



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Red Rock Hill
Sale 341-13-33

District: Forest Grove

Date: October 05, 2012

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,389,434.02	\$0.00	\$1,389,434.02
		Project Work:	\$(115,800.00)
		Advertised Value:	\$1,273,634.02



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District: Forest Grove

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timber description

Location: Portions of Sections 26, 27, 34 and 35, T3N, R7W, W.M., and Portions of Sections 2 and 3, T2N, R7W, W.M., Tillamook County, Oregon.

Stand Stocking: 20%

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

Volume by Grade	2S	3S	4S	Total
Douglas - Fir	1,723	2,408	551	4,682
Western Hemlock / Fir	426	508	138	1,072
Total	2,149	2,916	689	5,754



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"STEWARDSHIP IN FORESTRY"

District: Forest Grove

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comments: Pond Values Used: 3rd Quarter Calendar Year 2012.

Western redcedar and Other Cedars Stumpage Price = Pond Value
minus Logging Cost:
 $\$733.34/\text{MBF} = \$975/\text{MBF} - \$241.66/\text{MBF}$

Red Alder and Other Hardwoods Stumpage Price = Pond Value minus
Logging Cost:
 $\$298.34/\text{MBF} = \$540/\text{MBF} - \$241.66/\text{MBF}$

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: 5,754 MBF @ \$1/MBF = \$5,754
Intermediate Supports: 20 each x \$100/support = \$2,000
Total Other Costs (with Profit & Risk to be added) = \$7,754

Other Costs (No Profit & Risk added):
Pile Landing Slash & Pulp sort: 20 hrs @ \$150/hr. = \$3,000
Blocking/Waterbarring Skid Roads: 10 hrs @ \$150/hr = \$1,500
Equipment Cleaning: 4 machines @ \$1,000/machine = \$4,000
TOTAL Other Costs (No Profit & Risk added) = \$8,500

ROAD MAINTENANCE
Move-in: \$2,000
General Road Maintenance: 13.9 miles x \$1,000/mile = \$13,900
TOTAL: \$15,900 / 5,754 MBF = \$2.76/MBF



"STEWARDSHIP IN FORESTRY"

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Red Rock Hill
Sale 341-13-33

District: Forest Grove

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logging conditions

combination#: 1 Douglas - Fir 58.18%
 Western Hemlock / Fir 41.88%

yarding distance: Short (400 ft) **downhill yarding:** No
logging system: Shovel **Process:** Stroke Delimber

tree size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
loads / day: 4.0 **bd. ft / load:** 4,500
cost / mbf: \$79.90

machines: Stroke Delimber (B)

combination#: 2 Douglas - Fir 41.82%
 Western Hemlock / Fir 58.12%

yarding distance: Medium (800 ft) **downhill yarding:** No
logging system: Cable: Small Tower <=40 **Process:** Stroke Delimber

tree size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
loads / day: 4.0 **bd. ft / load:** 4,500
cost / mbf: \$157.46

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



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Red Rock Hill Sale 341-13-33

District: Forest Grove

Date: October 05, 2012

logging costs

Operating Seasons:	2.00	Profit Risk:	15.00%
Project Costs:	\$115,800.00	Other Costs (P/R):	\$7,754.00
Slash Disposal:	\$0.00	Other Costs:	\$8,500.00

Miles of Road

Road Maintenance: \$2.76

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	4.0
Western Hemlock / Fir	\$0.00	2.0	3.5



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Red Rock Hill
Sale 341-13-33

District: Forest Grove

Date: October 05, 2012

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$112.33	\$2.82	\$1.52	\$86.48	\$1.35	\$30.68	\$0.00	\$5.00	\$1.48	\$241.66
Western Hemlock / Fir									
\$124.98	\$2.82	\$1.52	\$98.83	\$1.35	\$34.42	\$0.00	\$5.00	\$1.48	\$270.40

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$502.95	\$261.29	\$0.00
Western Hemlock / Fir	\$0.00	\$425.32	\$154.92	\$0.00



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District: Forest Grove

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summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Western Hemlock / Fir	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	4,682	\$261.29	\$1,223,359.78
Western Hemlock / Fir	1,072	\$154.92	\$166,074.24

Gross Timber Sale Value

Recovery: \$1,389,434.02

Prepared by: Mark Savage

Phone: 503-359-7473

TIMBER SALE SUMMARY
Red Rock Hill
341-13-33

1. **Location:** Portions of Sections 26, 27, 34 and 35, T3N, R7W, W.M., and Sections 2 and 3, T2N, R7W, W.M., Tillamook County, Oregon.
2. **Type of Sale:** Light Partial Cut, Moderate Partial Cut, Recovery, sealed bid auction.
3. **Revenue Distribution:** 100% BOF, Tillamook County, Tax Codes 56-1
4. **Sale Acreage:** Area 1 is 146 acres of Partial Cut – Light, Area 2 is 133 acres of Partial Cut - Moderate, Area 3 is 86 acres of Partial Cut – Light, Area 4 is 8 acres of Right-of-Way. Acres were determined using ESRI Arcmap GIS software.
5. **Cruise:** The Timber Sale was cruised by inventory contract cruisers using variable radius plots. Volume estimates and plot data statistics were computed using SuperACE timber cruise software. For more information see the Cruise Report.
6. **Timber Description:** The timber in the Sale Areas is approximately 55 years old and is comprised primarily of Douglas-fir. The sale DBH is approximately 15 inches. Area 1 estimated average net take tree volume is 8.2 MBF per acre. Area 2 estimated average net take tree volume is 20.4 MBF per acre. Area 3 estimated average net take tree volume is 18.6 MBF per acre.
7. **Topography and Logging Method:**
Area 1: 46% tractor yarding and 54% cable yarding.
Area 2: 34% tractor yarding and 66% cable yarding.
Area 3: 88% tractor yarding and 12% cable yarding.
Area 4: 100% tractor yarding.
The maximum tractor yarding distance is approximately 700 feet horizontal distance, with an average yarding distance of about 400 feet. The maximum cable yarding distance is approximately 1,400 feet horizontal distance, with an average yarding distance of about 500 feet. Slopes range from 5% to 70%.
8. **Access:** From Forest Grove travel north seven miles on Highway 8 to its junction with Highway 6 and turn left. Continue west on Highway 6 for 9.5 miles to Storey Burn Road. Proceed north on Storey Burn Road 6.3 miles. Continue straight onto Standard Grade Road and follow 7.9 miles to Belding Road. Turn right onto Belding Road and follow for .1 miles to the southern portion of the sale area.

9. Projects:

Projects: Project costs are approximately 7.6% of the sale value.

Project 1: Road construction and improvements.	\$61,292.06
Project 2: Road surfacing.	\$46,458.51
Project 3: Grass seed, fertilize and mulch .	\$1,813.25

Move in and Equipment Cleaning.	\$6209.02
Total Project Costs (rounded).	\$115,800.00

10. Other Costs:

Other Costs with (P/R)

Brand and Paint: 5,754MBF @ \$1.00/MBF	\$5,754.00
Intermediate Supports: 20 @ \$100.00/support	\$2,000.00

Total Other Costs with (P/R):	\$7,754.00
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Other Costs (no P/R)

Pile Landing Slash & Pulpsort: 20 Hours @ \$150.00/hour	\$3,000.00
Blocking/Waterbarring skid roads: 10 Hours @ \$150.00/hour	\$1,500.00
Equipment Cleaning: 4 @ \$1000/machine	\$4,000.00

Total Other Costs (no P/R):	\$8,500.00
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Total Other Costs:	\$16,254.00
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RESIDUAL STAND SPECIFICATIONS

SALE NAME: Red Rock Hill

SALE NUMBER: 341-13-33

AREA 1

Residual QMD assumption (from leave tree cruise information) =

15

Target Relative Density =

39

	Minimum	Target	Maximum
Relative Density	39	40	41
Basal Area	150	155	160
Trees per Acre	122	126	130

AREA 2

Residual QMD assumption (from leave tree cruise information) =

16

Target Relative Density =

35

	Minimum	Target	Maximum
Relative Density	33	35	38
Basal Area	130	140	150
Trees per Acre	93	100	107

AREA 3

Residual QMD assumption (from leave tree cruise information) =

18

Target Relative Density =

40

	Minimum	Target	Maximum
Relative Density	38	40	42
Basal Area	160	170	180
Trees per Acre	91	96	102

$$RD = BA / \sqrt{DBH}$$

$$BA = \sqrt{DBH} (RD)$$

$$TPA = (BA/acre) / (BA/tree)$$

$$BA / tree = (\pi r^2) / (144)$$

PROJECT COST SUMMARY SHEETTimber Sale: Red Rock HillSale Number: 341-13-33**PROJECT NO. 1: ROAD CONSTRUCTION AND IMPROVEMENT****CONSTRUCTION**

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
A to B	7+90	\$2,536.06
C to D	2+00	\$702.38
E to F	7+25	\$2,810.01
G to H	5+90	\$1,771.28
J to K	25+00	\$8,197.27
L to M	11+40	\$2,799.08
N to O	9+10	\$2,547.59
P to Q	19+50	\$4,599.72
R to S	33+00	\$8,306.80
121+05 stations		
2.29 miles		

SUBTOTAL CONSTRUCTION **\$34,270.17****IMPROVEMENTS**

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
I to J	38+70	\$10,715.67
T to U	28+10	\$16,306.21
66+80 stations		
1.27 miles		

SUBTOTAL IMPROVEMENTS **\$27,021.89****TOTAL PROJECT NO. 1 COST =** **\$61,292.06****PROJECT NO. 2: SURFACING**

<u>Road Segment</u>	<u>Amount</u>	<u>Type</u>	<u>Cost</u>
C to D	276 cy	6" - 0	\$2,031.36
I to J	2,275 cy	6" - 0	\$18,245.50
J to K	300 cy	6" - 0	\$2,562.00
P to Q	1,268 cy	6" - 0	\$9,243.72
T to U	1,777 cy	6" - 0	\$14,375.93
Total	5,896 cy	6" - 0	

TOTAL PROJECT NO. 2 COST = **\$46,458.51****PROJECT NO. 3: GRASS SEED, FERTILIZE, & MULCH**

Grass seed and fertilize areas of disturbed soil.	\$1,813.25
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TOTAL PROJECT NO. 3 COST = **\$1,813.25****MOVE IN & EQUIPMENT CLEANING** **\$6,209.02**

<u>TOTAL ALL PROJECTS</u>	<u>\$115,772.84</u>
<u>TOTAL CREDITS</u>	<u>\$115,800.00</u>

SUMMARY OF CONSTRUCTION COST

Timber Sale: Red Rock Hill
Road Segment: A to B

Timber Sale No. : 341-13-33
Construction: 7+90 stations
0.15 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.73	acres @	\$980.00	per acre =	\$710.93
Balanced Road Construction	6.90	sta @	\$90.00	per sta =	\$621.00
Drift	1.00	sta @	\$150.00	per sta =	\$150.00
Construct Junction					
Excavate and Load	84	cy @	\$2.00	per cy =	\$168.00
Haul	84	cy @	\$2.40	per cy =	\$201.60
Compact Fill	84	cy @	\$0.45	per cy =	\$37.80
Construct Turnouts (1)	1	ea @	\$60.00	per ea =	\$60.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Construct Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	7.90	sta @	\$28.70	per sta =	\$226.73
				TOTAL EXCAVATION COSTS=	\$2,536.06

PROJECT NO. 1 TOTAL COST = \$2,536.06

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.36	acres @	\$220.00	per acre =	\$79.80
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PROJECT NO. 3 TOTAL COST = \$79.80

TOTAL COST = \$2,615.86

SUMMARY OF CONSTRUCTION COST

Timber Sale: Red Rock Hill
Road Segment: C to D

Timber Sale No. : 341-13-33
Construction: 2+00 stations
0.04 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.18	acres @	\$980.00	per acre =	\$179.98
Balanced Road Construction	2.00	sta @	\$90.00	per sta =	\$180.00
Construct Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	2.00	sta @	\$28.70	per sta =	\$57.40
TOTAL EXCAVATION COSTS=					\$702.38

PROJECT NO. 1 TOTAL COST = \$702.38

PROJECT NO. 2:

SURFACING	10	" deep =	53 cy/sta		
C to D	106	cy of	6" - 0	@	\$7.36 per cy = \$780.16
Junction	20	cy of	6" - 0	@	\$7.36 per cy = \$147.20
Landing (1)	150	cy of	6" - 0	@	\$7.36 per cy = \$1,104.00
Total =	276	cy of	6" - 0		

PROJECT NO. 2 TOTAL COST = \$2,031.36

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.09	acres @	\$220.00	per acre =	\$20.20
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PROJECT NO. 3 TOTAL COST = \$20.20

TOTAL COST = \$2,753.94

SUMMARY OF CONSTRUCTION COST

Timber Sale: Red Rock Hill
Road Segment: E to F

Timber Sale No. : 341-13-33
Construction: 7+25 stations
0.14 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.67	acres @	\$980.00	per acre =	\$652.43
Balanced Road Construction	2.80	sta @	\$90.00	per sta =	\$252.00
Drift	4.45	sta @	\$150.00	per sta =	\$667.50
Construct Turnouts (1)	1	ea @	\$60.00	per ea =	\$60.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Construct Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	7.25	sta @	\$28.70	per sta =	\$208.08
TOTAL EXCAVATION COSTS=					\$2,200.01

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 = \$2,810.01

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil. 0.33 acres @ \$220.00 per acre = \$73.23

PROJECT NO. 3 TOTAL COST = \$73.23

TOTAL COST = \$2,883.24

SUMMARY OF CONSTRUCTION COST

Timber Sale:	<u>Red Rock Hill</u>	Timber Sale No. :	<u>341-13-33</u>
Road Segment:	<u>G to H</u>	Construction:	<u>5+90</u> stations
			<u>0.11</u> miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.54	acres @	\$980.00	per acre =	\$530.95
Balanced Road Construction	3.90	sta @	\$90.00	per sta =	\$351.00
Drift	2.00	sta @	\$150.00	per sta =	\$300.00
Construct Turnouts (1)	1	ea @	\$60.00	per ea =	\$60.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Construct Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	5.90	sta @	\$28.70	per sta =	\$169.33
TOTAL EXCAVATION COSTS=					\$1,771.28

PROJECT NO. 1 TOTAL COST = \$1,771.28

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.27	acres @	\$220.00	per acre =	\$59.60
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PROJECT NO. 3 TOTAL COST = \$59.60

TOTAL COST = \$1,830.87

SUMMARY OF CONSTRUCTION COST

Timber Sale:	<u>Red Rock Hill</u>	Timber Sale No. :	<u>341-13-33</u>
Road Segment:	<u>I to J</u>	Improvement:	<u>38+70</u> stations
			<u>0.73</u> miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	2.67	acres @	\$980.00	per acre =	\$2,611.98
Road Widening (Drift)	38.70	sta @	\$90.00	per sta =	\$3,483.00
Construct Turnouts (3)	3	ea @	\$60.00	per ea =	\$180.00
Grade, Ditch, and Roll	38.70	sta @	\$28.70	per sta =	\$1,110.69
				TOTAL EXCAVATION COSTS=	\$7,385.67

CULVERTS - MATERIALS & INSTALLATION

Culverts

164 LF of 18" \$3,280.00

Culvert Markers

5 markers \$50.00

TOTAL CULVERT COSTS = \$3,330.00

PROJECT NO. 1 TOTAL COST = \$10,715.67

PROJECT NO. 2:

SURFACING

	10	" deep =	53 cy/sta		
I to J	2,051	cy of	6" - 0	@	\$8.02 per cy = \$16,449.02
Turnouts (3)	54	cy of	6" - 0	@	\$8.02 per cy = \$433.08
Junction	20	cy of	6" - 0	@	\$8.02 per cy = \$160.40
Landing (1)	150	cy of	6" - 0	@	\$8.02 per cy = \$1,203.00
Total =	2,275	cy of	6" - 0		

PROJECT NO. 2 TOTAL COST = \$18,245.50

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	1.33 acres @	\$220.00	per acre =	\$293.18
Mulch	3.00 bales @	\$4.50	per bale =	\$13.50

PROJECT NO. 3 TOTAL COST = \$306.68

TOTAL COST = \$29,267.86

SUMMARY OF CONSTRUCTION COST

Timber Sale:	<u>Red Rock Hill</u>	Timber Sale No. :	<u>341-13-33</u>
Road Segment:	<u>J to K</u>	Construction:	<u>25+00 stations</u> <u>0.47 miles</u>

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	2.30	acres @	\$980.00	per acre =	\$2,249.77
Balanced Road Construction	25.00	sta @	\$90.00	per sta =	\$2,250.00
Construct Turnouts (3)	3	ea @	\$60.00	per ea =	\$180.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Construct Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	25.00	sta @	\$28.70	per sta =	\$717.50
TOTAL EXCAVATION COSTS=					\$5,757.27

CULVERTS - MATERIALS & INSTALLATION

Culverts

120 LF of 18" \$2,400.00

Culvert Markers

4 markers \$40.00

TOTAL CULVERT COSTS = \$2,440.00

PROJECT NO. 1 TOTAL COST = \$8,197.27

PROJECT NO. 2:

SURFACING

Subgrade Reinforcement	300	cy of	6" - 0	@	\$8.54	per cy =	\$2,562.00
Total =	300	cy of	6" - 0				

PROJECT NO. 2 TOTAL COST = \$2,562.00

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	1.15	acres @	\$220.00	per acre =	\$252.53
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PROJECT NO. 3 TOTAL COST = \$252.53

TOTAL COST = \$11,011.80

SUMMARY OF CONSTRUCTION COST

Timber Sale:	<u>Red Rock Hill</u>	Timber Sale No. :	<u>341-13-33</u>
Road Segment:	<u>L to M</u>	Construction:	<u>11+40</u> stations
			<u>0.22</u> miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	1.05	acres @	\$980.00	per acre =	\$1,025.90
Balanced Road Construction	11.40	sta @	\$90.00	per sta =	\$1,026.00
Construct Turnouts (1)	1	ea @	\$60.00	per ea =	\$60.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Construct Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	11.40	sta @	\$28.70	per sta =	\$327.18
TOTAL EXCAVATION COSTS=					\$2,799.08

PROJECT NO. 1 TOTAL COST = \$2,799.08

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.52	acres @	\$220.00	per acre =	\$115.15
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PROJECT NO. 3 TOTAL COST = \$115.15

TOTAL COST = \$2,914.23

SUMMARY OF CONSTRUCTION COST

Timber Sale: Red Rock Hill
Road Segment: N to O

Timber Sale No. : 341-13-33
Construction: 9+10 stations
0.17 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.84	acres @	\$980.00	per acre =	\$818.92
Balanced Road Construction	9.10	sta @	\$90.00	per sta =	\$819.00
Construct Junction					
Excavate & Load	50	cy @	\$2.00	per cy =	\$100.00
Place Fill	50	cy @	\$2.12	per cy =	\$106.00
Compact Fill	50	cy @	\$0.45	per cy =	\$22.50
Construct Turnouts (1)	1	ea @	\$60.00	per ea =	\$60.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Construct Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	9.10	sta @	\$28.70	per sta =	\$261.17
TOTAL EXCAVATION COSTS=					\$2,547.59

PROJECT NO. 1 TOTAL COST = \$2,547.59

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.42	acres @	\$220.00	per acre =	\$91.92
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PROJECT NO. 3 TOTAL COST = \$91.92

TOTAL COST = \$2,639.51

SUMMARY OF CONSTRUCTION COST

Timber Sale: Red Rock Hill
Road Segment: P to Q

Timber Sale No. : 341-13-33
Construction: 19+50 stations
0.37 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	1.79	acres @	\$980.00	per acre =	\$1,754.82
Balanced Road Construction	19.50	sta @	\$90.00	per sta =	\$1,755.00
Construct Turnouts (3)	3	ea @	\$60.00	per ea =	\$180.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Construct Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	13.00	sta @	\$28.70	per sta =	\$373.10
Grade and Roll (Outslope)	6.50	sta @	\$27.20	per sta =	\$176.80
TOTAL EXCAVATION COSTS=					\$4,599.72

PROJECT NO. 1 TOTAL COST = \$4,599.72

PROJECT NO. 2:

SURFACING	10	" deep =	53 cy/sta		
P to Q	1,034	cy of	6" - 0	@	\$7.29 per cy = \$7,537.86
Turnouts (1)	48	cy of	6" - 0	@	\$7.29 per cy = \$349.92
Turnaround (1)	16	cy of	6" - 0	@	\$7.29 per cy = \$116.64
Junction	20	cy of	6" - 0	@	\$7.29 per cy = \$145.80
Landing (1)	150	cy of	6" - 0	@	\$7.29 per cy = \$1,093.50
Total =	1,268	cy of	6" - 0		

PROJECT NO. 2 TOTAL COST = \$9,243.72

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.90	acres @	\$220.00	per acre =	\$196.97
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PROJECT NO. 3 TOTAL COST = \$196.97

TOTAL COST = \$14,040.41

SUMMARY OF CONSTRUCTION COST

Timber Sale:	<u>Red Rock Hill</u>	Timber Sale No. :	<u>341-13-33</u>
Road Segment:	<u>R to S</u>	Construction:	<u>33+00</u> stations
			<u>0.63</u> miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	3.03	acres @	\$980.00	per acre =	\$2,969.70
Balanced Road Construction	33.00	sta @	\$90.00	per sta =	\$2,970.00
Construct Turnouts (5)	5	ea @	\$60.00	per ea =	\$300.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Roadside Landing	1	ea @	\$150.00	per ea =	\$150.00
Construct Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	33.00	sta @	\$28.70	per sta =	\$947.10
TOTAL EXCAVATION COSTS=					\$7,696.80

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 = \$8,306.80

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	1.52 acres @	\$220.00	per acre =	\$333.33
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PROJECT NO. 3 TOTAL COST = \$333.33

TOTAL COST = \$8,640.13

SUMMARY OF CONSTRUCTION COST

Timber Sale: Red Rock Hill
 Road Segment: T to U

Timber Sale No. : 341-13-33
 Improvement: 28+10 stations
0.53 miles

PROJECT NO. 1**EXCAVATION**

Clearing and Grubbing (Scatter)	2.58	acres @	\$980.00	per acre =	\$2,528.74
Balanced Road Construction	2.00	sta @	\$90.00	per sta =	\$180.00
Road Widening (Drift)	28.10	sta @	\$150.00	per sta =	\$4,215.00
Pull Ditch and Endhaul Waste Material	14.00	sta @	\$100.00	per sta =	\$1,400.00
Rock Cutbank Excavation					
Excavate & Load	280	cy @	\$5.00	per cy =	\$1,400.00
Haul	280	cy @	\$1.40	per cy =	\$392.00
Compact Waste Area	280	cy @	\$0.25	per cy =	\$70.00
Construct Turnouts (4)	4	ea @	\$60.00	per ea =	\$240.00
Construct Turnaround (1)	1	ea @	\$75.00	per ea =	\$75.00
Construct Landing	1	ea @	\$285.00	per ea =	\$285.00
Grade, Ditch, and Roll	28.10	sta @	\$28.70	per sta =	\$806.47
TOTAL EXCAVATION COSTS=					\$11,592.21

CULVERTS - MATERIALS & INSTALLATION**Culverts**

180 LF of 18" \$3,600.00 36 LF of 24" \$1,044.00

Culvert Markers

7 markers \$70.00

TOTAL CULVERT COSTS = \$4,714.00

PROJECT NO. 1 TOTAL COST = \$16,306.21

PROJECT NO. 2:**SURFACING**

	10	" deep =	53 cy/sta			
T to U	1,489	cy of	6" - 0	@	\$8.09 per cy =	\$12,046.01
Turnouts (4)	72	cy of	6" - 0	@	\$8.09 per cy =	\$582.48
Turnaround (1)	16	cy of	6" - 0	@	\$8.09 per cy =	\$129.44
Junction	20	cy of	6" - 0	@	\$8.09 per cy =	\$161.80
Landing (1)	150	cy of	6" - 0	@	\$8.09 per cy =	\$1,213.50
Subgrade Reinforcement	30	cy of	6" - 0	@	\$8.09 per cy =	\$242.70
Total =	1,777	cy of	6" - 0			

PROJECT NO. 2 TOTAL COST = \$14,375.93

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil. 1.29 acres @ \$220.00 per acre = \$283.84

PROJECT NO. 3 TOTAL COST = \$283.84

TOTAL COST = \$30,965.98

Move-In & Equipment Cleaning

Timber Sale: Red Rock Hill
Sale Number: 341-13-33

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

No.	EQUIPMENT DESCRIPTION	Equipment Cleaning	Base Cost	Woods Cost	Pilot Cars	Within Area Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Within	
										Area Cost	Total Cost
1	Graders		\$300.00	\$482.15		\$3.65	0.0	0.0	0.0	\$0.00	\$782.15
1	Rollers (smooth/grid) & Compactors		\$308.59	\$385.25		\$5.00	0.0	0.0	0.0	\$0.00	\$693.84
1	Excavators (Large)	\$1,000	\$466.14	\$659.45	1	\$44.80	0.0	0.0	0.0	\$0.00	\$2,125.59
1	Tractor (D8)	\$1,000	\$473.80	\$600.30	2	\$15.10	0.0	0.0	0.0	\$0.00	\$2,074.10
2	Dump Truck (10 cy +)		\$233.34	\$300.00		\$2.85	0.0	0.0	0.0	\$0.00	\$533.34
TOTAL MOVE-IN COSTS:											\$6,209.02

ROCK DEVELOPMENT COST SUMMARY

Timber Sale: Red Rock Hill

Sale Number: 341-13-33

Swell:	<u>1.30</u>	Pit Run (trk measure)	<u>5,896 cy</u>
Shrinkage:	<u>1.16</u>	Total Truck Yardage:	<u>5,896 cy</u>
Drill Pct.:	<u>100%</u>	Total In Place Yardage:	<u>4,535 cy</u>

Scalp & Clear Overburden:				\$4,420.00	
Rip Rock:	<u>\$1.90 /cy</u>	x	<u>4,535 cy</u>	=	\$8,617.23
Push Rock:	<u>\$0.70 /cy</u>	x	<u>5,896 cy</u>	=	\$4,127.20
Load Dump Truck:	<u>\$0.70 /cy</u>	x	<u>5,896 cy</u>	=	\$4,127.20
				Subtotal	<u>\$21,291.63</u>

Equipment Cleaning		\$2,000.00
Move in Excavator		\$1,125.59
Move in D-8		\$1,074.10
Grass seed, fertilizer, and mulch Waste Area		\$150.00
Clean Up Pit		<u>\$300.00</u>
	Subtotal	<u>\$4,649.69</u>

PIT DEVELOPMENT COST \$4.40/cy

TOTAL PRODUCTION COST \$25,941.32

VOLUME SUMMARY
(Shown in MBF)
Red Rock Hill
Sale No. 341-13-33
August 2012

AREA 1: PC-L (146 ACRES)

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Douglas-fir	Cruise Volume	439	638	120	1,197
	Hidden D&B (2%)	(9)	(13)	(2)	(24)
	NET TOTAL	430	625	118	1,173
	% of Total	37	53	10	

AREA 2: PC-M (133 ACRES)

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Douglas-fir	Cruise Volume	626	919	211	1,756
	Hidden D&B (2%)	(13)	(18)	(4)	(35)
	NET TOTAL	613	901	207	1,721
	% of Total	36	52	12	

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Western	Cruise Volume	368	466	129	963
hemlock	Hidden D&B (2%)	(7)	(9)	(3)	(19)
	NET TOTAL	361	457	126	944
	% of Total	38	48	13	

AREA 3: PC-L (86 ACRES)

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Douglas-fir	Cruise Volume	586	809	209	1,604
	Hidden D&B (2%)	(12)	(16)	(4)	(32)
	NET TOTAL	574	793	205	1,572
	% of Total	37	50	13	

AREA 4: R/W (8 ACRES)

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Douglas-fir	Cruise Volume	108	91	21	220
	Hidden D&B (2%)	(2)	(2)	()	(4)
	NET TOTAL	106	89	21	216
	% of Total	49	41	10	

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Western	Cruise Volume	66	52	12	130
hemlock	Hidden D&B (2%)	(1)	(1)	()	(3)
& other	NET TOTAL	65	51	12	127
conifer	% of Total	51	40	9	

SALE TOTAL

SPECIES		2 SAW	3 SAW	4 SAW	TOTAL
Douglas-fir		1,723	2,408	551	4,682
W. hemlock & other conifer		426	508	138	1,072
TOTAL		2,149	2,916	689	5,754

CRUISE REPORT
Red Rock Hill
341-13-33

1. SAMPLING METHOD:

The Sale Area was cruised in 2003 with 59 Stand Level Inventory variable radius plots using a combination of 27.78, 40, 54.45, and 30.4 BAF prisms. Plots were thinned from below to achieve desired basal area prescription by assigning a 'Take' or 'Leave' status to each tree in every plot.

2. CRUISE RESULTS

402 trees were measured and graded producing a cumulative Basal Area sampling error of 7.5% and 6.7% on the Board Foot Volume.

3. TREE MEASUREMENT AND GRADING:

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

All trees assigned a 'Take' status 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.

4. DATA PROCESSING

- a) **Volumes and Statistics,** Cruise and grown forward volume estimates, and sampling statistics, were derived from Super Ace 2008 cruise software. Plot data was grown forward to 07/2012.
- b) **Deductions:** Two percent of the volume was subtracted from the computed volumes to account for hidden defect and breakage.

5. Cruisers: The sale was cruised by SLI contract.

Prepared by:

Mark Savage

Date

Reviewed by:

Eric Foucht

Date

PROJECT STATISTICS							PAGE	1				
PROJECT RDRKHILL							DATE	8/27/2012				
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt		
03N	07	35	001	A1		365.00	59	402	S	W		
03N	07W	35	001	A2								
03N	07W	35	001	A3								
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL			59	402	6.8							
CRUISE			59	402	6.8	64,043	.6					
DBH COUNT												
REFOREST												
COUNT												
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-L			147	37.5	21.0	111	19.7	90.2	16,418	16,418	3,726	3,726
DOUG FIR-T			141	64.4	15.5	96	21.4	84.3	12,475	12,475	2,985	2,985
WHEMLOCK-L			71	49.6	14.2	85	14.4	54.2	8,050	8,050	1,915	1,915
WHEMLOCK-T			28	13.8	14.9	93	4.3	16.7	2,640	2,640	626	626
NOB FIR-L			11	3.7	17.0	90	1.4	5.8	813	813	201	201
GR FIR-L			2	4.8	10.5	58	0.9	2.9	343	343	81	81
R ALDER-L			2	1.7	14.0	81	0.5	1.8	263	263	67	67
TOTAL			402	175.5	16.4	95	63.3	255.9	41,001	41,001	9,600	9,600
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-L		60.1	5.0	516	543	570						
DOUG FIR-T		74.9	6.3	248	265	281						
WHEMLOCK-L		67.3	8.0	294	320	345						
WHEMLOCK-T		63.7	12.2	255	291	327						
NOB FIR-L		87.8	27.7	289	400	511						
GR FIR-L		127.6	119.5		205	450						
R ALDER-L		112.2	105.0		145	297						
TOTAL		75.3	3.8	367	381	395		227	57	25		
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-L		52.5	4.3	116	121	126						
DOUG FIR-T		69.7	5.9	58	62	66						
WHEMLOCK-L		62.7	7.4	70	76	82						
WHEMLOCK-T		61.0	11.7	61	69	77						
NOB FIR-L		75.6	23.9	72	94	117						
GR FIR-L		128.0	119.9		49	107						
R ALDER-L		112.0	104.9		37	75						
TOTAL		67.7	3.4	84	87	90		183	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-L		86.5	11.3	33	37	42						
DOUG FIR-T		103.1	13.4	56	64	73						
WHEMLOCK-L		169.5	22.0	39	50	61						
WHEMLOCK-T		454.1	59.1	6	14	22						
NOB FIR-L		370.3	48.2	2	4	5						
GR FIR-L		668.8	87.0	1	5	9						
R ALDER-L		540.9	70.4	0	2	3						
TOTAL		80.1	10.4	157	175	194		256	64	28		

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
03N	07	35	001	A1	365.00	59	402	S	W
03N	07W	35	001	A2					
03N	07W	35	001	A3					
CL	68.1		COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.	
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH	5	10
DOUG FIR-L			68.1	8.9	82	90	98		
DOUG FIR-T			98.3	12.8	74	84	95		
WHEMLOCK-L			112.5	14.6	46	54	62		
WHEMLOCK-T			365.8	47.6	9	17	25		
NOB FIR-L			273.8	35.6	4	6	8		
GR FIR-L			538.4	70.0	1	3	5		
R ALDER-L			637.6	82.9	0	2	3		
TOTAL			57.3	7.5	237	256	275	131	33
CL	68.1		COEFF		NET BF/ACRE			# OF PLOTS REQ.	
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH	5	10
DOUG FIR-L			70.6	9.2	14,909	16,418	17,926		
DOUG FIR-T			90.8	11.8	11,001	12,475	13,948		
WHEMLOCK-L			111.2	14.5	6,886	8,050	9,214		
WHEMLOCK-T			349.4	45.5	1,440	2,640	3,840		
NOB FIR-L			264.4	34.4	533	813	1,092		
GR FIR-L			607.8	79.1	72	343	615		
R ALDER-L			703.2	91.5	22	263	503		
TOTAL			51.5	6.7	38,254	41,001	43,749	106	26

T		TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)												Page		1						
				Project: RDRKHILL												Date		8/27/2012						
																Time		12:46:44PM						
T03N R07W S35 TA1												T03N R07W S35 TA1												
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		CuFt		BdFt						
03N		07W		35		001		A1		146.00		11		62		S		W						
S So Gr T rt ad Spp				%	Bd. Ft. per Acre			Total	Percent Net Board Foot Volume								Average Log				Logs Per /Acre			
									Log Scale Dia.				Log Length				Ln Dia		Bd CF/					
				Net	Def%	Gross	Net	Net MBF	4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99	Ft	In	Ft	Lf				
DF		L		2M		74		11,229	11,229	1,639			48	52			100	40	15	369	1.94	30.4		
DF		L		3M		23		3,452	3,452	504			93	7			14	86	38	8	108	0.81	32.0	
DF		L		4M		3		367	367	54			100			36	64		20	6	23	0.40	15.9	
DF		L		Totals		46		15,049	15,049	2,197			24	37	39	1	2	3	94	35	11	192	1.26	78.4
DF		T		2M		36		3,006	3,006	439			100				100	40	13	259	1.48	11.6		
DF		T		3M		54		4,372	4,372	638			100			3	12	85	38	9	107	0.76	40.7	
DF		T		4M		10		797	797	116	9	91			44	17	39		19	6	24	0.35	33.6	
DF		T		Totals		25		8,175	8,175	1,194	1	62	37		4	3	10	82	31	8	95	0.78	85.9	
WH		L		2M		16		1,305	1,305	190			57	43			100	40	15	343	1.82	3.8		
WH		L		3M		67		5,222	5,222	762			100				44	56	36	7	75	0.51	69.4	
WH		L		4M		17		1,254	1,254	183			100		19	60	10	11	20	6	25	0.29	49.3	
WH		L		Totals		24		7,781	7,781	1,136			83	10	7	3	10	31	56	30	7	64	0.50	122.5
GF		L		2M		56		483	483	71			100				100	40	14	290	1.63	1.7		
GF		L		3M		17		150	150	22			100				100	32	9	90	0.76	1.7		
GF		L		4M		27		225	225	33			100		100			19	6	19	0.24	12.1		
GF		L		Totals		3		858	858	125			44	56		26		17	56	23	7	56	0.58	15.4
RA		L		2M		76		461	461	67			100				100	40	12	200	1.18	2.3		
RA		L		3M		24		138	138	20			100				100	38	6	60	0.49	2.3		
RA		L		Totals		2		600	600	88			23	77			100	39	9	130	0.84	4.6		
NF		L		3M		81		355	355	52			100				100	40	8	90	0.57	3.9		
NF		L		4M		19		79	79	12			100		100			16	6	20	0.27	3.9		
NF		L		Totals		1		434	434	63			100		18		82	28	7	55	0.48	7.9		
Type Totals								32,897	32,897	4,803	0	49	31	19	3	4	12	81	31	8	105	0.80	314.7	

TC		Stand Table Summary														
Project										RDRKHILL						
T03N R07W S35 TA1										T03N R07W S35 TA1						
Twp	Rge	Sec	Tract	Type				Acres		Plots	Sample Trees			Page: 1		
03N	07W	35	001	A1				146.00		11	62			Date: 08/27/2011		
													Time: 12:46:44PM			
Spc	S	Sample		FF	Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	T o t a l s		
		DBH	Trees	16'	Tot				Net Cu.Ft.	Net Bd.Ft.		Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF
DF	L	15	1	88	86	2.252	2.76	4.50	18.3	70.0	2.35	82	315	343	120	46
DF	L	18	1	87	97	2.058	3.64	4.12	29.2	115.0	3.43	120	473	500	176	69
DF	L	19	2	87	113	2.807	5.53	8.42	26.0	106.7	6.24	219	898	911	320	131
DF	L	20	3	88	101	5.000	10.91	10.00	39.9	150.0	11.37	399	1,500	1,660	583	219
DF	L	21	1	87	111	1.512	3.64	4.54	31.3	126.7	4.04	142	574	590	207	84
DF	L	22	4	87	106	5.510	14.55	11.02	48.4	192.5	15.20	533	2,121	2,219	779	310
DF	L	24	1	88	122	1.157	3.64	3.47	44.0	190.0	4.35	153	660	635	223	96
DF	L	25	5	88	126	5.334	18.18	16.00	49.7	222.7	22.66	795	3,563	3,308	1,161	520
DF	L	26	2	88	123	1.973	7.27	5.92	53.8	246.7	9.08	319	1,460	1,325	465	213
DF	L	27	1	88	132	.915	3.64	2.74	62.6	293.3	4.89	172	805	714	251	118
DF	L	28	3	87	138	2.551	10.91	7.65	70.3	350.0	15.34	538	2,679	2,239	786	391
DF		Totals	24	88	113	31.069	84.65	78.39	44.3	192.0	98.95	3,472	15,049	14,447	5,069	2,197
DF	T	13	1	88	72	3.945	3.64	7.89	11.3	40.0	2.54	89	316	370	130	46
DF	T	14	3	87	81	10.205	10.91	20.41	14.9	55.0	8.66	304	1,123	1,265	444	164
DF	T	16	1	87	100	2.604	3.64	5.21	23.7	100.0	3.51	123	521	513	180	76
DF	T	17	2	88	93	4.614	7.27	9.23	26.5	105.0	6.98	245	969	1,019	358	141
DF	T	18	3	87	97	5.679	10.04	11.36	29.3	115.0	9.50	333	1,306	1,386	486	191
DF	T	19	3	88	115	5.541	10.91	16.62	26.3	108.9	12.48	438	1,810	1,822	639	264
DF	T	20	1	88	103	1.667	3.64	3.33	40.1	150.0	3.81	134	500	556	195	73
DF	T	21	2	87	111	3.024	7.27	9.07	31.3	126.7	8.08	284	1,149	1,180	414	168
DF	T	22	1	87	100	1.378	3.64	2.76	47.4	175.0	3.72	131	482	543	191	70
DF		Totals	17	87	94	38.656	60.95	85.88	24.2	95.2	59.28	2,080	8,175	8,655	3,037	1,194
WH	L	8	1	87	62	10.417	3.64	10.42	5.1	30.0	1.70	53	313	248	78	46
WH	L	9	3	87	73	22.718	10.04	22.72	8.7	50.0	6.34	198	1,136	926	289	166
WH	L	10	1	88	61	6.667	3.64	6.67	10.8	50.0	2.31	72	333	338	106	49
WH	L	11	1	87	79	5.510	3.64	11.02	8.3	35.0	2.93	91	386	427	134	56
WH	L	12	2	88	82	8.149	6.40	16.30	11.9	40.0	6.22	194	652	907	284	95
WH	L	13	4	87	94	15.780	14.55	31.56	15.6	58.7	15.80	494	1,854	2,306	721	271
WH	L	15	2	88	95	5.215	6.40	10.43	22.9	94.3	7.63	239	984	1,114	348	144
WH	L	16	1	87	99	2.604	3.64	5.21	27.4	115.0	4.57	143	599	667	208	87
WH	L	20	1	88	108	1.667	3.64	5.00	31.0	130.0	4.96	155	650	724	226	95
WH	L	25	1	88	135	1.067	3.64	3.20	58.4	273.3	5.98	187	875	873	273	128
WH		Totals	17	87	80	79.794	59.20	122.52	14.9	63.5	58.44	1,826	7,781	8,532	2,666	1,136
GF	L	8	1	87	50	10.417	3.64	10.42	4.6	20.0	1.06	48	208	155	71	30
GF	L	20	1	88	110	1.667	3.64	5.00	31.0	130.0	3.41	155	650	498	226	95
GF		Totals	2	87	58	12.084	7.27	15.42	13.2	55.7	4.47	203	858	653	297	125
RA	L	17	1	88	102	2.307	3.64	4.61	32.9	130.0	4.18	152	600	610	222	88
RA		Totals	1	88	102	2.307	3.64	4.61	32.9	130.0	4.18	152	600	610	222	88
NF	L	13	1	88	85	3.945	3.64	7.89	13.5	55.0	2.56	107	434	374	156	63
NF		Totals	1	88	85	3.945	3.64	7.89	13.5	55.0	2.56	107	434	374	156	63
Totals		62		87	88	167.855	219.35	314.70	24.9	104.5	227.88	7840	32,897	33,271	11,447	4,803

TC TLOGSTVB				Log Stock Table - MBF																
				Project: RDRKHILL																
T03N R07W S35 TA2										T03N R07W S35 TA2										
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		Page		1		
03N		07W		35		001		A2		133.00		30		228		Date		8/27/2012		
																Time		12:51:17PM		
Spp	S	T	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
DF	L		2M	40		1,165		1,165	31.9					233		277	454	160	42	
DF	L		3M	26		2		2	.1				2							
DF	L		3M	28		8		8	.2			1	7							
DF	L		3M	30		9		9	.2			2	7							
DF	L		3M	32		18		18	.5				18							
DF	L		3M	34		24		24	.7			7	17							
DF	L		3M	35		4		4	.1				4							
DF	L		3M	36		37		37	1.0				22	14						
DF	L		3M	38		49		49	1.3			12	23	13						
DF	L		3M	40		446		446	12.2			14	124	251	58					
DF	L		4M	12		18		18	.5			18								
DF	L		4M	14		2		2	.1			2								
DF	L		4M	16		4		4	.1			4								
DF	L		4M	18		1		1	.0			1								
DF	L		4M	22		2		2	.1			2								
DF	L		4M	24		14		14	.4			14								
DF	L		4M	28		3		3	.1			3								
DF	L		4M	30		14		14	.4			14								
DF	L		4M	32		8		8	.2			8								
DF	L		4M	34		10		10	.3			10								
DF	L		4M	36		3		3	.1			3								
DF	L		4M	38		46		46	1.3			46								
DF	L		4M	40		7		7	.2			7								
DF	T		2M	40		626		626	17.2					194		237	195			
DF	T		3M	28		3		3	.1			3								
DF	T		3M	32		97		97	2.7			52	45							
DF	T		3M	34		19		19	.5			4	15							
DF	T		3M	36		38		38	1.0			14	24							
DF	T		3M	40		763		763	20.9			98	359	269	38					
DF	T		4M	12		14		14	.4			14								
DF	T		4M	14		2		2	.1			2								
DF	T		4M	16		21		21	.6			21								
DF	T		4M	18		20		20	.5			20								
DF	T		4M	20		11		11	.3			11								
DF	T		4M	22		27		27	.7			27								
DF	T		4M	24		34		34	.9			34								
DF	T		4M	26		20		20	.6		2	19								
DF	T		4M	28		9		9	.2			9								
DF	T		4M	30		25		25	.7			25								
DF	T		4M	32		9		9	.3			9								
DF	T		4M	34		4		4	.1			4								
DF	T		4M	36		3		3	.1			3								
DF	T		4M	38		5		5	.2			5								
DF	T		4M	40		7		7	.2			7								
DF			Totals			3,648		3,648	62.5		2	546	667	547	523	514	648	160	42	
WH	L		2M	40		609		609	30.5					122		169	318			
WH	L		3M	22		2		2	.1			2								
WH	L		3M	28		6		6	.3				6							
WH	L		3M	30		6		6	.3					6						

TC TLOGSTVB				Log Stock Table - MBF																																			
				Project: RDRKHILL																																			
T03N R07W S35 TA2										T03N R07W S35 TA2																													
Twp		Rge		Sec		Tract		Type		Acres		Plots		Sample Trees		Page		2																					
03N		07W		35		001		A2		133.00		30		228		Date		8/27/2012																					
																Time		12:51:17PM																					
S		So Gr		Log		Gross		%		Net		%		Net Volume by Scaling Diameter in Inches																									
Spp		T		rt de		Len		MBF		Def		MBF		Spc		2-3		4-5		6-7		8-9		10-11		12-13		14-15		16-19		20-23		24-29		30-39		40+	
WH		L		3M		32		14				14		.7						14				7															
WH		L		3M		34		13				13		.7						7		7																	
WH		L		3M		36		25				25		1.3				4		21																			
WH		L		3M		38		14				14		.7						14																			
WH		L		3M		40		273				273		13.7				37		94		142																	
WH		L		4M		12		10				10		.5				10																					
WH		L		4M		14		2				2		.1				2																					
WH		L		4M		16		1				1		.1				1																					
WH		L		4M		18		3				3		.2				3																					
WH		L		4M		28		2				2		.1				2																					
WH		L		4M		30		23				23		1.2				23																					
WH		L		4M		32		11				11		.5				11																					
WH		L		4M		36		21				21		1.0				21																					
WH		T		2M		40		368				368		18.4						28		118		102		120													
WH		T		3M		28		9				9		.4				9																					
WH		T		3M		32		10				10		.5				10																					
WH		T		3M		34		23				23		1.2				23																					
WH		T		3M		36		51				51		2.6				27		25																			
WH		T		3M		38		13				13		.7				8				5																	
WH		T		3M		40		360				360		18.0				9		143		194		14															
WH		T		4M		12		11				11		.6				11																					
WH		T		4M		14		17				17		.8				17																					
WH		T		4M		16		5				5		.2				5																					
WH		T		4M		18		3				3		.2				3																					
WH		T		4M		26		18				18		.9				18																					
WH		T		4M		30		4				4		.2				4																					
WH		T		4M		32		11				11		.6				11																					
WH		T		4M		36		28				28		1.4				28																					
WH		T		4M		38		32				32		1.6				32																					
WH				Totals				1,998				1,998		34.2				312		342		381		254		271		439											
NF		L		2M		40		125				125		68.7						29		29		21		46													
NF		L		3M		32		6				6		3.5				6				6																	
NF		L		3M		38		6				6		3.3				6																					
NF		L		3M		40		37				37		20.4				16		10		12																	
NF		L		4M		12		2				2		1.2				2																					
NF		L		4M		16		3				3		1.8				3																					
NF		L		4M		18		1				1		.6				1																					
NF		L		4M		22		1				1		.5				1																					
NF				Totals				181				181		3.1				29		10		18		29		29		21		46									
RA		L		4M		28		8				8		100.0				8																					
RA				Totals				8				8		.1				8																					
Total All Species								5,836				5,836		100.0		2		896		1018		946		806		814		1108		205		42							

T	Species, Sort Grade - Board Foot Volumes (Type)														Page 1				
Project: RDRKHILL														Date	8/27/2012				
														Time	12:51:17PM				
T03N R07W S35 TA2														T03N R07W S35 TA2					
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt										
03N	07W	35	001	A2	133.00	30	228	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	CF/ Lf								
DF	L	2M	61	8,759	8,759	1,165	55	45			100	40	15	381	2.00	23.0			
DF	L	3M	32	4,487	4,487	597	90	10		3	8	89	38	9	122	0.84	36.7		
DF	L	4M	7	980	980	130	100		18	25	14	43	23	6	30	0.38	32.2		
DF	L	Totals	32	14,226	14,226	1,892	35	37	28	1	3	3	93	33	10	155	1.08	91.9	
DF	T	2M	35	4,709	4,709	626	69	31			100	40	14	306	1.66	15.4			
DF	T	3M	52	6,910	6,910	919	96	4		0	13	87	38	8	98	0.62	70.2		
DF	T	4M	13	1,586	1,586	211	1	99	32	54	6	7	21	6	26	0.30	61.9		
DF	T	Totals	30	13,205	13,205	1,756	0	62	27	11	4	7	7	82	31	8	90	0.67	147.4
WH	L	2M	58	4,581	4,581	609	67	33			100	40	15	351	1.89	13.1			
WH	L	3M	34	2,652	2,652	353	100			4	8	88	38	9	111	0.77	23.9		
WH	L	4M	8	546	546	73	100		22	35	15	29	22	6	29	0.36	18.7		
WH	L	Totals	18	7,779	7,779	1,035	41	39	19	2	4	4	91	33	9	140	0.99	55.7	
WH	T	2M	38	2,768	2,768	368	7	78	15			100	40	14	286	1.58	9.7		
WH	T	3M	48	3,506	3,506	466	97	3		2	7	91	38	8	105	0.69	33.3		
WH	T	4M	14	971	971	129	100		28	17	9	46	22	6	30	0.33	32.4		
WH	T	Totals	17	7,245	7,245	964	63	31	6	4	3	5	88	31	8	96	0.73	75.3	
NF	L	2M	68	937	937	125	63	37			100	40	15	357	1.94	2.6			
NF	L	3M	27	371	371	49	100				13	87	39	8	90	0.68	4.1		
NF	L	4M	5	55	55	7	100		87	13			15	6	17	0.37	3.2		
NF	L	Totals	3	1,364	1,364	181	31	43	25	4	1	3	92	31	9	137	1.06	10.0	
RA	L	4M	100	63	63	8	100			100			28	6	30	0.27	2.1		
RA	L	Totals	0	63	63	8	100			100			28	6	30	0.27	2.1		
Type Totals				43,881	43,881	5,836	0	49	33	18	3	4	5	88	32	9	115	0.84	382.4

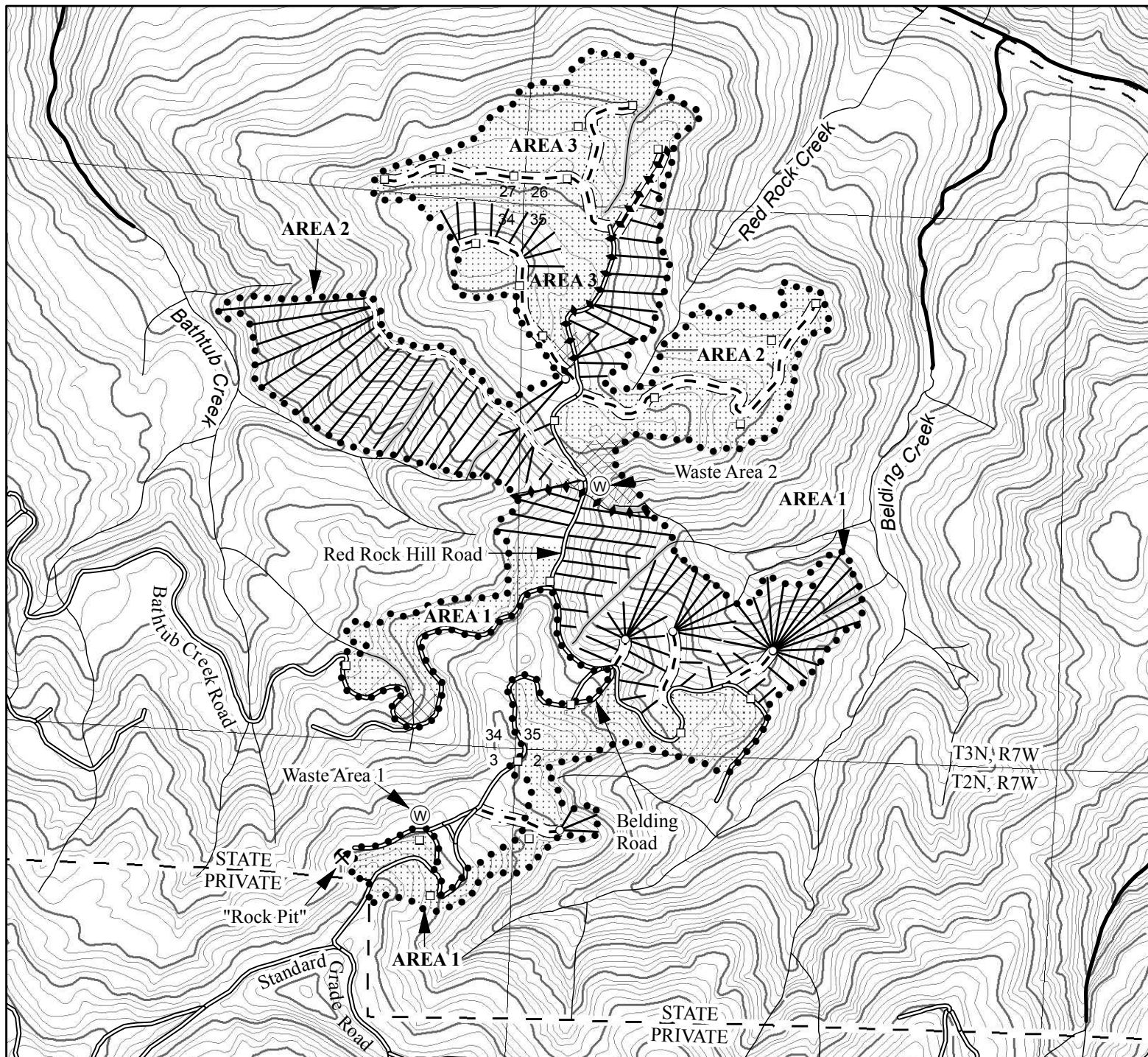
TC		TSTNDSUM															Stand Table Summary																			
																	Project										RDRKHILL									
T03N R07W S35 TA2																											T03N R07W S35 TA2									
Twp		Rge		Sec		Tract		Type				Acres		Plots		Sample Trees				Page:		1														
03N		07W		35		001		A2				133.00		30		228				Date:		08/27/2011														
																				Time:		12:51:17PM														
Spc	S T	Sample		FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Net		Tons	Totals																			
		DBH	Trees						Cu.Ft.	Bd.Ft.				Cunits	MBF																					
DF	L	12	1	87	85	1.122	.93	2.24	10.7	40.0	.68	24	90	91	32	12																				
DF	L	14	3	87	101	2.563	2.78	5.13	18.6	78.3	2.71	95	401	361	127	53																				
DF	L	15	3	88	92	2.264	2.78	4.53	18.9	75.0	2.44	86	340	325	114	45																				
DF	L	16	8	88	107	5.315	7.41	10.63	24.8	104.9	7.51	264	1,115	999	351	148																				
DF	L	17	4	87	101	2.415	3.70	4.83	27.8	116.3	3.83	134	562	510	179	75																				
DF	L	18	8	87	106	4.655	8.22	10.59	28.8	114.2	8.70	305	1,209	1,157	406	161																				
DF	L	19	6	88	114	2.894	5.56	7.25	29.6	116.9	6.11	214	847	812	285	113																				
DF	L	20	4	88	107	1.711	3.70	5.13	26.9	105.0	3.94	138	539	524	184	72																				
DF	L	21	4	88	112	1.932	4.59	5.41	34.0	140.5	5.24	184	760	697	245	101																				
DF	L	22	6	87	107	2.252	5.96	6.76	34.2	145.5	6.58	231	983	875	307	131																				
DF	L	23	6	87	119	2.200	6.37	6.60	40.1	177.7	7.54	264	1,173	1,002	352	156																				
DF	L	24	3	87	112	1.027	3.19	3.08	41.5	174.7	3.64	128	538	485	170	72																				
DF	L	25	3	88	125	1.070	3.59	3.21	49.7	220.4	4.55	160	708	605	212	94																				
DF	L	26	7	87	121	2.098	7.70	6.29	52.6	233.5	9.44	331	1,470	1,256	441	196																				
DF	L	27	3	87	120	.922	3.67	2.77	57.5	259.7	4.53	159	718	603	212	96																				
DF	L	28	1	88	127	.217	.93	.65	63.7	293.3	1.18	41	191	157	55	25																				
DF	L	29	4	87	116	.982	4.52	2.95	63.5	286.6	5.33	187	844	709	249	112																				
DF	L	30	1	88	123	.189	.93	.57	73.2	346.7	1.18	41	196	157	55	26																				
DF	L	31	1	87	138	.346	1.82	1.04	84.6	420.0	2.50	88	436	333	117	58																				
DF	L	32	2	88	130	.329	1.85	.99	85.2	416.7	2.39	84	411	318	112	55																				
DF	L	33	1	88	131	.161	.93	.48	90.9	450.0	1.25	44	217	166	58	29																				
DF	L	35	1	88	140	.272	1.82	.81	112.0	586.7	2.60	91	478	346	121	64																				
DF		Totals	80	87	109	36.933	82.93	91.93	35.8	154.7	93.90	3,295	14,226	12,488	4,382	1,892																				
DF	T	8	3	88	63	7.831	2.78	7.83	4.8	26.6	1.07	37	208	142	50	28																				
DF	T	9	6	88	69	15.341	6.78	15.34	8.3	41.5	3.62	127	637	481	169	85																				
DF	T	10	2	88	74	3.430	1.85	3.43	12.1	60.0	1.19	42	206	158	55	27																				
DF	T	11	3	88	78	4.235	2.78	4.24	14.8	60.0	1.79	63	254	238	84	34																				
DF	T	12	6	87	94	7.179	5.56	14.36	11.9	49.9	4.87	171	716	648	227	95																				
DF	T	13	9	88	90	9.733	8.74	19.47	13.7	55.0	7.60	267	1,071	1,011	355	142																				
DF	T	14	7	88	99	6.129	6.48	12.26	17.6	74.8	6.15	216	917	818	287	122																				
DF	T	15	5	87	95	3.826	4.63	7.65	19.2	77.1	4.19	147	590	557	195	78																				
DF	T	16	5	88	97	3.677	5.04	7.35	23.2	92.8	4.86	171	682	647	227	91																				
DF	T	17	6	88	112	4.797	7.59	12.11	23.4	98.7	8.07	283	1,196	1,073	377	159																				
DF	T	18	6	87	113	4.194	7.26	11.00	25.9	104.0	8.12	285	1,144	1,080	379	152																				
DF	T	19	3	88	113	2.069	4.07	5.06	31.2	122.7	4.49	158	621	598	210	83																				
DF	T	20	3	88	120	1.460	3.19	4.38	30.1	127.6	3.76	132	559	500	175	74																				
DF	T	21	5	87	119	2.256	5.44	6.77	33.2	143.2	6.40	225	969	851	299	129																				
DF	T	22	4	88	115	2.072	5.41	6.22	36.1	161.7	6.40	225	1,005	852	299	134																				
DF	T	24	2	87	107	1.002	3.15	2.43	50.5	214.6	3.50	123	521	465	163	69																				
DF	T	25	4	88	131	1.730	5.82	5.19	51.9	236.9	7.67	269	1,229	1,021	358	164																				
DF	T	26	1	88	141	.362	1.33	1.08	59.1	276.7	1.83	64	300	243	85	40																				
DF	T	28	1	88	132	.424	1.82	1.27	64.5	296.7	2.34	82	378	311	109	50																				
DF		Totals	81	88	90	81.748	89.71	147.44	20.9	89.6	87.92	3,085	13,205	11,693	4,103	1,756																				
WH	L	11	1	88	66	2.750	1.82	2.75	14.8	60.0	1.31	41	165	174	54	22																				
WH	L	14	2	87	103	3.453	3.63	6.91	19.3	82.4	4.26	133	569	566	177	76																				
WH	L	15	1	88	108	1.583	1.82	3.17	22.8	105.0	2.31	72	332	307	96	44																				
WH	L	16	3	88	89	3.272	4.48	6.54	22.5	86.4	4.70	147	566	625	195	75																				
WH	L	17	1	88	94	1.222	1.82	2.44	27.0	110.0	2.11	66	269	281	88	36																				
WH	L	18	1	88	100	.524	.93	1.05	34.4	130.0	1.15	36	136	153	48	18																				
WH	L	19	3	87	103	1.853	3.67	3.71	40.1	150.0	4.75	149	556	632	198	74																				
WH	L	20	3	88	109	2.073	4.48	6.22	30.1	123.9	5.98	187	770	796	249	102																				

TC		TSTNDSUM														
Stand Table Summary																
Project RDRKHILL																
T03N R07W S35 TA2													T03N R07W S35 TA2			
Twp	Rge	Sec	Tract	Type				Acres		Plots	Sample Trees			Page:	2	
03N	07W	35	001	A2				133.00		30	228			Date:	08/27/2011	
													Time:	12:51:17PM		
Spc	S	Sample		FF	Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	T o t a l s		
		DBH	Trees	16'	Tot				Net Cu.Ft.	Net Bd.Ft.		Cu.Ft.	Bd.Ft.	Tons	Cunits	MBF
WH	L	21	2	88	115	1.509	3.63	4.53	36.6	163.3	5.31	166	739	706	221	98
WH	L	22	2	88	107	.856	2.26	2.57	36.3	155.3	2.98	93	399	397	124	53
WH	L	23	4	87	115	2.211	6.30	6.63	41.9	180.1	8.88	278	1,194	1,182	369	159
WH	L	24	3	88	117	1.297	4.07	3.89	47.9	211.4	5.96	186	823	793	248	109
WH	L	25	2	88	102	.776	2.67	2.33	46.0	196.6	3.43	107	458	456	143	61
WH	L	26	2	88	127	.985	3.63	2.95	59.6	271.7	5.63	176	802	749	234	107
WH		Totals	30	88	101	24.364	45.19	55.68	33.0	139.7	58.77	1,836	7,779	7,816	2,442	1,035
WH	T	9	1	87	71	4.606	1.82	4.61	7.1	30.0	1.05	33	138	139	43	18
WH	T	10	1	88	67	3.328	1.82	3.33	11.5	60.0	1.22	38	200	163	51	27
WH	T	11	1	87	84	2.907	1.82	5.81	8.3	35.0	1.54	48	203	205	64	27
WH	T	12	1	87	77	2.311	1.82	4.62	10.7	45.0	1.59	50	208	211	66	28
WH	T	13	2	87	81	4.032	3.63	8.06	13.9	55.0	3.59	112	444	478	149	59
WH	T	14	2	87	93	2.893	3.15	5.79	19.2	78.8	3.55	111	456	472	147	61
WH	T	15	2	87	108	2.958	3.63	5.92	24.4	105.0	4.62	144	621	614	192	83
WH	T	16	3	88	106	3.433	4.56	6.87	24.8	103.1	5.45	170	708	725	227	94
WH	T	17	3	88	113	3.596	5.45	8.41	27.0	112.7	7.27	227	949	967	302	126
WH	T	18	3	87	106	2.638	4.56	6.36	28.7	112.9	5.85	183	718	778	243	96
WH	T	19	1	88	104	.922	1.82	2.77	26.9	106.7	2.38	74	295	317	99	39
WH	T	21	1	88	115	.755	1.82	2.26	36.6	163.3	2.65	83	370	353	110	49
WH	T	22	2	88	115	1.375	3.63	4.13	38.2	163.3	5.04	158	674	670	209	90
WH	T	23	2	88	120	.950	2.74	2.85	43.6	190.0	3.98	124	542	529	165	72
WH	T	24	2	88	120	.910	2.74	2.73	45.2	203.2	3.95	123	555	525	164	74
WH	T	25	1	87	110	.272	.93	.81	48.2	203.3	1.26	39	166	167	52	22
WH		Totals	28	87	93	37.885	45.89	75.33	22.8	96.2	54.99	1,718	7,245	7,313	2,285	964
NF	L	12	1	88	84	1.179	.93	2.36	10.7	40.0	.60	25	94	80	33	13
NF	L	17	2	88	75	1.204	1.85	2.41	21.6	77.2	1.25	52	186	166	69	25
NF	L	18	1	87	103	.755	1.33	1.51	32.9	130.0	1.19	50	196	159	66	26
NF	L	21	1	87	101	.571	1.33	1.14	45.2	175.0	1.24	52	200	164	69	27
NF	L	25	1	87	103	.394	1.33	1.18	42.1	176.7	1.19	50	209	159	66	28
NF	L	30	1	87	119	.272	1.33	.81	72.4	343.3	1.42	59	280	188	78	37
NF	L	31	1	87	123	.183	.93	.55	76.8	363.3	1.01	42	199	134	56	26
NF		Totals	8	88	92	4.557	9.04	9.96	33.1	136.9	7.90	329	1,364	1,051	438	181
RA	L	9	1	88	55	2.096	.93	2.10	7.6	30.0	.44	16	63	59	21	8
RA		Totals	1	88	55	2.096	.93	2.10	7.6	30.0	0.44	16	63	59	21	8
Totals		228		88	96	187.583	273.69	382.44	26.9	114.7	303.91	10280	43,881	40,420	13,672	5,836

TC TLOGSTVB				Log Stock Table - MBF															
				Project: RDRKHILL															
T03N R07W S35 TA3												T03N R07W S35 TA3							
Twp	Rge	Sec	Tract	Type				Acres		Plots		Sample Trees				Page 2			
03N	07W	35	001	A3				86.00		18		112				Date 8/27/2012			
																Time 12:55:14PM			
S Spp	So T	Gr rt	Log de Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
								2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
NF	L		2M 40	43		43	82.8						21	22					
NF	L		3M 34	4		4	8.4			4									
NF	L		3M 40	5		5	8.8			5									
NF Totals				52		52	1.2			9			21	22					
Total All Species				4,326		4,326	100.0			538	595	769	418	847	915	246			

T	Species, Sort Grade - Board Foot Volumes (Type)										Page	1						
Project: RDRKHILL											Date	8/27/2012						
											Time	12:55:14PM						
T03N R07W S35 TA3											T03N R07W S35 TA3							
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt									
03N	07W	35	001	A3	86.00	18	112	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	L	2M	72	15,968	15,968	1,373		50	50				100	40	15	388	1.98	
DF	L	3M	22	4,932	4,932	424		100			5	11	84	37	9	120	0.80	
DF	L	4M	6	1,231	1,231	106		100		18	65		17	23	6	29	0.35	
DF	L	Totals	44	22,131	22,131	1,903		28	36	36	1	5	3	92	33	10	178	1.16
DF	T	2M	36	6,809	6,809	586		69	31				100	40	14	296	1.63	
DF	T	3M	50	9,406	9,406	809		98	2			1	99	40	9	118	0.70	
DF	T	4M	14	2,429	2,429	209		100		12	48	22	18	24	6	31	0.34	
DF	T	Totals	37	18,644	18,644	1,603		63	26	11	2	6	3	89	33	8	104	0.73
WH	L	2M	53	4,762	4,762	410		80	20				100	40	14	322	1.78	
WH	L	3M	38	3,432	3,432	295		100					27	36	9	106	0.79	
WH	L	4M	9	731	731	63		100		28	47	25		19	6	22	0.33	
WH	L	Totals	18	8,925	8,925	768		47	42	11	2	4	13	81	30	9	112	0.92
NF	L	2M	82	500	500	43		100					100	40	13	263	1.58	
NF	L	3M	18	104	104	9		100					49	37	6	55	0.60	
NF	L	Totals	1	604	604	52		17	83			8	92	38	10	159	1.11	
Type Totals				50,305	50,305	4,326		44	34	22	1	5	5	89	33	9	130	0.91

TC		TSTNDSUM															Stand Table Summary																			
																	Project										RDRKHILL									
T03N R07W S35 TA3																											T03N R07W S35 TA3									
Twp		Rge		Sec		Tract		Type			Acres		Plots		Sample Trees		Page:		1																	
03N		07W		35		001		A3			86.00		18		112		Date:		08/27/2011																	
																	Time:		12:55:13PM																	
S		Av							Average Log		Net		Net		Net		Totals																			
T		Sample		FF	Ht	Trees/	BA/	Logs	Net	Net	Tons/	Cu.Ft.	Bd.Ft.																							
Sp	T	DBH	Trees	16'	Tot	Acre	Acre	Acre	Cu.Ft.	Bd.Ft.	Acre	Acre	Acre	Tons	Cunits	MBF																				
DF	L	9	2	87	74	10.060	4.44	10.06	8.2	40.0	2.35	82	402	202	71	35																				
DF	L	13	1	88	122	2.411	2.22	4.82	18.0	90.0	2.48	87	434	213	75	37																				
DF	L	17	2	87	114	3.838	6.05	11.51	20.2	86.7	6.62	232	998	570	200	86																				
DF	L	18	2	88	120	2.969	5.25	8.91	23.8	96.7	6.04	212	861	520	182	74																				
DF	L	19	2	88	104	3.073	6.05	7.68	28.2	104.0	6.17	216	799	531	186	69																				
DF	L	20	4	87	136	5.158	11.30	15.47	34.0	156.0	15.00	526	2,414	1,290	453	208																				
DF	L	21	3	88	128	3.439	8.27	10.32	34.9	153.3	10.26	360	1,582	883	310	136																				
DF	L	22	2	88	111	1.699	4.44	5.10	35.5	158.4	5.16	181	808	444	156	69																				
DF	L	23	3	88	136	3.145	9.08	9.44	44.9	206.7	12.07	424	1,950	1,038	364	168																				
DF	L	24	4	88	129	2.812	8.89	8.44	48.2	223.3	11.59	407	1,884	997	350	162																				
DF	L	25	3	88	147	1.956	6.67	5.87	58.1	276.7	9.72	341	1,623	836	293	140																				
DF	L	26	2	87	127	1.201	4.44	3.60	55.4	255.1	5.69	200	919	489	172	79																				
DF	L	27	4	87	130	2.631	10.49	7.89	61.5	289.3	13.85	486	2,284	1,191	418	196																				
DF	L	28	2	87	115	1.051	4.44	3.15	58.3	256.3	5.23	184	808	450	158	69																				
DF	L	29	2	88	119	.969	4.44	2.91	66.3	311.7	5.49	193	906	472	166	78																				
DF	L	30	2	88	153	1.232	6.05	4.93	63.2	326.2	8.88	312	1,608	764	268	138																				
DF	L	32	3	88	132	1.484	8.27	4.45	85.5	415.8	10.84	380	1,851	933	327	159																				
DF		Totals	43	88	116	49.129	110.81	124.55	38.7	177.7	137.45	4,823	22,131	11,821	4,148	1,903																				
DF	T	12	4	87	90	13.270	10.49	26.54	10.7	41.0	8.10	284	1,089	697	244	94																				
DF	T	13	2	87	122	6.564	6.05	13.13	18.0	90.0	6.74	236	1,181	580	203	102																				
DF	T	14	8	88	102	20.226	20.99	40.45	18.0	77.4	20.74	728	3,130	1,784	626	269																				
DF	T	15	3	88	103	6.841	8.27	13.68	21.5	94.4	8.37	294	1,292	720	253	111																				
DF	T	16	4	88	95	8.666	12.10	17.33	22.9	90.0	11.32	397	1,560	974	342	134																				
DF	T	17	2	87	95	4.074	6.05	8.15	25.0	95.0	5.80	204	774	499	175	67																				
DF	T	18	4	88	120	5.484	9.69	16.45	23.9	96.7	11.22	394	1,590	965	339	137																				
DF	T	19	2	88	104	3.073	6.05	6.15	35.3	130.0	6.19	217	799	532	187	69																				
DF	T	20	2	87	136	2.405	5.25	7.22	33.3	155.3	6.86	241	1,120	590	207	96																				
DF	T	21	3	87	129	3.563	8.27	10.69	34.5	150.6	10.51	369	1,610	904	317	138																				
DF	T	22	1	87	95	.842	2.22	1.68	46.1	175.0	2.21	78	295	190	67	25																				
DF	T	23	2	88	136	1.793	5.25	5.38	45.6	206.7	6.99	245	1,111	601	211	96																				
DF	T	24	3	88	129	2.087	6.67	6.26	48.2	223.3	8.60	302	1,399	739	259	120																				
DF	T	25	1	88	147	.673	2.22	2.02	55.6	253.3	3.20	112	512	275	97	44																				
DF	T	27	2	88	124	1.556	6.05	4.67	57.1	253.3	7.60	267	1,183	654	229	102																				
DF		Totals	43	88	106	81.118	115.63	179.80	24.3	103.7	124.45	4,367	18,644	10,703	3,755	1,603																				
WH	L	9	1	87	67	5.030	2.22	5.03	8.2	40.0	1.32	41	201	113	35	17																				
WH	L	11	1	87	53	3.493	2.22	3.49	11.9	50.0	1.33	41	175	114	36	15																				
WH	L	15	2	88	104	3.622	4.44	7.24	24.0	100.0	5.57	174	724	479	150	62																				
WH	L	16	5	87	65	9.108	12.72	18.22	16.9	55.0	9.87	308	1,002	849	265	86																				
WH	L	17	1	88	92	1.410	2.22	2.82	28.8	110.0	2.60	81	310	223	70	27																				
WH	L	18	1	87	95	1.258	2.22	2.52	33.9	125.0	2.73	85	314	234	73	27																				
WH	L	20	3	88	128	3.936	8.27	11.81	33.2	148.9	12.55	392	1,758	1,079	337	151																				
WH	L	21	4	88	105	4.363	10.49	13.09	32.5	130.0	13.61	425	1,702	1,171	366	146																				
WH	L	22	3	87	108	3.134	8.27	9.40	36.5	156.7	10.98	343	1,473	945	295	127																				
WH	L	24	3	87	113	2.122	6.67	6.37	46.2	198.9	9.41	294	1,266	809	253	109																				
WH		Totals	24	87	87	37.474	59.76	79.98	27.3	111.6	69.97	2,186	8,925	6,017	1,880	768																				
NF	L	20	1	87	93	1.019	2.22	2.04	38.4	145.0	1.88	78	295	162	67	25																				
NF	L	22	1	87	101	.881	2.22	1.76	47.4	175.0	2.01	84	308	172	72	27																				
NF		Totals	2	87	97	1.900	4.44	3.80	42.6	158.9	3.88	162	604	334	139	52																				
Totals			112	88	105	169.621	290.63	388.13	29.7	129.6	335.75	11538	50,305	28,874	9,922	4,326																				



LEGEND

- Timber Sale Boundary
- ◆◆ Area Boundary
- Surfaced Road
- - - Unsurfaced Road
- - - New Construction
- - - Right-of-Way Boundary
- Type F Stream
- Type N Stream
- Stream Buffer
- Tractor Landing
- Cable Landing
- ▨ Tractor Yarding Area
- ▤ Cable Yarding Area
- ××× Thinning Not Required Area
- ▬ ODF Ownership Boundary
- Sections
- 200 Foot Contour Band
- 40 Foot Contour Band

LOGGING PLAN

FOR TIMBER SALE CONTRACT # 341-13-33
RED ROCK HILL
PORTIONS OF SECTIONS 26, 27, 34, & 35 T3N, R7W, W.M.
AND PORTIONS OF SECTIONS 2 & 3, T2N, R7W, W.M.
TILLAMOOK COUNTY, OREGON

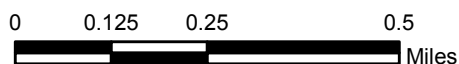
Forest Grove District GIS

August, 2012

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

1:15,840

1 inch = .25 miles



APPROXIMATE NET ACRES

	TRACTOR	CABLE
AREA 1	67	79
AREA 2	45	88
AREA 3	76	10
AREA 4 (R/W)	8	0
TOTAL	196	177