8,817	8,483	76	42	28	30			27		73	37	154	1.06	55.0	
SS	DO	4M	21	3.9	3,874	3,725	34	100				1	61	5	33	29	43	0.52	86.7	
SS	Totals		40	4.7	18,790	17,912	161	41	30	29		5	25	1	69	33	114	0.93	157.1	
NL	DO	2M	68	1.2	12,733	12,584	113		3	97		6	8		87	38	578	3.13	21.8	
NL	DO	3M	25	4.8	4,687	4,461	40	40	40	19			21	13	66	37	179	1.49	25.0	
NL	DO	4M	7		1,256	1,256	11	100				16	72		12	23	34	0.49	36.5	
NL	Totals		40	2.0	18,676	18,301	165	17	12	71		5	16	3	76	31	220	1.69	83.2	
WH	DO	2M	34		1,815	1,815	16		38	62					100	40	342	2.08	5.3	
WH	DO	3M	52		2,781	2,781	25	41	59						100	40	180	1.20	15.5	
WH	DO	4M	14		743	743	7	100					29	42	29	31	44	0.46	17.0	
WH	Totals		12		5,339	5,339	48	36	43	21			4	6	90	36	141	1.05	37.8	
RA	DO	CR	100		920	920	8	100				100				15	33	0.63	27.9	
RA	Totals		2		920	920	8	100				100				15	33	0.63	27.9	
DL	DO	3M	89		1,668	1,668	15	100							100	40	120	0.92	13.9	
DL	DO	4M	11		186	186	2	100							100	32	30	0.29	6.2	
DL	Totals		4		1,853	1,853	17	10	90						10	90	38	92	0.76	20.1
WL	DO	2M	87		852	852	8		100						100	40	360	2.18	2.4	
WL	DO	3M	13		118	118	1	100				100				15	50	0.89	2.4	
WL	Totals		2		970	970	9	12	88			12			88	28	205	1.83	4.7	
Type Totals				2.7	46,548	45,295	408	0	33	24	43	6	17	3	74	31	137	1.12	330.8	

SPRUCE TAKE

SPRUCE LEAVE

HEM TAKE

RA TAKE

DL LEAVE

DL LEAVE

T1N R9W S36 T220 T1N R9W S36 T220
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 1N 9W 36 AREA 4 220 33.00 17 107 S W

DF TAKE
 HEM LEAVE
 SPICE TAKE
 HEM TAKE
 SPICE LEAVE
 RA TAKE
 RA LEAVE

Spp	S T	So rt	Gr ad	%	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 Ft	Bd Ft	CF/ Lf		
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
DF		DO	3M	7		252	252	8		100					30	70	36	60	0.51	4.2	
DF		DO	4M	93	.5	2,996	2,982	98	98	2				20	38	25	17	27	29	0.34	101.3
DF		Totals		46	.4	3,248	3,233	107	91	9				18	35	26	21	27	31	0.35	105.5
WL		DO	2M	16	3.0	294	286	9		69	31			31		26	43	31	229	1.98	1.2
WL		DO	3M	65	1.9	1,114	1,093	36		27	64	9			25	5	70	35	174	1.41	6.3
WL		DO	4M	19	1.2	327	323	11	100					15	29		56	27	48	0.60	6.7
WL		Totals		24	1.9	1,736	1,702	56	36	53	11			8	22	8	62	31	119	1.12	14.2
SS		DO	3M	48	4.1	315	302	10	100							100		38	60	0.60	5.1
SS		DO	4M	52		315	315	10	100					33	67			23	30	0.49	10.7
SS		Totals		9	2.1	630	617	20	100					17	34		49	28	39	0.54	15.7
WH		DO	3M	12		90	90	3	100							100		32	90	0.83	1.0
WH		DO	4M	88		616	616	20	9	91				7	34		60	28	44	0.44	13.9
WH		Totals		10		706	706	23	8	92				6	29	13	52	29	47	0.47	14.9
NL		DO	3M	65	6.6	247	231	8	100						30	25	45	34	76	1.18	3.0
NL		DO	4M	35		121	121	4		53	47			100				18	57	0.94	2.1
NL		Totals		5	4.4	368	351	12	84	16				34	20	16	30	28	68	1.11	5.2
RA		DO	CR	100		370	370	12	100					35		45	21	25	50	0.67	7.4
RA		Totals		5		370	370	12	100					35		45	21	25	50	0.67	7.4
OH		DO	CR	100		124	124	4	100							100		40	115	1.31	1.1
OH		Totals		2		124	124	4	100							100		40	115	1.31	1.1
Type Totals					1.1	7,181	7,104	234	42	42	13	3		16	28	18	38	28	43	0.50	164.1

T TSPCSTGR
David Wells

Species, Sort Grade - Board Foot Volumes (Type)

Project: JUNOB

Page 1
Date 2/27/2007
Time 10:56:09AM

T1N R9W S36 T225

T1N R9W S36 T225

Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt
1N 9W 36 AREA 5 225 42.00 23 172 S

BdFt W

HEM LEAVE
HEM TAKE
SPRUCES TAKE
SPRUCES LEAVE
TRA LEAVE

Spp	S T	So rt	Gr ad	% 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 Ft	Bd Ft	CF/ Lf			
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99						
WL		DO	2M	51	2.9	10,511	10,206	429			57	43			100	40	381	2.28	26.8			
WL		DO	3M	43	2.2	8,592	8,399	353		53	42	5	0	0	11	88	38	133	1.03	63.2		
WL		DO	4M	6	.6	1,086	1,080	45	100				31	19	39	11	25	34	0.47	32.1		
WL		Totals		56	2.5	20,188	19,685	827		28	48	24	2	1	7	90	35	161	1.24	122.0		
WH		DO	2M	16	5.2	2,142	2,032	85			100				100	40	260	1.59	7.8			
WH		DO	3M	62	4.3	7,681	7,352	309		73	27			2	12	86	38	111	0.82	66.4		
WH		DO	4M	22	.8	2,626	2,604	109	6	94			20	34	16	30	26	39	0.45	67.3		
WH		Totals		34	3.7	12,450	11,988	503	1	66	33		4	8	11	76	32	85	0.74	141.5		
SS		DO	3M	76	4.4	1,897	1,814	76		68	32			14	86	38	130	1.08	13.9			
SS		DO	4M	24	2.2	574	562	24		100			15	16	70	29	41	0.44	13.8			
SS		Totals		7	3.9	2,471	2,376	100		76	24		3	14	82	34	86	0.80	27.7			
NL		DO	2M	34	1.8	330	324	14			100				100	40	245	1.78	1.3			
NL		DO	3M	57	2.4	544	531	22		51	19	31		31	19	51	37	180	1.78	2.9		
NL		DO	4M	9		83	83	3		100				22	78	33	63	1.08	1.3			
NL		Totals		3	2.0	957	938	39		37	45	17		19	11	70	37	168	1.63	5.6		
RA		DO	CR	100		231	231	10		100			59	17	24		20	38	0.86	6.1		
RA		Totals		1		231	231	10		100			59	17	24		20	38	0.86	6.1		
Type Totals					3.0	36,297	35,217	1,479		0	45	41	14		3	5	8	84	33	116	0.98	302.9

TC TLOGSTBF		Log Stock Table - Percent Board Feet															
David Wells		Project: JUNOB															
T1N R9W S36 T200		AREAS 1, 2, 3A & B, 4, 5 COMBINED										T1N R9W S36 T200					
Twp Rge Sec Tract Type Acres Plots Sample Trees												Page 1					
1N 9W 36 COMPOSITE 200 245.00 137 967												Date 02/27/2007					
												Time 9:12:58AM					
S Spp T	So rt	Log Grd Len	Gross MBF	% Def	Net MBF	% Spc	Percent 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
RA	DO	3M 29	1		1	.1				100.0							
RA	DO	3M 32	11		11	1.1				100.0							
RA	DO	3M 33	4		4	.4				100.0							
RA	DO	3M 36	10		9	.9				39.0	61.0						
RA	DO	3M 40	13		13	1.4				56.7		43.3					
RA	DO	4M 12	1		1	.1				100.0							
RA	DO	4M 15	4		4	.4				100.0							
RA	DO	4M 16	3		3	.4				100.0							
RA	DO	4M 17	1		1	.1				100.0							
RA	DO	4M 20	5		5	.5				100.0							
RA	DO	4M 26	2		1	.1				100.0							
RA	DO	4M 30	7		6	.6				100.0							
RA	DO	4M 38	1		1	.1				100.0							
RA	DO	CR 12	1		1	.1				100.0							
RA	DO	CR 15	12		12	1.3				85.9	14.1						
RA	DO	CR 16	51		50	5.1				90.5	6.5	3.1					
RA	DO	CR 17	21		21	2.1				91.5	8.5						
RA	DO	CR 18	27		27	2.7				100.0							
RA	DO	CR 19	19		19	1.9				100.0							
RA	DO	CR 20	27		27	2.7				59.0	24.3	16.7					
RA	DO	CR 21	21		21	2.2				100.0							
RA	DO	CR 22	36		36	3.7				87.7		12.3					
RA	DO	CR 23	19		19	1.9				60.8	25.5	13.7					
RA	DO	CR 24	18		18	1.8				100.0							
RA	DO	CR 25	24		24	2.4				100.0							
RA	DO	CR 26	14		14	1.5				100.0							
RA	DO	CR 27	26		26	2.7				77.6		22.4					
RA	DO	CR 28	38		37	3.8				56.3	36.8	6.8					
RA	DO	CR 29	20		20	2.1				100.0							
RA	DO	CR 30	50		48	4.9				33.8	27.9	38.3					
RA	DO	CR 31	19		18	1.8				100.0							
RA	DO	CR 32	73		70	7.1				43.9	29.3	23.6	3.2				
RA	DO	CR 33	30		29	3.0				100.0							
RA	DO	CR 34	45		44	4.4				92.4	7.6						
RA	DO	CR 35	42		41	4.2				100.0							
RA	DO	CR 36	44		43	4.3				68.1	14.5	17.4					
RA	DO	CR 37	25		24	2.4				100.0							
RA	DO	CR 38	10		10	1.0				100.0							
RA	DO	CR 39	22		22	2.2				100.0							
RA	DO	CR 40	195		193	19.6				83.3	10.5	6.3					
RA	DO	CR 41	10		10	1.0				100.0							
RA		Totals	1,002	1.6	986	22.9				81.2	10.2	8.3	.2				
WL	DO	2M 20	3		3	.3							100.0				
WL	DO	2M 32	3		2	.2					100.0						
WL	DO	2M 36	5		5	.5						100.0					
WL	DO	2M 40	488		476	47.1						12.4	21.0	47.3	14.9	2.0	2.3
WL	DO	3M 15	1		1	.1				100.0							
WL	DO	3M 16	1		1	.1				100.0							
WL	DO	3M 24	2		2	.2					100.0						
WL	DO	3M 26	3		3	.3					100.0						
WL	DO	3M 28	3		3	.3						100.0					

TAKE

LEAVE

TC TLOGSTBF		Log Stock Table - Percent Board Feet																	
David Wells		Project: JUNOB																	
T1N R9W S36 T200								T1N R9W S36 T200											
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	2										
1N	9W	36	COMPOSITE	200	245.00	137	967	Date	02/27/2007										
								Time	9:12:58AM										
S	So	Log	Gross	% Net	% Spc	Percent Net Volume by Scaling Diameter in Inches													
						MBF	Def	MBF	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39
WL	DO	3M 29	1		1	.1				100.0									
WL	DO	3M 30	4		4	.4				100.0									
WL	DO	3M 31	1		1	.1				100.0									
WL	DO	3M 32	48		47	4.7				17.0	50.5	18.7	13.9						
WL	DO	3M 34	4		4	.4				69.6	30.4								
WL	DO	3M 35	5		5	.5				100.0									
WL	DO	3M 36	5		5	.4				66.0		34.0							
WL	DO	3M 37	1		1	.1				100.0									
WL	DO	3M 38	8		8	.8				84.4	15.6								
WL	DO	3M 39	1		1	.1				100.0									
WL	DO	3M 40	363		354	35.1				8.9	17.3	23.7	34.1	10.9	5.2				
WL	DO	3M 41	3		3	.2				100.0									
WL	DO	4M 13	0		0	.0					100.0								
WL	DO	4M 14	1		1	.1				100.0									
WL	DO	4M 15	3		3	.3				100.0									
WL	DO	4M 16	2		2	.2				100.0									
WL	DO	4M 17	3		3	.3				100.0									
WL	DO	4M 18	0		0	.0				100.0									
WL	DO	4M 19	1		1	.1				34.7	65.3								
WL	DO	4M 20	9		9	.9				100.0									
WL	DO	4M 22	3		3	.3				100.0									
WL	DO	4M 23	1		1	.1				100.0									
WL	DO	4M 26	2		2	.2				100.0									
WL	DO	4M 27	4		4	.4				100.0									
WL	DO	4M 28	1		1	.1				100.0									
WL	DO	4M 29	3		3	.3				66.9	33.1								
WL	DO	4M 31	5		5	.5				100.0									
WL	DO	4M 32	10		10	1.0				100.0									
WL	DO	4M 33	8		8	.8				100.0									
WL	DO	4M 34	12		12	1.2				42.9	57.1								
WL	DO	4M 36	1		1	.1				100.0									
WL	DO	4M 38	4		4	.4				58.4	41.6								
WL	DO	4M 40	6		6	.6				33.7		66.3							
WL		Totals	1,031	2.2	1,009	23.4			.5	12.8	9.5	9.9	19.2	14.3	24.7	7.0	1.0	1.1	
DF	DO	2M 26	5		5	1.0						100.0							
DF	DO	2M 35	8		8	1.7							100.0						
DF	DO	2M 40	41		40	9.0						80.2	19.8						
DF	DO	3M 30	5		5	1.1						100.0							
DF	DO	3M 32	29		29	6.6				7.9	57.3	18.6	16.2						
DF	DO	3M 34	6		6	1.3						100.0							
DF	DO	3M 36	23		23	5.1				16.8	25.6		57.6						
DF	DO	3M 40	122		120	27.2				21.5	20.3	38.2	19.9						
DF	DO	4M 12	1		1	.2				100.0									
DF	DO	4M 14	0		0	.1				100.0									
DF	DO	4M 15	1		1	.2				100.0									
DF	DO	4M 16	7		7	1.6				100.0									
DF	DO	4M 17	3		3	.7				100.0									
DF	DO	4M 18	6		6	1.3				100.0									
DF	DO	4M 19	4		4	1.0				100.0									
DF	DO	4M 20	10		10	2.2				85.4	14.6								
DF	DO	4M 21	5		5	1.2				70.9	29.1								

LEAVE

TAKE

TC TLOGSTBF		Log Stock Table - Percent Board Feet																		
David Wells		Project: JUNOB																		
T1N R9W S36 T200										T1N R9W S36 T200										
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	3											
1N	9W	36	COMPOSITE	200	245.00	137	967	Date	02/27/2007											
								Time	9:12:58AM											
S	So	Log	Gross	% Net	% Spc	Percent Net Volume by Scaling Diameter in Inches														
						MBF	Def	MBF	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF	DO	4M 22	5		5	1.2			51.2	13.3	35.5									
DF	DO	4M 23	3		3	.6			100.0											
DF	DO	4M 24	4		4	1.0			100.0											
DF	DO	4M 25	9		9	2.0			100.0											
DF	DO	4M 26	2		2	.5			100.0											
DF	DO	4M 27	10		10	2.2			100.0											
DF	DO	4M 28	11		11	2.4			100.0											
DF	DO	4M 29	8		8	1.7			100.0											
DF	DO	4M 30	5		5	1.2			100.0											
DF	DO	4M 31	10		10	2.2			100.0											
DF	DO	4M 32	10		10	2.3			13.7	32.4		53.9								
DF	DO	4M 33	2		2	.4			100.0											
DF	DO	4M 34	7		6	1.5			100.0											
DF	DO	4M 35	15		15	3.5			100.0											
DF	DO	4M 36	9		8	1.9			75.0	25.0										
DF	DO	4M 37	2		2	.3			100.0											
DF	DO	4M 38	4		4	1.0			100.0											
DF	DO	4M 39	6		6	1.4			100.0											
DF	DO	4M 40	50		50	11.2			20.8	22.3	30.7	19.6	6.6							
DF		Totals	447	1.2	441	10.2			33.9	12.1	14.5	17.5	18.5	1.8	1.7					
SS	DO	2M 16	7		7	1.5													100.0	
SS	DO	2M 40	86		81	16.9						2.6	20.1	77.3						
SS	DO	3M 11	1		1	.2			100.0											
SS	DO	3M 22	13		13	2.7								100.0						
SS	DO	3M 23	6		6	1.2						100.0								
SS	DO	3M 24	13		11	2.4							100.0							
SS	DO	3M 27	9		9	1.8				23.0	77.0									
SS	DO	3M 28	6		6	1.2								100.0						
SS	DO	3M 29	1		1	.2				100.0										
SS	DO	3M 32	18		18	3.8					33.3	28.3						38.4		
SS	DO	3M 33	7		7	1.4								100.0						
SS	DO	3M 36	1		1	.1				100.0										
SS	DO	3M 37	4		4	.8				100.0										
SS	DO	3M 39	3		3	.7				100.0										
SS	DO	3M 40	190		182	37.8				6.1	21.0	33.8	19.9	9.6	9.6					
SS	DO	4M 13	1		1	.2			100.0											
SS	DO	4M 15	1		1	.2			100.0											
SS	DO	4M 16	2		2	.4			100.0											
SS	DO	4M 17	5		4	.9			100.0											
SS	DO	4M 18	1		1	.3				84.0	16.0									
SS	DO	4M 19	2		2	.5			100.0											
SS	DO	4M 20	4		4	.9			100.0											
SS	DO	4M 23	4		4	.8			100.0											
SS	DO	4M 24	7		7	1.4				73.6	26.4									
SS	DO	4M 25	4		4	.7			100.0											
SS	DO	4M 26	8		8	1.8				52.3	47.7									
SS	DO	4M 28	2		2	.5			100.0											
SS	DO	4M 29	5		5	1.1			100.0											
SS	DO	4M 30	12		12	2.6			100.0											
SS	DO	4M 31	1		1	.1			100.0											
SS	DO	4M 32	11		11	2.3				58.8		41.2								
SS	DO	4M 35	6		6	1.3			100.0											

TAKE

LEAVE

TC TLOGSTBF

Log Stock Table - Percent Board Feet

David Wells

Project: JUNOB

T1N R9W S36 T200

T1N R9W S36 T200

Twp Rge Sec Tract Type Acres Plots Sample Trees
 1N 9W 36 COMPOSITE 200 245.00 137 967

Page 5
 Date 02/27/2007
 Time 9:12:58AM

SPRUCE LEAVE

ALDER LEAVE

S	So	Log	Gross	% Net	% Spc	Percent Net Volume by Scaling Diameter in Inches														
						MBF	Def	MBF	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
NL	DO	3M	35	5	5	1.0			100.0											
NL	DO	3M	36	4	4	.7								100.0						
NL	DO	3M	38	1	1	.2						100.0								
NL	DO	3M	40	118	114	23.9			5.1	20.7	15.7	4.4	6.6	10.1	11.8	10.3	5.0	10.2		
NL	DO	4M	13	2	2	.4			100.0											
NL	DO	4M	14	2	2	.4							100.0							
NL	DO	4M	15	2	2	.4			39.8				27.3	32.9						
NL	DO	4M	16	3	3	.7		100.0												
NL	DO	4M	17	4	4	.9			67.9	18.4			13.7							
NL	DO	4M	19	3	3	.6			100.0											
NL	DO	4M	20	8	8	1.6			5.7	8.1	19.7						66.5			
NL	DO	4M	21	4	4	.8			100.0											
NL	DO	4M	23	2	2	.4			100.0											
NL	DO	4M	24	2	2	.3			48.7	51.3										
NL	DO	4M	26	2	2	.5					27.9		21.1		51.0					
NL	DO	4M	27	5	5	1.1			100.0											
NL	DO	4M	28	4	4	.7		100.0												
NL	DO	4M	29	6	6	1.2			100.0											
NL	DO	4M	30	1	1	.2					100.0									
NL	DO	4M	32	5	5	1.1								34.4	65.6					
NL	DO	4M	33	3	3	.5			100.0											
NL	DO	4M	35	4	4	.9			100.0											
NL	DO	4M	36	5	4	.9								74.3	25.7					
NL	DO	4M	37	1	1	.3					100.0									
NL	DO	4M	40	25	24	5.1					11.1			25.4	18.5	11.0			34.1	
NL	Totals			490	2.5	478	11.1		1.4	9.3	7.7	4.5	4.2	6.4	18.6	18.4	15.5	7.7	6.4	
OH	DO	3M	28	5	5	4.6				100.0										
OH	DO	4M	12	3	3	2.5				100.0										
OH	DO	4M	15	7	7	6.4				100.0										
OH	DO	4M	16	6	6	6.0				100.0										
OH	DO	4M	18	3	3	2.4				100.0										
OH	DO	4M	20	4	4	3.5				100.0										
OH	DO	CR	11	0	0	.5				100.0										
OH	DO	CR	15	12	12	10.8				100.0										
OH	DO	CR	16	1	1	.6				100.0										
OH	DO	CR	17	3	3	2.9				100.0										
OH	DO	CR	18	0	0	.3				100.0										
OH	DO	CR	20	4	4	3.4				100.0										
OH	DO	CR	21	6	6	5.7				59.5				40.5						
OH	DO	CR	22	0	0	.3				100.0										
OH	DO	CR	23	4	4	4.1				100.0										
OH	DO	CR	24	8	8	7.8				100.0										
OH	DO	CR	27	4	4	4.1				100.0										
OH	DO	CR	30	7	7	6.2				100.0										
OH	DO	CR	32	10	10	8.9						19.4	52.6	28.0						
OH	DO	CR	33	6	6	6.0				100.0										
OH	DO	CR	34	1	1	.6				100.0										
OH	DO	CR	39	3	3	2.5				100.0										
OH	DO	CR	40	10	10	9.7					31.0	37.9		31.1						
OH	Totals			108		107	2.5				82.0	3.7	1.7	7.7	4.8					

T1N R9W S36 T200 **T1N R9W S36 T200**
Twp Rge Sec Tract Type Acres Plots Sample Trees **Page 6**
1N 9W 36 COMPOSITE 200 245.00 137 967 **Date 02/27/2007**
Time 9:12:58AM

LEAVE

S Spp T	So rt	Log Grd Len	Gross MBF	% Def	Net MBF	% Spc	Percent 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+	
DL	DO	SM 40	7		7	4.2												100.0	
DL	DO	2M 17	4		3	2.0												100.0	
DL	DO	2M 32	7		7	4.0								7.4	92.6				
DL	DO	2M 40	79		79	45.9					4.1			31.5	9.8	30.4	17.3	7.0	
DL	DO	3M 16	1		1	.8						100.0							
DL	DO	3M 26	1		1	.5						100.0							
DL	DO	3M 32	15		15	8.6			9.2			9.0		59.2	22.6				
DL	DO	3M 40	46		46	26.8			4.5	17.9		13.4	20.1	7.6	22.1	14.4			
DL	DO	4M 14	0		0	.2							100.0						
DL	DO	4M 15	0		0	.2							100.0						
DL	DO	4M 16	0		0	.2							100.0						
DL	DO	4M 17	0		0	.1							100.0						
DL	DO	4M 21	1		1	.6			36.2	63.8									
DL	DO	4M 26	1		1	.5			56.6	43.4									
DL	DO	4M 28	1		1	.5					42.6	57.4							
DL	DO	4M 29	0		0	.3			100.0										
DL	DO	4M 30	1		1	.5							100.0						
DL	DO	4M 31	1		1	.9			30.1	69.9									
DL	DO	4M 32	2		2	1.3			74.0	26.0									
DL	DO	4M 34	0		0	.3												100.0	
DL	DO	4M 40	3		3	1.7							100.0						
DL	Totals		173		172	4.0			2.0	4.1	6.3	4.9	9.8	21.9	18.1	17.8	7.9	3.2	4.2
Total	All Species		4,415	2.3	4,315	100.0			4.1	11.9	29.6	11.5	13.5	8.4	12.2	4.4	2.4	1.2	.9

Stand Table Summary																
TC TSTNDSUM				Project JUNOB												
David Wells																
T1N R9W S36 T220										T1N R9W S36 T220						
Twp Rge Sec Tract				Type		Acres		Plots		Sample Trees		Page: 1				
1N 9W 36 AREA 1				220		34.00		30		259		Date: 03/15/201				
												Time: 7:52:05AM				
S Spc	T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
RA		10	5	82	32	6.112	3.33	3.67	6.3	26.7	.65	23	98	22	8	3
RA		11	11	80	49	11.112	7.33	11.11	9.6	35.5	2.92	106	394	99	36	13
RA		12	17	80	45	14.430	11.33	14.43	12.7	41.8	5.05	183	603	172	62	20
RA		13	30	80	55	21.698	20.00	21.70	17.9	55.0	10.70	389	1,193	364	132	41
RA		14	26	80	61	16.214	17.33	16.21	24.3	70.8	10.85	395	1,147	369	134	39
RA		15	24	80	61	13.038	16.00	13.58	27.5	78.4	10.27	374	1,065	349	127	36
RA		16	13	79	60	6.207	8.67	6.21	33.7	84.6	5.75	209	525	195	71	18
RA		17	21	80	61	8.882	14.00	11.42	30.7	81.1	9.65	351	926	328	119	31
RA		18	15	79	61	5.659	10.00	7.55	33.2	85.0	6.89	250	641	234	85	22
RA		19	10	80	59	3.386	6.67	5.42	29.9	84.4	4.46	162	457	152	55	16
RA		20	10	79	53	3.056	6.67	3.97	38.2	86.9	4.18	152	345	142	52	12
RA		21	6	80	56	1.663	4.00	2.22	44.0	106.3	2.68	98	236	91	33	8
RA		22	9	80	55	2.273	6.00	2.78	48.2	98.2	3.68	134	273	125	46	9
RA	Totals		197	80	54	113.729	131.33	120.26	23.5	65.7	77.73	2,825	7,904	2,643	961	269
DL		21	3	83	84	.832	2.00	1.66	38.5	115.0	1.76	64	191	60	22	7
DL		22	1	83	90	.253	.67	.51	44.3	140.0	.62	22	71	21	8	2
DL		23	1	83	89	.231	.67	.46	49.3	165.0	.63	23	76	21	8	3
DL		24	1	81	82	.212	.67	.42	47.9	135.0	.56	20	57	19	7	2
DL		26	1	80	91	.181	.67	.36	61.1	210.0	.61	22	76	21	8	3
DL		28	2	84	99	.312	1.33	.78	60.3	234.0	1.29	47	182	44	16	6
DL		29	1	85	72	.145	.67	.29	62.1	240.0	.50	18	70	17	6	2
DL		31	2	83	102	.254	1.33	.64	77.7	314.0	1.36	49	200	46	17	7
DL		34	1	80	85	.106	.67	.21	103.4	335.0	.60	22	71	20	7	2
DL		35	2	83	78	.200	1.33	.40	99.8	362.5	1.10	40	145	37	14	5
DL		46	1	82	154	.058	.67	.17	193.9	973.3	.92	34	169	31	11	6
DL		54	1	95	137	.042	.67	.13	273.9	1643.3	.95	34	207	32	12	7
DL	Totals		17	83	90	2.825	11.33	6.03	65.6	251.0	10.89	396	1,514	370	135	51
DF		10	1	84	48	1.222	.67	1.22	8.7	30.0	.30	11	37	10	4	1
DF		14	2	84	81	1.247	1.33	2.49	14.7	50.0	1.05	37	125	36	12	4
DF		17	2	84	85	.846	1.33	1.69	24.3	87.5	1.17	41	148	40	14	5
DF		18	3	84	84	1.132	2.00	2.26	27.6	93.3	1.78	62	211	60	21	7
DF		19	1	83	92	.339	.67	.68	32.9	110.0	.63	22	74	22	8	3
DF		20	6	84	89	1.833	4.00	3.67	36.0	117.5	3.76	132	431	128	45	15
DF	Totals		15	84	79	6.619	10.00	12.02	25.4	85.4	8.69	305	1,026	296	104	35
SS		13	2	84	40	1.447	1.33	1.45	15.7	35.0	.59	23	51	20	8	2
SS		14	1	81	35	.624	.67	.62	16.4	30.0	.27	10	19	9	3	1
SS		16	2	83	60	.955	1.33	1.43	22.0	63.3	.82	32	91	28	11	3
SS		17	1	84	82	.423	.67	.85	24.9	85.0	.55	21	72	19	7	2
SS		21	2	79	55	.554	1.33	.83	36.8	70.0	.80	31	58	27	10	2
SS		22	1	85	90	.253	.67	.51	46.8	135.0	.62	24	68	21	8	2
SS		23	1	85	75	.231	.67	.46	43.7	85.0	.52	20	39	18	7	1
SS		24	2	83	95	.424	1.33	.64	72.9	273.3	1.21	46	174	41	16	6
SS		25	1	80	100	.196	.67	.20	84.2	370.0	.43	16	72	15	6	2
SS		26	2	83	65	.362	1.33	.54	64.9	190.0	.92	35	103	31	12	4
SS		28	1	84	54	.156	.67	.16	98.7	180.0	.40	15	28	14	5	1
SS		29	1	82	73	.145	.67	.29	70.9	215.0	.54	21	62	18	7	2
SS	Totals		17	83	60	5.769	11.33	7.97	36.9	105.1	7.65	294	838	260	100	28
OH		23	2	80	60	.462	1.33	1.16	27.8	84.0	.89	32	97	30	11	3
OH		24	2	79	56	.424	1.33	.42	74.7	130.0	.87	32	55	30	11	2

TC TSTNDSUM

Stand Table Summary

David Wells

Project **JUNOB**

T1N R9W S36 T220

T1N R9W S36 T220

Twp Rge Sec Tract
1N 9W 36 AREA 1

Type Acres Plots Sample Trees
220 34.00 30 259

Page: 2
Date: 03/15/201
Time: 7:52:05AM

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
OH		25	4	80	53	.782	2.67	.98	63.1	122.0	1.70	62	119	58	21	4
OH		26	1	80	63	.181	.67	.36	48.7	155.0	.48	18	56	16	6	2
OH		27	1	80	79	.168	.67	.34	63.7	200.0	.59	21	67	20	7	2
OH		28	1	80	61	.156	.67	.31	55.3	175.0	.47	17	55	16	6	2
OH		30	1	80	35	.136	.67	.14	80.0	60.0	.30	11	8	10	4	0
OH		Totals	12	80	57	2.309	8.00	3.70	52.0	123.5	5.30	193	457	180	65	16
WH		8	1	85	44	1.910	.67	1.91	4.2	20.0	.26	8	38	9	3	1
WH		Totals	1	85	44	1.910	.67	1.91	4.2	20.0	0.26	8	38	9	3	1
Totals			259	80	56	133.161	172.67	151.89	26.5	77.5	110.52	4021	11,777	3,758	1,367	400

TC TSTNDSUM		Stand Table Summary														
Project JUNOB1																
T1N R9W S36 T270											T1N R9W S36 T270					
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees		Page:	1						
1N	9W	36	AREA 2	270	85.00	39	266		Date:	05/31/201						
									Time:	8:30:54AM						
Spc	T	Sample		Av	Trees/			Average Log		Tons/	Net	Net	Totals			
		DBH	Trees	FF	Ht	16'	Tot	Acres	BA/				Logs	Acres	Cu.Ft.	Bd.Ft.
RA	9	1	80	36	1.161	.51										
RA	10	11	83	39	10.343	5.64	7.52	6.1	25.0	1.26	46	188	107	39	16	
RA	11	25	80	46	19.426	12.82	18.65	9.5	34.6	4.85	176	645	412	150	55	
RA	12	19	80	62	12.406	9.74	13.06	14.3	48.0	5.12	187	627	435	159	53	
RA	13	21	80	61	11.683	10.77	11.68	19.4	60.0	6.24	227	701	531	193	60	
RA	14	14	79	53	6.716	7.18	6.72	21.4	60.0	3.94	143	403	335	122	34	
RA	15	20	80	56	8.358	10.26	9.61	22.3	62.2	5.89	214	598	501	182	51	
RA	16	19	79	56	6.978	9.74	8.08	26.6	70.5	5.90	215	569	502	183	48	
RA	17	11	80	53	3.579	5.64	3.58	33.2	78.2	3.26	119	280	277	101	24	
RA	18	8	79	61	2.322	4.10	3.48	29.2	80.0	2.80	102	279	238	86	24	
RA	19	11	79	61	2.865	5.64	3.91	37.2	99.3	3.99	145	388	340	123	33	
RA	20	4	80	58	.940	2.05	1.18	43.6	100.0	1.41	51	118	120	44	10	
RA	21	4	80	62	.853	2.05	1.28	41.6	100.0	1.46	53	128	124	45	11	
RA	22	3	80	70	.583	1.54	.97	45.5	122.0	1.22	44	119	103	38	10	
RA	23	1	80	80	.178	.51	.36	46.9	135.0	.46	17	48	39	14	4	
RA	25	1	79	49	.150	.51	.15	80.7	90.0	.33	12	14	28	10	1	
RA	26	1	80	55	.139	.51	.14	80.7	230.0	.31	11	32	26	10	3	
RA	Totals	174	80	53	88.680	89.23	90.36	19.5	56.8	48.46	1,762	5,135	4,119	1,498	436	
DF	10	2	84	39	3.761	2.05	3.76	7.4	25.0	.79	28	94	67	24	8	
DF	12	4	83	59	5.224	4.10	5.22	16.1	45.0	2.40	84	235	204	72	20	
DF	13	4	84	58	4.451	4.10	5.56	15.5	42.0	2.46	86	234	209	73	20	
DF	14	1	82	55	.959	1.03	.96	21.2	40.0	.58	20	38	49	17	3	
DF	15	8	82	69	6.686	8.21	9.19	21.8	62.7	5.73	201	577	487	171	49	
DF	16	7	82	72	5.142	7.18	8.81	21.1	64.2	5.31	186	566	451	158	48	
DF	17	6	82	69	3.904	6.15	7.81	20.5	69.2	4.56	160	540	387	136	46	
DF	18	2	81	83	1.161	2.05	2.32	27.2	87.5	1.80	63	203	153	54	17	
DF	19	1	82	110	.521	1.03	1.56	25.0	86.7	1.12	39	135	95	33	12	
DF	20	2	82	77	.940	2.05	1.88	30.1	100.0	1.62	57	188	138	48	16	
DF	21	4	82	87	1.706	4.10	3.41	38.4	128.7	3.72	131	439	316	111	37	
DF	22	1	85	97	.389	1.03	.78	48.5	175.0	1.07	38	136	91	32	12	
DF	23	3	82	79	1.066	3.08	2.13	43.6	125.0	2.65	93	267	225	79	23	
DF	Totals	45	83	66	35.910	46.15	53.41	22.2	68.4	33.80	1,186	3,652	2,873	1,008	310	
NL	32	3	74	58	.551	3.08	.55	96.9	203.3	1.28	53	112	109	45	10	
NL	36	1	77	61	.145	1.03	.15	106.1	500.0	.37	15	73	31	13	6	
NL	39	1	85	53	.124	1.03	.12	182.0	310.0	.54	23	38	46	19	3	
NL	41	1	87	108	.112	1.03	.22	183.5	860.0	.99	41	192	84	35	16	
NL	42	1	85	127	.107	1.03	.32	146.2	733.3	1.12	47	235	95	40	20	
NL	47	1	85	88	.085	1.03	.17	208.0	755.0	.85	35	129	72	30	11	
NL	48	2	80	108	.163	2.05	.41	193.2	850.0	1.89	79	347	161	67	29	
NL	64	2	73	78	.092	2.05	.18	299.7	1070.0	1.32	55	196	112	47	17	
NL	68	1	85	107	.041	1.03	.08	501.8	2180.0	.98	41	177	83	35	15	
NL	Totals	13	79	77	1.419	13.33	2.21	176.4	679.4	9.34	389	1,499	794	331	127	
DL	24	3	82	85	.979	3.08	1.96	43.4	155.0	2.34	85	304	199	72	26	
DL	26	1	80	62	.278	1.03	.56	44.5	125.0	.68	25	70	58	21	6	
DL	27	1	72	111	.258	1.03	.52	73.9	225.0	1.05	38	116	89	32	10	
DL	33	1	82	111	.173	1.03	.52	77.9	340.0	1.11	40	176	94	34	15	
DL	35	1	84	116	.154	1.03	.46	92.3	436.7	1.17	42	201	99	36	17	
DL	36	1	85	114	.145	1.03	.44	97.4	463.3	1.17	42	202	99	36	17	
DL	Totals	8	81	92	1.987	8.21	4.44	61.5	240.3	7.51	273	1,068	638	232	91	

TAKE

DOUGLAS-FIR - TAKE

SPRUCE-LEAVE

DOUG FIR LEAVE

Stand Table Summary

Project JUNOB1

T1N R9W S36 T270

T1N R9W S36 T270

Twp Rge Sec Tract
1N 9W 36 AREA 2

Type
270

Acres
85.00

Plots
39

Sample Trees
266

Page: 2
Date: 05/31/201
Time: 8:30:54AM

Sp	S	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF	
SS		9	1	80	17	2.322	1.03										
SS		10	1	70	27	1.880	1.03	1.88	6.3	20.0	.31	12	38	26	10	3	
SS		12	3	80	62	3.918	3.08	3.92	17.2	50.0	1.74	67	196	148	57	17	
SS		13	1	65	56	1.113	1.03										
SS		14	1	81	17	.959	1.03	.96	10.0	20.0	.25	10	19	21	8	2	
SS		15	1	81	60	.836	1.03	.84	28.5	60.0	.62	24	50	53	20	4	
SS		16	3	82	59	2.204	3.08	2.94	24.4	55.0	1.87	72	162	159	61	14	
SS		17	1	91	58	.651	1.03										
SS		18	1	91	65	.580	1.03	.58	42.0	140.0	.64	24	81	54	21	7	
SS		19	1	74	23	.521	1.03	.52	22.0	20.0	.29	11	10	25	10	1	
SS		22	1	81	62	.389	1.03	.78	35.5	105.0	.71	28	82	60	23	7	
SS		24	1	85	41	.326	1.03	.33	58.4	50.0	.50	19	16	42	16	1	
SS		25	1	84	56	.301	1.03	.90	26.8	110.0	.63	24	99	53	21	8	
SS		26	1	80	100	.278	1.03	.56	66.5	235.0	.96	37	131	81	31	11	
SS		28	2	85	64	.480	2.05	.72	76.5	203.3	1.43	55	146	122	47	12	
SS		Totals		20	79	47	16.757	20.51	14.91	25.7	69.1	9.94	383	1,030	845	326	88
WL		9	1	85	17	2.322	1.03										
WL		12	1	89	106	1.306	1.03	2.61	14.0	50.0	1.18	37	131	100	31	11	
WL		14	1	88	110	.959	1.03	1.92	22.3	100.0	1.37	43	192	116	36	16	
WL		15	1	89	106	.836	1.03	1.67	24.0	100.0	1.29	40	167	109	34	14	
WL		31	1	87	117	.196	1.03	.59	79.2	370.0	1.49	47	217	127	40	18	
WL		44	1	88	101	.097	1.03	.19	214.5	965.0	1.33	42	187	113	35	16	
WL		Totals		6	87	71	5.715	6.15	6.98	29.7	128.1	6.65	208	894	565	176	76
Totals			266	81	57	150.468	183.59	172.32	24.4	77.1	115.70	4201	13,278	9,835	3,571	1,129	

SPRUCE - TAKE

HEMLOCK - LEAVE

TC TSTNDSUM
David Wells

Stand Table Summary

Project JUNOB

T1N R9W S36 T240

T1N R9W S36 T240

Twp Rge Sec Tract
1N 9W 36 AREA3A

Type Acres Plots Sample Trees
240 42.00 23 115

Page: 1
Date: 02/27/201
Time: 10:57:40AM

Spc	T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net		Net		Totals		
									Net Cu.Ft.	Net Bd.Ft.	Tons/ Acre	Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF	
RA		13	7	80	72	13.473	12.17	17.46	16.1	56.0	7.72	281	978	324	118	41	
RA		14	6	80	69	9.955	10.43	14.96	16.0	54.3	6.58	239	812	276	100	34	
RA		15	5	81	75	7.342	8.70	10.30	22.6	70.0	6.40	233	720	269	98	30	
RA		16	2	79	76	2.540	3.48	3.85	24.7	82.6	2.62	95	318	110	40	13	
RA		17	5	80	45	5.598	8.70	5.60	28.0	72.2	4.30	157	404	181	66	17	
RA		18	4	80	61	3.951	6.96	5.91	29.6	78.2	4.81	175	462	202	73	19	
RA		19	2	77	57	1.749	3.48	2.64	30.8	83.9	2.24	81	222	94	34	9	
RA		20	1	80	86	.781	1.74	1.56	34.8	120.0	1.50	54	188	63	23	8	
RA		21	1	81	75	.703	1.74	1.41	38.5	110.0	1.49	54	155	63	23	6	
RA		Totals	33	80	68	46.092	57.39	63.68	21.5	66.9	37.65	1,369	4,258	1,581	575	179	
NL		9	1	80	21	4.026	1.74	4.03	3.9	20.0	.38	16	81	16	7	3	
NL		10	2	80	24	6.642	3.48	3.25	6.1	20.0	.47	20	65	20	8	3	
NL		11	1	61	56	2.892	1.74	2.89	12.9	30.0	.90	37	87	38	16	4	
NL		12	2	85	48	4.252	3.48	4.25	14.1	40.2	1.44	60	171	61	25	7	
NL		13	3	80	59	6.058	5.22	8.10	13.1	40.2	2.53	106	325	106	45	14	
NL		14	4	85	81	6.514	6.96	9.68	14.6	54.6	3.38	141	528	142	59	22	
NL		16	1	80	45	1.277	1.74	1.28	23.0	50.0	.72	29	64	30	12	3	
NL		30	1	83	85	.359	1.74	.72	78.3	255.0	1.35	56	183	57	24	8	
NL		31	2	87	123	.655	3.48	1.64	91.2	407.8	3.60	150	670	151	63	28	
NL		40	1	80	109	.196	1.74	.39	173.6	695.0	1.64	68	273	69	29	11	
NL		42	1	85	119	.181	1.74	.54	135.3	670.0	1.76	73	363	74	31	15	
NL		58	1	79	127	.096	1.74	.29	268.4	1153.3	1.86	78	334	78	33	14	
NL		60	1	87	111	.089	1.74	.18	399.6	2010.0	1.70	71	357	72	30	15	
NL		67	1	78	156	.070	1.74	.21	408.7	1876.7	2.07	86	396	87	36	17	
NL		Totals	22	80	52	33.308	38.26	37.45	26.5	104.1	23.80	992	3,897	1,000	417	164	
SS		17	1	84	48	1.090	1.74	1.09	32.8	60.0	.93	36	65	39	15	3	
SS		18	2	82	86	1.968	3.48	3.94	29.3	100.0	3.00	115	394	126	49	17	
SS		19	1	83	77	.883	1.74	1.77	32.3	100.0	1.48	57	177	62	24	7	
SS		20	1	89	81	.789	1.74	1.58	29.6	125.0	1.22	47	197	51	20	8	
SS		21	1	76	37	.703	1.74	.70	41.6	70.0	.76	29	49	32	12	2	
SS		23	2	84	104	1.207	3.48	2.41	57.4	206.2	3.60	139	498	151	58	21	
SS		25	1	86	108	.518	1.74	1.56	47.4	200.0	1.91	74	311	80	31	13	
SS		27	1	61	66	.454	1.74	.45	123.0	140.0	1.45	56	64	61	23	3	
SS		28	1	81	131	.398	1.74	1.19	69.9	293.3	2.17	83	350	91	35	15	
SS		Totals	11	82	80	8.011	19.13	14.69	43.3	143.3	16.52	636	2,105	694	267	88	
OH		10	4	81	25	12.579	6.96	6.19	5.7	20.0	.97	35	124	41	15	5	
OH		11	10	81	49	26.061	17.39	26.06	9.6	31.8	6.88	250	829	289	105	35	
OH		12	10	80	48	22.276	17.39	24.49	11.2	39.1	7.56	275	958	318	115	40	
OH		Totals	24	80	44	60.916	41.74	56.75	9.9	33.7	15.41	561	1,911	647	235	80	
WH		18	2	84	98	1.925	3.48	4.82	26.5	88.1	4.09	128	425	172	54	18	
WH		19	1	87	86	.893	1.74	1.79	33.9	115.0	1.94	61	205	81	25	9	
WH		20	1	83	46	.813	1.74	.81	41.1	50.0	1.07	33	41	45	14	2	
WH		21	1	85	74	.730	1.74	1.46	36.6	110.0	1.71	53	161	72	22	7	
WH		23	1	86	113	.587	1.74	1.76	42.2	186.7	2.38	74	329	100	31	14	
WH		24	1	80	94	.540	1.74	1.08	59.2	205.0	2.04	64	221	86	27	9	
WH		26	1	82	76	.483	1.74	.97	57.3	195.0	1.77	55	188	74	23	8	
WH		28	1	83	122	.413	1.74	1.24	63.4	256.7	2.51	78	318	105	33	13	
WH		Totals	9	84	88	6.384	15.65	13.93	39.3	135.5	17.51	547	1,888	735	230	79	

TAKES

SPRUCES LEAVE

TAKES

TRA LEAVE

TAKES

TC TSTNDSUM

Stand Table Summary

David Wells

Project **JUNOB**

T1N R9W S36 T240

T1N R9W S36 T240

Twp Rge Sec Tract
1N 9W 36 AREA3A

Type Acres Plots Sample Trees
240 42.00 23 115

Page: 2
Date: 02/27/201
Time: 10:57:40AM

LEAVE

TAKE

S Spc	T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
WL		10	1	60	70	3.189	1.74	3.19	15.7	40.0	1.60	50	128	67	21	5
WL		13	2	80	45	3.892	3.48	3.89	15.4	40.0	1.94	60	156	81	25	7
WL		14	2	79	52	3.231	3.48	3.23	23.1	55.0	2.39	75	178	100	31	7
WL		15	4	79	80	5.697	6.96	9.94	19.9	65.4	6.33	198	650	266	83	27
WL		30	1	82	89	.366	1.74	.73	83.7	300.0	1.96	61	220	82	26	9
WL		31	1	86	86	.332	1.74	.66	93.8	380.0	1.99	62	252	84	26	11
WL		37	1	84	96	.234	1.74	.47	144.4	585.0	2.16	68	274	91	28	12
WL		Totals	12	76	65	16.941	20.87	22.11	25.9	84.0	18.37	574	1,857	772	241	78
DF		18	1	80	103	1.041	1.74	2.08	29.5	85.0	1.76	61	177	74	26	7
DF		19	1	83	107	.874	1.74	1.75	37.4	130.0	1.86	65	227	78	27	10
DF		22	1	81	104	.653	1.74	1.31	46.7	140.0	1.74	61	183	73	26	8
DF		26	1	82	112	.458	1.74	.92	66.0	245.0	1.72	60	224	72	25	9
DF		Totals	4	81	106	3.026	6.96	6.05	41.0	134.1	7.08	248	811	297	104	34
Totals			115	80	58	174.678	200.00	214.66	23.0	77.9	136.35	4927	16,728	5,727	2,069	703

TC TSTNDSUM

Stand Table Summary

David Wells

Project **JUNOB**

T1N R9W S36 T210

T1N R9W S36 T210

Twp Rge Sec Tract
1N 9W 36 AREA3B

Type Acres Plots Sample Trees
210 9.00 5 48

Page: 1
Date: 02/27/201
Time: 10:58:44AM

SPRUCE LEAVE

TAKE

TAKE

LEAVE

TAKE

Spc	T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
NL	10	1	88	33	14.379	8.00	14.38	6.7	30.0	2.31	96	431	21	9	4	
NL	12	1	87	40	10.186	8.00	10.19	12.0	30.0	2.83	122	306	25	11	3	
NL	19	1	86	72	4.240	8.00	8.48	25.8	65.0	5.27	219	551	47	20	5	
NL	24	1	89	110	2.484	8.00	4.97	64.8	290.0	7.73	322	1,441	70	29	13	
NL	26	2	87	110	4.357	16.00	6.56	73.4	336.2	11.56	482	2,205	104	43	20	
NL	28	1	87	85	1.831	8.00	3.66	69.3	245.0	6.10	254	897	55	23	8	
NL	29	2	87	105	3.441	16.00	8.61	71.1	319.9	14.70	612	2,756	132	55	25	
NL	31	3	89	109	4.569	24.00	12.20	73.4	337.6	21.49	895	4,119	193	81	37	
NL	32	3	86	114	4.325	24.00	10.06	91.8	415.8	22.17	924	4,181	200	83	38	
NL	33	2	87	80	2.702	16.00	4.07	99.9	347.7	9.75	406	1,413	88	37	13	
NL	Totals	17	87	70	52.514	136.00	83.17	52.1	220.0	103.90	4,332	18,301	935	390	165	
SS	10	2	86	54	30.257	16.00	30.26	9.3	34.8	7.35	283	1,054	66	25	9	
SS	11	1	86	65	11.905	8.00	11.90	15.0	50.0	4.77	179	595	43	16	5	
SS	13	1	87	74	9.239	8.00	9.24	21.0	50.0	5.06	194	462	46	17	4	
SS	14	3	86	59	22.559	24.00	30.15	17.3	57.6	13.52	520	1,735	122	47	16	
SS	17	1	88	87	5.323	8.00	10.65	25.4	100.0	7.05	271	1,065	63	24	10	
SS	18	1	87	111	4.629	8.00	9.26	36.1	135.0	8.68	334	1,250	78	30	11	
SS	19	1	87	99	4.063	8.00	8.13	38.7	145.0	8.17	314	1,178	74	28	11	
SS	21	1	87	112	3.423	8.00	6.85	48.9	190.0	8.71	335	1,301	78	30	12	
SS	22	1	87	70	3.031	8.00	3.03	39.0	60.0	3.05	118	182	27	11	2	
SS	23	1	88	114	2.872	8.00	5.74	61.2	260.0	9.14	351	1,493	82	32	13	
SS	24	2	87	113	5.097	16.00	10.19	68.6	251.8	18.16	699	2,567	163	63	23	
SS	25	3	88	98	7.099	24.00	16.60	53.3	213.0	22.96	885	3,536	207	80	32	
SS	29	1	90	99	1.697	8.00	5.09	54.5	293.3	7.21	277	1,493	65	25	13	
SS	Totals	19	86	73	111.193	152.00	157.09	30.3	114.0	123.83	4,760	17,912	1,114	428	161	
WH	15	1	86	105	6.185	8.00	12.37	23.8	100.0	9.44	295	1,237	85	27	11	
WH	20	2	86	91	7.410	16.00	14.82	37.6	132.1	17.83	557	1,958	160	50	18	
WH	21	1	81	85	3.423	8.00	6.85	38.3	115.0	8.39	262	787	75	24	7	
WH	28	1	89	104	1.884	8.00	3.77	83.6	360.0	10.08	315	1,357	91	28	12	
WH	Totals	5	85	96	18.902	40.00	37.80	37.8	141.2	45.73	1,429	5,339	412	129	48	
DL	15	1	77	103	6.185	8.00	12.37	23.0	75.0	7.83	285	928	70	26	8	
DL	20	1	77	107	3.857	8.00	7.71	37.0	120.0	7.85	285	926	71	26	8	
DL	Totals	2	77	105	10.042	16.00	20.08	28.4	92.3	15.67	570	1,853	141	51	17	
WL	25	1	87	76	2.366	8.00	4.73	50.3	205.0	7.62	238	970	69	21	9	
WL	Totals	1	87	76	2.366	8.00	4.73	50.3	205.0	7.62	238	970	69	21	9	
RA	11	1	80	21	12.575	8.00										
RA	12	1	84	19	11.091	8.00	11.09	8.3	30.0	2.52	92	333	23	8	3	
RA	13	2	80	19	16.848	16.00	16.85	10.6	34.8	4.89	178	587	44	16	5	
RA	Totals	4	81	20	40.514	32.00	27.94	9.6	32.9	7.41	270	920	67	24	8	
Totals		48	85	66	235.531	384.00	330.82	35.1	136.9	304.16	11,599	45,295	2,737	1,044	408	

TC TSTNDSUM

Stand Table Summary

David Wells

Project **JUNOB**

T1N R9W S36 T220

T1N R9W S36 T220

Twp Rge Sec Tract
1N 9W 36 AREA 4

Type Acres Plots Sample Trees
220 33.00 17 107

Page: 1
Date: 03/15/201
Time: 7:52:55AM

S Spc	T	Sample			Av			Average Log		Net		Net		Totals		
		DBH	Trees	16'	FF	Ht	Tot	Trees/ Acre	BA/ Acre	Logs Acre	Net Cu.Ft.	Net Bd.Ft.	Tons/ Acre	Cu.Ft. Acre	Bd.Ft. Acre	Tons
DF		8	4	82	35	13.444	4.71	10.31	5.3	26.5	1.56	55	274	51	18	9
DF		9	10	81	41	27.208	11.76	21.57	6.3	27.5	3.89	137	593	128	45	20
DF		10	12	81	40	26.665	14.12	26.67	7.4	27.6	5.60	196	735	185	65	24
DF		11	9	81	48	16.047	10.59	16.05	11.2	35.4	5.13	179	568	169	59	19
DF		12	14	80	40	21.057	16.47	19.58	12.0	30.0	6.68	235	588	220	77	19
DF		13	8	81	48	10.222	9.41	10.22	17.0	42.3	4.93	174	432	163	57	14
DF		14	1	83	55	1.101	1.18	1.10	21.2	40.0	.66	23	44	22	8	1
DF	Totals		58	81	42	115.743	68.24	105.50	9.5	30.6	28.45	998	3,233	939	329	107
WL		16	1	83	97	.843	1.18	1.69	24.6	90.0	1.33	41	152	44	14	5
WL		18	2	84	90	1.370	2.35	2.74	28.1	105.0	2.45	77	288	81	25	9
WL		19	2	83	69	1.221	2.35	2.44	25.4	87.5	1.99	62	214	66	20	7
WL		20	1	84	86	.523	1.18	1.05	36.3	115.0	1.22	38	120	40	13	4
WL		21	2	85	84	1.022	2.35	2.04	38.6	125.1	2.52	79	256	83	26	8
WL		22	2	81	79	.875	2.35	1.75	38.9	117.5	2.18	68	206	72	22	7
WL		23	1	81	89	.419	1.18	.84	49.7	170.0	1.33	42	142	44	14	5
WL		24	1	80	83	.391	1.18	.78	40.1	145.0	1.01	31	113	33	10	4
WL		26	1	83	72	.309	1.18	.62	59.0	185.0	1.17	37	115	39	12	4
WL		27	1	81	64	.305	1.18	.30	77.7	320.0	.76	24	98	25	8	3
WL	Totals		14	83	82	7.277	16.47	14.25	35.0	119.5	15.96	499	1,702	527	165	56
WH		9	1	80	44	2.916	1.18	2.92	5.1	20.0	.48	15	58	16	5	2
WH		10	1	83	84	2.073	1.18	2.07	14.8	60.0	.98	31	124	32	10	4
WH		11	1	81	49	1.849	1.18	1.85	10.0	30.0	.59	19	55	20	6	2
WH		12	1	81	44	1.426	1.18	1.43	14.2	40.0	.65	20	57	21	7	2
WH		14	2	84	98	2.316	2.35	4.63	17.7	64.9	2.64	82	301	87	27	10
WH		15	1	79	71	.998	1.18	2.00	15.7	55.0	1.01	31	110	33	10	4
WH	Totals		7	82	65	11.579	8.24	14.89	13.3	47.4	6.35	198	706	209	65	23
SS		9	1	85	54	2.441	1.18	2.44	8.3	30.0	.53	20	73	17	7	2
SS		11	1	83	75	1.720	1.18	1.72	16.7	60.0	.75	29	103	25	9	3
SS		12	3	75	52	4.473	3.53	4.47	11.8	29.7	1.37	53	133	45	17	4
SS		13	5	73	34	6.633	5.88	4.01	13.6	33.1	1.41	55	133	47	18	4
SS		14	1	80	67	1.101	1.18	1.10	26.7	70.0	.76	29	77	25	10	3
SS		15	2	75	51	1.972	2.35	1.97	25.4	49.6	1.30	50	98	43	17	3
SS	Totals		13	77	49	18.339	15.29	15.72	15.0	39.3	6.12	236	617	202	78	20
RA		12	2	80	27	2.996	2.35	3.00	9.9	30.0	.82	30	90	27	10	3
RA		13	1	79	26	1.276	1.18	1.28	11.4	30.0	.40	15	38	13	5	1
RA		14	2	85	55	2.201	2.35	2.20	23.8	75.0	1.44	52	165	47	17	5
RA		15	1	80	61	.959	1.18	.96	29.2	80.0	.77	28	77	25	9	3
RA	Totals		6	81	40	7.432	7.06	7.43	16.8	49.8	3.43	125	370	113	41	12
NL		17	3	78	56	2.207	3.53	2.92	25.1	59.9	1.75	73	175	58	24	6
NL		18	2	72	51	1.401	2.35	1.40	27.1	84.9	.91	38	119	30	13	4
NL		21	1	79	57	.494	1.18	.49	55.0	80.0	.65	27	40	22	9	1
NL		24	1	78	47	.365	1.18	.37	55.0	50.0	.48	20	18	16	7	1
NL	Totals		7	76	54	4.466	8.24	5.18	30.6	67.9	3.80	159	351	125	52	12
OH		20	2	79	59	1.079	2.35	1.08	51.8	115.0	1.54	56	124	51	18	4
OH	Totals		2	79	59	1.079	2.35	1.08	51.8	115.0	1.54	56	124	51	18	4
Totals			107	80	46	165.915	125.88	164.05	13.8	43.3	65.64	2270	7,104	2,166	749	234

TC TSTNDSUM

Stand Table Summary

David Wells

Project JUNOB

T1N R9W S36 T225

T1N R9W S36 T225

Twp Rge Sec Tract
1N 9W 36 AREA 5

Type Acres Plots Sample Trees
225 42.00 23 172

Page: 1
Date: 02/27/201
Time: 10:56:39AM

LEAVE

TAKE

TAKE

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net		Net		Totals		
									Net Cu.Ft.	Net Bd.Ft.	Tons/ Acre	Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF	
WL		12	3	88	96	6.643	5.22	11.07	15.4	56.0	5.48	171	620	230	72	26	
WL		13	1	86	74	1.887	1.74	1.89	23.8	70.0	1.44	45	132	60	19	6	
WL		14	2	87	99	3.254	3.48	6.51	20.0	85.0	4.17	130	553	175	55	23	
WL		15	2	88	92	2.834	3.48	5.67	20.8	85.0	3.77	118	482	158	49	20	
WL		17	3	84	88	3.310	5.22	6.62	25.9	93.3	5.49	172	618	231	72	26	
WL		18	6	88	110	5.905	10.43	13.78	31.4	126.4	13.85	433	1,742	582	182	73	
WL		19	2	85	107	1.767	3.48	3.53	38.9	140.0	4.39	137	495	184	58	21	
WL		20	5	84	84	3.986	8.70	7.97	36.3	122.0	9.25	289	973	388	121	41	
WL		21	7	83	101	5.061	12.17	10.12	45.9	152.9	14.87	465	1,547	624	195	65	
WL		22	5	83	98	3.294	8.70	7.25	45.6	163.6	10.58	330	1,186	444	139	50	
WL		23	10	83	92	6.028	17.39	12.06	52.1	171.5	20.12	628	2,067	845	264	87	
WL		24	9	85	102	4.982	15.65	10.52	56.7	210.0	19.06	596	2,209	800	250	93	
WL		25	3	85	86	1.531	5.22	3.06	57.8	215.0	5.66	177	658	238	74	28	
WL		26	8	88	106	3.774	13.91	8.02	63.1	266.5	16.18	506	2,137	680	212	90	
WL		27	7	84	92	3.062	12.17	6.56	68.4	256.7	14.35	448	1,684	603	188	71	
WL		28	3	85	90	1.220	5.22	2.44	78.6	285.0	6.14	192	695	258	81	29	
WL		29	4	85	105	1.517	6.96	3.03	84.1	337.5	8.16	255	1,024	343	107	43	
WL		30	1	85	99	.354	1.74	.71	96.2	395.0	2.18	68	280	92	29	12	
WL		31	1	86	101	.332	1.74	.66	104.9	440.0	2.23	70	292	94	29	12	
WL		35	1	84	103	.260	1.74	.52	135.0	560.0	2.25	70	292	94	30	12	
WL	Totals	83	85	97		60.999	144.35	121.99	43.4	161.4	169.61	5,300	19,685	7,123	2,226	827	
WH		8	1	86	52	4.982	1.74	4.98	6.3	30.0	1.01	31	149	42	13	6	
WH		9	2	89	60	7.873	3.48	7.87	8.6	40.0	2.16	67	315	91	28	13	
WH		10	1	81	74	3.189	1.74	3.19	13.4	60.0	1.36	43	191	57	18	8	
WH		11	4	87	90	10.541	6.96	15.81	13.0	55.0	6.56	205	870	276	86	37	
WH		12	3	84	84	6.643	5.22	8.86	16.8	60.0	4.77	149	531	200	63	22	
WH		13	5	85	73	9.434	8.70	11.32	19.9	68.3	7.18	225	774	302	95	32	
WH		14	4	85	72	6.507	6.96	9.76	18.6	66.7	5.81	182	651	244	76	27	
WH		15	7	84	77	9.920	12.17	18.42	18.6	64.6	10.94	342	1,190	459	144	50	
WH		17	10	83	89	11.033	17.39	22.07	26.0	93.0	18.39	575	2,052	772	241	86	
WH		18	6	87	100	5.905	10.43	11.81	32.8	117.5	12.39	387	1,388	520	163	58	
WH		19	5	81	89	4.416	8.70	8.83	33.6	99.0	9.50	297	874	399	125	37	
WH		20	5	85	99	3.986	8.70	7.97	41.4	150.0	10.57	330	1,196	444	139	50	
WH		21	3	89	110	2.169	5.22	4.34	49.7	218.3	6.91	216	947	290	91	40	
WH		22	3	87	80	1.976	5.22	3.95	43.2	118.3	5.45	171	468	229	72	20	
WH		23	1	89	90	.603	1.74	1.21	50.8	205.0	1.96	61	247	82	26	10	
WH		24	1	85	98	.554	1.74	1.11	61.4	130.0	2.17	68	144	91	29	6	
WH	Totals	61	85	81		89.732	106.09	141.50	23.7	84.7	107.14	3,349	11,988	4,500	1,406	503	
SS		9	1	80	78	3.937	1.74	3.94	12.1	60.0	1.24	48	236	52	20	10	
SS		13	1	85	57	1.887	1.74	1.89	20.7	60.0	1.01	39	113	43	16	5	
SS		14	2	82	82	3.254	3.48	3.25	29.9	90.0	2.53	97	293	106	41	12	
SS		15	1	81	83	1.417	1.74	1.42	36.8	120.0	1.35	52	170	57	22	7	
SS		16	4	80	66	4.982	6.96	7.47	22.8	71.7	4.44	170	536	186	72	22	
SS		18	1	81	78	.984	1.74	1.97	28.0	80.0	1.45	55	157	61	23	7	
SS		19	2	85	78	1.767	3.48	3.53	30.5	95.0	2.79	108	336	117	45	14	
SS		21	2	82	88	1.446	3.48	2.89	42.5	132.5	3.21	123	383	135	52	16	
SS		22	2	70	54	1.318	3.48	1.32	38.7	115.0	1.33	51	152	56	21	6	
SS	Totals	16	81	73		20.991	27.83	27.68	26.9	85.8	19.36	743	2,376	813	312	100	
NL		21	2	80	89	1.446	3.48	2.17	51.0	156.7	2.65	111	340	111	46	14	
NL		23	1	80	81	.603	1.74	1.21	42.5	110.0	1.23	51	133	52	22	6	

TC TSTNDSUM
David Wells

Stand Table Summary

Project **JUNOB**

T1N R9W S36 T225

T1N R9W S36 T225

Twp Rge Sec Tract
1N 9W 36 AREA 5

Type Acres Plots Sample Trees
225 42.00 23 172

Page: 2
Date: 02/27/201
Time: 10:56:39AM

SPRUC
LEAVE

Spc	T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Cu.Ft. Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF	
NL		25	1	60	21	.510	1.74										
NL		26	1	85	58	.472	1.74	.47	81.4	180.0	.92	38	85	39	16	4	
NL		27	3	78	77	1.312	5.22	1.75	77.4	217.5	3.25	135	381	136	57	16	
NL		Totals		8	78	73	4.343	13.91	5.60	60.0	167.6	8.05	336	938	338	141	39
RA		11	1	79	46	2.635	1.74	2.64	9.1	30.0	.66	24	79	28	10	3	
RA		13	1	80	18	1.887	1.74	1.89	10.2	30.0	.53	19	57	22	8	2	
RA		20	2	75	40	1.594	3.48	1.59	39.8	60.0	1.75	63	96	73	27	4	
RA		Totals		4	78	36	6.116	6.96	6.12	17.4	37.8	2.93	107	231	123	45	10
Totals			172	84	84	182.181	299.13	302.88	32.5	116.3	307.09	9835	35,217	12,898	4,131	1,479	



Juno Bay

Volume Summary

Area 1-Modified Clearcut					
34 acres					
SPECIES	Gross MBF/Acre	Net MBF/Acre	Net MBF	Hidden D&B	Adj Net Vol MBF
Douglas-fir	1.0	1.0	34	5%	32
Alder	8.0	7.9	269	10%	242
TOTAL	9.0	8.9	303		274

Areas 2A and 2B-Modified Clearcut					
85 acres					
SPECIES	Gross MBF/Acre	Net MBF/Acre	Net MBF	Hidden D&B	Adj Net Vol MBF
Douglas-fir	3.7	3.6	306	5%	292
Alder	5.3	5.1	434	10%	391
Spruce	1.1	1.0	85	5%	81
TOTAL	10.1	9.7	825		764

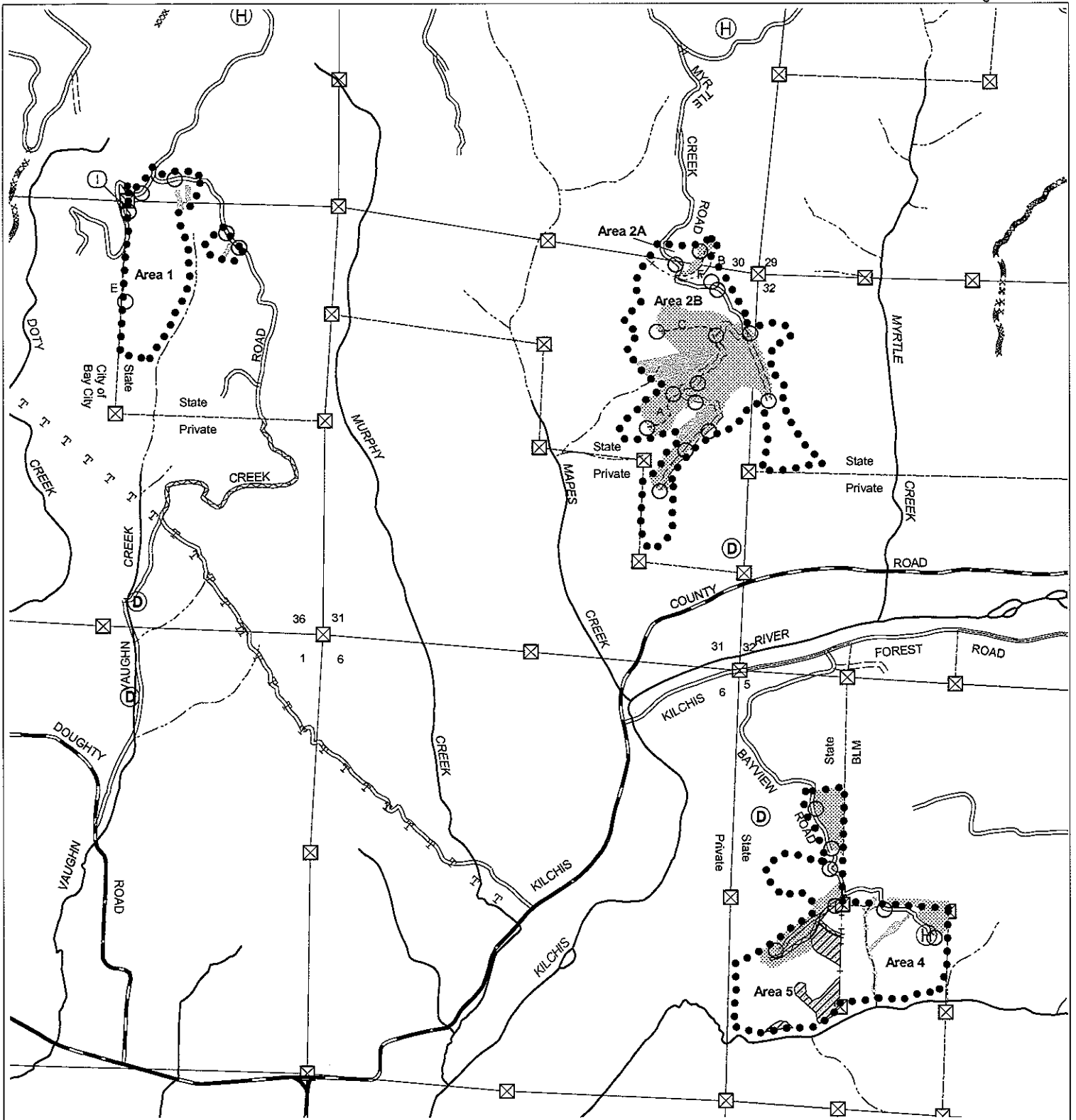
Area 3A-Partial Cut					
42 acres					
SPECIES	Gross MBF/Acre	Net MBF/Acre	Net MBF	Hidden D&B	Adj Net Vol MBF
Douglas-fir	0.8	0.8	34	5%	32
Alder	4.3	4.2	176	10%	158
Hemlock	2.0	1.9	80	5%	76
Spruce	2.1	2.1	88	5%	83
TOTAL	9.2	9.0	378		349

Area 3B-Partial Cut					
9 acres					
SPECIES	Gross MBF/Acre	Net MBF/Acre	Net MBF	Hidden D&B	Adj Net Vol MBF
Alder	0.9	0.9	8.1	10%	7
Hemlock	5.3	5.3	48	5%	46
Spruce	18.8	17.9	161	5%	153
TOTAL	25.0	24.1	217		206

Area 4-Modified Clearcut					
33 acres					
SPECIES	Gross MBF/Acre	Net MBF/Acre	Net MBF	Hidden D&B	Adj Net Vol MBF
Douglas-fir	3.2	3.2	106	5%	101
Alder	0.4	0.4	13	10%	12
Hemlock	0.7	0.7	23	5%	22
Spruce	0.6	0.6	20	5%	19
TOTAL	4.9	4.9	162		154

Area 5-Partial Cut					
42 acres					
SPECIES	Gross MBF/Acre	Net MBF/Acre	Net MBF	Hidden D&B	Adj Net Vol MBF
Hemlock	12.4	12.0	504	5%	480
Spruce	2.5	2.4	101	5%	96
TOTAL	14.9	14.4	605		576

TOTAL SALE VOLUME		
SPECIES	Gross MBF	Net Vol. (MBF)
Douglas-fir	480	457
Alder	900	810
Hemlock	655	624
Spruce	455	432
TOTAL	2490	2323



- Landing
- Ⓚ Domestic water supply intake
- Ⓜ Helicopter landing zone
- Ⓣ Truck turn-around
- ⊠ Survey corner
- ▭ Cable yarding
- ▨ Ground yarding
- ▩ Helicopter yarding
- ▧ Downhill yarding
- ▦ Buffer
- ▨ Non-required thinning
- - - Area boundary
- Sale boundary
- - - Ownership boundary
- Perennial Type-F stream
- - - Perennial Type-N stream
- Surfaced road
- Unsurfaced road
- State/Federal highway
- County road
- ② Non-project road
- - - A - - Swing road
- Legacy road
- × × × Blocked road
- OHV trail
- Non-motorized trail
- T T Transmission line

LOGGING PLAN

Timber Sale Contract No. 341-08-41

Juno Bay

Portions of Sections 30, 31 and 32

T1N, R9W, and Sections 25 and 36

T1N, R10W, and Sections 5 and 17

T1S, R9W, W. M. Tillamook County,

Oregon

Area	Type of Operation	Acres Gross	Acres Net
1	Modified Clearcut	37	34
2	Modified Clearcut	92	85
3A	Partial Cut	44	42
3B	Partial Cut	9	9
4	Modified Clearcut	36	33
5	Partial Cut	50	42
Total		268	245

1000 0 1000 Feet

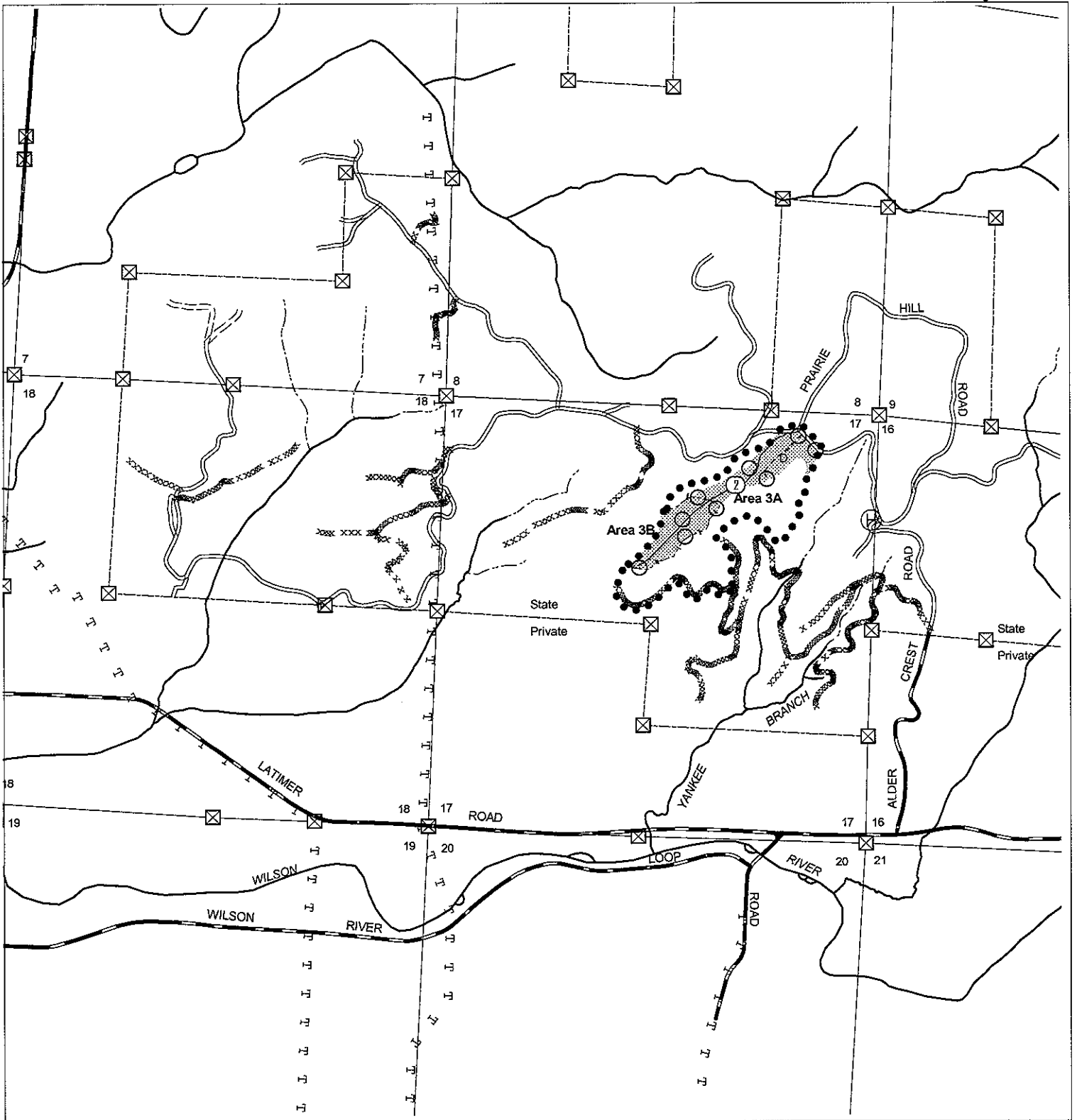


Tillamook District GIS

January 31, 2007

This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.





- Landing
- Ⓧ Domestic water supply intake
- Ⓜ Helicopter landing zone
- Ⓣ Truck turn-around
- ⊠ Survey corner
- ▭ Cable yarding
- ▨ Ground yarding
- ▩ Helicopter yarding
- ▧ Downhill yarding
- ▦ Buffer
- ▧ Non-required thinning
- - - - Area boundary
- ● ● Sale boundary
- - - Ownership boundary
- Perennial Type-F stream
- - - Perennial Type-N stream
- Surfaced road
- Unsurfaced road
- State/Federal highway
- County road
- Ⓣ Non-project road
- . - . Swing road
- x - x Legacy road
- x x x Blocked road
- OHV trail
- - - Non-motorized trail
- T T Transmission line

LOGGING PLAN

Timber Sale Contract No. 341-08-41
 Juno Bay
 Portions of Sections 30, 31 and 32
 T1N, R9W, and Sections 25 and 36
 T1N, R10W, and Sections 5 and 17
 T1S, R9W, W. M. Tillamook County,
 Oregon

Area	Type of Operation	Acres Gross	Acres Net
1	Modified Clearcut	37	34
2	Modified Clearcut	92	85
3A	Partial Cut	44	42
3B	Partial Cut	9	9
4	Modified Clearcut	36	33
5	Partial Cut	50	42
Total		268	245

1000 0 1000 Feet



Tillamook District GIS
 January 31, 2007

This product is for informational use and may not have been prepared for, or suitable for legal, engineering, or surveying purposes.

