



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Codey Canyon
Sale 341-13-77

District: Tillamook

Date: March 15, 2013

cost summary

| | Conifer | Hardwood | Total |
|--------------------------------|----------------|--------------------------|--------------|
| Gross Timber Sale Value | \$298,151.68 | \$133,380.00 | \$431,531.68 |
| | | Project Work: | \$(9,410.00) |
| | | Advertised Value: | \$422,121.68 |



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timber description

Location: Portions of Section 1, T1S, R8W, portions of Section 31, T1N, R7W, and portions of Section 6, T1S, R7W, W.M., Tillamook County, Oregon.

Stand Stocking: 60%

| SpecieName | AvgDBH | Amortization (%) | Recovery (%) |
|-----------------------|--------|------------------|--------------|
| Douglas - Fir | 21 | 0 | 95 |
| Western Hemlock / Fir | 24 | 0 | 95 |
| Alder (Red) | 15 | 0 | 90 |

| Volume by Grade | 2S | 3S | 4S | Camprun | Total |
|-----------------------|-----|-----|-----|---------|-------|
| Douglas - Fir | 766 | 428 | 108 | 0 | 1,302 |
| Western Hemlock / Fir | 128 | 133 | 8 | 0 | 269 |
| Alder (Red) | 0 | 0 | 0 | 540 | 540 |
| Total | 894 | 561 | 116 | 540 | 2,111 |



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comments: Pond Values Used: 4th Quarter Calendar Year 2012.

Western redcedar and Other Cedars Stumpage Price = Pond Value
minus Logging Cost:
\$649/MBF = \$985/MBF - \$336/MBF

Pulp (Conifer and Hardwood) Price = \$25/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):

Non-Project Landings: (Construction = \$250 + Surface = \$875) x 2 =
\$2,250

Brand and Paint: \$2/MBF x 2,111 MBF = \$4,222

TOTAL Other Costs (with Profit & Risk to be added) = \$6,472

Other Costs (No Profit & Risk added):

Slash Piling and Sorting: \$5/acre x 90 (cable) acres = \$450

Equipment Cleaning: 5 x \$1,000/Piece = \$5,000

Snag Creation (girdling): \$10/snag x 220 snags = \$2,200

Trail Filter: 1 filter x \$75/filter = \$75

TOTAL Other Costs (No Profit & Risk added) = \$7,725

ROAD MAINTENANCE

Interim Maintenance:

Grade: (((\$250/Mile x 2.5 miles)+(100 move-in))/2,111 MBF =
\$.34/MBF

Final Maintenance:

Grade: \$500/Mile x 2.5 miles / 2,111 MBF = \$.59/MBF

Vibratory Roll: \$950/Mile x 2.5 miles / 2,111 MBF = \$1.13/MBF

TOTAL Maintenance Cost = \$2.06/MBF



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logging conditions

combination#: 1

| | | |
|--------------------------|---|---------------------------------|
| | Douglas - Fir | 83.00% |
| | Western Hemlock / Fir | 83.00% |
| | Alder (Red) | 83.00% |
| yarding distance: | Long (1,500 ft) | downhill yarding: No |
| logging system: | Cable: Large Tower >=70 | Process: Stroke Delimber |
| tree size: | Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF | |
| loads / day: | 5.0 | bd. ft / load: 3,600 |
| cost / mbf: | \$212.59 | |
| machines: | Log Loader (A) Stroke Delimber (A) Tower Yarder (Large) | |

combination#: 2

| | | |
|--------------------------|---|---------------------------------|
| | Douglas - Fir | 17.00% |
| | Western Hemlock / Fir | 17.00% |
| | Alder (Red) | 17.00% |
| yarding distance: | Short (400 ft) | downhill yarding: No |
| logging system: | Shovel | Process: Stroke Delimber |
| tree size: | Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF | |
| loads / day: | 8.0 | bd. ft / load: 4,000 |
| cost / mbf: | \$44.94 | |
| machines: | Stroke Delimber (B) | |



"STEWARDSHIP IN FORESTRY"

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District: Tillamook

Date: March 15, 2013

logging costs

| | | | |
|---------------------------|------------|---------------------------|------------|
| Operating Seasons: | 2.00 | Profit Risk: | 15.00% |
| Project Costs: | \$9,410.00 | Other Costs (P/R): | \$6,472.00 |
| Slash Disposal: | \$0.00 | Other Costs: | \$7,725.00 |

Miles of Road

Road Maintenance: \$2.06

| 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 | 3.9 |
| Western Hemlock / Fir | \$0.00 | 2.0 | 3.8 |
| Alder (Red) | \$0.00 | 3.0 | 3.5 |



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Codey Canyon
Sale 341-13-77

District: Tillamook

Date: March 15, 2013

logging costs breakdown

| Logging | Road Maint | Fire Protect | Hauling | Other P/R appl | Profit & Risk | Slash Disposal | Scaling | Other | Total |
|------------------------------|------------|--------------|---------|----------------|---------------|----------------|---------|--------|----------|
| Douglas - Fir | | | | | | | | | |
| \$184.09 | \$2.16 | \$4.15 | \$91.31 | \$3.07 | \$42.72 | \$0.00 | \$5.00 | \$3.66 | \$336.16 |
| Western Hemlock / Fir | | | | | | | | | |
| \$184.09 | \$2.16 | \$4.15 | \$93.70 | \$3.07 | \$43.08 | \$0.00 | \$5.00 | \$3.66 | \$338.91 |
| Alder (Red) | | | | | | | | | |
| \$184.09 | \$2.27 | \$4.15 | \$71.06 | \$3.07 | \$39.70 | \$0.00 | \$5.00 | \$3.66 | \$313.00 |

| Specie | Amortization | Pond Value | Stumpage | Amortized |
|-----------------------|--------------|------------|----------|-----------|
| Douglas - Fir | \$0.00 | \$544.35 | \$208.19 | \$0.00 |
| Western Hemlock / Fir | \$0.00 | \$439.61 | \$100.70 | \$0.00 |
| Alder (Red) | \$0.00 | \$560.00 | \$247.00 | \$0.00 |



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Codey Canyon
Sale 341-13-77

District: Tillamook

Date: March 15, 2013

summary

Amortized

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

Unamortized

| Specie | MBF | Value | Total |
|-----------------------|-------|----------|--------------|
| Douglas - Fir | 1,302 | \$208.19 | \$271,063.38 |
| Western Hemlock / Fir | 269 | \$100.70 | \$27,088.30 |
| Alder (Red) | 540 | \$247.00 | \$133,380.00 |

Gross Timber Sale Value

Recovery: \$431,531.68

Prepared by: Eric Foucht

Phone: 503-359-7473

PROJECT COST SUMMARY SHEET

Timber Sale: Codey Canyon

Sale Number: 341-13-77

PROJECT NO. 1: ROAD CONSTRUCTION

CONSTRUCTION

| <u>Road Segment</u> | <u>Length</u> | <u>Cost</u> |
|---------------------|---------------|-------------|
| A to B | 3+60 | \$950.39 |
| | 3+60 stations | |
| | 0.07 miles | |

TOTAL PROJECT NO. 1 COST = \$950.39

PROJECT NO. 2: SURFACING

| <u>Road Segment</u> | <u>Amount</u> | <u>Type</u> | <u>Cost</u> |
|---------------------|---------------|-------------|-------------|
| A to B | 295 cy | 6" - 0 | \$5,454.55 |
| Total | 295 cy | 6" - 0 | |

TOTAL PROJECT NO. 2 COST = \$5,454.55

PROJECT NO. 3: GRASS SEED AND FERTILIZE

| | |
|--|----------------|
| <u>Grass seed and fertilize areas of disturbed soil.</u> | <u>\$31.82</u> |
|--|----------------|

TOTAL PROJECT NO. 3 COST = \$31.82

MOVE IN & EQUIPMENT CLEANING \$2,969.84

TOTAL ALL PROJECTS \$9,406.60
TOTAL CREDITS \$9,410.00

SUMMARY OF CONSTRUCTION COST

Timber Sale: Codey Canyon

Timber Sale No. : 341-13-77

Road Segment: A to B

Construction : 3+60 stations
0.07 miles

PROJECT NO. 1

EXCAVATION

| | | | | | |
|---------------------------------|------|---------|----------|-------------------------|-----------------|
| Clearing and Grubbing (Scatter) | 0.29 | acres @ | \$980.00 | per acre = | \$283.47 |
| Balanced Road Construction | 3.60 | sta @ | \$90.00 | per sta = | \$324.00 |
| Construct 2 way Junction | 0.50 | sta @ | \$90.00 | per sta = | \$45.00 |
| Landing | 1 | ea @ | \$200.00 | per ea = | \$200.00 |
| Grade and Roll (Outslope) | 3.60 | sta @ | \$27.20 | per sta = | \$97.92 |
| | | | | TOTAL EXCAVATION COSTS= | \$950.39 |

PROJECT NO. 1 TOTAL COST = \$950.39

PROJECT NO. 2:

SURFACING

| | | | | | |
|----------------|------------|--------------|---------------|---|-----------------------------|
| | 10 | " deep = | 53 cy/sta | | |
| A to B | 191 | cy of | 6" - 0 | @ | \$18.49 per cy = \$3,531.59 |
| 2 way Junction | 27 | cy of | 6" - 0 | @ | \$18.49 per cy = \$499.23 |
| Curve Widening | 24 | cy of | 6" - 0 | @ | \$18.49 per cy = \$443.76 |
| Landing | 53 | cy of | 6" - 0 | @ | \$18.49 per cy = \$979.97 |
| Total = | 295 | cy of | 6" - 0 | | |

PROJECT NO. 2 TOTAL COST = \$5,454.55

PROJECT NO. 3:

| | | | | | |
|---|------|---------|----------|------------|---------|
| Grass seed and fertilize areas of disturbed soil. | 0.14 | acres @ | \$220.00 | per acre = | \$31.82 |
|---|------|---------|----------|------------|---------|

PROJECT NO. 3 TOTAL COST = \$31.82

TOTAL COST = \$6,436.76

Move-In & Equipment Cleaning

Timber Sale: Codey Canyon
 Sale Number: 341-13-77

| LOWBOY HAUL (One-way) | | |
|-----------------------|--------------|--------------------|
| DIST. (mi) | ROAD | AVE SPEED (mph) |
| 13.5 | Main Lines | 7 |
| 0.0 | Steep Grades | 2 |

| No. | EQUIPMENT DESCRIPTION | Equipment Cleaning | Base Cost | Woods Cost | Pilot Cars | Within | | | Within | | |
|-----------------------------|------------------------------------|-----------------------|--------------|---------------|---------------|------------------------|------------------|----------------|----------------|--------------|-------------------|
| | | | | | | Area Move (\$/mile) | Begin Mileage | End Mileage | Total Miles | Area Cost | Total Cost |
| 1 | Graders | | \$108.00 | \$347.15 | | \$3.65 | 0.0 | 0.0 | 0.0 | \$0.00 | \$455.15 |
| 1 | Rollers (smooth/grid) & Compactors | | \$136.85 | \$350.75 | | \$5.00 | 0.0 | 0.0 | 0.0 | \$0.00 | \$487.60 |
| 1 | Tractor (D8) | \$1,000 | \$223.56 | \$446.53 | 2 | \$15.10 | 0.0 | 0.0 | 0.0 | \$0.00 | \$1,670.09 |
| 4 | Dump Truck (10 cy +) | | \$168.00 | \$189.00 | | \$2.85 | 0.0 | 0.0 | 0.0 | \$0.00 | \$357.00 |
| TOTAL MOVE-IN COSTS: | | | | | | | | | | | \$2,969.84 |

ROCKING COST COMPUTATIONS

Timber Sale: Codey Canyon

Road: A-B

HAULING TIME

Road Speed Time Factors:

50 mph x 10.00 miles per round trip = 12.00 min

20 mph x 1.80 miles per round trip = 5.40 min

5 mph x 3.67 miles per round trip = 44.04 min

Total Distance 15.47 miles

TOTAL HAUL TIME = 61.44 min

LOADING DELAY

5.00 min

DUMPING DELAY

2.00 min

(Dump or spread time can vary from 0.2 to 2.0 minute.

Use least time for spreading; use greater time when excessive maneuvering is required.)

Subtotal Cycle Time = 68.44 min

EFFICIENCY ADJUSTMENTS

Operator efficiency correction= 85%

Job efficiency correction= 85%

TOTAL CYCLE TIME = 94.73 min

TRUCK HAULING CAPACITY = 10 cy

TRUCK OPERATING COST = \$75.00/hr

HAULING COST = \$11.84/cy

PROCESSING COST = \$1.01/cy

PIT DEVELOPMENT COST = \$5.64/cy

TOTAL ROCKING COST = \$18.49/cy

**ROCK PROCESSING COSTS
CRUSHED ROCK**

Timber Sale: Codey Canyon

Sale Number: 341-13-77

Road Name: A-B

Length of road = 360 ft

Quantity of rock = 295 cy

Depth of rock = 10 in

Number of lifts = 2

Cost per lift = \$41.40/sta

Total Processing Cost = \$298.08

PROCESSING COST = \$1.01/cy

ROCK DEVELOPMENT COST SUMMARY

Timber Sale: Codey Canyon

Sale Number: 341-13-77

Pit Name: Fisherman's Access

| | | | |
|-------------|-------------|-------------------------|---------------|
| Swell: | <u>1.30</u> | Pit Run (trk measure) | <u>295 cy</u> |
| Shrinkage: | <u>1.16</u> | Total Truck Yardage: | <u>295 cy</u> |
| Drill Pct.: | <u>100%</u> | Total In Place Yardage: | <u>227 cy</u> |

| | | | | |
|------------------|---------------------|---------------|---|-----------------|
| Dig Rock: | <u>\$1.90</u> /cy x | <u>227 cy</u> | = | <u>\$431.15</u> |
| Sort Rock: | <u>\$0.50</u> /cy x | <u>295 cy</u> | = | <u>\$147.50</u> |
| Load Dump Truck: | <u>\$0.70</u> /cy x | <u>295 cy</u> | = | <u>\$206.50</u> |

Subtotal \$785.15

Move in Excavator \$578.52

Clean Up Pit \$300.00

Subtotal \$878.52

PIT DEVELOPMENT COST \$5.64/cy

TOTAL PRODUCTION COST \$1,663.67

Codey Canyon
341-13-77
Volume Summary (Shown in MBF)
JANUARY 2013

Area 1: Modified Clearcut (108 Acres)

| SPECIES | | 2 SAW | 3 SAW | 4 SAW | CAMPRUN | TOTAL |
|--------------------|----------------|--------------|--------------|--------------|----------------|--------------|
| Douglas-fir | Cruise Volume | 806 | 451 | 114 | | 1,371 |
| -5% | Hidden D&B | (40) | (23) | (6) | | (69) |
| | Total | 766 | 428 | 108 | | 1,302 |
| | <i>% Total</i> | <i>59</i> | <i>33</i> | <i>8</i> | | |

| SPECIES | | 2 SAW | 3 SAW | 4 SAW | CAMPRUN | TOTAL |
|------------------|----------------|--------------|--------------|--------------|----------------|--------------|
| Red alder | Cruise Volume | | | | 600 | 600 |
| -10% | Hidden D&B | | | | (60) | (60) |
| | Total | | | | 540 | 540 |
| | <i>% Total</i> | | | | <i>100</i> | |

| SPECIES | | 2 SAW | 3 SAW | 4 SAW | CAMPRUN | TOTAL |
|----------------|----------------|--------------|--------------|--------------|----------------|--------------|
| Hemlock | Cruise Volume | 135 | 140 | 8 | | 283 |
| -5% | Hidden D&B | (7) | (7) | (0) | | (14) |
| | Total | 128 | 133 | 8 | | 269 |
| | <i>% Total</i> | <i>48</i> | <i>49</i> | <i>3</i> | | |

SALE TOTALS

| SPECIES | 2 SAW | 3 SAW | 4 SAW | CAMPRUN | TOTAL (MBF) |
|--------------------|--------------|--------------|--------------|----------------|--------------------|
| Douglas-fir | 766 | 428 | 108 | | 1,302 |
| Red Alder | | | | 540 | 540 |
| Hemlock | 128 | 133 | 8 | | 269 |
| Total | 894 | 561 | 116 | 540 | 2,111 |

OREGON DEPARTMENT OF FORESTRY CRUISE REPORT *Codey Canyon*

1. **Type of Sale**

Regeneration harvest, Recovery.

2. **Legal Description**

Portions of Section 1, T1S, R8W, portions of Section 31, T1N, R7W, and portions of Section 6, T1S, R7W, W.M., Tillamook County, Oregon.

3. **Sale Acreage**

Sale acreage was determined by GPS and orthophotographs along with GIS.

| | ACRES | |
|--------------------------|--------------|------------|
| | <u>Gross</u> | <u>Net</u> |
| Area 1 (Clearcut) | 126 | 108 |

Gross Acres

Area within the Timber Sale Boundary signs

Net acres

Used for calculating the advertised volume.

Gross acres, less green tree retention, roads, Non-required thinning areas, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

4. **Cruising Procedures**

A. Cruise Method

Eighteen (18) plots were sampled on a rectangular grid pattern spaced 350' between plots and 700' between cruise lines.

All conifers 8 inches DBH and greater containing 20 net board feet and all hardwoods 9 inches DBH and greater containing 30 net board feet were sampled for tree species, DBH, form factor, merchantable height, visible defect and grade. Diameters were measured outside bark to the nearest inch and merchantable heights were recorded to the nearest foot. The point of tree observation was 4.5 feet on all plots.

B. Plot size

All plots were variable radius plots. A BAF of 33.61 was used for all species.

C. Grading System

Tree heights were measured to a 6" merchantable top for conifers, and 7" for

hardwoods. All measurements were outside the bark. All species were graded using Columbia River Log Scaling and Grading Bureau rules, favoring a 40' log.

5. **Computation Procedure**

The volumes and statistics for the timber cruised were computed using SuperACE 2004, developed by Atterbury Consultants, Inc. The standard error and the coefficient of variation for the cruise as based on net board feet per acre shown in the table below.

| Area | C.V. (%) | S.E. (%) |
|------|----------|----------|
| 1 | 64.5 | 15.6 |

6. **Hidden Defect and Breakage**

A 5% reduction was applied to conifers and a 10% reduction to hardwood volumes for hidden defect and breakage. This was in addition to visual defect deducted during the cruise.

7. **Timber Description**

This is a predominantly a Douglas-fir and alder stand with a minor component of hemlock.

| Sale Area – Species | DBH | Merchantable Top |
|---------------------|------|------------------|
| Douglas-fir | 20.5 | 5" |
| Western Hemlock | 23.8 | 5" |
| Alder | 14.7 | 6" |

8. **Cruiser Names/Dates**

2012, Cruised by ODF District Personnel

9. **Revenue Distribution**

FDF 100%

Tax Code: 9-2 100%

Deed Numbers: 159, 161, 169

10. **Attachments**

Stand Table

Volume Summary

Log Stock Table

Logging Plan

11. Stand and Log Stock Tables Species Key

DF – Douglas-fir take

RA – Red alder take

WH – Western hemlock take

Log Stock Table - MBF

T01N R07W S31 Ty0100 108.00

Project: CODEYCYN
Acres 108.00

Page 1
Date 1/16/2013
Time 6:28:33AM

| Spp | S T | So Gr rt de | Log Len | Gross MBF | Def % | Net MBF | % Spc | Net Volume by Scaling Diameter in Inches | | | | | | | | | | | | | |
|-----|--------|----------------|------------|--------------|----------|------------|----------|--|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-----|--|--|
| | | | | | | | | 2-3 | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 | 30-39 | 40+ | | |
| DF | | CH | 2M | 18 | | 16 | 16 | 1.1 | | | | | | | | | 16 | | | | |
| DF | | CH | 2M | 22 | | 13 | 13 | .9 | | | | | 13 | | | | | | | | |
| DF | | CH | 2M | 32 | | 21 | 21 | 1.5 | | | | | | | | | | | 21 | | |
| DF | | CH | 2M | 40 | | 764 | 757 | 54.9 | | | | | 113 | 89 | 440 | | 115 | | | | |
| DF | | CH | 3M | 19 | | 2 | 2 | .1 | | | | | 2 | | | | | | | | |
| DF | | CH | 3M | 22 | 4.0 | 19 | 18 | 1.3 | | | | 6 | 6 | 7 | | | | | | | |
| DF | | CH | 3M | 24 | | 6 | 6 | .4 | | 3 | | | 2 | | | | | | | | |
| DF | | CH | 3M | 27 | | 6 | 6 | .4 | | | | | 6 | | | | | | | | |
| DF | | CH | 3M | 28 | | 3 | 3 | .2 | | | | | 3 | | | | | | | | |
| DF | | CH | 3M | 32 | | 39 | 39 | 2.8 | | | | 39 | | | | | | | | | |
| DF | | CH | 3M | 33 | | 2 | 2 | .2 | | | | 2 | | | | | | | | | |
| DF | | CH | 3M | 36 | | 12 | 12 | .9 | | | | 4 | 9 | | | | | | | | |
| DF | | CH | 3M | 37 | | 5 | 5 | .3 | | | | 5 | | | | | | | | | |
| DF | | CH | 3M | 40 | | 363 | 358 | 26.0 | | | | 3 | 94 | 107 | 82 | 30 | 42 | | | | |
| DF | | CH | 4M | 14 | | 1 | 1 | .1 | | | 1 | | | | | | | | | | |
| DF | | CH | 4M | 16 | | 2 | 2 | .1 | | | | | 2 | | | | | | | | |
| DF | | CH | 4M | 17 | | 6 | 6 | .4 | | | 6 | | | | | | | | | | |
| DF | | CH | 4M | 18 | | 1 | 1 | .1 | | | | 1 | | | | | | | | | |
| DF | | CH | 4M | 20 | | 2 | 2 | .2 | | | 2 | | | | | | | | | | |
| DF | | CH | 4M | 21 | | 2 | 2 | .2 | | | 2 | | | | | | | | | | |
| DF | | CH | 4M | 23 | | 11 | 11 | .8 | | | 8 | 4 | | | | | | | | | |
| DF | | CH | 4M | 25 | | 2 | 2 | .1 | | | | 2 | | | | | | | | | |
| DF | | CH | 4M | 26 | | 4 | 4 | .3 | | | 4 | | | | | | | | | | |
| DF | | CH | 4M | 27 | | 7 | 7 | .5 | | | | 7 | | | | | | | | | |
| DF | | CH | 4M | 28 | | 4 | 4 | .3 | | | 4 | | | | | | | | | | |
| DF | | CH | 4M | 29 | | 4 | 4 | .3 | | | | 4 | | | | | | | | | |
| DF | | CH | 4M | 30 | | 10 | 10 | .7 | | | 10 | | | | | | | | | | |
| DF | | CH | 4M | 34 | | 17 | 17 | 1.2 | | | 2 | | | 15 | | | | | | | |
| DF | | CH | 4M | 35 | | 9 | 9 | .6 | | | 9 | | | | | | | | | | |
| DF | | CH | 4M | 37 | | 18 | 18 | 1.3 | | | 18 | | | | | | | | | | |
| DF | | CH | 4M | 40 | | 14 | 14 | 1.0 | | | | 14 | | | | | | | | | |
| DF | | CH | UT | 12 | | 5 | 5 | .3 | | | | 5 | | | | | | | | | |
| DF | | CH | UT | 31 | | 2 | 2 | .2 | | | 2 | | | | | | | | | | |
| DF | | Totals | | | | 1,390 | 1,378 | 59.4 | | | 71 | 76 | 120 | 128 | 208 | 140 | 483 | 130 | 21 | | |
| WH | | CH | 2M | 32 | | 23 | 23 | 7.9 | | | | | | | | 23 | | | | | |
| WH | | CH | 2M | 40 | | 113 | 113 | 39.4 | | | | | 18 | | 68 | | 27 | | | | |

Log Stock Table - MBF

| | |
|----------------------|--------|
| T01N R07W S31 Ty0100 | 108.00 |
|----------------------|--------|

Project: CODEYCYN
Acres 108.00

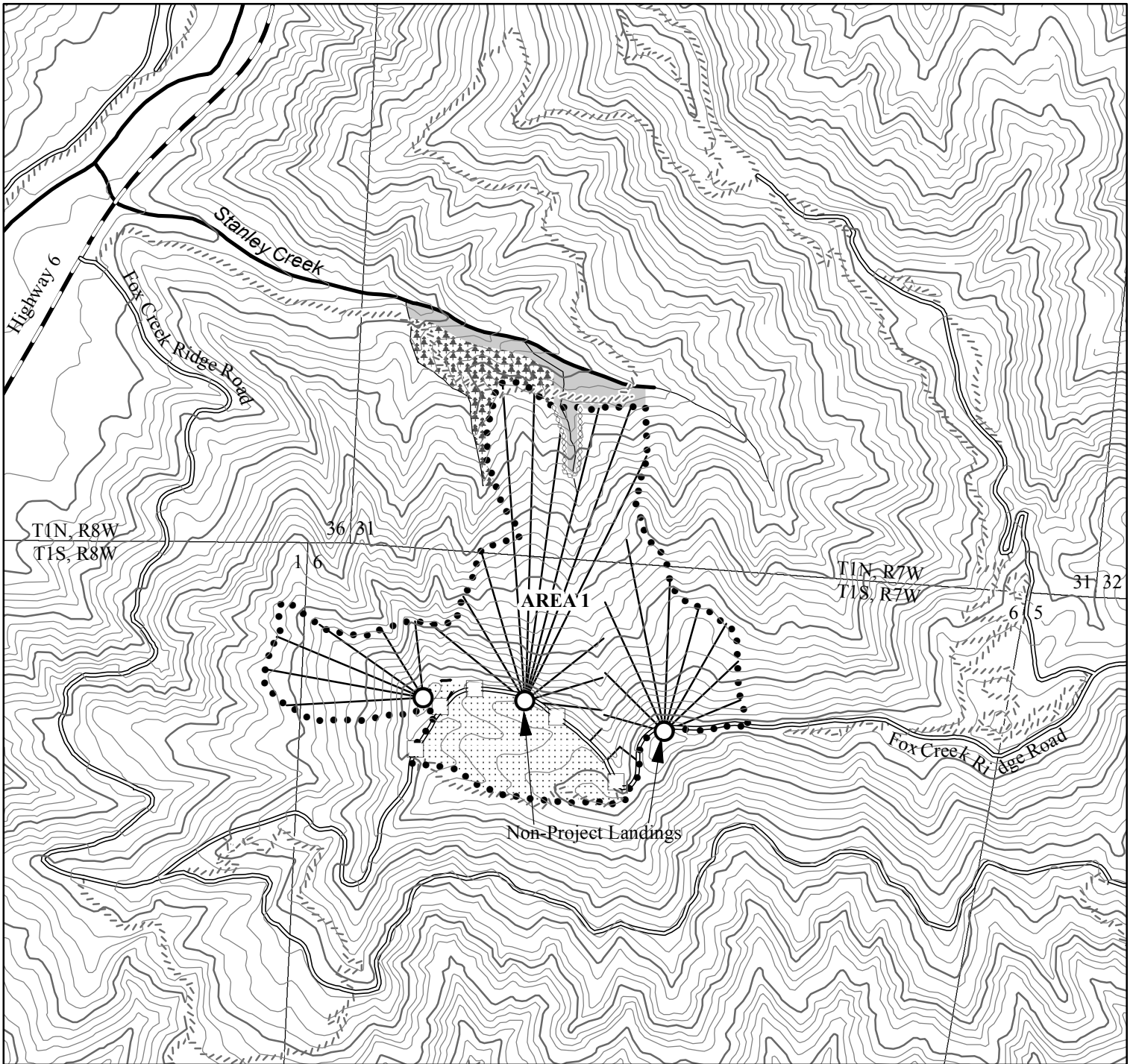
Page 3
Date 1/16/2013
Time 6:28:33AM

| Spp | S T | So Gr rt de | Log Len | Gross MBF | Def % | Net MBF | % Spc | Net Volume by Scaling Diameter in Inches | | | | | | | | | | | | | | | |
|-------|--------|----------------|------------|--------------|----------|------------|----------|--|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-----|--|--|--|--|
| | | | | | | | | 2-3 | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 | 30-39 | 40+ | | | | |
| RA | | HW D | 28 | 12 | | 12 | 1.9 | | | | | 12 | | | | | | | | | | | |
| RA | | HW D | 32 | 44 | 2.7 | 43 | 6.7 | | | | | 29 | 13 | | | | | | | | | | |
| RA | | HW D | 33 | 5 | | 5 | .8 | | | | 5 | | | | | | | | | | | | |
| RA | | HW D | 35 | 18 | | 18 | 2.9 | | | | | 18 | | | | | | | | | | | |
| RA | | HW D | 37 | 14 | | 14 | 2.2 | | | | 14 | | | | | | | | | | | | |
| RA | | HW D | 38 | 9 | 16.7 | 8 | 1.2 | | | | 8 | | | | | | | | | | | | |
| RA | | HW D | 40 | 168 | 3.2 | 163 | 25.5 | | | | 79 | 62 | 23 | | | | | | | | | | |
| RA | | Totals | | 658 | 2.9 | 639 | 27.5 | | | 10 | 199 | 215 | 186 | 29 | | | | | | | | | |
| SS | | CH UT | 28 | 5 | | 5 | 100.0 | | | | | 5 | | | | | | | | | | | |
| SS | | Totals | | 5 | | 5 | .2 | | | | | 5 | | | | | | | | | | | |
| BM | | HW UT | 40 | 13 | | 13 | 100.0 | | | | 13 | | | | | | | | | | | | |
| BM | | Totals | | 13 | | 13 | .6 | | | | 13 | | | | | | | | | | | | |
| Total | | All Species | | 2,359 | 1.6 | 2,321 | 100.0 | | | 85 | 307 | 345 | 342 | 258 | 150 | 590 | 200 | 44 | | | | | |

| | | |
|----------------------------------|---|---|
| T01N R07W S31 Ty0100 108.00 | Project: CODEYCYN Acres 108.00 | Page 1 Date 1/16/2013 Time 6:28:34AM |
|----------------------------------|---|---|

| S Spp | So Gr T rt ad | % Net BdFt | Bd. Ft. per Acre Def% Gross Net | | | Total Net MBF | Percent of Net Board Foot Volume | | | | | | | | Average Log | | | | Logs Per /Acre |
|---------------|---------------------|------------------|--|--------|--------|------------------|----------------------------------|------|-------|-----|------------|-------|-------|-------|-------------|-----------|----------|-----------|----------------------|
| | | | | | | | Log Scale Dia. | | | | Log Length | | | | Ln Ft | Dia In | Bd Ft | CF/ Lf | |
| | | | | | | | 4-5 | 6-11 | 12-16 | 17+ | 12-20 | 21-30 | 31-35 | 36-99 | | | | | |
| DF | CH 2M | 58 | .9 | 7,527 | 7,460 | 806 | | | 36 | 64 | 2 | 2 | 3 | 94 | 38 | 16 | 396 | 2.44 | 18.9 |
| DF | CH 3M | 33 | 1.2 | 4,229 | 4,179 | 451 | 1 | 64 | 26 | 9 | 0 | 7 | 9 | 83 | 36 | 9 | 128 | 0.98 | 32.8 |
| DF | CH 4M | 8 | | 1,053 | 1,053 | 114 | 57 | 29 | 14 | | 10 | 38 | 23 | 29 | 28 | 6 | 36 | 0.38 | 29.2 |
| DF | CH UT | 1 | | 63 | 63 | 7 | 33 | 67 | | | 67 | | 33 | | 20 | 9 | 36 | 0.52 | 1.8 |
| DF | Totals | 59 | .9 | 12,873 | 12,755 | 1,378 | 5 | 24 | 31 | 41 | 2 | 6 | 7 | 85 | 33 | 9 | 154 | 1.18 | 82.6 |
| WH | CH 2M | 47 | | 1,254 | 1,254 | 135 | | | 46 | 54 | | | 17 | 83 | 39 | 16 | 419 | 2.72 | 3.0 |
| WH | CH 3M | 49 | 4.3 | 1,358 | 1,300 | 140 | | 34 | 18 | 47 | 1 | 13 | 17 | 69 | 36 | 11 | 205 | 1.61 | 6.3 |
| WH | CH 4M | 3 | | 70 | 70 | 8 | 58 | 42 | | | 88 | 12 | | | 16 | 6 | 17 | 0.38 | 4.1 |
| WH | CH UT | 1 | | 26 | 26 | 3 | | | 100 | | 100 | | | | 12 | 12 | 60 | 1.01 | .4 |
| WH | Totals | 12 | 2.1 | 2,709 | 2,651 | 286 | 2 | 18 | 32 | 49 | 4 | 7 | 16 | 73 | 30 | 11 | 191 | 1.72 | 13.9 |
| RA | H UT | 6 | 4.9 | 377 | 359 | 39 | | | 100 | | 16 | 21 | 63 | | 26 | 7 | 42 | 0.78 | 8.6 |
| RA | H C | 37 | 3.0 | 2,267 | 2,198 | 237 | | | 93 | 7 | 10 | 12 | 15 | 63 | 33 | 10 | 110 | 1.05 | 20.0 |
| RA | H D | 57 | 2.6 | 3,450 | 3,360 | 363 | 3 | 94 | 4 | | 18 | 13 | 18 | 51 | 26 | 7 | 46 | 0.56 | 73.1 |
| RA | Totals | 28 | 2.9 | 6,094 | 5,917 | 639 | 2 | 94 | 5 | | 15 | 13 | 20 | 52 | 28 | 7 | 58 | 0.70 | 101.8 |
| SS | CH UT | 100 | | 45 | 45 | 5 | | | 100 | | | | 100 | | 28 | 9 | 70 | 1.93 | .6 |
| SS | Totals | 0 | | 45 | 45 | 5 | | | 100 | | | | 100 | | 28 | 9 | 70 | 1.93 | .6 |
| BM | H UT | 100 | | 122 | 122 | 13 | | | 100 | | | | 100 | | 40 | 7 | 70 | 0.67 | 1.7 |
| BM | Totals | 1 | | 122 | 122 | 13 | | | 100 | | | | 100 | | 40 | 7 | 70 | 0.67 | 1.7 |
| Totals | | | 1.6 | 21,843 | 21,490 | 2,321 | 4 | 43 | 23 | 30 | 6 | 9 | 11 | 74 | 30 | 9 | 107 | 0.99 | 200.6 |

| TC | PSTNDSUM | Stand Table Summary | | | | | | | | | | Page | 2 | | | | |
|-----------------------------|----------|----------------------------|-----------------|-----------|------------------|----------------|-------------|--------------|---------------|-----------------|---------------|-----------------------|-----------------------|--------|--------|-------|--|
| | | | | | | | | | | | | Date: | 1/16/2013 | | | | |
| T01N R07W S31 Ty0100 108.00 | | | | | Project CODEYCYN | | | | | Time: 6:28:36AM | | | | | | | |
| | | | | | Acres 108.00 | | | | | Grown Year: | | | | | | | |
| S Spc | T | DBH | Sample Trees | FF 16' | Av Ht | Trees/ Acre | BA/ Acre | Logs Acre | Average Log | | Tons/ Acre | Net Cu.Ft. Acre | Net Bd.Ft. Acre | Totals | | | |
| | | | | | | | | | Net Cu.Ft. | Net Bd.Ft. | | | | Tons | Cunits | MBF | |
| OC 4 | | Totals | 1 | 90 | 66 | .194 | 1.87 | | | | | | | | | | |
| OC 5 | | 50 | 1 | 90 | 36 | .137 | 1.87 | | | | | | | | | | |
| OC 5 | | Totals | 1 | 90 | 36 | .137 | 1.87 | | | | | | | | | | |
| OH 2 | | 10 | 1 | 52 | 44 | 3.423 | 1.87 | | | | | | | | | | |
| OH 2 | | Totals | 1 | 52 | 44 | 3.423 | 1.87 | | | | | | | | | | |
| Totals | | | 101 | 77 | 83 | 122.553 | 192.32 | 200.64 | 29.8 | 107.1 | 170.89 | 5,983 | 21,490 | 18,456 | 6,462 | 2,321 | |



LEGEND

- Timber Sale Boundary
- ∞∞∞ Stream Buffer Boundary
- Surfacd Road
- Paved Road
- - - Road Construction
- //// Recreation Trails
- Type-F Stream
- Type-N Stream
- Stream Buffer
- Green Tree Retention Area
- Cable Landing
- Tractor Landing
- ▲ Cable Yarding Area
- ▨ Tractor Yarding Area
- Sections
- 200 Foot Contour Band
- 40 Foot Contour Band

LOGGING PLAN

FOR TIMBER SALE CONTRACT #341-13-77
 CODEY CANYON
 PORTIONS OF SECTION 1, T1S, R8W, W.M.,
 PORTIONS OF SECTION 31, T1N, R7W, W.M.,
 AND PORTIONS OF SECTION 6, T1S, R7W, W.M.,
 TILLAMOOK COUNTY, OREGON

Forest Grove District GIS
 January, 2013

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

1:12,000
 1 inch = 1,000 feet

0 250 500 1,000 1,500 2,000 Feet



| APPROXIMATE NET ACRES | TRACTOR CABLE | |
|-----------------------|---------------|-------|
| | TRACTOR | CABLE |
| AREA 1 (MC) | 18 | 90 |
| TOTAL | 18 | 90 |