



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Wolf Creek
Sale 341-14-68

District: Western Lane

Date: December 09, 2013

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$840,243.22	\$4,460.17	\$844,703.39
		Project Work:	\$(68,446.00)
		Advertised Value:	\$776,257.39



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Wolf Creek
Sale 341-14-68

District: Western Lane

Date: December 09, 2013

timber description

Location: Portions of Section 26, T18S, R6W, W.M., Lane County, Oregon.

Stand Stocking: 40%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	23	0	100
Western Hemlock / Fir	18	0	100
Alder (Red)	18	0	100

Volume by Grade	2S	3S	4S	Camprun	Total
Douglas - Fir	1,831	471	76	0	2,378
Western Hemlock / Fir	9	0	2	0	11
Alder (Red)	0	0	0	13	13
Total	1,840	471	78	13	2,402



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Wolf Creek
Sale 341-14-68

District: Western Lane

Date: December 09, 2013

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

A damage and breakage of 3% is included in the volume by grade estimates.

Western redcedar and Other Cedars Stumpage Price = Pond Value
minus Logging Cost:
 $\$765/\text{MBF} = \$1,000/\text{MBF} - \$235/\text{MBF}$

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: \$5,412

Road Maintenance Fee 18-6-25 Rd with Oxbow Timber: \$700

Road Use Fee 18-6-25 Rd with W.E. McArthur & Associates, Inc.:
\$1,000

Landing Slash Piling: \$1,500

TOTAL Other Costs (No Profit & Risk added) = \$8,612



Timber Sale Appraisal
Wolf Creek
Sale 341-14-68

"STEWARDSHIP IN FORESTRY"

District: Western Lane

Date: December 09, 2013

logging conditions

combination#: 1

	Douglas - Fir	20.00%
	Western Hemlock / Fir	20.00%
	Alder (Red)	20.00%
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:	5.0	bd. ft / load: 4,000
cost / mbf:	\$167.21	
machines:	Log Loader (A) Stroke Delimber (A) Tower Yarder (Medium)	

combination#: 2

	Douglas - Fir	80.00%
	Western Hemlock / Fir	80.00%
	Alder (Red)	80.00%
yarding distance:	Short (400 ft)	downhill yarding: No
logging system:	Shovel	Process: Feller Buncher
tree size:	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF	
loads / day:	4.0	bd. ft / load: 4,000
cost / mbf:	\$89.91	
machines:	Feller Buncher w/ Delimber	



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Wolf Creek Sale 341-14-68

District: Western Lane

Date: December 09, 2013

logging costs

Operating Seasons:	2.00	Profit Risk:	20.00%
Project Costs:	\$68,446.00	Other Costs (P/R):	\$0.00
Slash Disposal:	\$0.00	Other Costs:	\$8,612.00

Miles of Road

Road Maintenance: \$0.00

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	4.0
Alder (Red)	\$0.00	2.0	4.0



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Wolf Creek
Sale 341-14-68

District: Western Lane

Date: December 09, 2013

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$105.37	\$0.00	\$3.65	\$81.25	\$0.00	\$38.05	\$0.00	\$5.00	\$3.59	\$236.91
Western Hemlock / Fir									
\$105.37	\$0.00	\$3.65	\$81.25	\$0.00	\$38.05	\$0.00	\$5.00	\$3.59	\$236.91
Alder (Red)									
\$105.37	\$0.00	\$3.65	\$81.25	\$0.00	\$38.05	\$0.00	\$5.00	\$3.59	\$236.91

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$589.17	\$352.26	\$0.00
Western Hemlock / Fir	\$0.00	\$470.45	\$233.54	\$0.00
Alder (Red)	\$0.00	\$580.00	\$343.09	\$0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Wolf Creek
Sale 341-14-68

District: Western Lane

Date: December 09, 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	2,378	\$352.26	\$837,674.28
Western Hemlock / Fir	11	\$233.54	\$2,568.94
Alder (Red)	13	\$343.09	\$4,460.17

Gross Timber Sale Value

Recovery: \$844,703.39

Prepared by: Chad Howard

Phone: 541-935-2283

Summary of "Other Costs" for Timber Sale Appraisals

Fish Ridge (341-13-97)

"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>
Final Road Maintenance	Operation			\$ 5,412
Road maintenance fee 18-6-25 Rd with Oxbow Timber				\$ 700
Road Use fee 18-6-25 Rd with W.E. McArthur & Associates, Inc				\$ 1,000
Landing slash piling	Operation			\$ 1,500

Total "Other Costs" With No Additional Profit and Risk:

\$ 8,612

Cost per MBF 2,457.10 MBF

\$ 3.50

State Timber Sale Contract
 Wolf Creek
 341-14-68

Subgrade Construction/Culverts
 Processing and Decking Right-of-Way Logs Not Included

Totals	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	TOTAL
Stations	42.66	4.85	5.24	16.12	14.84	6.00	90
Cost	\$ 3,117.46	\$ 1,748.17	\$ 1,937.33	\$ 2,424.95	\$ -	\$ 2,289.20	\$ 11,516.00

Earthwork

Clearing & Grubbing	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	TOTAL
Acreage	0.2	0.5	0.6	0.5		0.7	
Cost/Acre	\$1,337.00	\$1,337.00	\$1,337.00	\$1,337.00	\$1,337.00	\$1,337.00	
Total	\$ 267	\$ 669	\$ 802	\$ 669	\$ -	\$ 936	\$ 3,342.00

Excavation yards are bank run from State's design

Drift & Excavation	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	TOTAL
Stations	0.50	4.85	5.24	3.70		6.00	
\$/sta	\$122.00	\$122.00	\$122.00	\$122.00	\$122.00	\$122.00	
Landing Construction	\$390.00	\$390.00	\$390.00	\$390.00		\$390.00	
Subtotal	\$ 451	\$ 982	\$ 1,029	\$ 891	\$ -	\$ 1,122	\$ 4,475.00

Culverts

Existing Culverts	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	
Clear Outlets & Inlets	\$ 450	\$ -	\$ -	\$ 150	\$ -		

Culvert markers	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	
Cost/Marker	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	
# of Markers	12			4			16
Subtotal cost	\$ 120	0	0	\$ 40	\$ -	\$ -	
Subtotal	\$ 770	\$ -	\$ -	\$ 190	\$ -	\$ -	\$ 960.00

Subgrade Treatment

Compaction w/ Roller	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	TOTAL
Road Stations	2	4.85	5.24	3.7		6	22
Cost/STA	20.2	20.2	20.2	20.2	20.2	20.2	
Subtotal	\$ 40	\$ 98	\$ 106	\$ 75	\$ -	\$ 121	\$ 440

Grade and Shape	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	TOTAL
Road Stations	42.66			16.12		6	65
Cost/STA	\$ 37.24	\$ 18.35	\$ 18.35	\$ 37.24	\$ 18.35	\$ 18.35	
Subtotal	\$ 1,589	\$ -	\$ -	\$ 600	\$ -	\$ 110	\$ 2,299

Move in Cost	Initial	Between Projects
D-7 Cat		
Dump Truck	\$ -	
grader	\$ 500	
excavator	\$ 1,500	
vibratory roller	\$ 200	
water truck	\$ 100	

Project Cost \$ 11,516.00

Move In Cost \$ 2,300

Total Cost \$ 13,816.00

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

Rocking and Compaction

Rock Source: Hale Valley

Rock Quantity (Inplace)

Base Rock	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	Spur 5	TOTAL
Rock Size	Jaw Run	Jaw Run	Jaw Run	Jaw Run	0	Jaw Run	0	
Stations	1.00	4.85	5.24	3.70	14.84	3.00		32.63
Approx yds/sta	33	44	33	33	0	33		
Subtotal base (cu. yds)	33	213	173	122	0	99	0	640.0

Cap Rock	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	Spur 5	TOTAL
Rock Size	1 1/2"-0"	0	0	1 1/2"-0"	0	3"-0"	1 1/2"-0"	
Stations	28.08			12.42		3	3	46.00
Approx yds/sta	19			33		17	17	
Curve Widening (Yds)	30					20		
Spot Rocking				10				
Subtotal cap (cu. yds)	564	0	0	420	0	71	51	1106

Landings	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	Spur 5	TOTAL
Rock Size	Jaw Run	Jaw Run	Jaw Run	Jaw Run	0	Jaw Run	0	
Stations	3.00	1.00	1.00	1.00		1.00		7.00
Approx yds/sta	33	33	33	33		33		
Subtotal base (cu. yds)	99	33	33	33	0	33	0	231

Additional Rock	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	Spur 5	TOTAL
Rock Size	Jaw Run	Jaw Run	Jaw Run	Jaw Run	0	Jaw Run	0	
Turnouts and Turn-Arounds								
Approaches onto Mainline	1			1				
Approx cu. yds	44			44				
Subtotal additional (cu. yds)	44	0	0	44	0	0	0	88

* Yardages are based on compacted depth not on truck volume

ROCK COST (Rock + Delivery)

Road Segment/Name	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	Spur 5	TOTAL
Rock Size	Jaw Run	Jaw Run	Jaw Run	Jaw Run	0	Jaw Run	0	
Approx cu. yds	33	213	173		0	99	0	518
Cost/yd (includes load/spread)	\$14.78	\$14.78	\$14.78	\$14.78	\$0.00	\$14.78	\$0.00	
Subtotal Cost "Base" Rock	\$ 488	\$ 3,153	\$ 2,555	\$ -	\$ -	\$ 1,463	\$ -	\$ 7,659

Rock Size	1 1/2"-0"	0	0	1 1/2"-0"	0	3"-0"	1 1/2"-0"	
Approx cu. yds	564	0	0	420	0	71	51	1106
Cost/yd (includes load/spread)	\$16.67	\$0.00	\$0.00	\$16.67	\$0.00	\$16.13	\$16.67	
Subtotal Cost "Cap" Rock	\$ 9,392	\$ -	\$ -	\$ 6,998	\$ -	\$ 1,145	\$ 850	\$ 18,385

Rock Size	Jaw Run	Jaw Run	Jaw Run	Jaw Run	0	Jaw Run	0	
Approx cu. yds	44	0	0	44	0	0	0	88
Cost/yd (includes load/spread)	\$14.78	\$14.78	\$14.78	\$14.78	\$0.00	\$14.78	\$0.00	
Subtotal Cost "Additional" Rock	\$ 650	\$ -	\$ -	\$ 650	\$ -	\$ -	\$ -	\$ 1,300

Rock Size	Jaw Run	Jaw Run	Jaw Run	Jaw Run	\$ -	Jaw Run	\$ -	
Approx cu. yds	99	33	33	33	0	33	0	231
Cost/yd (includes load/spread)	\$14.78	\$14.78	\$14.78	\$14.78	\$0.00	\$14.78	\$0.00	
Subtotal Cost "Landing" Rock	\$ 1,463	\$ 488	\$ 488	\$ 488	\$ -	\$ 488	\$ -	\$ 3,415

Grand total quarry approx yds	739.52	246.4	205.92	496.86	0	203	51	1943
Total Quarry Rock Cost	\$ 11,993	\$ 3,641	\$ 3,043	\$ 8,135	\$ -	\$ 3,096	\$ 850	\$ 30,758

Compaction w/ Vibratory Roller	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	Spur 5	TOTAL
Road Stations	32.08	5.85	6.24	17.12		7.00	3.00	71.00
Lifts	1	1	1	2	0	1	1	
Cost/Station	\$20.20	\$20.20	\$20.20	\$20.20	\$20.20	\$20.20	\$20.20	
Subtotal Compaction	\$ 648	\$ 118	\$ 126	\$ 692	\$ -	\$ 141	\$ 61	\$ 1,786

* landing stations are included in the compacted stations

\$/yd ³ rock in place & compacted	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 4	Spur 5	Spur 5	Total
Total Rock Costs	\$12,641	\$3,759	\$3,169	\$8,827	\$0	\$3,237	\$911	\$ 32,544

Move-in included in subgrade construction

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

State Timber Sale Contract
341-14-68
Wolf Creek

Final Road Maintenance Cost Summary

Totals	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 5	Purchaser Maintained	TOTAL
Stations	42.66	4.85	5.24	12.42	3.00	38.00	
Cost/Sta	\$ 36.32	\$ 18.56	\$ 17.18	\$ 44.49	\$ 71.68	\$ 63.56	
Total Cost	1549.4992	90	90	552.5208	215.05	2415.12	\$ 4,912

Spot Rocking	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 5	Purchaser Maintained	TOTAL
Total Yds	30	0	0	0	0	60	
Rock Size	3"-0"	0	0	0	0	1 1/2"-0"	
\$/yd	\$16.13	\$0.00	\$0.00	\$0.00	\$0.00	\$16.67	
Subtotal	\$ 484	\$ -	\$ -	\$ -	\$ -	\$ 1,000	\$ 1,484

Grade, Shape & Pull Ditches	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 5	Purchaser Maintained	TOTAL
Stations	28.08	0.00	0.00	12.42	3.00	38.00	
\$/STA	\$ 37.24	\$ 18.35	\$ 18.35	\$ 37.24	\$ 18.35	\$ 37.24	
Subtotal	\$ 1,046	\$ -	\$ -	\$ 463	\$ 55	\$ 1,415	\$ 2,979

Install Waterbars	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 5	Purchaser Maintained	TOTAL
# of waterbars		2.00	2.00	2.00	4.00		
\$/waterbar		\$35.00	\$35.00	\$35.00	\$35.00		
Subtotal	0	70	70	70	140	0	\$350

Landing clean up	Bear Tree Rd	Spur 1	Spur 2	Spur 3	Spur 5	Purchaser Maintained	TOTAL
Stations	1.00	1.00	1.00	1.00	1.00		
\$/STA	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00		
Subtotal	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ -	\$ 100

Move In	Initial	Between Proj.
Grader	\$ 500	
Vibratory Rolloer		
D * Cat		
Excavator		
Dump Truck		

Move in costs associated with one entry for the entire project

Total Final Maintenance Costs **\$ 5,412**

**Wolf Creek
341-14-68
Combined Project Costs**

Project 1	Construct and compact sub-grades, Road Improvements,and culverts.	\$13,816
Project 2	Spread and compact rock for Roads.	\$32,544
Project 3	Road Side Brushing	\$5,700
Project 4	Slash Piling	\$16,386

TOTAL PROJECT COSTS	\$68,446
---------------------	----------

Cruise Report

Wolf Creek

SALE # 341-14-68

Sale Area: Portions of Section 26, T18S, R6W, W.M., Lane County, Oregon. The gross acreage is 120. There are 7 acres of stream buffers and approximately 5 acre of roads. The sales net harvestable acres are 108. Acres were determined by using a combination of aerial photos, GPS, GIS, and topographic maps.

Stand Description: Wolf Creek is a mixed species harvest unit dominated by Douglas-fir. Other merchantable species consist of Western Hemlock, Western Red Cedar, Big Leaf Maple, and Red Alder. The stands average DBH is 23". Douglas-fir "take trees" have an average DBH of 22.5. There are leave trees scattered in the stand that are clearly marked in red paint. Any conifer greater than 52" in DBH shall not be cut. The leave trees mainly consist of wildlife trees that contain some sort of defect and/or demonstrate some old growth characteristics. Understory vegetation is moderate. The terrain is fairly flat but there are some short stretches that are steeper than 40%.

Cruise Method: The sale area was cruised in a grid pattern using a systematic variable radius plot sampling method. A Basel Area Factor of 40 was used. A total of 58 cruise plots were captured with an average of 4 trees per plot. Every tree was graded using the official rules for log scaling for the above species. 2 saw and 3 saw quality lumbered favored 40' and 36' log lengths. Deductions for defect were estimated on a tree by tree basis. Logs that were not at least 12 feet in length and having at least 20 bf were not counted. Leave trees were included in the cruise but the volume was excluded from the totals shown below.

Cruiser: Chad Howard

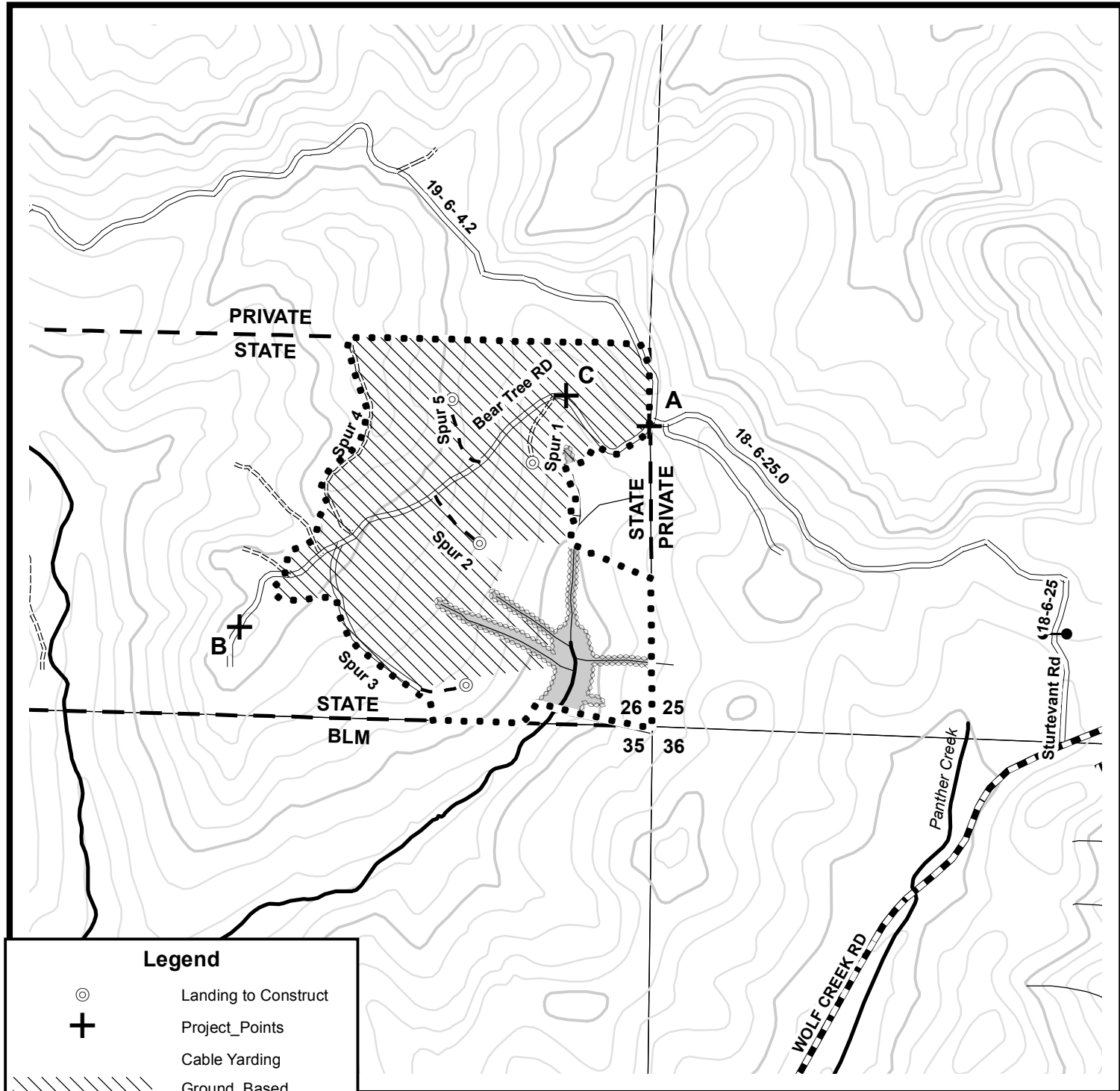
Volume Table: Volumes were computed by using the Super Ace program. A breakage and damage factor of three percent was used. Leave tree volumes are excluded from the totals.

	2 Saw (MBF)	3 Saw (MBF)	4 Saw (MBF)	Camp Run (MBF)	Sub-Total (MBF)
Douglas-fir	1831.2	471.1	75.9		2378.2
Western Hemlock	9.0		2.0		11.0
Red Alder				13.4	13.4

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

Net MBF/Acre = 22340

Total MBF = 2403



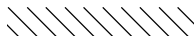
Legend



Landing to Construct



Project Points



Cable Yarding



Ground-Based



New Road Construction

Roads



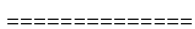
Highway



Paved road



Surfaced road



Dirt road



Timber Sale Boundary



ODF Ownership

Streams



Fish



Nonfish



Posted Stream Buffer

Logging Plan Map

OF TIMBER SALE CONTRACT NO. 341-14-068
WOLF CREEK
PORTIONS OF SECTION 26, T18S, R6W, W.M.
LANE COUNTY, OREGON

0 500 1,000 2,000 Feet

1 inch = 1,000 feet

Contours = 40'

	Gross Acres	Net Acres
Total (CC)	120	108



"STEWARDSHIP IN FORESTRY"

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.