



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Chilly Willy
Sale 341-13-31

District: Forest Grove

Date: August 03, 2012

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$807,357.82	\$100,826.28	\$908,184.10
		Project Work:	\$(187,905.00)
		Advertised Value:	\$720,279.10



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timber description

Location: Portions of Section 16, T1S, R6W, W.M., Washington County, Oregon.

Stand Stocking: 20%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	15	0	98
Western Hemlock / Fir	13	0	98
Alder (Red)	16	0	98

Volume by Grade	2S	3S	4S	Camprun	Total
Douglas - Fir	981	709	124	0	1,814
Western Hemlock / Fir	253	768	161	0	1,182
Alder (Red)	0	0	0	282	282
Total	1,234	1,477	285	282	3,278



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comments: Pond Values Used: 2nd Quarter Calendar Year 2012.

Western redcedar and Other Cedars Stumpage Price = Pond Value
minus Logging Cost:
 $\$726.92/\text{MBF} = \$950/\text{MBF} - \$223.08/\text{MBF}$

SCALING COST ALLOWANCE = \$5.00/MBF

FUEL COST ALLOWANCE = \$4.00/Gallon

HAULING COST ALLOWANCE

Hauling costs equivalent to \$780 daily truck cost.

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

Brand and Paint: $3,278 \text{ MBF} \times \$1/\text{MBF} = \$3,278$

Total Other Costs (with Profit & Risk to be added) = \$3,278

Other Costs (No Profit & Risk added):

Machine Time to Block/Waterbar Roads:

10 hours x \$150/hr. = \$1,500

Machine Time to Pile Landing Slash:

10 hours x \$110/hr. = \$1,100

Slash Treatment:

10 acres x \$150/ac. = \$1,500

Equipment Cleaning: 2 machines x \$1,000/machine = \$2,000

Snags (Tree Topping): 109 trees x \$40/tree = \$4,360

Weyerhaeuser Road Use Fee: \$31,463.58

TOTAL Other Costs (No Profit & Risk added) = \$41,923.58

ROAD MAINTENANCE

Move-in: \$2,000

General Road Maintenance: 7.5 miles x \$1,000/mile = \$7,500

TOTAL: $\$9,500 / 3,278 \text{ MBF} = \$2.90/\text{MBF}$



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logging conditions

combination#: 1 Douglas - Fir 84.00%
 Western Hemlock / Fir 84.00%
 Alder (Red) 84.00%

yarding distance: Long (1,500 ft) **downhill yarding:** No
logging system: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 8.0 **bd. ft / load:** 4,000
cost / mbf: \$104.50

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

combination#: 2 Douglas - Fir 16.00%
 Western Hemlock / Fir 16.00%
 Alder (Red) 16.00%

yarding distance: Medium (800 ft) **downhill yarding:** No
logging system: Shovel **Process:** Manual Delimiting
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 10.0 **bd. ft / load:** 4,000
cost / mbf: \$62.62

machines: Shovel Logger



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logging costs

Operating Seasons:	2.00	Profit Risk:	10.00%
Project Costs:	\$187,905.00	Other Costs (P/R):	\$3,278.00
Slash Disposal:	\$0.00	Other Costs:	\$41,923.58

Miles of Road

Road Maintenance: \$2.90

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

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	4.4
Western Hemlock / Fir	\$0.00	2.0	3.7
Alder (Red)	\$0.00	3.0	3.8



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logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$97.80	\$2.96	\$2.68	\$82.19	\$1.00	\$18.66	\$0.00	\$5.00	\$12.79	\$223.08
Western Hemlock / Fir									
\$97.80	\$2.96	\$2.68	\$97.74	\$1.00	\$20.22	\$0.00	\$5.00	\$12.79	\$240.19
Alder (Red)									
\$97.80	\$2.96	\$2.68	\$63.44	\$1.00	\$16.79	\$0.00	\$5.00	\$12.79	\$202.46

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$529.79	\$306.71	\$0.00
Western Hemlock / Fir	\$0.00	\$452.53	\$212.34	\$0.00
Alder (Red)	\$0.00	\$560.00	\$357.54	\$0.00



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District: Forest Grove

Date: August 03, 2012

summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	1,814	\$306.71	\$556,371.94
Western Hemlock / Fir	1,182	\$212.34	\$250,985.88
Alder (Red)	282	\$357.54	\$100,826.28

Gross Timber Sale Value

Recovery: \$908,184.10

Prepared by: Joe Koch

Phone: 503-359-7460

TIMBER SALE SUMMARY

Chilly Willy

Contract No. 341-13-31

1. **Type of Sale:** The Timber Sale is 109 acres of Modified Clearcut (MC). The timber will be sold on a recovery basis at a sealed bid auction.
2. **Revenue Distribution:** 100% BOF; Washington County.
3. **Sale Acreage:** Acres are net of stream buffers and existing road prisms. Acreage was determined using ESRI ArcMap GIS software.
4. **Cruise Data:** The Timber Sale was cruised with Stand Level Inventory plots in April 2004 and December 2006. For more information see Cruise Report.
5. **Timber Description:** Timber Sale Area is well stocked, 65 year old mixed stand of Douglas-fir and western hemlock with minor amounts of western redcedar, and hardwoods. The average Douglas-fir DBH is approximately 15 inches. The estimated average net Douglas-fir volume is 17 MBF per acre. The average DBH of western hemlock is approximately 13 inches. The estimated average net Western hemlock volume is 11 MBF per acre.
6. **Topography and Logging Method:** Slopes within the sale vary in aspect and range from 10% to 70%. The sale area is 84% cable-based yarding and 16% ground-based yarding.
7. **Access:** From Forest Grove, proceed south on HWY 47 for 15 miles. Turn right onto Pike Road and continue for 4.5 miles. Pike Road then becomes Turner Cr. Road. Continue down Turner Cr. Road for 4 miles and there is a Weyerhaeuser gate that requires a key. Continue through this gate on Turner Cr. Road for 4.5 miles. Turn right onto North Fork Trask River Road and continue for 1.5 miles and there is a Weyerhaeuser gate that requires a key. Continue through this gate on North Fork Trask River Road for 4.5 miles. Turn right onto Williams Road and continue for 2 miles and there is a Stimpson gate that requires a combination. Continue through this gate on Williams Road for 1 mile the timber sale.

8. **Projects:**

Project No. 1: 2.27 miles of road improvement and 0.44 miles road construction	\$16,265.06
Project No. 2: Road Surfacing	\$85,880.33
Project No. 3: Crush and stockpile 6,000 cubic yards of 3"-0 rock	\$79,344.00
Project No 4: Seed, fertilize, and mulch areas of disturbed soil	\$302.40
Move in and equipment cleaning:	\$6,109.84

Project Total (rounded): \$187,905.00

9. Other Costs:

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

Brand and Paint: $3,285 \text{ MBF} \times \$1/\text{MBF} = \$3,285$

Total Other Costs (with Profit & Risk to be added) = \$3,285

Other Costs (No Profit & Risk added):

Machine time to block/waterbar roads:

10 hours x \$150/hr. = \$1,500

Machine time to pile landing slash:

10 hours x \$110/hr. = \$1,100

Slash Treatment:

10 acres x \$150/ac. = \$1,500

Equipment Cleaning: 2 machines x \$1,000/machine = \$2,000

Snags (Tree Topping): 109 trees x \$40/tree = \$4,360

Weyerhaeuser road use and maintenance fee: \$31,463.58

TOTAL Other Costs (No Profit & Risk added) = \$41,923.58

ROAD MAINTENANCE

Move-in: \$2,000

General Road Maintenance: 7.5 miles x \$1,000/mile = \$7,500

TOTAL: \$9,500 / 3,387 MBF = \$2.80/MBF

PROJECT COST SUMMARY SHEET

Timber Sale: Chilly Willy

Sale Number: 341-13-31

PROJECT NO. 1: ROAD CONSTRUCTION AND IMPROVEMENT

CONSTRUCTION

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
A to B	12+30	\$5,068.21
C to D	10+80	\$4,445.66
Pt. G (turnaround)		\$1,930.53
	23+10 stations	
	0.44 miles	

SUBTOTAL CONSTRUCTION \$11,444.40

IMPROVEMENTS

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
E to F	119+80	\$4,820.66
	119+80 stations	
	2.27 miles	

SUBTOTAL IMPROVEMENTS \$4,820.66

TOTAL PROJECT NO. 1 COST = \$16,265.06

PROJECT NO. 2: SURFACING

<u>Road Segment</u>	<u>Amount</u>	<u>Type</u>	<u>Cost</u>
A to B	755 cy	3" - 0	\$12,857.65
C to D	612 cy	3" - 0	\$10,618.20
E to F	3,924 cy	3" - 0	\$56,623.32
E to F	20 cy	24" - 6	\$127.20
Pt. G	332 cy	3" - 0	\$5,653.96
Total			
	5,623 cy	3" - 0	
	20 cy	24" - 6	

TOTAL PROJECT NO. 2 COST = \$85,880.33

PROJECT NO. 3: STOCKPILE CONSTRUCTION

Crush and stockpile 6,000 cubic yards of 3"-0 at Barney SP

TOTAL PROJECT NO. 3 COST = \$79,344.00

PROJECT NO. 4: GRASS SEED, FERTILIZE, & MULCH

Grass seed and fertilize areas of disturbed soil. \$302.40

TOTAL PROJECT NO. 4 COST = \$302.40

MOVE IN & EQUIPMENT CLEANING \$6,109.84

TOTAL ALL PROJECTS \$187,901.63

TOTAL CREDITS \$187,905.00

SUMMARY OF CONSTRUCTION COST

Timber Sale: Chilly Willy Timber Sale No.: 341-13-31
 Road Segment: A to B Construction: 12+30 stations
0.23 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	1.14	acres @	\$980.00	per acre =	\$1,117.20
Balanced Road Construction	12.30	sta @	\$90.00	per sta =	\$1,107.00
Junction Construction					
Excavate	300	cy @	\$1.40	per cy =	\$420.00
Place Fill	300	cy @	\$2.12	per cy =	\$636.00
Compact Fill	300	hr @	\$0.45	per cy =	\$135.00
Construct Turnouts (1)	1	ea @	\$60.00	per ea =	\$60.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Roadside Landing	1	ea @	\$150.00	per ea =	\$150.00
Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	12.30	sta @	\$28.70	per sta =	\$353.01
			TOTAL EXCAVATION COSTS=		\$4,338.21

CULVERTS - MATERIALS & INSTALLATION

Culverts					
36	LF of 18"	\$720.00			
		<u>\$720.00</u>			
Culvert Markers					
1	markers	<u>\$10.00</u>			
			TOTAL CULVERT COSTS =		\$730.00
			PROJECT NO. 1 TOTAL COST =		\$5,068.21

PROJECT NO. 2:

<u>SURFACING</u>	8	" deep =	42 cy/sta		
A to B	517	cy of	3" - 0	@	\$17.03 per cy = \$8,804.51
Curve Widening	10	cy of	3" - 0	@	\$17.03 per cy = \$170.30
Turnouts (1)	14	cy of	3" - 0	@	\$17.03 per cy = \$238.42
Turnaround (1)	14	cy of	3" - 0	@	\$17.03 per cy = \$238.42
Junction	20	cy of	3" - 0	@	\$17.03 per cy = \$340.60
Roadside Landing	60	cy of	3" - 0	@	\$17.03 per cy = \$1,021.80
Landing (1)	120	cy of	3" - 0	@	\$17.03 per cy = \$2,043.60
Total =	755	cy of	3" - 0		
					PROJECT NO. 2 TOTAL COST = \$12,857.65

PROJECT NO. 4:

Grass seed and fertilize areas of disturbed soil.	0.57	acres @	\$220.00	per acre =	\$125.40
					PROJECT NO. 4 TOTAL COST = \$125.40

TOTAL COST = \$18,051.26

SUMMARY OF CONSTRUCTION COST

Timber Sale:	Chilly Willy	Timber Sale No.:	341-13-31
Road Segment:	C to D	Construction:	10+80 stations 0.20 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	1.00	acres @	\$980.00	per acre =	\$980.00
Balanced Road Construction	1.75	sta @	\$90.00	per sta =	\$157.50
Drift	2.70	sta @	\$150.00	per sta =	\$405.00
Endhaul (Full Bench Construction)					
Excavate & Load	320	cy @	\$1.80	per cy =	\$576.00
Haul to Waste Area	160	cy @	\$2.10	per cy =	\$336.00
Place Fill	160	cy @	\$2.12	per cy =	\$339.20
Compact Fill	160	hr @	\$0.45	per cy =	\$72.00
Compact Waste Area	160	cy @	\$0.25	per cy =	\$40.00
Construct Turnouts (1)	1	ea @	\$60.00	per ea =	\$60.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	10.80	sta @	\$28.70	per sta =	\$309.96
			TOTAL EXCAVATION COSTS=		\$3,635.66

CULVERTS - MATERIALS & INSTALLATION

Culverts					
40	LF of 18"	<u>\$800.00</u>			
		\$800.00			
Culvert Markers					
1	markers	<u>\$10.00</u>			
			TOTAL CULVERT COSTS =		\$810.00

PROJECT NO. 1 TOTAL COST = \$4,445.66

PROJECT NO. 2:

SURFACING

	8	" deep =	42 cy/sta		
C to D	454	cy of	3"-0	@	\$17.35 per cy = \$7,876.90
Curve Widening	10	cy of	3"-0	@	\$17.35 per cy = \$173.50
Turnouts (1)	14	cy of	3"-0	@	\$17.35 per cy = \$242.90
Turnaround (1)	14	cy of	3"-0	@	\$17.35 per cy = \$242.90
Landing (1)	120	cy of	3"-0	@	\$17.35 per cy = \$2,082.00
Total =	612	cy of	3"-0		

PROJECT NO. 2 TOTAL COST = \$10,618.20

PROJECT NO. 4:

Grass seed and fertilize areas of disturbed soil.	0.50	acres @	\$220.00	per acre =	\$110.00
Mulch	5.00	bales @	\$4.50	per bale =	\$22.50

PROJECT NO. 4 TOTAL COST = \$132.50

TOTAL COST = \$15,196.36

SUMMARY OF CONSTRUCTION COST

Timber Sale: Chilly Willy
 Road Segment: E to F

Timber Sale No. : 341-13-31
 Improvement : 119+80 stations
2.27 miles

PROJECT NO. 1

FILL EXCAVATION

Place riprap	20	cy @	\$2.12	per cy =	\$42.40	
Grade, Ditch, and Roll	119.80	sta @	\$28.70	per sta =	\$3,438.26	
					TOTAL EXCAVATION COSTS=	\$3,480.66

CULVERTS - MATERIALS & INSTALLATION

Culverts

66 LF of 18" \$1,320.00
\$1,320.00

Culvert Markers

2 markers \$20.00

TOTAL CULVERT COSTS = \$1,340.00

PROJECT NO. 1 TOTAL COST = \$4,820.66

PROJECT NO. 2:

SURFACING

	6	" deep =	31 cy/sta			
E to F	3,714	cy of	3" - 0	@	\$14.43	per cy = \$53,593.02
Curve Widening	48	cy of	3" - 0	@	\$14.43	per cy = \$692.64
Turnouts (1)	132	cy of	3" - 0	@	\$14.43	per cy = \$1,904.76
Culvert Bedding	30	cy of	3" - 0	@	\$14.43	per cy = \$432.90
Riprap	20	cy of	24" - 6"	@	\$6.36	per cy = \$127.20
Total =						
	3924	cy of	3" - 0			
	20	cy of	24" - 6"			

PROJECT NO. 2 TOTAL COST = \$56,750.52

TOTAL COST = \$61,571.18

SUMMARY OF CONSTRUCTION COST

Timber Sale: Chilly Willy
 Road Segment: Point G

Timber Sale No. : 341-13-31
 Construction : Loaded Truck Turnaround

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.25	acres @	\$980.00	per acre =	\$245.00
Turnaround Construction	670.0	sq. yd. @	\$0.51	per sq. yd. =	\$341.70
Endhaul					
Excavate	200	cy @	\$1.80	per cy =	\$360.00
Push	260	cy @	\$0.80	per cy =	\$208.00
Place Fill	260	cy @	\$2.12	per cy =	\$551.20
Compact Fill	260	cy @	\$0.45	per cy =	\$117.00
Grade, Ditch, and Roll	3.75	sta @	\$28.70	per sta =	\$107.63
				TOTAL EXCAVATION COSTS =	\$1,930.53

PROJECT NO. 1 TOTAL COST = \$1,930.53

PROJECT NO. 2:

SURFACING	6	" deep =	31 cy/sta		
Point G	332	cy of	3" - 0	@	\$17.03 per cy =
					\$5,653.96
Total =	332	cy of	3" - 0		

PROJECT NO. 2 TOTAL COST = \$5,653.96

PROJECT NO. 4:

Grass seed and fertilize areas of disturbed soil.	0.10	acres @	\$220.00	per acre =	\$22.00
Mulch	5.00	bales @	\$4.50	per bale =	\$22.50

PROJECT NO. 4 TOTAL COST = \$44.50

TOTAL COST = \$7,628.99

Move-In & Equipment Cleaning

Timber Sale: Chilly Willy
 Sale Number: 341-13-31

LOWBOY HAUL (One-way)	
DIST. (mi)	AVE SPEED (mph)
9.5	7
2.0	2

No.	EQUIPMENT DESCRIPTION	Equipment Cleaning	Base Cost	Woods Cost	Pilot Cars	Area Move	Begin Mileage	End Mileage	Total Miles	Within		Total Cost
										Area Cost	Area Cost	
0	Drill & Compressor		\$0.00	\$0.00		\$46.00	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
0	Brush Cutter		\$0.00	\$0.00		\$4.00	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
1	Graders		\$300.00	\$360.00		\$3.65	0.0	0.0	0.0	\$0.00	\$0.00	\$660.00
0	Loader (Small)		\$0.00	\$0.00	1	\$3.55	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
0	Loader (Med. & Large)		\$0.00	\$0.00	1	\$9.00	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
1	Rollers (smooth/grid) & Compactors		\$308.59	\$304.75		\$5.00	0.0	0.0	0.0	\$0.00	\$0.00	\$613.34
0	Excavators (Small)	\$0	\$0.00	\$0.00		\$22.00	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
0	Excavators (Med.)	\$0	\$0.00	\$0.00		\$35.50	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
1	Excavators (Large)	\$1,000	\$466.14	\$511.59	1	\$44.80	0.0	0.0	0.0	\$0.00	\$0.00	\$1,977.73
0	Tired Backhoes/Skidders	\$0	\$0.00	\$0.00		\$3.00	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
0	Tractors (D6)	\$0	\$0.00	\$0.00	2	\$7.10	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
0	Tractors (D7)	\$0	\$0.00	\$0.00	2	\$11.30	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
1	Tractor (D8)	\$1,000	\$473.80	\$468.22	2	\$15.10	0.0	0.0	0.0	\$0.00	\$0.00	\$1,942.02
3	Dump Truck (10 cy +)		\$350.00	\$345.00		\$2.85	0.0	0.0	0.0	\$0.00	\$0.00	\$695.00
0	Dump Truck (Off Hiway)		\$0.00	\$0.00	1	\$4.75	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
0	Water Truck (1500 Gal)		\$0.00	\$0.00		\$2.85	0.0	0.0	0.0	\$0.00	\$0.00	\$0.00
1	Water Truck (2500 Gal)		\$111.67	\$110.08		\$2.85	0.0	0.0	0.0	\$0.00	\$0.00	\$221.75

TOTAL MOVE-IN COSTS: \$6,109.84

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Timber Sale: Chilly Willy
 Sale Number: 341-13-31
 Pit Name: Barney

Swell:	<u>130%</u>		
Shrinkage:	<u>116%</u>	3"-0 (trk measure)	<u>5,623 cy</u>
Drill Pct.:	<u>100%</u>		
		Stockpile (stockpile measurement)	<u>6,000 cy</u>
		Total Truck Yardage:	<u>12,583 cy</u>
		Total In Place Yardage:	<u>9,679 cy</u>

Pit Development & Cleanup				\$134.99
Drill & Shoot (Downholes):	<u>\$2.50 /cy x</u>	<u>9,679 cy</u>	=	\$24,198.08
Push Rock:	<u>\$0.70 /cy x</u>	<u>12,583 cy</u>	=	\$8,808.10
Oversize Reduction:	<u>\$4.50 /cy x</u>	<u>968 cy</u>	=	\$4,355.65
Load Crusher:	<u>\$0.70 /cy x</u>	<u>12,583 cy</u>	=	\$8,808.10
Crushing (3" - 0):	<u>\$3.00 /cy x</u>	<u>5,623 cy</u>	=	\$16,869.00
Crushing (Stockpile):	<u>\$3.00 /cy x</u>	<u>6,960 cy</u>	=	\$20,880.00
Build and Shape Stockpile:	<u>\$1.00 /cy x</u>	<u>6,000 cy</u>	=	\$6,000.00
Load Dump Truck:	<u>\$0.70 /cy x</u>	<u>12,583 cy</u>	=	\$8,808.10
		Subtotal		\$98,862.02

Equipment Cleaning				\$2,000.00
Move in Crusher (3 Stage)				\$2,987.00
Set up Crusher				\$3,024.00
Move in and set up Drill and Compressor				\$477.09
Move in Excavator				\$800.30
Move in D-8				\$785.62
Move in Loader				\$710.85
Clean Up Pit				\$300.00
Gradation Tests (\$65/2000 cy)	<u>\$65.00 cy/2000cy x</u>	<u>7 tests</u>		\$455.00
		Subtotal		\$11,539.86

PIT DEVELOPMENT COST \$8.77/cy TOTAL PRODUCTION COST \$110,401.88

VOLUME SUMMARY

(Shown in MBF)

Chilly Willy

341-13-31

May 2012

CC (109 ACRES)

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Douglas-fir	Cruise Volume	1,001	723	127	1,851
	Hidden D&B (2%)	20	14	3	37
	NET TOTAL	981	709	124	1,814
	% of Total	54	39	7	

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Western Hemlock	Cruise Volume	258	784	164	1,206
	Hidden D&B (2%)	5	16	3	24
	NET TOTAL	253	768	161	1,182
	% of Total	21	65	13	

SPECIES		CR	TOTAL
Red Alder & Other	Cruise Volume	288	288
Hardwoods	Hidden D&B (2%)	6	6
	NET TOTAL	282	282
	% of Total	100	

SPECIES	2 SAW	3 SAW	4 SAW	CR	TOTAL
Douglas-fir	981	709	124		1,814
Western Hemlock	253	768	161		1,182
Red Alder				282	282
					3278

Log Stock Table - MBF
Project: CHILLWIL

T01_R06_S16 T8122

T01_R06_S16 T8122

Twp Rge Sec Tract Type Acres Plots Sample Trees Page
 01_ 06_ 16 0 8122 109.00 21 123 Date 7/5/2012
 Time 11:53:08AM

Spp	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches									
									MBF	MBF	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19
DF				2M 40	1,001		1,001	54.1					382	151	377	91		
DF				3M 32	239		239	12.9			91	120	28					
DF				3M 34	8		8	.4			8							
DF				3M 36	23		23	1.2			23							
DF				3M 40	453		453	24.5			120	114	219					
DF				4M 12	13		13	.7			13							
DF				4M 16	29		29	1.6			29							
DF				4M 18	2		2	.1			2							
DF				4M 20	12		12	.7			12							
DF				4M 22	11		11	.6			11							
DF				4M 24	41		41	2.2			41							
DF				4M 28	3		3	.2			3							
DF				4M 32	16		16	.9			16							
DF				Totals	1,851		1,851	54.8			369	234	248	382	151	377	91	
WH				2M 40	258		258	21.4					110	149				
WH				3M 28	18		18	1.5			18							
WH				3M 32	114		114	9.4			73	33	8					
WH				3M 34	31		31	2.6			31							
WH				3M 36	56		56	4.6			56							
WH				3M 38	9		9	.7			9							
WH				3M 40	558		558	46.2			176	197	185					
WH				4M 12	2		2	.1			2							
WH				4M 16	52		52	4.3			52							
WH				4M 22	8		8	.7			8							
WH				4M 24	33		33	2.7			33							
WH				4M 26	29		29	2.4			29							
WH				4M 30	17		17	1.4			17							
WH				4M 32	13		13	1.1			13							
WH				4M 40	10		10	.8			10							
WH				Totals	1,206		1,206	35.7			525	229	193	110	149			
RA				CR 18	2		2	.8			2							
RA				CR 22	6		6	2.2			6							
RA				CR 24	5		5	2.0			5							
RA				CR 26	9		9	3.5			9							
RA				CR 28	6		6	2.0			6							
RA				CR 30	4		4	1.4			4							
RA				CR 40	240		240	88.0			38	30	86	40	47			
RA				Totals	273		273	8.1			71	30	86	40	47			
RC				3M 40	19		19	54.1			19							
RC				4M 16	3		3	9.0			3							
RC				4M 24	13		13	36.9			13							
RC				Totals	36		36	1.1			17	19						
BM				CR 24	15		15	100.0			15							
BM				Totals	15		15	.5			15							
Total All Species					3,381		3,381	100.0			996	513	527	531	346	377	91	

TC		Stand Table Summary														
TSTNDSUM		Project											CHILLWIL			
T01_R06_S16 T8122											T01_R06_S16 T8122					
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1							
01_	06_	16	0	8122	109.00	21	123	Date:	07/05/2011							
								Time:	11:53:08AM							
S Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits	MBF
DF		8	2	87	68	9.236	3.51	9.24	6.5	30.0	1.72	60	277	188	66	30
DF		9	2	87	75	7.682	3.66	7.68	10.2	50.0	2.24	78	384	244	85	42
DF		10	3	88	82	10.557	5.42	10.56	12.3	60.0	3.71	130	633	405	142	69
DF		11	2	88	85	5.227	3.51	7.79	10.3	43.5	2.28	80	339	248	87	37
DF		12	5	88	72	11.872	9.08	16.69	12.8	48.5	6.09	214	809	663	233	88
DF		13	1	87	91	1.876	1.76	3.75	14.1	55.0	1.50	53	206	164	58	22
DF		14	2	87	93	3.358	3.51	6.72	17.1	75.0	3.28	115	504	358	126	55
DF		15	4	88	101	5.845	7.02	11.69	20.6	91.0	6.86	241	1,063	747	262	116
DF		16	1	87	102	1.331	1.90	2.66	23.7	100.0	1.79	63	266	196	69	29
DF		17	1	87	107	1.114	1.76	2.23	29.1	120.0	1.85	65	267	202	71	29
DF		18	4	87	115	3.889	7.02	11.67	24.0	95.0	7.98	280	1,108	870	305	121
DF		19	9	87	114	8.208	16.10	23.72	27.6	117.3	18.65	654	2,783	2,033	713	303
DF		20	2	88	123	1.660	3.51	4.98	29.5	120.1	4.18	147	598	456	160	65
DF		21	4	87	126	2.943	7.02	8.83	35.1	152.8	8.82	310	1,350	962	338	147
DF		22	1	88	133	.665	1.76	2.00	39.0	180.0	2.22	78	359	242	85	39
DF		23	1	88	125	.593	1.76	1.78	42.3	190.0	2.15	75	338	234	82	37
DF		24	4	88	113	2.284	7.17	6.28	46.1	200.0	8.26	290	1,256	900	316	137
DF		25	3	87	123	1.650	5.42	4.95	48.9	216.5	6.91	242	1,072	753	264	117
DF		26	4	88	118	1.931	7.17	5.79	52.7	241.7	8.71	306	1,400	949	333	153
DF		27	2	88	130	.874	3.51	2.62	62.0	291.6	4.63	162	764	505	177	83
DF		28	1	87	138	.402	1.76	1.21	69.8	350.0	2.40	84	422	262	92	46
DF		29	1	87	117	.383	1.76	1.15	65.8	306.7	2.15	76	352	235	82	38
DF		31	1	87	137	.344	1.76	1.03	84.1	420.0	2.47	87	433	269	95	47
DF		Totals	60	87	93	83.924	106.85	155.02	25.1	109.6	110.85	3,890	16,986	12,083	4,240	1,851
WH		8	1	87	64	4.563	1.76	4.56	6.5	30.0	.96	30	137	104	33	15
WH		9	4	87	63	16.839	7.17	16.84	8.1	37.1	4.35	136	624	475	148	68
WH		10	6	87	67	19.603	10.54	19.60	11.0	53.3	6.87	215	1,045	749	234	114
WH		11	3	88	68	8.706	5.27	8.71	14.8	60.0	4.13	129	522	450	141	57
WH		12	9	88	90	20.604	15.80	39.01	12.4	50.3	15.42	482	1,960	1,681	525	214
WH		13	4	88	84	7.548	7.02	15.10	14.5	55.0	7.01	219	830	764	239	91
WH		14	3	87	93	5.076	5.27	10.15	17.5	68.0	5.69	178	691	621	194	75
WH		15	2	87	110	2.962	3.51	5.92	23.6	102.6	4.48	140	608	488	152	66
WH		16	3	88	104	3.843	5.27	7.69	26.2	113.2	6.44	201	870	701	219	95
WH		17	3	88	97	3.332	5.27	6.66	28.9	115.0	6.15	192	766	671	210	84
WH		18	2	87	98	2.022	3.51	4.04	33.4	130.0	4.32	135	526	471	147	57
WH		19	1	88	102	.901	1.76	1.80	40.1	150.0	2.31	72	270	252	79	29
WH		20	3	87	100	2.375	5.27	4.75	43.2	158.1	6.56	205	751	715	224	82
WH		21	3	87	107	2.191	5.27	5.82	36.6	151.4	6.83	213	882	744	233	96
WH		22	1	87	109	.647	1.76	1.94	37.2	166.7	2.31	72	324	252	79	35
WH		23	1	87	99	.614	1.76	1.23	55.4	210.0	2.18	68	258	237	74	28
WH		Totals	49	87	80	101.828	86.19	153.83	17.5	71.9	86.02	2,688	11,065	9,376	2,930	1,206
RA		11	1	87	87	2.710	1.76	2.71	18.5	70.0	1.38	50	190	151	55	21
RA		12	1	87	84	2.312	1.76	2.31	18.5	70.0	1.18	43	162	129	47	18
RA		14	1	88	88	1.691	1.76	1.69	27.3	120.0	1.27	46	203	138	50	22
RA		15	1	87	92	1.394	1.76	2.79	22.2	95.0	1.70	62	265	185	67	29
RA		16	1	88	91	1.258	1.76	2.52	24.3	95.0	1.68	61	239	183	67	26
RA		17	2	87	92	2.164	3.51	4.33	28.4	110.0	3.38	123	476	368	134	52
RA		18	1	87	93	1.016	1.76	2.03	32.9	125.0	1.84	67	254	200	73	28
RA		21	2	88	101	1.476	3.51	2.95	45.8	180.4	3.71	135	532	405	147	58
RA		22	1	88	73	.665	1.76	1.33	41.0	135.0	1.50	55	180	163	59	20

TC TSTNDSUM		Stand Table Summary													
Project CHILLWIL															
T01_R06_S16 T8122								T01_R06_S16 T8122							
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:							
01_	06_	16	0	8122	109.00	21	123	2	Date:	07/05/2011					
								Time:	11:53:08AM						
S Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	T o t a l s		
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.		Net Bd.Ft.	Tons	Cunits	MBF	
RA	Totals	11	87	89	14.685	19.32	22.66	28.3	110.4	17.64	642	2,500	1,923	699	273
RC	9	1	87	49	4.065	1.76	4.06	6.5	30.0	.63	27	122	68	29	13
RC	15	1	88	80	1.490	1.76	2.98	17.7	70.0	1.24	53	209	135	57	23
RC	Totals	2	87	57	5.555	3.51	7.04	11.2	46.9	1.86	79	331	203	86	36
BM	10	1	88	65	3.493	1.76	3.49	8.5	40.0	.79	30	140	86	32	15
BM	Totals	1	88	65	3.493	1.76	3.49	8.5	40.0	0.79	30	140	86	32	15
Totals		123	87	85	209.485	217.62	342.04	21.4	90.7	217.16	7328	31,022	23,671	7,988	3,381

TC		Stand Table Summary														
TSTNDSUM		Project											CHILLWIL			
T01_R06_S16 T8122											T01_R06_S16 T8122					
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1							
01_	06_	16	0	8122	109.00	21	123	Date:	07/05/2011							
								Time:	11:53:08AM							
S Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits	MBF
DF		8	2	87	68	9.236	3.51	9.24	6.5	30.0	1.72	60	277	188	66	30
DF		9	2	87	75	7.682	3.66	7.68	10.2	50.0	2.24	78	384	244	85	42
DF		10	3	88	82	10.557	5.42	10.56	12.3	60.0	3.71	130	633	405	142	69
DF		11	2	88	85	5.227	3.51	7.79	10.3	43.5	2.28	80	339	248	87	37
DF		12	5	88	72	11.872	9.08	16.69	12.8	48.5	6.09	214	809	663	233	88
DF		13	1	87	91	1.876	1.76	3.75	14.1	55.0	1.50	53	206	164	58	22
DF		14	2	87	93	3.358	3.51	6.72	17.1	75.0	3.28	115	504	358	126	55
DF		15	4	88	101	5.845	7.02	11.69	20.6	91.0	6.86	241	1,063	747	262	116
DF		16	1	87	102	1.331	1.90	2.66	23.7	100.0	1.79	63	266	196	69	29
DF		17	1	87	107	1.114	1.76	2.23	29.1	120.0	1.85	65	267	202	71	29
DF		18	4	87	115	3.889	7.02	11.67	24.0	95.0	7.98	280	1,108	870	305	121
DF		19	9	87	114	8.208	16.10	23.72	27.6	117.3	18.65	654	2,783	2,033	713	303
DF		20	2	88	123	1.660	3.51	4.98	29.5	120.1	4.18	147	598	456	160	65
DF		21	4	87	126	2.943	7.02	8.83	35.1	152.8	8.82	310	1,350	962	338	147
DF		22	1	88	133	.665	1.76	2.00	39.0	180.0	2.22	78	359	242	85	39
DF		23	1	88	125	.593	1.76	1.78	42.3	190.0	2.15	75	338	234	82	37
DF		24	4	88	113	2.284	7.17	6.28	46.1	200.0	8.26	290	1,256	900	316	137
DF		25	3	87	123	1.650	5.42	4.95	48.9	216.5	6.91	242	1,072	753	264	117
DF		26	4	88	118	1.931	7.17	5.79	52.7	241.7	8.71	306	1,400	949	333	153
DF		27	2	88	130	.874	3.51	2.62	62.0	291.6	4.63	162	764	505	177	83
DF		28	1	87	138	.402	1.76	1.21	69.8	350.0	2.40	84	422	262	92	46
DF		29	1	87	117	.383	1.76	1.15	65.8	306.7	2.15	76	352	235	82	38
DF		31	1	87	137	.344	1.76	1.03	84.1	420.0	2.47	87	433	269	95	47
DF		Totals	60	87	93	83.924	106.85	155.02	25.1	109.6	110.85	3,890	16,986	12,083	4,240	1,851
WH		8	1	87	64	4.563	1.76	4.56	6.5	30.0	.96	30	137	104	33	15
WH		9	4	87	63	16.839	7.17	16.84	8.1	37.1	4.35	136	624	475	148	68
WH		10	6	87	67	19.603	10.54	19.60	11.0	53.3	6.87	215	1,045	749	234	114
WH		11	3	88	68	8.706	5.27	8.71	14.8	60.0	4.13	129	522	450	141	57
WH		12	9	88	90	20.604	15.80	39.01	12.4	50.3	15.42	482	1,960	1,681	525	214
WH		13	4	88	84	7.548	7.02	15.10	14.5	55.0	7.01	219	830	764	239	91
WH		14	3	87	93	5.076	5.27	10.15	17.5	68.0	5.69	178	691	621	194	75
WH		15	2	87	110	2.962	3.51	5.92	23.6	102.6	4.48	140	608	488	152	66
WH		16	3	88	104	3.843	5.27	7.69	26.2	113.2	6.44	201	870	701	219	95
WH		17	3	88	97	3.332	5.27	6.66	28.9	115.0	6.15	192	766	671	210	84
WH		18	2	87	98	2.022	3.51	4.04	33.4	130.0	4.32	135	526	471	147	57
WH		19	1	88	102	.901	1.76	1.80	40.1	150.0	2.31	72	270	252	79	29
WH		20	3	87	100	2.375	5.27	4.75	43.2	158.1	6.56	205	751	715	224	82
WH		21	3	87	107	2.191	5.27	5.82	36.6	151.4	6.83	213	882	744	233	96
WH		22	1	87	109	.647	1.76	1.94	37.2	166.7	2.31	72	324	252	79	35
WH		23	1	87	99	.614	1.76	1.23	55.4	210.0	2.18	68	258	237	74	28
WH		Totals	49	87	80	101.828	86.19	153.83	17.5	71.9	86.02	2,688	11,065	9,376	2,930	1,206
RA		11	1	87	87	2.710	1.76	2.71	18.5	70.0	1.38	50	190	151	55	21
RA		12	1	87	84	2.312	1.76	2.31	18.5	70.0	1.18	43	162	129	47	18
RA		14	1	88	88	1.691	1.76	1.69	27.3	120.0	1.27	46	203	138	50	22
RA		15	1	87	92	1.394	1.76	2.79	22.2	95.0	1.70	62	265	185	67	29
RA		16	1	88	91	1.258	1.76	2.52	24.3	95.0	1.68	61	239	183	67	26
RA		17	2	87	92	2.164	3.51	4.33	28.4	110.0	3.38	123	476	368	134	52
RA		18	1	87	93	1.016	1.76	2.03	32.9	125.0	1.84	67	254	200	73	28
RA		21	2	88	101	1.476	3.51	2.95	45.8	180.4	3.71	135	532	405	147	58
RA		22	1	88	73	.665	1.76	1.33	41.0	135.0	1.50	55	180	163	59	20

TC TSTNDSUM		Stand Table Summary													
Project CHILLWIL															
T01_R06_S16 T8122								T01_R06_S16 T8122							
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:							
01_	06_	16	0	8122	109.00	21	123	2	Date:	07/05/2011					
								Time:	11:53:08AM						
S Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	T o t a l s		
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.		Net Bd.Ft.	Tons	Cunits	MBF	
RA	Totals	11	87	89	14.685	19.32	22.66	28.3	110.4	17.64	642	2,500	1,923	699	273
RC	9	1	87	49	4.065	1.76	4.06	6.5	30.0	.63	27	122	68	29	13
RC	15	1	88	80	1.490	1.76	2.98	17.7	70.0	1.24	53	209	135	57	23
RC	Totals	2	87	57	5.555	3.51	7.04	11.2	46.9	1.86	79	331	203	86	36
BM	10	1	88	65	3.493	1.76	3.49	8.5	40.0	.79	30	140	86	32	15
BM	Totals	1	88	65	3.493	1.76	3.49	8.5	40.0	0.79	30	140	86	32	15
Totals		123	87	85	209.485	217.62	342.04	21.4	90.7	217.16	7328	31,022	23,671	7,988	3,381

T01_R06_S16 T8122										T01_R06_S16 T8122			
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt				
01_	06_	16	0	8122	109.00	21	123	S	W				

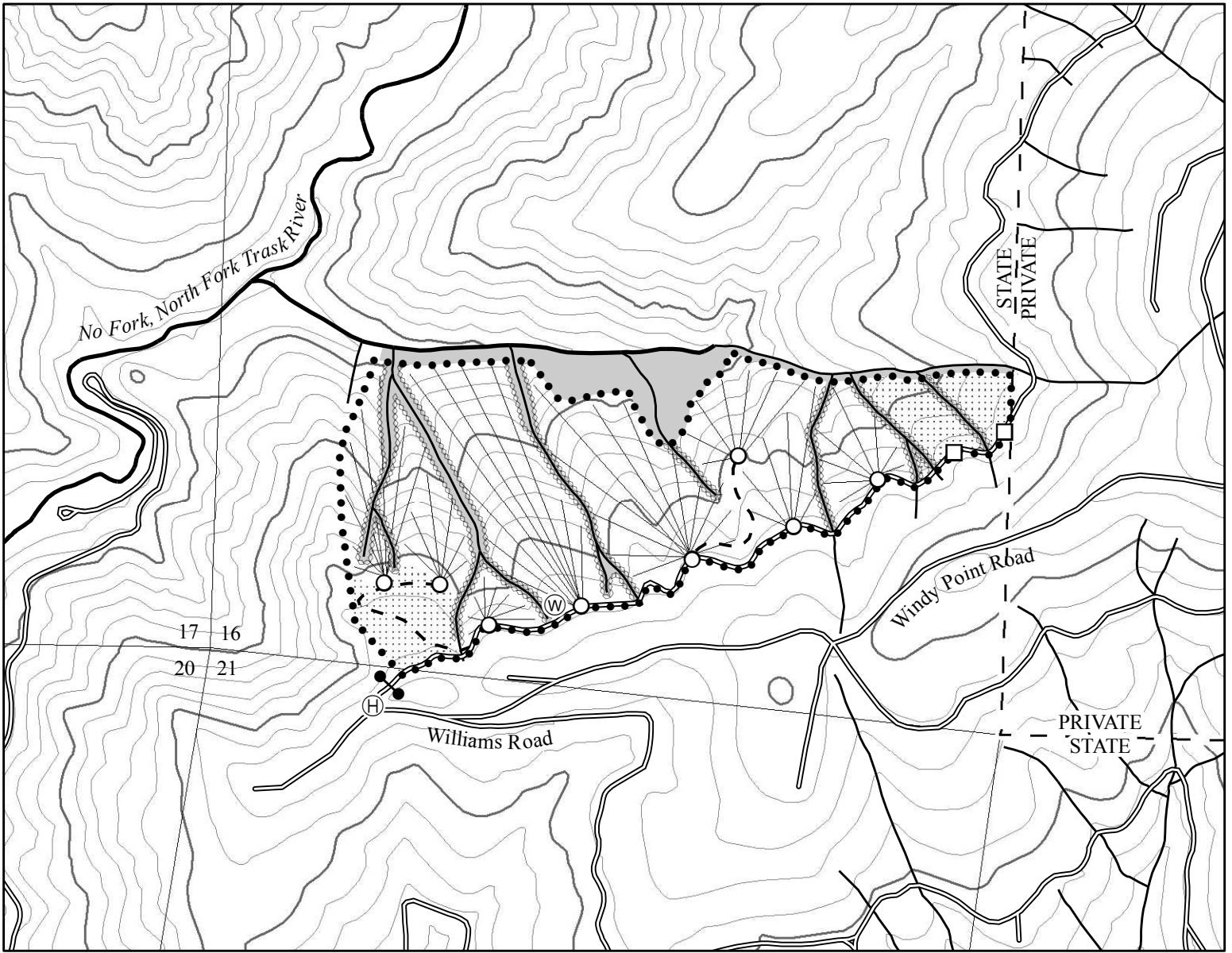
S Spp	So T	Gr rt ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre
								Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf	
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99				
DF		2M	54	9,182	9,182	1,001		66	34				100	40	324	1.74	28.4		
DF		3M	39	6,636	6,636	723		100				34	66	36	86	0.57	76.7		
DF		4M	7	1,169	1,169	127		100		44	43	13		19	23	0.32	49.9		
DF	Totals		55	16,986	16,986	1,851		46	36	19	3	3	14	80	31	110	0.80	155.0	
WH		2M	21	2,369	2,369	258		100					100	40	271	1.58	8.8		
WH		3M	65	7,196	7,196	784		100				2	18	37	79	0.53	90.6		
WH		4M	14	1,500	1,500	164		100		33	53	8	6	22	28	0.29	54.5		
WH	Totals		36	11,065	11,065	1,206		79	21		4	9	13	74	32	72	0.55	153.8	
RA		CR	100	2,500	2,500	273		68	32		1	11		88	35	110	0.81	22.7	
RA	Totals		8	2,500	2,500	273		68	32		1	11		88	35	110	0.81	22.7	
RC		3M	54	179	179	19		100					100	40	120	0.76	1.5		
RC		4M	46	152	152	17		100		20	80			22	27	0.28	5.6		
RC	Totals		1	331	331	36		100		9	37		54	26	47	0.44	7.0		
BM		CR	100	140	140	15		100					100	24	40	0.35	3.5		
BM	Totals		0	140	140	15		100					100	24	40	0.35	3.5		
Type Totals				31,022	31,022	3,381		60	30	10	3	6	12	78	32	91	0.68	342.0	

TC PSTATS				PROJECT STATISTICS				PAGE 1		
				PROJECT CHILLWIL				DATE 7/5/2012		
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
01_	06_	16	0	8122	109.00	21	123	S	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				PLOTS	TREES	TREES	TREES			
TOTAL			21	123	5.9					
CRUISE			21	123	5.9	22,834	.5			
DBH COUNT										
REFOREST										
COUNT										
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR-T	60	83.9	15.3	93	28	106.8	16,986	16,986	3,890	3,890
WHEMLOCK-T	49	101.8	12.5	80	18	86.2	11,065	11,065	2,688	2,688
R ALDER-T	11	14.7	15.5	89		19.3	2,500	2,500	642	642
WR CEDAR-L	2	5.6	10.8	57		3.5	331	331	79	79
BL MAPLE-T	1	3.5	9.6	65		1.8	140	140	30	30
TOTAL	123	209.5	13.8	85		217.6	31,022	31,022	7,328	7,328
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-T	77.0	9.9		334	371	408				
WHEMLOCK-T	75.4	10.8		147	165	182				
R ALDER-T	47.2	14.9		179	211	242				
WR CEDAR-L	91.5	85.7		12	85	158				
BL MAPLE-T										
TOTAL	89.5	8.1		246	267	289	320	80	36	
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-T	108.8	24.3		64	84	104				
WHEMLOCK-T	134.7	30.1		71	102	132				
R ALDER-T	297.9	66.6		5	15	24				
WR CEDAR-L	458.3	102.4		6	11					
BL MAPLE-T	458.3	102.4		3	7					
TOTAL	64.3	14.4		179	209	240	173	43	19	
CL	68.1	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR-T	87.1	19.5		86	107	128				
WHEMLOCK-T	127.8	28.6		62	86	111				
R ALDER-T	246.1	55.0		9	19	30				
WR CEDAR-L	458.3	102.4		4	7					
BL MAPLE-T	458.3	102.4		2	4					
TOTAL	55.0	12.3		191	218	244	127	32	14	
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-T	86.7	19.4		13,694	16,986	20,278				
WHEMLOCK-T	130.1	29.1		7,846	11,065	14,283				
R ALDER-T	242.6	54.2		1,144	2,500	3,856				
WR CEDAR-L	458.3	102.4			331	669				
BL MAPLE-T	458.3	102.4			140	283				
TOTAL	58.1	13.0		26,994	31,022	35,049	142	35	16	

PROJECT STATISTICS
PROJECT CHILLWIL

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
01_	06_	16	0	8122	109.00	21	123	S	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
DOUG FIR-T		86.2	19.3	3,140	3,890	4,639			
WHEMLOCK-T		129.9	29.0	1,908	2,688	3,469			
R ALDER-T		239.2	53.5	299	642	985			
WR CEDAR-L		458.3	102.4		79	160			
BL MAPLE-T		458.3	102.4		30	60			
TOTAL		<i>57.1</i>	<i>12.8</i>	<i>6,393</i>	<i>7,328</i>	<i>8,263</i>	<i>137</i>	<i>34</i>	<i>15</i>



LOGGING PLAN

Legend

- Timber Sale Boundary
- Roads
- - - New Construction
- Type F Stream
- Type N Stream
- Stream Buffer
- ⋯ Stream Buffer Boundary
- ⋮ Tractor Yarding Area
- ▵ Cable Yarding Area
- Cable Landing
- Tractor Landing
- ┌ - - - ┐ ODF Ownership Boundary
- Sections
- 400 Foot Contour Band
- 80 Foot Contour Band
- ⊕ Helipad
- Gate

FOR TIMBER SALE CONTRACT # 341-13-31
 CHILLY WILLY
 PORTIONS OF SECTION 16, T1S, R6W, W.M.
 WASHINGTON COUNTY, OREGON

Forest Grove District GIS
 May, 2012

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



APPROXIMATE NET ACRES

TRACTOR	CABLE
17	92

1:12,000

1 inch = 1,000 feet

