



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Penn Tie
Sale 341-13-65

District: Western Lane

Date: September 10, 2012

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$388,911.60	\$9,637.60	\$398,549.20
		Project Work:	\$(18,665.00)
		Advertised Value:	\$379,884.20



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Penn Tie
Sale 341-13-65

District: Western Lane

Date: September 10, 2012

timber description

Location: Portions of Section 4, T18S, R7W, W.M., Lane County, Oregon.

Stand Stocking: 80%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	16	0	97
Alder (Red)	16	0	97

Volume by Grade	2S	3S	4S	Camprun	Total
Douglas - Fir	580	894	182	0	1,656
Alder (Red)	0	0	0	35	35
Total	580	894	182	35	1,691



Timber Sale Appraisal
Penn Tie
Sale 341-13-65

"STEWARDSHIP IN FORESTRY"

District: Western Lane

Date: September 10, 2012

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

Western Hemlock and Other Conifers Stumpage Price = Pond Value
minus Logging Cost
 $\$160/\text{MBF} = \$450/\text{MBF} - \$290/\text{MBF}$

Western redcedar and Other Cedars Stumpage Price = Pond Value
minus Logging Cost
 $\$660/\text{MBF} = \$950/\text{MBF} - \$290/\text{MBF}$

Peelable Cull (Conifer) Price = $\$80/\text{MBF}$

Pulp Prices (Conifer and Hardwood) = $\$30/\text{MBF}$

SCALING COST ALLOWANCE = $\$5.00/\text{MBF}$

FUEL COST ALLOWANCE = $\$4.00/\text{Gallon}$

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):
Final Road Maintenance: $\$3,104$
Snag Creation: 39 snags @ $\$75/\text{snag} = \$2,925$
TOTAL Other Costs (No Profit & Risk added) = $\$6,029$



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Penn Tie
Sale 341-13-65

District: Western Lane

Date: September 10, 2012

logging conditions

combination#: 1 Douglas - Fir 80.00%
 Alder (Red) 80.00%

yarding distance: Long (1,500 ft) **downhill yarding:** No
logging system: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 6.0 **bd. ft / load:** 3,600
cost / mbf: \$154.82

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

combination#: 2 Douglas - Fir 20.00%
 Alder (Red) 20.00%

yarding distance: Medium (800 ft) **downhill yarding:** No
logging system: Shovel **Process:** Stroke Delimber
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 7.0 **bd. ft / load:** 3,800
cost / mbf: \$54.07

machines: Stroke Delimber (B)



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Penn Tie
Sale 341-13-65

District: Western Lane

Date: September 10, 2012

logging costs

Operating Seasons:	2.00	Profit Risk:	20.00%
Project Costs:	\$18,665.00	Other Costs (P/R):	\$0.00
Slash Disposal:	\$0.00	Other Costs:	\$6,029.00

Miles of Road

Road Maintenance: \$0.00

Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	2.0	0.0	0.0

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	3.6
Alder (Red)	\$0.00	2.0	3.8



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Penn Tie
Sale 341-13-65

District: Western Lane

Date: September 10, 2012

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$134.67	\$2.10	\$5.19	\$92.99	\$0.00	\$46.99	\$0.00	\$5.00	\$3.57	\$290.51
Alder (Red)									
\$134.67	\$2.10	\$5.19	\$88.10	\$0.00	\$46.01	\$0.00	\$5.00	\$3.57	\$284.64

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$525.36	\$234.85	\$0.00
Alder (Red)	\$0.00	\$560.00	\$275.36	\$0.00



Timber Sale Appraisal
Penn Tie
Sale 341-13-65

"STEWARDSHIP IN FORESTRY"

District: Western Lane

Date: September 10, 2012

summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	1,656	\$234.85	\$388,911.60
Alder (Red)	35	\$275.36	\$9,637.60

Gross Timber Sale Value

Recovery: \$398,549.20

Prepared by: Dan Menk

Phone: 541-935-2283

Summary of "Other Costs" for Timber Sale Appraisals

Penn Tie (341-13-65)

"Other Costs" with Profit and Risk to be Added:

None

Total "Other Costs" with Profit and Risk to be Added:

\$0

"Other Costs" With No Additional Profit and Risk

	<u>Units</u>	<u>Quantity</u>	<u>Cost/Unit</u>	<u>Total Cost</u>
Snag Creation		39	\$75	\$2,925
Final Road Maintenance	Operation			\$3,104
Total "Other Costs" With No Additional Profit and Risk:				<u>\$6,029</u>
Cost per MBF	1,691	MBF		\$ 4

Penn Tie
341-13-65
Combined Project Costs

Project 1	Construct and compact sub-grade for Spurs 1,2,and 3.	\$8,493
Project 2	Spread and compact rock for Spurs 1,2,and 3	\$7,572
Project 3	Machine pile slash and brush on 12 acres	\$2,060
Project 4	Cover slash piles	\$540
TOTAL PROJECT COSTS		\$18,665

Penn Tie (341-13-65)
Subgrade Construction and Culverts
Cutting and Decking Right of Way not Included

	Spur 1	Spur 2	Spur 3	TOTAL
Stations	1.32	3.03	5.08	9.43
Cost	\$1,735	\$2,724	\$4,034	\$8,493

Clearing and Grubbing	Spur 1	Spur 2	Spur 3	TOTAL
Acreage	0.1	0.3	0.6	
Cost/Acre	\$600	\$600	\$600	
Total	\$73	\$167	\$347	\$587

Excavation yards are bank run from State's design

Excavation	Spur 1	Spur 2	Spur 3	TOTAL
Stations	1.32	3.03	5.08	
Ex Cu Yd				
\$/sta	\$85.00	\$85.00	\$150.00	
\$/yd	\$1.50	\$1.50	\$1.50	
Subtotal	\$112	\$258	\$762	\$1,132

End-haul Costs are in addition to excavation costs above. Assumes 5% loss of endhaul material.

Cu Yd				
\$/yd				
Subtotal	\$0	\$0	\$0	\$0

Drill & Shoot	Spur 1	Spur 2	Spur 3	TOTAL
Cu Yd				
\$/yd	\$5.00	\$5.00	\$5.00	
Subtotal	\$0	\$0	\$0	\$0

Culverts	Spur 1	Spur 2	Spur 3	TOTAL
Feet of 18" 16 gauge		40	72	0
Cost/foot	\$17.09	\$17.09	\$17.09	
Subtotal	\$0	\$683	\$1,230	\$1,914

* Aluminized Steel was used for costing purposes based on prices as of 10/20/11

Compaction w/ Roller	Spur 1	Spur 2	Spur 3	TOTAL
Road Stations	1.32	3.03	5.08	
passes	2	2	2	
Subtotal Compacted STA	2.64	6.06	10.16	
Cost/STA	\$12.50	\$12.50	\$12.50	
Subtotal	\$33	\$76	\$127	\$236

Grade and Shape	Spur 1	Spur 2	Spur 3	
Road Stations	1.32	3.03	5.08	
Cost/STA	\$13.26	\$13.26	\$13.26	
Subtotal	\$18	\$40	\$67	\$125

Move in (costs shared with Timber Sale Spurs above)				TOTAL
D-7 Cat	\$1,500	excavator	\$1,500	
Dump Truck	\$200	vibratory roller	\$200	
grader	\$1,000	water truck	\$100	
Subtotal				\$ 4,500

Subgrade Cost for Project Roads

\$8,493

Due to rounding, the numbers in the table above may not add up to the totals shown.

Penn Tie (341-13-65)

Rocking and Compaction

Rock source used was Hale Valley.

Totals	Spur 1	Spur 2	Spur 3	TOTAL
Stations	1.32	3.03	5.08	1.32
Cost	\$1,334	\$2,163	\$4,075	\$7,572

ROCK QUANTITIES

Base Rock (3" Minus)	Spur 1	Spur 2	Spur 3	TOTAL
Depth x Width	6"x12'	6"x12'	6"x12'	
Stations	0.82	2.53	5.08	8.43
Approx yds/sta	33	33	33	
Subtotal 3" Minus base (yds)	27	83	168	278

Base/Landing Rock (Jaw Run)	Spur 1	Spur 2	Spur 3	TOTAL
Depth x Width	8"x24'	8"x24'	8"x24'	
Stations	1.00	1.00	1.00	3.00
Approx yds/sta	44	44	44	
Subtotal Jaw Run base (yds)	44	44	44	132

Cap Rock (1 1/2" -0")				TOTAL
Depth x Width	n/a	n/a	n/a	
Stations				0.00
Approx yds/sta				
Subtotal 1 1/2 "-0" cap (yds)	0	0	0	-

Additional Rock (3" minus)	Spur 1	Spur 2	Spur 3	TOTAL
Turnouts and Turn-Arounds				0
Curve Widening (yds)	10		25	35
Contamination Prevention				
Subtotal additional	10	-	25	35

TOTAL ROCK COSTS (Rock+Delivery)				TOTAL
Approx Yds (1 1/2"-0")	-			0
Cost/yd (includes load/spread)	\$17.48	\$17.48	\$17.48	
Subtotal Cost (1 1/2"-0")	\$0	\$0	\$0	\$0
Approx Yds (3"-0")	37	83	193	313
Cost/yd (includes load/spread)	\$16.94	\$16.94	\$16.94	
Subtotal Cost (3"-0")	\$628	\$1,414	\$3,262	\$5,304

Approx Yds (Jaw Run)	44	44	44	132
Cost/yd (includes load/spread)	\$15.59	\$15.59	\$15.59	
Subtotal Cost (1 1/2"-0")	\$686	\$686	\$686	\$2,057

Grand total quarry approx yds	81	127	237	318
Total Quarry Rock Cost	\$1,313	\$2,100	\$3,948	\$7,361

Compaction w/ Vibratory Roller	Spur 1	Spur 2	Spur 3	TOTAL
Road Stations	0.82	2.53	5.08	
Lifts	2	2	2	
Subtotal - Compacted Stations	1.64	5.06	10.16	16.86
Cost/Station	\$12.50	\$12.50	\$12.50	
Subtotal Compaction	\$21	\$63	\$127	\$211

\$/Yd_Rock in Place & Compacted

	Spur 1	Spur 2	Spur 3	Total
Subtotal Rock Costs	\$1,334	\$2,163	\$4,075	\$7,572

Move-in included in subgrade construction

Due to rounding, the numbers in the table above may not add up to the totals shown.

Penn Tie
341-13-65

Final Road Maintenance Cost Summary

	Spur 1	Spur 2	spur 3	Penn Tie Rd (upper gate)	TOTAL
Stations	1.32	3.03	5.08	66.65	
Cost/Sta	\$342.88	\$157.93			
Total Cost	\$453	\$479	\$429	\$1,744	\$3,104

Spot Rocking	Spur 1	Spur 2	spur 3	Penn Tie Rd (upper gate)	
Total Yds	10	10	20	50	
\$/yd	\$16.94	\$16.94	\$16.94	\$16.94	
Subtotal	\$169.35	\$169.35	\$338.70	\$846.75	\$1,524

Grade,Shape & Pull Ditches	Spur 1	Spur 2	spur 3	Penn Tie Rd (upper gate)	
Stations	1.32	3.03	5.08	66.65	
\$/STA	\$13.26	\$13.26	\$13.26	\$13.26	
Subtotal	\$18	\$40	\$67	\$884	\$1,009

Compact	Spur 1	Spur 2	spur 3	Penn Tie Rd (upper gate)	
Stations	0.00	0.00	0.00	0.00	
\$/STA	\$13.26	\$13.26	\$13.26	\$13.26	
Subtotal	\$0	\$0	\$0	\$0	\$0

Install Waterbars	Spur 1	Spur 2	spur 3	Penn Tie Rd (upper gate)	
Stations	1.32	3.03	5.08	0.00	
\$/STA	\$1.89	\$1.89	\$1.89	\$1.89	
Subtotal	\$2.50	\$5.74	\$9.62	\$0.00	\$18

Landing clean up	Spur 1	Spur 2	spur 3	Penn Tie Rd (upper gate)	
Stations	1.00	1.00	1.00	1.00	
\$/STA	\$13.26	\$13.26	\$13.26	\$13.26	
Subtotal	\$13	\$13	\$13	\$13	\$53

Tank Trap	Spur 1	Spur 2	spur 3	Penn Tie Rd (upper gate)	
Tank Traps	n/a	n/a	n/a	n/a	
\$/trap	\$500	\$500	\$500	\$500	
Subtotal					\$0

Move In	Spur 1	Spur 2	spur 3	Penn Tie Rd (upper gate)	
Grader	\$1,000				
					\$1,000

Move in costs associated across all spurs

Total Final Maintenance Costs	\$3,104
--------------------------------------	----------------

Cruise Report

Penn Tie 341-13-65

Sale Area : Portion of Section 4, T18S R7W. The acreage for the sale was determined by transferring unit boundaries from topographic maps and aerial photos to orthophotos in GIS. The gross acres for the sale is 50 acres. There are 10 acres in creek buffers and 1 acre in existing road. The sales net acres are 39.

Stand Description :

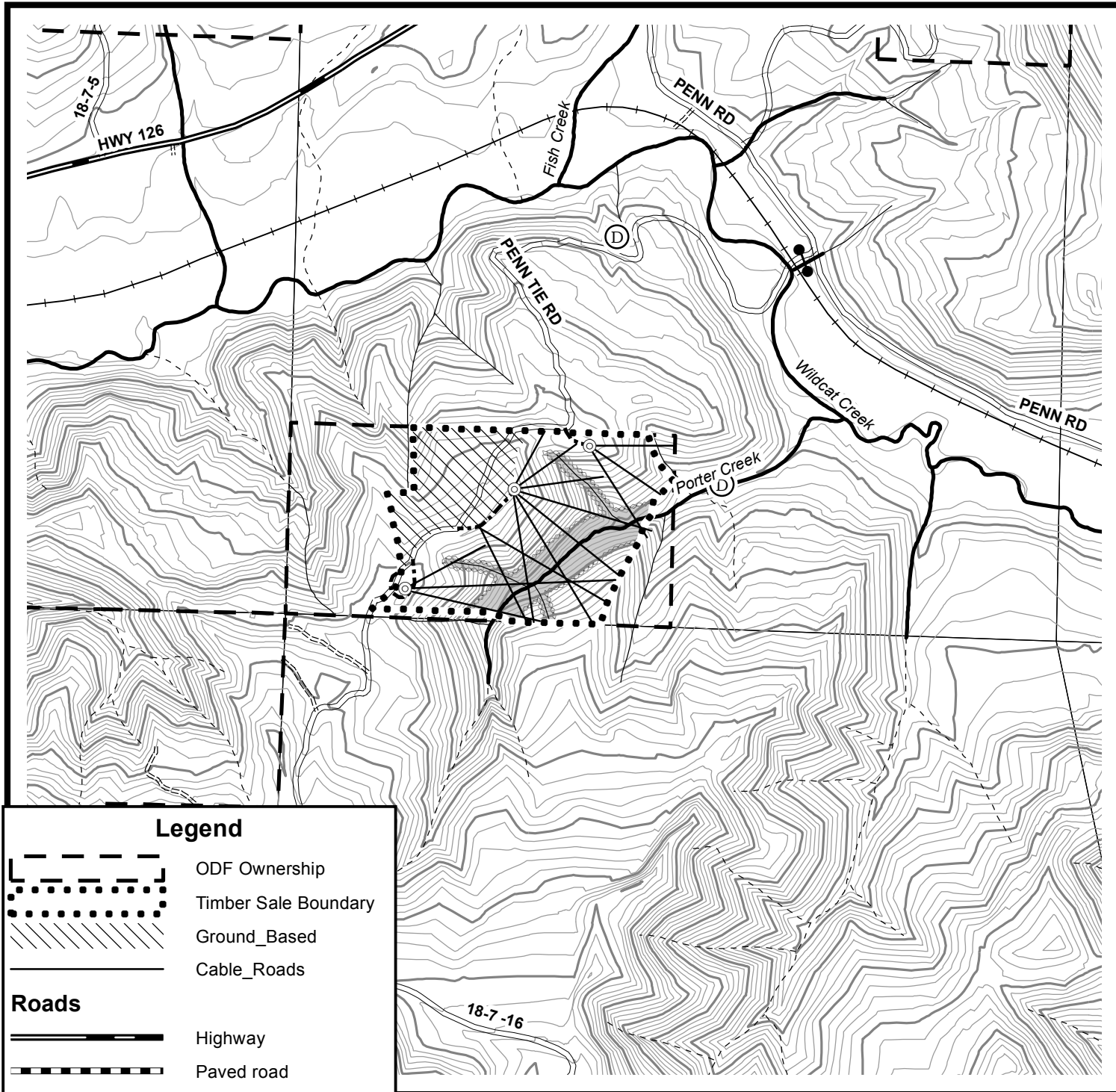
The sale area is comprised of mostly pure conifer that naturally regenerated from past logging in the 40's and 50's. Ages range from 65 to 75 years. Average DBH for Douglas-fir is 16 inches.

Methods : The sale area was sampled with 20 variable full point cruise plots and 5 count plots using 40 BAF. The determination for in/out trees was made at DBH. Diameters were measured or estimated to the nearest inch. The form factor for each tree was measured or estimated with the form point at 16 feet. All trees were graded favoring 36 to 40 feet lengths to either 5 inch minimum diameter inside bark (conifers) or 6 inch minimum diameter inside bark (hardwoods). Logs that were not at least 12 feet in length and having at least 20 bf were not counted. Appropriate deductions for all visible defects were made by the cruiser. No deductions were made for hidden defect or breakage. Douglas-fir with a DBH greater than 36 inches were considered as reserve trees.

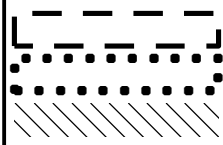
Cruiser: Dan Menk 06/12

Calculations: Volumes were computed by using the Super Ace program. R/W volume was considered as part of the overall stand.

Area	Species	2 SAW	3 SAW	4 SAW	Camp Run	TOTAL
Area 1 (mcc)	Douglas-fir	580 mbf	894 mbf	182 mbf		1,656 mbf
	Alder/maple				35 mbf	
Total						1,691 mbf

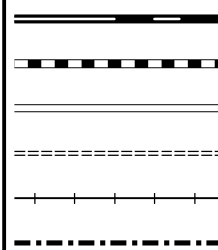


Legend



ODF Ownership
Timber Sale Boundary
Ground-Based
Cable_Roads

Roads



Highway
Paved road
Surfaced road
Dirt road
Railroads
New Road Construction

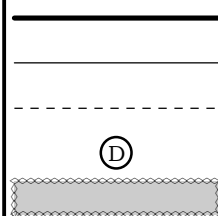


Landing to Construct



Gate

Streams



Fish
Nonfish
Unknown
Domestic Water Intake
Posted Stream Buffer

Logging Plan Map

OF TIMBER SALE CONTRACT NO. 341-13-65
PENN TIE
PORTIONS OF SECTION 4, T18S, R7W, W.M.
LANE COUNTY, OREGON

0 500 1,000 2,000
Feet

1 inch = 1,000 feet
Contours = 20'

This product is for informational use
and may not have been prepared
for or be suitable for legal, engineering
or surveying purposes. Users of this information should
review or consult the primary data and information
sources to ascertain the usability of this information.

	Gross Acres	Net Acres
Total (CC)	50	39



"STEWARDSHIP IN FORESTRY"