



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Batty Baldwin
Sale 341-14-10

District: Forest Grove

Date: October 07, 2013

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,960,498.06	\$3,639.09	\$1,964,137.15
		Project Work:	\$(43,010.00)
		Advertised Value:	\$1,921,127.15



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Batty Baldwin
Sale 341-14-10

District: Forest Grove

Date: October 07, 2013

timber description

Location: Portions of Sections 32 and 33, T3N, R6W, and portions of Section 4, T2N, R6W,
W.M., Washington County, Oregon.

Stand Stocking: 20%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	19	0	98
Western Hemlock / Fir	17	0	98
Noble Fir	26	0	95
Alder (Red)	15	0	95

Volume by Grade	2S	3S	4S	Camprun	Total
Douglas - Fir	3,930	1,447	171	0	5,548
Western Hemlock / Fir	143	85	22	0	250
Noble Fir	36	2	0	0	38
Alder (Red)	0	0	0	13	13
Total	4,109	1,534	193	13	5,849



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Batty Baldwin
Sale 341-14-10

District: Forest Grove

Date: October 07, 2013

comments: Pond Values Used: 3rd Quarter Calendar Year 2013.

Western redcedar and Other Cedars Stumpage Price = Pond Value
minus Logging Cost:
 $\$755.84/\text{MBF} = \$1,000/\text{MBF} - \$244.16/\text{MBF}$

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: $5,849 \text{ MBF} \times \$1/\text{MBF} = \$5,849$
TOTAL Other Costs (with Profit & Risk to be added) = \$5,849

Other Costs (No Profit & Risk added):
Block/Waterbar Roads, & Skid Trails: $20 \text{ hrs} \times \$150/\text{hour} = \$3,000$
Pile Landing Slash and Sort Firewood: $20 \text{ hrs} \times \$150/\text{hour} = \$3,000$
Equipment Cleaning: $4 \times \$1,000/\text{Piece} = \$4,000$
TOTAL Other Costs (No Profit & Risk added) = \$10,000

ROAD MAINTENANCE
Move-in: \$2,000
General Road Maintenance: $8.3 \text{ miles} \times \$1,000/\text{mile} = \$8,300$
TOTAL Road Maintenance: $\$10,300 / 5,849 \text{ MBF} = \$1.76/\text{MBF}$



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Batty Baldwin
Sale 341-14-10

District: Forest Grove

Date: October 07, 2013

logging conditions

combination#: 1

	Douglas - Fir	67.81%
	Western Hemlock / Fir	60.84%
	Noble Fir	68.00%
	Alder (Red)	98.00%
yarding distance:	Medium (800 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:	5.0	bd. ft / load: 4,000
cost / mbf:	\$167.21	
machines:	Log Loader (A) Stroke Delimber (A) Tower Yarder (Medium)	

combination#: 2

	Douglas - Fir	32.19%
	Western Hemlock / Fir	39.16%
	Noble Fir	32.00%
	Alder (Red)	2.00%
yarding distance:	Short (400 ft)	downhill yarding: No
logging system:	Track Skidder	Process: Stroke Delimber
tree size:	Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF	
loads / day:	6.0	bd. ft / load: 3,800
cost / mbf:	\$63.08	
machines:	Stroke Delimber (B)	



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Batty Baldwin
Sale 341-14-10

District: Forest Grove

Date: October 07, 2013

logging costs

Operating Seasons:	1.00	Profit Risk:	10.00%
Project Costs:	\$43,010.00	Other Costs (P/R):	\$5,849.00
Slash Disposal:	\$0.00	Other Costs:	\$10,000.00

Miles of Road

Road Maintenance: \$1.76

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

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	4.6
Western Hemlock / Fir	\$0.00	2.0	3.9
Noble Fir	\$0.00	2.0	4.0
Alder (Red)	\$0.00	2.0	3.8



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Batty Baldwin
Sale 341-14-10

District: Forest Grove

Date: October 07, 2013

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$133.69	\$1.80	\$0.75	\$78.62	\$1.00	\$21.59	\$0.00	\$5.00	\$1.71	\$244.16
Western Hemlock / Fir									
\$126.43	\$1.80	\$0.75	\$92.73	\$1.00	\$22.27	\$0.00	\$5.00	\$1.71	\$251.69
Noble Fir									
\$133.89	\$1.85	\$0.75	\$93.07	\$1.00	\$23.06	\$0.00	\$5.00	\$1.71	\$260.33
Alder (Red)									
\$165.13	\$1.85	\$0.75	\$97.96	\$1.00	\$26.67	\$0.00	\$5.00	\$1.71	\$300.07

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$586.41	\$342.25	\$0.00
Western Hemlock / Fir	\$0.00	\$466.00	\$214.31	\$0.00
Noble Fir	\$0.00	\$473.95	\$213.62	\$0.00
Alder (Red)	\$0.00	\$580.00	\$279.93	\$0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Batty Baldwin
Sale 341-14-10

District: Forest Grove

Date: October 07, 2013

summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	5,548	\$342.25	\$1,898,803.00
Western Hemlock / Fir	250	\$214.31	\$53,577.50
Noble Fir	38	\$213.62	\$8,117.56
Alder (Red)	13	\$279.93	\$3,639.09

Gross Timber Sale Value

Recovery: \$1,964,137.15

Prepared by: Eric Foucht

Phone: 503-359-7473

TIMBER SALE SUMMARY
Batty Baldwin
Contract No. 341-14-10

1. **Location:** Portions of Sections 32 and 33, T3N, R6W, and Section 4, T2N, R6W, W.M., Washington County, Oregon.
2. **Type of Sale:** This timber sale is 146 acres of Modified Clearcut in three sale areas. The timber will be sold on a recovery basis at a sealed bid auction.
3. **Revenue Distribution:** 100% BOF, Washington County.
4. **Sale Acreage:** Acres are net of stream buffers and existing road prisms. Acreage was determined using ESRI ArcMap GIS software.
5. **Cruise:** The Timber Sale was cruised by ODF Cruisers in July of 2013. For more information see Cruise Report.
6. **Timber Description:** The Timber Sale Area consists of medium to well stocked 70 to 75 year old Douglas-fir stands with minor amounts of western hemlock, Noble fir, Western redcedar and hardwoods. The following table summarizes stand conditions for Douglas-fir only.

	Trees/Acre	Average Diameter	Net MBF Per Acre
Area 1	139	16"	33.4
Area 2	64	22"	34.2
Area 3	84	22"	47.5

There is an additional 3.4 MBF/acre of western hemlock in Area 2 and approximately 1MBF of noble fir in Area 3.

7. **Topography and Logging Method:** Slopes within the sale areas range from 15% to 75% and are variable in aspect. Area 1 is 2% ground-based yarding, and 98% cable-based yarding. Area 2 is 41% ground-based yarding, and 59% cable-based logging. Area 3 is 68% cable yarding and 32% ground based yarding. The average horizontal cable corridor length in Area 1 is approximately 530 feet and the maximum is approximately 900 feet. The tractor yarding in Area 1 is right of way construction. In Area 2 the average horizontal tractor yarding distance is approximately 400 feet and the maximum is approximately 600 feet. The average cable corridor length in Area 2 is 880 feet and the maximum is 1100 feet. In Area 3 the average horizontal tractor yarding distance is approximately 500 feet and the maximum is approximately 650 feet. The average cable corridor length in Area 3 is 920 feet and the maximum is 1620 feet.
8. **Access:** Access to the Timber Sale Areas is on surfaced all-weather roads. From Forest Grove, travel north on Highway 8 to its junction with Highway 6. Turn left and continue west approximately 3.5 miles to the Timber Road. Turn right, proceed north approximately 6.5 miles and turn onto Cochran Road. Go west on the Cochran road

approximately 5.6 miles to the Standard Grade Road. Continue south on the Standard Grade Road 1.2 miles to its junction with the Standard Grade Loop and Standard Grade Ridge Roads. Sale Area 3 is approximately .7 miles from the junction of these roads.

9. Projects:

Project No. 1: Road Construction and Improvement	\$25,588.11
Project No. 2: Road Surfacing	\$10,250.89
Project No. 3: Grass Seed, Fertilize and Mulch	\$444.90
Move in and equipment cleaning.	\$6,725.00
 Total Credit for all Projects (rounded)	 \$43,010

PROJECT COST SUMMARY SHEET

Timber Sale: Batty Baldwin

Sale Number: 341-14-10

PROJECT NO. 1: ROAD CONSTRUCTION AND IMPROVEMENT

CONSTRUCTION

Road Segment	Length	Cost
C to D	11+35	\$2,958.99
E to F	1+75	\$706.95
A to H	9+50	\$3,201.29
G to J	2+30	\$734.16
K to L	2+00	\$782.38
	26+90 stations	
	0.51 miles	

SUBTOTAL CONSTRUCTION \$8,383.77

IMPROVEMENTS

Road Segment	Length	Cost
A to B	45+25	\$1,934.20
I to G	4+50	\$51.14
M to N	80+00	\$15,219.00
	129+75 stations	
	2.46 miles	

SUBTOTAL IMPROVEMENTS \$17,204.34

TOTAL PROJECT NO. 1 COST = \$25,588.11

PROJECT NO. 2: SURFACING

Road Segment	Amount	Type	Cost
A to B	20 cy	1 1/2" - 0	\$183.80
E to F	209 cy	6" - 0	\$1,348.05
A to H	794 cy	6" - 0	\$4,732.24
G to J	245 cy	6" - 0	\$1,484.70
K to L	225 cy	6" - 0	\$1,876.50
M to N	100 cy	6" - 0	\$147.20
M to N	260 cy	1 1/2" - 0	\$478.40
Total	280 cy	1 1/2" - 0	
	1,573 cy	6" - 0	

TOTAL PROJECT NO. 2 COST = \$10,250.89

PROJECT NO. 3: GRASS SEED, FERTILIZE, & MULCH

Grass seed and fertilize areas of disturbed soil.	\$444.90
---	----------

TOTAL PROJECT NO. 3 COST = \$444.90

MOVE IN & EQUIPMENT CLEANING \$6,725.00

TOTAL ALL PROJECTS \$43,008.90

TOTAL CREDITS \$43,010.00

SUMMARY OF IMPROVEMENT COST

Timber Sale:	<u>Batty Baldwin</u>	Timber Sale No.:	<u>341-14-10</u>
Road Segment:	<u>A to B</u>	Improvement:	<u>45+25 stations</u> <u>0.86 miles</u>

PROJECT NO. 1

Roadside brushing	0.86 miles @ \$600.00 per mile =	<u>\$514.20</u>	
		TOTAL =	\$514.20

CULVERTS - MATERIALS & INSTALLATION

Culverts	
70 LF of 18"	<u>\$1,400.00</u>
Culvert Markers	
2 markers	<u>\$20.00</u>

TOTAL CULVERT COSTS = \$1,420.00

PROJECT NO. 1 TOTAL COST = \$1,934.20

PROJECT NO. 2:

SURFACING

Spot rock	20	cy of	1 1/2" - 0	@	\$9.19 per cy =	<u>\$183.80</u>
Total =	20	cy of	1 1/2" - 0			

PROJECT NO. 2 TOTAL COST = \$183.80

TOTAL COST = \$2,118.00

SUMMARY OF CONSTRUCTION COST

Timber Sale:	<u>Batty Baldwin</u>	Timber Sale No. :	<u>341-14-10</u>
Road Segment:	<u>C to D</u>	Construction :	<u>11+35</u> stations
			<u>0.21</u> miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	1.30	acres @	\$980.00	per acre =	\$1,276.74
Balanced Road Construction	10.35	sta @	\$90.00	per sta =	\$931.50
Drift	1.00	sta @	\$150.00	per sta =	\$150.00
Construct Turnaround	1	ea @	\$75.00	per ea =	\$75.00
Landing	1	ea @	\$200.00	per ea =	\$200.00
Grade, Ditch, and Roll	11.35	sta @	\$28.70	per sta =	\$325.75

PROJECT NO. 1 TOTAL COST = \$2,958.99

TOTAL COST = \$2,958.99

SUMMARY OF CONSTRUCTION COST

Timber Sale:	<u>Batty Baldwin</u>	Timber Sale No.:	<u>341-14-10</u>
Road Segment:	<u>E to F</u>	Construction:	<u>1+75 stations</u> <u>0.03 miles</u>

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.20	acres @	\$980.00	per acre =	\$196.85
Drift	1.75	sta @	\$150.00	per sta =	\$262.50
Landing	1	ea @	\$200.00	per ea =	\$200.00
Grade and Roll (Outslope)	1.75	sta @	\$27.20	per sta =	<u>\$47.60</u>

PROJECT NO. 1 TOTAL COST = \$706.95

PROJECT NO. 2:

SURFACING	12	" deep =	65 cy/sta		
E to F	114	cy of	6" - 0	@	\$6.45 per cy = \$735.30
Landing	95	cy of	6" - 0	@	\$6.45 per cy = <u>\$612.75</u>
Total =	209	cy of	6" - 0		

PROJECT NO. 2 TOTAL COST = \$1,348.05

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil	0.11	acres @	\$220.00	per acre =	\$24.20
--	------	---------	----------	------------	---------

PROJECT NO. 3 TOTAL COST = \$24.20

TOTAL COST = \$2,079.20

SUMMARY OF CONSTRUCTION COST

Timber Sale:	<u>Batty Baldwin</u>	Timber Sale No.:	<u>341-14-10</u>
Road Segment:	<u>A to H</u>	Construction:	<u>9+50 stations</u> <u>0.18 miles</u>

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	1.09	acres @	\$980.00	per acre =	\$1,068.64
Balanced Road Construction	8.50	sta @	\$90.00	per sta =	\$765.00
Drift	1.00	sta @	\$150.00	per sta =	\$150.00
Construct Turnout	1	ea @	\$60.00	per ea =	\$60.00
Construct Turnaround	1	ea @	\$75.00	per ea =	\$75.00
Landing	1	ea @	\$200.00	per ea =	\$200.00
Grade, Ditch, and Roll	9.50	sta @	\$28.70	per sta =	\$272.65
TOTAL EXCAVATION COSTS=					\$2,591.29

CULVERTS - MATERIALS & INSTALLATION

Culverts	
30 LF of 18"	\$600.00
Culvert Markers	
1 markers	\$10.00

TOTAL CULVERT COSTS = \$610.00

PROJECT NO. 1 TOTAL COST = \$3,201.29

PROJECT NO. 2:

SURFACING

	12	" deep =	65 cy/sta		
A to H	618	cy of	6" - 0	@	\$5.96 per cy = \$3,683.28
Curve Widening	15	cy of	6" - 0	@	\$5.96 per cy = \$89.40
Turnout	33	cy of	6" - 0	@	\$5.96 per cy = \$196.68
Turnaround	33	cy of	6" - 0	@	\$5.96 per cy = \$196.68
Landing	95	cy of	6" - 0	@	\$5.96 per cy = \$566.20
Total =	794	cy of	6" - 0		

PROJECT NO. 2 TOTAL COST = \$4,732.24

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.55	acres @	\$220.00	per acre =	\$121.00
---	------	---------	----------	------------	----------

PROJECT NO. 3 TOTAL COST = \$121.00

TOTAL COST = \$8,054.53

SUMMARY OF CONSTRUCTION COST

Timber Sale:	<u>Batty Baldwin</u>	Timber Sale No. :	<u>341-14-10</u>
Road Segment:	<u>I to G</u>	Improvement :	<u>4+50 stations</u>
			<u>0.09 miles</u>

PROJECT NO. 1

BRUSHING

Roadside brushing 0.09 miles @ \$500.00 per mile = \$51.14

PROJECT NO. 1 TOTAL COST = \$51.14

TOTAL COST = \$51.14

SUMMARY OF CONSTRUCTION COST

Timber Sale:	Batty Baldwin	Timber Sale No.:	341-14-10
Road Segment:	G to J	Construction:	2+30 stations
			0.04 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.27	acres @	\$980.00	per acre =	\$264.60
Balanced Road Construction	2.30	sta @	\$90.00	per sta =	\$207.00
Landing	1	ea @	\$200.00	per ea =	\$200.00
Grade and Roll (Outslope)	2.30	sta @	\$27.20	per sta =	\$62.56

PROJECT NO. 1 TOTAL COST = \$734.16

PROJECT NO. 2:

SURFACING	12	" deep =	65 cy/sta		
G to J	150	cy of	6" - 0	@	\$6.06 per cy = \$909.00
Landing	95	cy of	6" - 0	@	\$6.06 per cy = \$575.70
Total =	245	cy of	6" - 0		

PROJECT NO. 2 TOTAL COST = \$1,484.70

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.14	acres @	\$220.00	per acre =	\$30.80
---	------	---------	----------	------------	---------

PROJECT NO. 3 TOTAL COST = \$30.80

TOTAL COST = \$2,249.66

SUMMARY OF CONSTRUCTION COST

Timber Sale:	Batty Baldwin	Timber Sale No.:	341-14-10
Road Segment:	K to L	Construction:	2+00 stations 0.04 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.23	acres @	\$980.00	per acre =	\$224.98
Drift	2.00	sta @	\$150.00	per sta =	\$300.00
Landing	1	ea @	\$200.00	per ea =	\$200.00
Grade, Ditch, and Roll	2.00	sta @	\$28.70	per sta =	\$57.40
TOTAL EXCAVATION COSTS=					\$782.38

PROJECT NO. 1 TOTAL COST = \$782.38

PROJECT NO. 2:

SURFACING	12	" deep =	65 cy/sta		
K to L	130	cy of	6" - 0	@	\$8.34 per cy = \$1,084.20
Landing	95	cy of	6" - 0	@	\$8.34 per cy = \$792.30
Total =	225	cy of	6" - 0		

PROJECT NO. 2 TOTAL COST = \$1,876.50

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.12	acres @	\$220.00	per acre =	\$26.40
---	------	---------	----------	------------	---------

PROJECT NO. 3 TOTAL COST = \$26.40

TOTAL COST = \$2,685.28

SUMMARY OF CONSTRUCTION COST

Timber Sale:	Batty Baldwin	Timber Sale No.:	341-14-10
Road Segment:	M to N	Improvement:	80+00 stations
			1.52 miles

PROJECT NO. 1

EXCAVATION

Excavate existing culverts	2.00	pipes @	\$90.00	per pipe =	\$180.00
Compact backfill	2.00	fills @	\$45.00	per fill =	\$90.00
Fill Excavation	15.00	hrs @	\$90.00	per hr =	\$1,350.00
Load unsuitable material	5.00	hrs @	\$90.00	per hr =	\$450.00
Haul unsuitable material	10.00	hrs @	\$75.00	per hr =	\$750.00
Shape/compact waste areas	2.00	hrs @	\$90.00	per hr =	\$180.00
Pull Ditch and waste onsite	49.70	sta @	\$30.00	per sta =	\$1,491.00
Pull Ditch and Endhaul Waste Material	3.75	sta @	\$60.00	per sta =	\$225.00
TOTAL EXCAVATION COSTS=					\$4,716.00

CULVERTS - MATERIALS & INSTALLATION

Culverts	
350	LF of 18" \$7,000.00
110	LF of 24" <u>\$3,190.00</u>
Half Rounds	
10	LF of 21" <u>\$203.00</u>
Culvert Markers	
11 markers	<u>\$110.00</u>
TOTAL CULVERT COSTS = \$10,503.00	

PROJECT NO. 1 TOTAL COST = \$15,219.00

PROJECT NO. 2:

Backfill	80	cy of	6" - 0	@	\$1.84	per cy =	\$147.20
Backfill (removed culverts)	20						
Spot rock	260	cy of	1 1/2" - 0	@	\$1.84	per cy =	\$478.40
Total =	100	cy of	6" - 0				
	260	cy of	1 1/2" - 0				

PROJECT NO. 2 TOTAL COST = \$625.60

PROJECT NO. 3:

Grass seed waste areas	1.00	acres @	\$220.00	per acre =	\$220.00
Mulch	5.00	bales @	\$4.50	per bale =	\$22.50

PROJECT NO. 3 TOTAL COST = \$242.50

TOTAL COST = \$16,087.10

Move-In & Equipment Cleaning

Timber Sale:

Batty Baldwin

Sale Number:

341-14-10

LOWBOY HAUL (One-way)		
DIST. (mi)	ROAD	AVE SPEED (mph)
7.0	Main Lines	7
0.0	Steep Grades	2

EQUIPMENT DESCRIPTION		Within Area				Within			
No.		Equipment Cleaning	Base Cost	Woods Cost	Pilot Cars	Move (\$/mile)	Total Miles	Area Cost	Total Cost
0	Drill & Compressor		\$0.00	\$0.00		\$0.00	0.0	\$0.00	\$0.00
1	Brush Cutter		\$308.59	\$161.00		\$4.00	0.0	\$0.00	\$469.59
1	Graders		\$316.67	\$180.00		\$3.65	4.0	\$14.60	\$511.27
1	Loader (Small)		\$308.59	\$221.38		\$3.55	0.0	\$0.00	\$529.97
0	Loader (Med. & Large)		\$0.00	\$0.00	1	\$0.00	0.0	\$0.00	\$0.00
1	Rollers (smooth/grid) & Compactors		\$308.59	\$201.25		\$5.00	0.0	\$0.00	\$509.84
1	Excavators (Small)		\$308.59	\$201.25		\$22.00	0.0	\$0.00	\$509.84
0	Excavators (Med.)	\$0	\$0.00	\$0.00		\$0.00	0.0	\$0.00	\$0.00
1	Excavators (Large)	\$1,000	\$466.14	\$289.80	1	\$44.80	4.0	\$179.20	\$1,935.14
0	Backhoe		\$0.00	\$0.00		\$0.00	0.0	\$0.00	\$0.00
0	Tractors (D6)	\$0	\$0.00	\$0.00	2	\$0.00	0.0	\$0.00	\$0.00
0	Tractors (D7)	\$0	\$0.00	\$0.00	2	\$0.00	0.0	\$0.00	\$0.00
1	Tractor (D8)	\$1,000	\$473.80	\$271.40	2	\$15.10	4.0	\$60.40	\$1,805.60
3	Dump Truck (10 cy +)		\$375.00	\$78.75		\$8.55	0.0	\$0.00	\$453.75
0	Dump Truck (Off Hiway)		\$0.00	\$0.00	1	\$0.00	0.0	\$0.00	\$0.00
0	Water Truck (1500 Gal)		\$0.00	\$0.00		\$0.00	0.0	\$0.00	\$0.00
0	Water Truck (2500 Gal)		\$0.00	\$0.00		\$0.00	0.0	\$0.00	\$0.00
TOTAL MOVE-IN COSTS: \$6,725.00									

ROCK DEVELOPMENT COST SUMMARY

Timber Sale: Batty Baldwin

Sale Number: 341-14-10

Pit Name: Standard Grade Loop Rd. Pit

Swell:	<u>1.30</u>	Pit Run (trk measure)	<u>1,616 cy</u>
Shrinkage:	<u>1.16</u>	Total Truck Yardage:	<u>1,616 cy</u>
Drill Pct.:	<u>100%</u>	Total In Place Yardage:	<u>1,243 cy</u>

Scalp & Clear Overburden:	<u>\$150.00 /hr</u> x	<u>6 hr</u>	=	<u>\$900.00</u>
Dig Rock:	<u>\$2.25 /cy</u> x	<u>1,243 cy</u>	=	<u>\$2,796.92</u>
Load Dump Truck:	<u>\$0.70 /cy</u> x	<u>1,616 cy</u>	=	<u>\$1,131.20</u>
		Subtotal		<u>\$4,828.12</u>

Clean Up Pit				<u>\$150.00</u>
		Subtotal		<u>\$150.00</u>

ROCK DEVELOPMENT COST =	<u>\$3.08/cy</u>	TOTAL PRODUCTION COST	<u>\$4,978.12</u>
-------------------------	------------------	-----------------------	-------------------

CRUISE REPORT BATTY BALDWIN 341-14-10

1. LOCATION:

Portions of Sections 32 and 33, T3N, R6W, and Portions of Section 4, T2N, R6W, W.M., Washington County, Oregon.

2. CRUISE DESIGN:

The cruise design assumed a Coefficient of Variation (CV) of 50%, an average stand diameter of 16 inches, a desired sampling error (SE) of 9% and a minimum sample size of 100 grade trees for all three areas. Pre-cruise plots indicated that approximately 6 - 8 trees per plot could be realized with a 40 BAF prism.

3. SAMPLING METHOD:

The Timber Sale Area was cruised in July, 2013 with 40 variable radius grade plots and 40 variable radius count plots using a 40 BAF prism. 12 plots were taken in Area 1, 13 in Area 2 and 15 in Area 3. Plots were laid out on a 5 chain x 7chain grid. Plots falling on or near existing roads or no-harvest areas were offset 1 chain.

4. CRUISE RESULTS

126 trees were measured and graded producing a cumulative SE of 6.6% on the Basal Area and a cumulative SE of 7% on the Board Foot Volume at a 68% Confidence Level.

5. TREE MEASUREMENT AND GRADING:

All grade plot sample trees were measured and graded following Columbia River Log Scale grade rules and favoring 40 foot segments.

a) Height Standards:

Total tree heights were measured to the nearest foot. Bole heights were calculated to a six inch top.

b) Diameter Standards:

Diameters were measured outside bark at breast height to the nearest inch.

c) Form Factors

were measured for each grade tree using a form point of 16 feet.

6. DATA PROCESSING

a) Volumes and Statistics,

Cruise volume estimates, and sampling statistics, were derived from Super Ace 2008 cruise software.

b) Deductions:

Two percent of the volume was subtracted from the computed volumes to account for hidden defect and breakage.

7. CRUISERS:

The sale was cruised by ODF cruisers Mark Savage, Joe Koch, and Peter Stone.

Prepared by:	<u>Mark Savage</u>	<u>9/3/2013</u>
	ODF Forester	Date
Reviewed by:	<u>Eric Foucht</u>	<u>9/6/2013</u>
		Date

TC PSTATS			PROJECT STATISTICS							PAGE	1	
			PROJECT		BATTYB			DATE		8/30/2013		
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt		
03N	06	32	0001	00A1		146.00	40	234	S	W		
03N	06W	32	0001	00A2								
03N	06W	32	0001	00A3								
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL			40	234	5.8							
CRUISE			23	126	5.5	15,426	.8					
DBH COUNT												
REFOREST												
COUNT			17	98	5.8							
BLANKS												
100 %												
STAND SUMMARY												
			SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR			108	93.7	19.2	117	43.1	189.2	39,559	38,782	8,456	8,456
WHEMLOCK			8	6.1	17.2	105	2.4	9.9	1,835	1,746	407	407
NOB FIR			7	1.8	26.1	142	1.3	6.8	1,777	1,761	355	355
WR CEDAR			2	3.2	10.4	66	0.6	1.9	190	190	48	48
R ALDER			1	.8	15.0	78	0.3	1.0	74	74	29	29
TOTAL			126	105.7	19.0	115	47.9	208.9	43,434	42,552	9,295	9,295
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			77.7	7.5	572	618	664					
WHEMLOCK			72.5	27.3	313	431	549					
NOB FIR			35.5	14.5	898	1,050	1,202					
WR CEDAR			107.5	100.6		125	251					
R ALDER												
TOTAL			77.3	6.9	576	618	661	239	60	27		
CL	68.1	COEFF	SAMPLE TREES - CF					# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15		
DOUG FIR			67.8	6.5	123	132	141					
WHEMLOCK			66.4	25.0	73	98	123					
NOB FIR			29.5	12.0	185	210	235					
WR CEDAR			122.1	114.4		37	80					
R ALDER												
TOTAL			67.5	6.0	124	132	140	182	46	20		
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			81.3	12.8	82	94	106					
WHEMLOCK			248.5	39.2	4	6	8					
NOB FIR			314.9	49.7	1	2	3					
WR CEDAR			632.5	99.9	0	3	6					
R ALDER			632.5	99.9	0	1	2					
TOTAL			71.7	11.3	94	106	118	205	51	23		
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			48.8	7.7	175	189	204					
WHEMLOCK			196.2	31.0	7	10	13					
NOB FIR			336.1	53.1	3	7	10					
WR CEDAR			632.5	99.9	0	2	4					
R ALDER			632.5	99.9	0	1	2					
TOTAL			42.0	6.6	195	209	223	70	18	8		

PROJECT STATISTICS
PROJECT BATTYB

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
03N	06	32	0001	00A1	146.00	40	234	S	W	
03N	06W	32	0001	00A2						
03N	06W	32	0001	00A3						
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			49.7	7.8	35,739	38,782	41,826			
WHEMLOCK			191.0	30.2	1,219	1,746	2,272			
NOB FIR			351.7	55.6	782	1,761	2,739			
WR CEDAR			632.5	99.9	0	190	379			
R ALDER			632.5	99.9	0	74	147			
TOTAL			44.2	7.0	39,580	42,552	45,524	78	20	9
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			49.0	7.7	7,802	8,456	9,111			
WHEMLOCK			190.2	30.0	284	407	529			
NOB FIR			342.6	54.1	163	355	547			
WR CEDAR			632.5	99.9	0	48	96			
R ALDER			632.5	99.9	0	29	57			
TOTAL			43.4	6.9	8,657	9,295	9,933	75	19	8

TC		TLOGSTVB		Log Stock Table - MBF																
				Project:		BATTYB														
T03N R06W S32 T00A1										T03N R06W S32 T00A1										
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	1											
03N	06W	32	0001	00A1	44.00	12	47	Date	8/30/2013											
										Time	10:59:27AM									
Spp	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches											
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF			CU	12																
DF			2M	24	22		22	1.5							22					
DF			2M	40	749	7.0	697	47.4					198	226	214	58				
DF			3M	32	24		24	1.6			7	16								
DF			3M	34	9		9	.6			9									
DF			3M	36	63		63	4.3			63									
DF			3M	38	14		14	1.0			14									
DF			3M	40	557	.8	553	37.6			83	246	224							
DF			4M	12	2		2	.2			2									
DF			4M	14	19		19	1.3			19									
DF			4M	16	7		7	.5			7									
DF			4M	18	11		11	.7			11									
DF			4M	20	3		3	.2			3									
DF			4M	22	24		24	1.6			24									
DF			4M	24	10		10	.7			10									
DF			4M	28	10		10	.6			10									
DF			4M	30	4		4	.2			4									
DF			Totals		1,527	3.7	1,471	93.6			266	262	224	198	226	236	58			
WH			2M	40	30	11.1	26	29.5						26						
WH			3M	40	54	6.9	50	56.3			38		12							
WH			4M	16	4		4	4.2			4									
WH			4M	22	6		6	7.2			6									
WH			4M	26	2		2	2.8			2									
WH			Totals		96	7.3	89	5.7			13	38	12		26					
RA			3M	40	11		11	100.0			11									
RA			4M	7																
RA			Totals		11		11	.7			11									
Total All Species					1,634	3.9	1,571	100.0			279	311	237	198	253	236	58			

TC		TLOGSTVB		Log Stock Table - MBF																						
				Project: BATTYB																						
T03N R06W S32 T00A2												T03N R06W S32 T00A2														
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	1																	
03N	06W	32	0001	00A2	49.00	14	42	Date	8/30/2013																	
										Time	11:02:34AM															
Spp	S	So	Gr	Log	T	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches																
										2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+					
DF			2M	20		26		26	1.5							26										
DF			2M	40		1,335	4.0	1,281	76.5					275		270	446		246	43						
DF			3M	30		3		3	.2				3													
DF			3M	32		7		7	.4			7														
DF			3M	34		37		37	2.2			16	21													
DF			3M	38		3		3	.2				3													
DF			3M	40		280	1.1	277	16.5			54	79	144												
DF			4M	12		3		3	.2			3														
DF			4M	16		3		3	.2			3														
DF			4M	20		2		2	.1			2														
DF			4M	22		8		8	.5			8														
DF			4M	24		10		10	.6			10														
DF			4M	26		2		2	.1				2													
DF			4M	28		7		7	.4			7														
DF			4M	30		6		6	.4			6														
DF			Totals			1,733	3.3	1,676	80.3			115	109	144	275	270	472		246	43						
WH			CU	7																						
WH			2M	40		126	4.7	120	72.7					32		13	75									
WH			3M	32		2		2	1.4			2														
WH			3M	40		34		34	20.8			6	19	10												
WH			4M	24		2		2	1.0			2														
WH			4M	26		5		5	2.9			5														
WH			4M	30		2		2	1.3			2														
WH			Totals			172	3.5	166	7.9			17	19	10	32	13	75									
NF			2M	40		192	1.2	190	87.2					8		41	46		95							
NF			3M	30		1		1	.7			1														
NF			3M	36		4		4	2.0					4												
NF			3M	38		2		2	1.1			2														
NF			3M	40		15		15	6.7				3	12												
NF			4M	14		1		1	.2				1													
NF			4M	30		2		2	.8			2														
NF			4M	32		3		3	1.5			3														
NF			Totals			220	1.0	218	10.4			9	3	16	8	41	46		95							
RC			3M	40		13		13	46.2					13												
RC			4M	22		12		12	43.5			12														
RC			4M	30		3		3	10.3			3														
RC			Totals			28		28	1.3			15		13												
Total All Species						2,152	3.0	2,087	100.0			155	131	183	316	325	593		341	43						

TC		TLOGSTVB																		Log Stock Table - MBF									
																				Project: BATTYB									
T03N R06W S32 T00A3										T03N R06W S32 T00A3																			
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		Page		1											
03N		06W		32		0001		00A3		53.00		14		37		Date		8/30/2013											
																Time		9:47:29AM											
Spp	T	S	So	Gr	Log	Gross	%	Net	%	Net Volume by Scaling Diameter in Inches																			
										MBF	Def	MBF	Spc	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+				
DF				CU	3																								
DF				CU	5																								
DF				CU	6																								
DF				2M	16	47		47	1.9							47													
DF				2M	40	1,939		1,939	77.1					262		372	803	298	145	58									
DF				3M	32	16		16	.6			16																	
DF				3M	34	52		52	2.1			52																	
DF				3M	36	30		30	1.2			15	14																
DF				3M	38	20		20	.8			16	4																
DF				3M	40	368		368	14.6			40	113	215															
DF				4M	12	10		10	.4			9		1															
DF				4M	16	7		7	.3			7																	
DF				4M	20	3		3	.1			3																	
DF				4M	24	8		8	.3			8																	
DF				4M	26	14		14	.5			14																	
DF				4M	30	3		3	.1			3																	
DF				Totals		2,515		2,515	98.5			182	132	216	262	372	850	298	145	58									
NF				2M	40	37		37	93.7							12	25												
NF				3M	36	2		2	6.3			2																	
NF				Totals		39		39	1.5			2				12	25												
Total All Species						2,554		2,554	100.0			185	132	216	262	384	875	298	145	58									

T	Species, Sort Grade - Board Foot Volumes (Type)										Page 1								
Project: BATTYB										Date 8/30/2013									
										Time 10:59:26AM									
T03N R06W S32 T00A1										T03N R06W S32 T00A1									
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt										
03N	06W	32	0001	00A1	44.00	12	47	S	W										
S So Gr T rt ad Spp		% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre
		Def%	Gross	Net	Log Scale Dia.				Log Length				Ln	Dia	Bd	CF/ Lf			
DF		CU													12	15		0.00	2.5
DF		2M	48	6.8	17,515	16,328	718		72	28		3		97	40	14	298	1.66	54.8
DF		3M	45	.6	15,177	15,082	664	100					5	95	39	8	97	0.59	155.3
DF		4M	7		2,024	2,024	89	100			48	52			19	6	24	0.30	84.9
DF Totals			94	3.7	34,716	33,434	1,471	51	35	14	3	5	2	90	33	9	112	0.78	297.5
WH		2M	29	11.1	674	599	26		100					100	40	15	320	1.82	1.9
WH		3M	56	6.9	1,225	1,141	50	100						100	40	9	104	0.67	11.0
WH		4M	15		287	287	13	100			29	71			20	6	26	0.31	11.0
WH Totals			6	7.3	2,185	2,026	89	70	30		4	10		86	31	8	85	0.67	23.8
RA		3M	100		244	244	11	100						100	40	8	90	0.87	2.7
RA		4M													7	7		0.00	2.7
RA Totals			1		244	244	11	100						100	24	8	45	0.74	5.4
Type Totals				3.9	37,145	35,705	1,571	53	35	13	3	5	2	90	33	9	109	0.77	326.7

T	Species, Sort Grade - Board Foot Volumes (Type)														Page	1			
Project: BATTYB																Date	8/30/2013		
																Time	11:02:33AM		
T03N R06W S32 T00A2																T03N R06W S32 T00A2			
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt										
03N	06W	32	0001	00A2	49.00	14	42	S	W										
S So Gr T rt ad Spp		% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log		Logs Per /Acre		
		Def%	Gross	Net	Log Scale Dia.				Log Length				Ln	Dia	Bd	CF/ Lf			
							4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99	Ft	In	Ft		
DF		2M	78	4.0	27,781	26,680			55	45	2			98	40	15	362	1.91	73.8
DF		3M	19	.9	6,753	6,690		100				1	13	86	38	8	99	0.66	67.3
DF		4M	3		830	830		100			19	81			22	6	27	0.39	31.2
DF	Totals		80	3.3	35,363	34,199		22	43	35	2	2	3	93	36	11	198	1.22	172.3
WH		CU													7	12		0.00	3.2
WH		2M	72	4.7	2,579	2,457			38	62				100	40	15	344	1.83	7.1
WH		3M	22		750	750		100					6	94	39	8	104	0.66	7.2
WH		4M	6		174	174		100				100			26	6	32	0.39	5.4
WH	Totals		8	3.5	3,504	3,382		27	27	45		5	1	93	32	10	147	1.04	23.0
NF		2M	87	1.2	3,926	3,879			33	67				100	40	17	488	2.32	7.9
NF		3M	10		461	461		100				6		94	38	9	122	0.88	3.8
NF		4M	3		110	110		100			10	31	60		28	6	41	0.46	2.7
NF	Totals		10	1.0	4,497	4,450		13	29	59	0	1	1	97	37	13	308	1.68	14.4
RC		3M	46		261	261		100						100	40	11	180	1.42	1.5
RC		4M	54		304	304		100				100			23	6	32	0.27	9.6
RC	Totals		1		565	565		100				54		46	25	7	51	0.51	11.1
Type Totals				3.0	43,929	42,596		22	40	38	2	3	2	93	35	11	193	1.21	220.9

T	Species, Sort Grade - Board Foot Volumes (Type)													Page	1				
Project: BATTYB															Date	8/30/2013			
															Time	9:47:28AM			
T03N R06W S32 T00A3															T03N R06W S32 T00A3				
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt										
03N	06W	32	0001	00A3	53.00	14	37	S	W										
S So Gr T rt ad Spp			% Net BdFt	Bd. Ft. per Acre		Total Net MBF	Percent Net Board Foot Volume								Average Log		Logs Per /Acre		
			Def%	Gross	Net		Log Scale Dia.				Log Length				Ln	Dia		Bd	CF/ Lf
							4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99	Ft	In	Ft		
DF			CU												4	17		0.00	
DF			2M	78	37,458	37,458	1,985			43	57	2		98	39	16	406	2.03	
DF			3M	20	9,159	9,159	485	100					14	86	38	8	96	0.68	
DF			4M	2	843	843	45	100				45	55		18	6	20	0.35	
DF	Totals			98	47,460	47,460	2,515	21	34	45		3	1	3	94	34	11	201	1.25
NF			2M	93	690	690	37			33	67			100	40	17	445	2.10	
NF			3M	7	46	46	2	100						100	36	6	60	0.63	
NF			Totals	2	736	736	39	6	31	63				100	39	13	317	1.65	
Type Totals					48,196	48,196	2,554	21	34	46		3	1	3	94	34	11	202	1.25

TC		TSTNDSUM													Stand Table Summary																									
															Project													BATTYB												
T03N R06W S32 T00A1																												T03N R06W S32 T00A1												
Twp		Rge		Sec		Tract					Type			Acres			Plots			Sample Trees			Page:		1															
03N		06W		32		0001					00A1			44.00			12			47			Date:		08/30/2015															
																												Time: 10:59:26AM												
S T Spc		Sample DBH Trees		Av FF Ht 16' Tot		Trees/ BA/ Logs Acre Acre Acre			Average Log Net Cu.Ft. Bd.Ft.		Net Cu.Ft. Bd.Ft.		Net Cu.Ft. Bd.Ft.		Tons/ Cu.Ft. Bd.Ft.		Tons/ Cu.Ft. Bd.Ft.		T o t a l s																					
																			Tons Cunits MBF																					
DF		8		1 88 78		12.753 4.45 12.75			5.1 30.0		1.85 65 383		82 29 17																											
DF		10		2 85 85		16.324 8.90 16.32			13.8 60.0		6.42 225 979		282 99 43																											
DF		11		2 87 90		13.491 8.90 26.98			8.9 40.0		6.87 241 1,079		302 106 47																											
DF		12		1 89 92		5.668 4.45 11.34			11.1 45.0		3.59 126 510		158 55 22																											
DF		13		2 89 103		9.659 8.90 19.32			15.9 72.5		8.76 307 1,401		385 135 62																											
DF		14		5 89 105		20.821 22.26 41.64			18.7 83.0		22.24 780 3,456		979 343 152																											
DF		16		3 90 127		9.565 13.35 25.51			22.4 98.7		16.30 572 2,519		717 252 111																											
DF		17		2 88 110		5.648 8.90 11.30			25.7 112.5		8.27 290 1,271		364 128 56																											
DF		18		5 89 123		12.595 22.26 35.27			25.6 106.4		25.73 903 3,753		1,132 397 165																											
DF		19		1 88 124		2.261 4.45 6.78			27.7 110.0		5.35 188 746		235 83 33																											
DF		20		5 89 135		10.202 22.26 28.57			35.7 155.7		29.08 1,020 4,448		1,279 449 196																											
DF		21		2 89 131		3.701 8.90 11.10			37.5 165.0		11.87 417 1,832		522 183 81																											
DF		22		1 90 125		1.686 4.45 5.06			38.5 163.3		5.55 195 826		244 86 36																											
DF		23		4 89 130		6.171 17.81 18.51			43.7 195.8		23.08 810 3,626		1,016 356 160																											
DF		25		2 88 132		2.612 8.90 7.84			53.2 233.3		11.88 417 1,828		523 183 80																											
DF		26		3 86 136		3.622 13.35 10.87			58.2 235.6		18.03 633 2,560		793 278 113																											
DF		28		1 87 145		1.041 4.45 3.12			73.2 346.7		6.52 229 1,083		287 101 48																											
DF		30		1 87 150		.907 4.45 2.72			83.6 416.7		6.48 227 1,134		285 100 50																											
DF		Totals		43 88 108		138.727 191.42 294.99			25.9 113.3		217.89 7,645 33,434		9,587 3,364 1,471																											
WH		13		1 88 94		4.882 4.50 9.76			14.3 60.0		4.48 140 586		197 62 26																											
WH		14		1 88 80		4.209 4.50 8.42			16.2 60.0		4.36 136 505		192 60 22																											
WH		21		1 89 133		1.871 4.50 5.61			39.2 166.7		7.05 220 935		310 97 41																											
WH		Totals		3 88 95		10.962 13.50 23.80			20.9 85.2		15.89 497 2,026		699 219 89																											
RA		15		1 73 78		2.716 3.33 5.43			17.5 45.0		2.61 95 244		115 42 11																											
RA		Totals		1 73 78		2.716 3.33 5.43			17.5 45.0		2.61 95 244		115 42 11																											
Totals				47 88 106		152.405 208.25 324.22			25.4 110.1		236.39 8237 35,705		10,401 3,624 1,571																											

TC		TSTNDSUM															Stand Table Summary																											
															Project															BATTYB														
T03N R06W S32 T00A2																														T03N R06W S32 T00A2														
Twp		Rge		Sec		Tract		Type			Acres			Plots			Sample Trees			Page:		1																						
03N		06W		32		0001		00A2			49.00			14			42			Date:		08/30/2015																						
															Time: 11:02:33AM																													
S		Sample			Av					Average Log			Net		Net		Totals																											
Spc		DBH		Trees		FF 16'		Ht Tot		Trees/Acre		BA/Acre		Logs Acre		Net Cu.Ft.		Net Bd.Ft.		Tons		Cunits		MBF																				
DF		11	1	87	78	8.371	5.52	8.37	14.8	60.0	3.54	124	502	173	61	25																												
DF		16	1	87	114	3.957	5.52	7.91	27.4	120.0	6.19	217	950	303	106	47																												
DF		17	1	88	116	3.505	5.52	10.51	22.1	93.3	6.61	232	981	324	114	48																												
DF		18	2	87	138	6.253	11.05	18.76	26.4	106.7	14.10	495	2,001	691	242	98																												
DF		19	2	90	137	5.612	11.05	16.84	31.3	140.0	15.02	527	2,357	736	258	115																												
DF		20	3	88	141	7.597	16.57	22.79	35.3	158.9	22.95	805	3,621	1,124	395	177																												
DF		21	2	90	140	4.594	11.05	13.78	41.1	200.0	16.14	566	2,756	791	278	135																												
DF		23	3	88	134	5.744	16.57	17.23	44.6	191.1	21.91	769	3,293	1,074	377	161																												
DF		24	2	88	135	3.517	11.05	12.31	41.9	202.9	14.70	516	2,497	720	253	122																												
DF		25	2	87	133	3.241	11.05	9.72	53.8	223.3	14.90	523	2,172	730	256	106																												
DF		26	2	88	136	2.997	11.05	8.99	59.6	265.0	15.26	535	2,382	748	262	117																												
DF		28	1	85	138	1.292	5.52	3.88	69.0	306.7	7.62	267	1,189	374	131	58																												
DF		30	1	85	150	1.125	5.52	3.38	85.7	390.0	8.25	289	1,317	404	142	65																												
DF		31	3	88	146	3.162	16.57	9.49	88.8	436.7	24.02	843	4,142	1,177	413	203																												
DF		32	1	89	130	.989	5.52	2.97	88.4	450.0	7.48	262	1,335	366	129	65																												
DF		33	1	85	145	.930	5.52	2.79	100.9	460.0	8.02	281	1,284	393	138	63																												
DF		34	1	88	143	.876	5.52	2.63	106.7	540.0	7.99	280	1,419	392	137	70																												
DF		Totals		29	88	127	63.763	160.21	172.35	43.7	198.4	214.70	7,533	34,199	10,520	3,691	1,676																											
NF		20	1	89	142	1.315	2.87	3.95	36.3	173.3	3.44	143	684	169	70	34																												
NF		25	1	87	133	.842	2.87	2.52	53.9	233.3	3.27	136	589	160	67	29																												
NF		28	2	90	147	1.342	5.74	4.03	77.9	406.7	7.52	313	1,637	369	154	80																												
NF		30	1	85	133	.584	2.87	1.75	80.4	363.3	3.39	141	637	166	69	31																												
NF		31	1	90	158	.547	2.87	2.19	74.9	412.5	3.94	164	903	193	80	44																												
NF		Totals		6	89	142	4.630	17.21	14.44	62.2	308.2	21.55	898	4,450	1,056	440	218																											
WH		14	1	87	109	3.234	3.46	6.47	16.4	75.0	3.40	106	485	167	52	24																												
WH		18	1	88	106	1.956	3.46	3.91	35.3	130.0	4.43	138	509	217	68	25																												
WH		24	2	90	129	2.201	6.91	6.60	52.2	236.7	11.02	344	1,563	540	169	77																												
WH		26	1	91	136	.938	3.46	2.81	62.9	293.3	5.66	177	825	277	87	40																												
WH		Totals		5	88	116	8.329	17.29	19.80	38.7	170.8	24.50	766	3,382	1,201	375	166																											
RC		8	1	86	62	8.185	2.86	8.19	5.1	30.0	.98	42	246	48	20	12																												
RC		19	1	81	91	1.451	2.86	2.90	34.8	110.0	2.38	101	319	116	50	16																												
RC		Totals		2	85	66	9.636	5.71	11.09	12.9	50.9	3.36	143	565	164	70	28																											
Totals		42		88	120	86.358	200.43	217.67	42.9	195.7	264.11	9340	42,596	12,941	4,577	2,087																												

TC		TSTNDSUM														
Stand Table Summary																
ProjectBATTYB																
T03N R06W S32 T00A3												T03N R06W S32 T00A3				
Twp	Rge	Sec	Tract	Type				Acres		Plots	Sample Trees			Page:	1	
03N	06W	32	0001	00A3				53.00		14	37			Date:	08/30/2015	
														Time:	9:47:28AM	
S Spc	T	Sample		FF	Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	Totals		
		DBH	Trees	16'	Tot				Net Cu.Ft.	Net Bd.Ft.		Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF
DF		12	1	86	77	7.579	5.95	15.16	9.3	35.0	4.01	141	531	212	74	28
DF		13	1	88	87	6.458	5.95	12.92	13.5	55.0	4.98	175	710	264	93	38
DF		15	1	88	109	4.850	5.95	9.70	22.8	105.0	6.31	221	1,019	334	117	54
DF		16	1	89	101	4.263	5.95	8.53	24.0	100.0	5.84	205	853	309	109	45
DF		18	2	89	119	6.737	11.90	20.21	24.0	98.3	13.84	485	1,987	733	257	105
DF		19	1	89	134	3.023	5.95	9.07	29.6	130.0	7.64	268	1,179	405	142	62
DF		20	2	90	132	5.457	11.90	16.37	33.3	150.0	15.56	546	2,456	824	289	130
DF		21	1	90	143	2.475	5.95	9.90	27.2	130.0	7.67	269	1,287	406	143	68
DF		22	3	89	138	6.765	17.86	20.29	43.4	207.8	25.12	881	4,217	1,331	467	223
DF		23	4	87	128	8.252	23.81	22.69	45.3	196.4	29.28	1,028	4,456	1,552	545	236
DF		24	3	89	132	5.684	17.86	17.05	49.2	227.8	23.89	838	3,884	1,266	444	206
DF		25	4	89	143	6.985	23.81	20.95	56.5	270.8	33.72	1,183	5,675	1,787	627	301
DF		26	3	90	144	4.843	17.86	14.53	64.3	316.7	26.61	934	4,601	1,410	495	244
DF		27	3	89	141	4.491	17.86	13.47	67.0	332.2	25.74	903	4,476	1,364	479	237
DF		28	1	89	150	1.392	5.95	4.18	74.3	383.3	8.84	310	1,601	469	164	85
DF		30	1	90	145	1.213	5.95	3.64	86.2	436.7	8.93	313	1,589	474	166	84
DF		32	1	89	147	1.066	5.95	3.20	96.8	496.7	8.82	309	1,588	467	164	84
DF		33	1	90	151	1.002	5.95	3.01	105.6	553.3	9.05	318	1,664	480	168	88
DF		38	1	89	143	.756	5.95	2.27	138.0	756.7	8.91	313	1,716	472	166	91
DF		42	1	90	162	.619	5.95	2.47	138.5	797.5	9.77	343	1,974	518	182	105
DF		Totals	36	89	123	83.908	214.29	229.61	43.5	206.7	284.52	9,983	47,460	15,080	5,291	2,515
NF		26	1	91	139	.775	2.86	2.32	63.7	316.7	3.55	148	736	188	78	39
NF		Totals	1	91	139	.775	2.86	2.32	63.7	316.7	3.55	148	736	188	78	39
Totals			37	89	123	84.683	217.14	231.93	43.7	207.8	288.07	10131	48,196	15,268	5,370	2,554

VOLUME SUMMARY
(Shown in MBF)
BATTY BALDWIN
Sale No 341-14-10
August 2013

AREA 1: MC (44 ACRES)

SPECIES		2 SAW	3 SAW	4 SAW	CR	TOTAL
Douglas-fir	Cruise Volume	718	664	89	0	1,471
	Hidden D&B (2%)	(14)	(13)	(2)	()	(29)
	NET TOTAL	704	651	87	0	1,442
	% of Total	49	45	6		
Western hemlock/fir	Cruise Volume	26	50	13	0	89
	Hidden D&B (2%)	(1)	(1)	()	()	(2)
	NET TOTAL	25	49	13	0	87
	% of Total	29	56	15		
Red Alder	Cruise Volume	0	0	0	13	13
	Hidden D&B (2%)	()	()	()	()	()
	NET TOTAL	0	0	0	13	13
	% of Total				100	

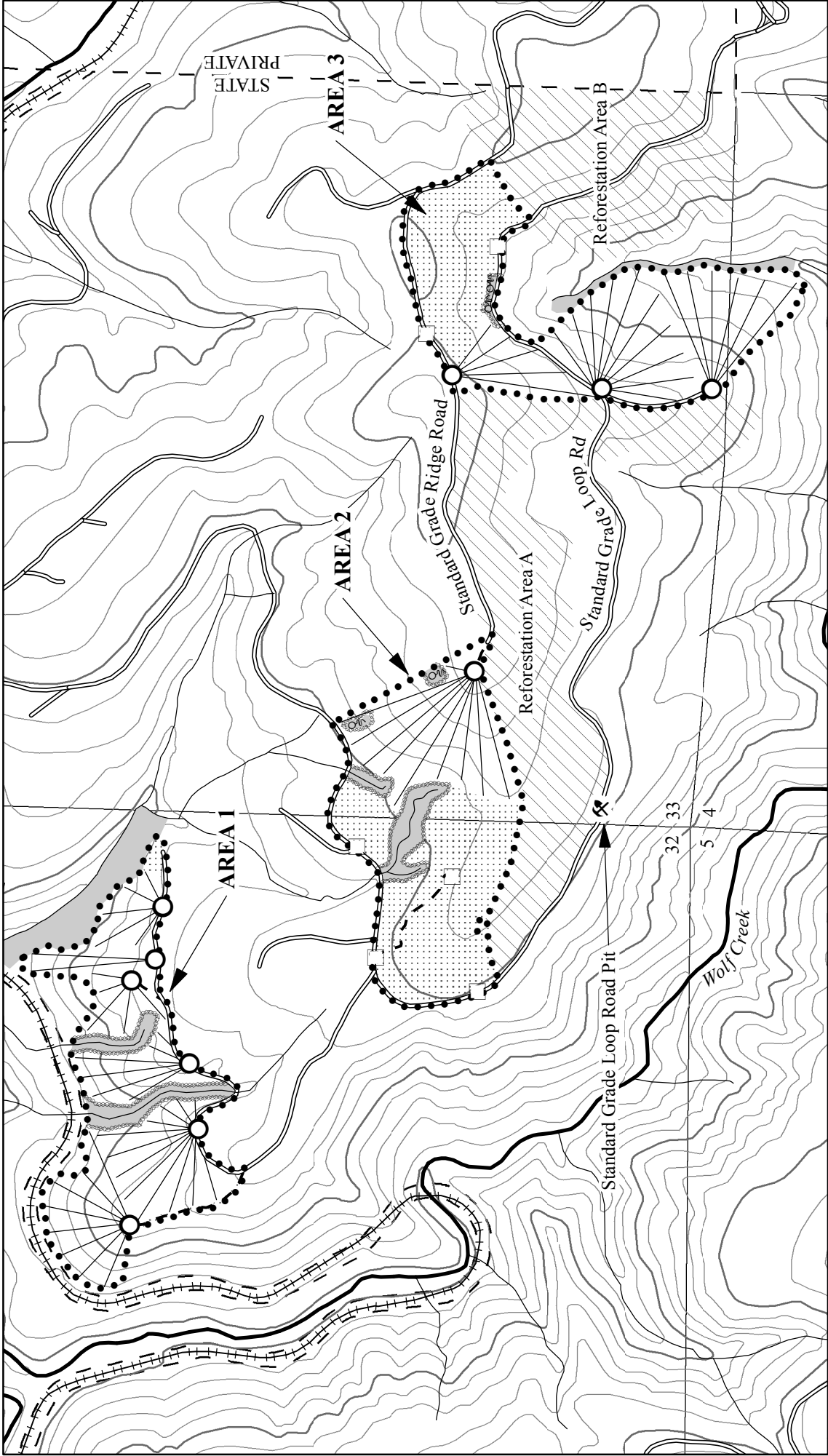
AREA 2: MC (49 ACRES)

SPECIES		2 SAW	3 SAW	4 SAW	CR	TOTAL
Douglas-fir	Cruise Volume	1,307	328	41	0	1,676
	Hidden D&B (2%)	(26)	(7)	(1)	()	(34)
	NET TOTAL	1,281	321	40	0	1,642
	% of Total	78	20	2	0	
Western hemlock/fir	Cruise Volume	120	37	9	0	166
	Hidden D&B (2%)	(2)	(1)	()	()	(3)
	NET TOTAL	118	36	9	0	163
	% of Total	72	22	6	0	

AREA 3: MC (53 ACRES)

SPECIES		2 SAW	3 SAW	4 SAW	CR	TOTAL
Douglas-fir	Cruise Volume	1,985	485	45	0	2,515
	Hidden D&B (2%)	(40)	(10)	(1)	()	(50)
	NET TOTAL	1,945	475	44	0	2,465
	% of Total	79	19	2	0	
Noble fir	Cruise Volume	37	2	0	0	39
	Hidden D&B (2%)	(1)	()	()	()	(1)
	NET TOTAL	36	2	0	0	38
	% of Total	95	5	0	0	

SALE TOTAL					
SPECIES	2 SAW	3 SAW	4 SAW	Camp Run	TOTAL
Douglas-fir	3,930	1,447	171	0	5,548
Western hemlock	143	85	22	0	250
Noble fir	36	2	0	0	38
Red Alder	0	0	0	13	13



APPROXIMATE NET ACRES

	TRACTOR	CABLE
AREA 1	1	43
AREA 2	29	20
AREA 3	17	36
TOTAL	47	99

Forest Grove District GIS
 August, 2013

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