



Timber Sale Appraisal
Buckeye
Sale KL-341-2018-30-

District: Klamath/Lake

Date: August 22, 2017

Cost Summary

| | Conifer | Hardwood | Total |
|-------------------------|-------------|-------------------|--------------|
| Gross Timber Sale Value | \$45,123.40 | \$0.00 | \$45,123.40 |
| | | Project Work: | (\$2,665.75) |
| | | Advertised Value: | \$42,457.65 |



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Timber Description

Location: Portions of Section 32, T37S, R13E, W.M., Klamath County, Oregon.

Stand Stocking: 40%

| Specie Name | AvgDBH | Amortization (%) | Recovery (%) |
|----------------|--------|------------------|--------------|
| White Fir | 11 | 0 | 95 |
| Incense Cedar | 16 | 0 | 95 |
| Ponderosa Pine | 18 | 0 | 95 |

| Volume by Grade | Camprun | Total |
|-----------------|---------|-------|
| White Fir | 4 | 4 |
| Incense Cedar | 9 | 9 |
| Ponderosa Pine | 373 | 373 |
| Total | 386 | 386 |

Comments: Pond Values Used: Local Pond Values, May 2017.

Log Markets: Klamath Falls and Lakeview

SCALING COST ALLOWANCE = \$5.00/MBF

BRANDING AND PAINTING COST ALLOWANCE = \$2.00/MBF

FUEL COST ALLOWANCE = \$3.00/Gallon

HAULING COST ALLOWANCE
Hauling costs equivalent to \$780 daily truck cost.

Other Costs (with Profit & Risk to be added):
None.

Other Costs (No Profit & Risk added):
USFS Road Fees: \$3,952.64
Green Diamond Road Maintenance: \$1,500.00
Dust Abatement: \$4,570.00
TOTAL Other Costs (No Profit & Risk added) = \$10,022.64

ROAD MAINTENANCE
Road Maintenance: \$1,349.50
\$1,349.50/386 MBF = \$3.50



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Logging Conditions

Combination#: 1 White Fir 68.00%
 Incense Cedar 68.00%
 Ponderosa Pine 68.00%

Logging System: Wheel Skidder **Process:** Feller Buncher
yarding distance: Medium (800 ft) **downhill yarding:** Yes
tree size: Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF
loads / day: 10 **bd. ft / load:** 3700
cost / mbf: \$102.61
machines: Log Loader (B)
 Stroke Delimber (B)
 Feller Buncher w/ Delimber
 Tire Skidder

Combination#: 2 White Fir 32.00%
 Incense Cedar 32.00%
 Ponderosa Pine 32.00%

Logging System: Track Skidder **Process:** Manual Falling/Delimbing
yarding distance: Medium (800 ft) **downhill yarding:** Yes
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 10 **bd. ft / load:** 4300
cost / mbf: \$102.58
machines: Log Loader (B)
 Track Skidder



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Logging Costs

| | |
|---------------------------|---------------------------|
| Operating Seasons: 1.00 | Profit Risk: 15% |
| Project Costs: \$2,665.75 | Other Costs (P/R): \$0.00 |
| Slash Disposal: \$0.00 | Other Costs: \$10,022.64 |

Miles of Road

Road Maintenance: \$3.50

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

Hauling Costs

| Species | \$ / MBF | Trips/Day | MBF / Load |
|----------------|----------|-----------|------------|
| White Fir | \$0.00 | 3.0 | 4.4 |
| Incense Cedar | \$0.00 | 3.0 | 4.4 |
| Ponderosa Pine | \$0.00 | 3.0 | 4.4 |



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Logging Costs Breakdown

| Logging | Road Maint | Fire Protect | Hauling | Other P/R appl | Profit & Risk | Slash Disposal | Scaling / Brand & Paint | Other | Total |
|-----------------------|------------|--------------|---------|----------------|---------------|----------------|-------------------------|---------|----------|
| White Fir | | | | | | | | | |
| \$102.60 | \$3.68 | \$11.36 | \$62.04 | \$0.00 | \$26.95 | \$0.00 | \$7.00 | \$25.97 | \$239.60 |
| Incense Cedar | | | | | | | | | |
| \$102.60 | \$3.68 | \$11.36 | \$62.04 | \$0.00 | \$26.95 | \$0.00 | \$7.00 | \$25.97 | \$239.60 |
| Ponderosa Pine | | | | | | | | | |
| \$102.60 | \$3.68 | \$11.36 | \$62.04 | \$0.00 | \$26.95 | \$0.00 | \$7.00 | \$25.97 | \$239.60 |

| Specie | Amortization | Pond Value | Stumpage | Amortized |
|----------------|--------------|------------|----------|-----------|
| White Fir | \$0.00 | \$356.50 | \$116.90 | \$0.00 |
| Incense Cedar | \$0.00 | \$356.50 | \$116.90 | \$0.00 |
| Ponderosa Pine | \$0.00 | \$356.50 | \$116.90 | \$0.00 |



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Summary

Amortized

| Specie | MBF | Value | Total |
|----------------|-----|--------|--------|
| White Fir | 0 | \$0.00 | \$0.00 |
| Incense Cedar | 0 | \$0.00 | \$0.00 |
| Ponderosa Pine | 0 | \$0.00 | \$0.00 |

Unamortized

| Specie | MBF | Value | Total |
|----------------|-----|----------|-------------|
| White Fir | 4 | \$116.90 | \$467.60 |
| Incense Cedar | 9 | \$116.90 | \$1,052.10 |
| Ponderosa Pine | 373 | \$116.90 | \$43,603.70 |

Gross Timber Sale Value

Recovery: \$45,123.40

Prepared By: Jon Fitch

Phone: 541-883-5681

Summary of Project Work

Buckeye
341-18-30



| | |
|--|-------------------|
| Project No. 1: Road Improvement | \$2,400.75 |
|--|-------------------|

| | |
|--------------------------------------|-----------------|
| Project No. 2: Road closures. | \$265.00 |
|--------------------------------------|-----------------|

| | |
|---------------|-------------------|
| Total: | \$2,665.75 |
|---------------|-------------------|

Buckeye
341-18-30
Other Costs

Road Maintenance

Purchaser of the Fast Track Timber Sale will be required to obtain a road use permit from the USDA Forest Service in order to haul on approximately 1.74 miles of Forest Road 3673 and 5.3 miles of the 3673-025 road. The road use permit fees for the haul is \$10.24 per Mbf.

Any exchange of project work in lieu of road use fees will need to be negotiated between the purchaser and the USDA Forest Service.

Access Permit/Agreement. PURCHASER's use of the 3673 (1.74 miles) and 3673-025 (5.3miles) Roads is subject to a Permit, which PURCHASER shall complete with the United States Forest Service. PURCHASER shall furnish a copy of the executed document to STATE within 10 days of its completion. This Permit/agreement requires PURCHASER to pay a road use fee of \$10.24 per gross Mbf.

Access Permit/Agreement. PURCHASER's use of the Area 2 Access Road is subject to a Permit/agreement (#314.18323), which PURCHASER shall complete with Green Diamond Resource Company. STATE shall provide a sample form and PURCHASER shall furnish a copy of the executed document to STATE within 10 days of its completion. This Permit/agreement requires normal maintenance and road closure at the completion of operations.

Estimated Fee Totals

USFS Road Use Permit

Total Fees (Use / SSR / Maintenance): **\$10.24** per Mbf

Cruised Sale Volume: 386 Mbf

Total Cost: **\$3,952.64**

Green Diamond Road use permit

Road use Fee
Total Cost: **\$1,500.00**

Cost / MBF: **\$3.89**

Total Cost / MBF: **\$14.13**

Green Diamond Road Maintenance

Cruised Sale Volume: 386 Mbf

Move-in cost (grader): \$400.00

| | |
|-------------------------------------|-------------------|
| 022 Rd | 2.65 miles |
| 830-00 Rd | 1.71 miles |
| Number of Miles to be Bladed: | 4.4 022 Rd |
| Number of Bladings: | 1 |
| Total Miles | 4.4 |
| Miles / Hour for equipment: | 0.5 |
| Cost / Hour (grader with operator): | \$105.50 |
| Total Grading Hours: | 9 |
| Grading Cost: | \$949.50 |
| Total Cost: | \$1,349.50 |

Cost / MBF: \$3.50

Total Cost / MBF: \$3.50 **to be added to other P & R

Dust Abatement (Profit & Risk to be added in Appraisal)

| | | | | | | |
|---------------|----------------|-----|--------------|--------------------|--------------|-----------|
| PP | 373 MBF | 97% | Average Load | 4.2 MBF | No. of Loads | 89 |
| other | 13 MBF | 3% | Average Load | 4.5 MBF | No. of Loads | 3 |
| Total: | 386 MBF | | | Total Loads | | 92 |

Assume: 3 Trucks/Day
 3 Trips/Day
 9 Loads per Day
 10 Hauling Days

10 Days of Dust Abatement
 5 Hours/Day
 \$88.00 Cost/Hour
 50 Total Hours
 \$170.00 Move in for Water Truck
 \$4,570.00 Dust Abatement Cost
\$4,570.00 Total Cost
 \$11.84 Cost/MBF

Other Costs Summary (Profit and Risk to be added in Appraisal)

| | | |
|--------------------|-------------------------------|------------------------|
| \$5,452.64 | Road Use Fees and maintenance | \$14.13 per MBF |
| \$4,570.00 | Total cost for Dust Abatement | \$11.84 per MBF |
| \$10,022.64 | Total Other Costs | \$25.97 per MBF |

Buckeye

341-18-30

Project Costs

Project #1 Road Improvement

Move in Cost Dozer: \$400.00

Improvement

| | Points | Distance (ft) | Feet/Hour | Hours | Cost/Hour | Cost |
|------------------|--------|---------------|-----------|-------|-----------|------------|
| Shape | A to B | 5380 | 1500 | 3.6 | \$132.50 | \$477.00 |
| Shape | B to C | 2930 | 1500 | 2.0 | \$132.50 | \$265.00 |
| Shape | C to D | 3220 | 1500 | 2.1 | \$132.50 | \$278.25 |
| Shape | D to E | 3040 | 1500 | 2.0 | \$132.50 | \$265.00 |
| Open/Clear/Shape | B to X | 1495 | 1000 | 1.5 | \$132.50 | \$198.75 |
| Open/Clear/Shape | C to Y | 1980 | 1000 | 2.0 | \$132.50 | \$265.00 |
| Open/Clear/Shape | D to Z | 1925 | 1000 | 1.9 | \$132.50 | \$251.75 |
| | Total | 19970 | | | Total | \$2,000.75 |

Project #1 Summary

| | |
|-------------------------|--------------------------|
| Equipment Costs | \$400.00 |
| Open/Clear Shape | \$2,000.75 |
| Project #1 Total | <u>\$2,400.75</u> |
| per MBF | \$6.22 |

Buckeye
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Project Costs

Project #2 Road Closure

Road Closures

| | |
|-----------------|--|
| 2 | Number of Closure Points (Pt. C and Pt. D) |
| 1 | Hour/Point (Travel Included) |
| \$132.50 | Cost per Hour (Cat) |
| \$265.00 | Total |
| \$0.69 | per MBF |

Cost Summary

| <i>Other Costs</i> | <i>Projects</i> |
|---|--|
| \$3,952.64 USFS Road fees | \$2,400.75 Project #1 Road Improvement |
| \$1,500.00 Green Diamond Road maintenance | |
| \$4,570.00 Dust Abatement | \$265.00 Project #2 Road Closure |
| \$1,349.50 Road Maint. | \$2,665.75 |
| \$11,372.14 | |

\$14,037.89 Total

\$36.37 per MBF

Buckeye

KL-341-18-30

Cruise Report



SALE NAME: Buckeye

LEGAL DESCRIPTION:

Portions of Section 32, T37S, R13E, W.M., Klamath County, Oregon.

BOUNDARY LINES:

Unit boundaries are posted with “Timber Sale Boundary” signs, marked with fluorescent orange paint and fluorescent orange flagging.

FUND:

100% B.O.F.

ACREAGE:

Gross Sale Acreage: 158 Acres

Net Sale Acreage: 158 Acres

Mapping was accomplished using a handheld Global Positioning System unit with the data run on the district Geographical Information System Program.

TREATMENT:

The Timber Sale is a single tree selection cuts with all blue marked trees 5.0 inches DBH or larger to be cut. All unmarked trees are reserved from cutting. All trees less than 5.0 inches DBH are reserved from cutting in the sale area.

CRUISE METHOD:

Variable plot cruise with a ratio of a count plot for every measure plot. Fixed plot cruise for all sub-merchantable material (5.0” to 10.0”) DBH for all Areas.

BASAL AREA FACTOR:

| Area | BAF | Type Acreage |
|--------|-------|--------------|
| Area 1 | 5 BAF | 158 |

PLOT DESIGNATION:

Plot centers were established at every plot with blue flag wire stakes with the corresponding plot number. Blue striped flagging was attached to the nearest available tree branch.

SAMPLE SIZE:

25 plots were taken which resulted in a sampling error of 16.1%. Cruise plots and count plots were taken at a 1:1 ratio.

Measurements and Grading:

- Ratio of a count plot for every measure plot.
- DBH and Height were measured on all “in” trees for measure plots.
- Sawlog volume cruised.
- See attached species and grade tables for minimum requirements.
- All trees were graded using the segment system.

TREE HEIGHT:

All trees were measured to a fixed diameter outside bark. This height is usually taken as high up the bole as possible, where the cruiser can clearly see the bole, and the taper remains constant. The log segments are broken out and graded accordingly.

MINIMUM D.B.H:

8.0” DBH for sawlog volume.

DIAMETER STANDARDS:

1” diameter class

BTR:

Standard ratios were used. See attached species tables.

FORM FACTOR:

Form factor was measured or estimated at 16’ for each tree. Each tree was assigned its own FF.

FORM POINT:

All trees were sighted at DBH.

VOLUME COMPUTATION:

All cruise data was input and run at the district on Atterbury's Super Ace program.

CRUISERS: Jon Fitch, James Monteil, and Ed Scheick

FINAL CRUISE RESULTS:

| AREA | CV% | SE% | ACRES |
|--------|------|------|-------|
| Area 1 | 83.6 | 16.1 | 158 |

TIMBER DESCRIPTION**SAWLOG VOLUME:**

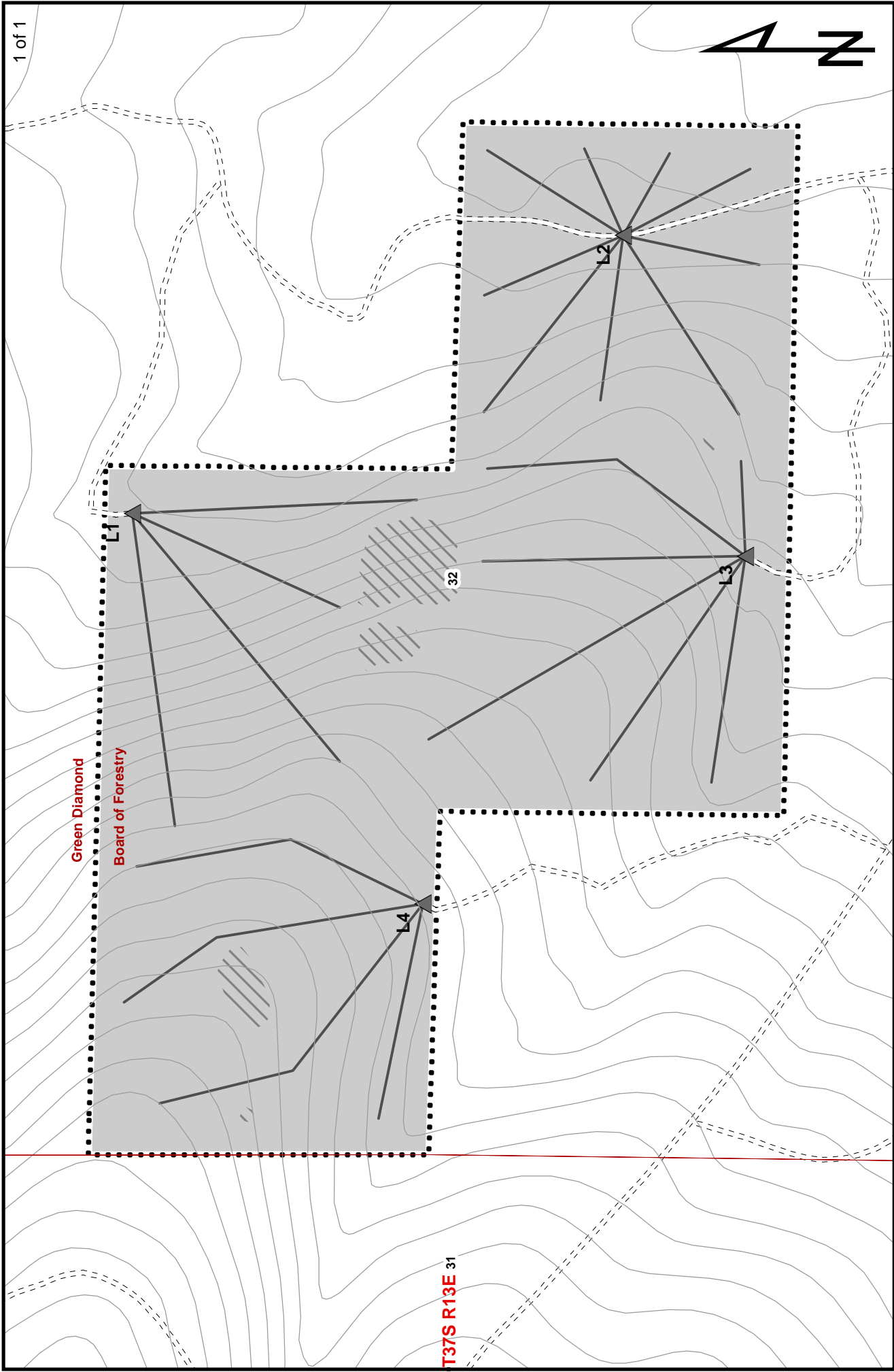
This volume was obtained from the variable plot cruise. All material graded camprun. See grade table for minimum standards.

TOTAL SAWLOG VOLUME

| SPECIES | AVE. DBH | GROSS VOL (MBF) | NET VOL (MBF) |
|----------------|----------|-----------------|---------------|
| Ponderosa Pine | 18.4 | 378 | 373 |
| Incense Cedar | 15.8 | 9 | 9 |
| White Fir | 11.0 | 4 | 4 |
| Total | | 391 | 386 |

TOTAL NET SAWLOG VOLUME: 386 MBF

All Species will be sold at Ponderosa Pine and other conifers price. Refer to timber sale contract for details.



Logging Plan

OF TIMBER SALE CONTRACT NO. 341-18-030

BUCKEYE TIMBER SALE

LOCATED IN PORTIONS OF SECTION 32, T37S, R13E, W,M, KAMATH COUNTY

Landings

Skid Trails

Low Stocking

Roads

Timber Sale Area

1 inch = 500 feet

0200400800

Feet

| Sale Area | Harvest Type | Net Acres | |
|-----------|--------------|-------------------|-----------|
| | | Single Tree | Selection |
| 1 | | 158 | |
| | | Total = 158 Acres | |

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