



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Pokegama Salvage
Sale 343-15-808

District: Klamath/Lake

Date: August 26, 2014

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$58,026.16	\$0.00	\$58,026.16
Project Work:			\$0.00
Advertised Value:			\$58,026.16



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Date: August 26, 2014

timber description

Location: Portions of Section 11, T41S, R5E, W.M., Klamath County, Oregon.

Stand Stocking: 40%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	16	0	95
Ponderosa Pine	19	0	95

Volume by Grade	CR 14" -	CR 6" - 8	CR 8" - 1	Total
Douglas - Fir	15	23	53	91
Ponderosa Pine	68	73	215	356
Total	83	96	268	447

comments: Pond Values Used: 2nd Quarter Calendar Year 2014.

Log Markets: Klamath Falls and Medford.

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):

Log Branding and Painting: \$360

Dust Abatement: \$1,930

TOTAL Other Costs (with Profit & Risk to be added) = \$2,290

Other Costs (No Profit & Risk added):

None



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logging conditions

combination#: 1 Douglas - Fir 60.00%
 Ponderosa Pine 40.00%

yarding distance: Medium (800 ft) **downhill yarding:** Yes
logging system: Wheel Skidder **Process:** Feller Buncher
tree size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
loads / day: 8.0 **bd. ft / load:** 4,200
cost / mbf: \$98.83

machines: Log Loader (B)
Stroke Delimber (B)
Feller Buncher w/ Delimber
Tire Skidder

combination#: 2 Douglas - Fir 40.00%
 Ponderosa Pine 60.00%

yarding distance: Medium (800 ft) **downhill yarding:** Yes
logging system: Track Skidder **Process:** Manual Falling/Delimbing
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 10.0 **bd. ft / load:** 4,500
cost / mbf: \$75.69

machines: Log Loader (B)
Track Skidder



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logging costs

Operating Seasons:	1.00	Profit Risk:	15.00%
Project Costs:	\$0.00	Other Costs (P/R):	\$2,290.00
Slash Disposal:	\$0.00	Other Costs:	\$0.00

Miles of Road

Road Maintenance: \$4.67

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	4.2
Ponderosa Pine	\$0.00	2.0	4.4

Local Pond Values

Date	Specie	Grade	Value
8/26/14	Douglas - Fir	CR 6" - 8"	\$440.00
8/26/14	Douglas - Fir	CR 8" - 14"	\$445.00
8/26/14	Douglas - Fir	CR 14" - 22"	\$450.00
8/26/14	Ponderosa Pine	CR 6" - 8"	\$280.00
8/26/14	Ponderosa Pine	CR 8" - 14"	\$325.00
8/26/14	Ponderosa Pine	CR 14" - 22"	\$380.00



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logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$89.57	\$4.90	\$9.81	\$84.79	\$5.12	\$29.13	\$0.00	\$5.00	\$0.00	\$228.32
Ponderosa Pine									
\$84.95	\$4.90	\$9.81	\$80.92	\$5.12	\$27.86	\$0.00	\$5.00	\$0.00	\$218.56

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$444.56	\$216.24	\$0.00
Ponderosa Pine	\$0.00	\$326.28	\$107.72	\$0.00



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summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Ponderosa Pine	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	91	\$216.24	\$19,677.84
Ponderosa Pine	356	\$107.72	\$38,348.32

Gross Timber Sale Value

Recovery: \$58,026.16

Prepared by: Ed Scheick

Phone: 541-883-5681

Pokegama Salvage

343-15-808

Additional Costs



Road Maintenance							
Move-in cost (grader):		\$400.00					
Number of Miles to be Bladed:		8.0					
Number of Bladings:		1					
Miles / Hour for equipment:		0.5					
Cost / Hour (grader with operator):		\$105.50					
Total Grading Hours:		16					
Grading Cost:		\$1,688.00					
Total Cost:		\$2,088.00					
Cost / MBF:		\$4.67					
Brand & Paint (Profit and Risk to be added in Appraisal)							
10 Hauling Days							
1.5 Hours/Day							
\$24.00 Cost/Hour							
\$360.00 Total Cost							
\$0.81 Cost/MBF							
Dust Abatement (Profit & Risk to be added in Appraisal)							
PP	356 MBF	80%	Average Load	4.4 MBF	No. of Loads	81	
DF	91 MBF	20%	Average Load	4.2 MBF	No. of Loads	22	
Total:	447 MBF				Total Loads	103	
Assume:							
5 Trucks/Day							
2 Trips/Day		5 Days of Dust Abatement					
10 Loads per Day		4 Hours/Day					
10 Hauling Days		\$88.00 Cost/Hour					
		20 Total Hours					
		\$170.00 Move in for Water Truck					
		\$1,930.00 Dust Abatement Cost					
		\$1,930.00 Total Cost					
		\$4.32 Cost/MBF					
Other Costs Summary							
Log Branding and Painting:		\$360.00					
Dust Abatement		\$1,930.00					
Total Cost:		\$2,290.00					

POKEGAMA SALVAGE

343-15-808
Cruise Report



SALE NAME: Pokegama

LEGAL DESCRIPTION: T41S, R5E, Portion of Section 11.

BOUNDARY LINES:

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

FUND: 100% BOF

ACREAGE:

Total sale acreage is 65 acres. Powerline R/W acres and group selection acres from previous sale were deducted from the total gross acres (80).
Acreage was determined using district GIS data.

TREATMENT:

The entire timber sale is a salvage within the Oregon Gulch fire of August 2014. Cut trees are all unmarked Ponderosa pine and Douglas fir greater than 10 inches dbh, and contain a log segment that meets or exceeds both of the following requirements: 6 inches in gross scaling diameter, containing 20 board feet (net). Approximately 75 green Ponderosa pine trees were marked with orange paint after the fire, and are reserved from cutting. All Incense cedar and Oak are also reserved from cutting. All wildlife trees and snags marked with an orange “W” are reserved from cutting.

CRUISE METHOD:

Variable Plot cruise with a ratio of 1.5 measure plot for every count plot.

BASAL AREA FACTOR:

Area	BAF	Type Acreage
Entire Sale Area	14 BAF	65 acres

Full point plots taken.

PLOT DESIGNATION:

Plot centers were established at every plot. Blue and white candystripe flagging with the corresponding plot number was attached to the plot center and also to the nearest available tree branch.

SAMPLE SIZE CALCULATIONS:

Pokegama Timber Sale			
	CV %	Desired SE %	Acres
Total Sale Area	75	15	65

$$\text{Number of Plots} = \frac{T^2 C^2}{A^2}$$

C = Coefficient of Variation in Percent (Taken from inventory data)

T = Number of Standard Errors

A = Desired Sampling Error for a sale of this size and value

$$\text{Total Sale Number of Plots: } \frac{(1)^2(75)^2}{15^2} = 25 \text{ Plots, Took 26.}$$

Measurements and Grading:

- DBH and Height were measured on all “in” trees in the measure plots.
- Ratio of 1.5 measure plot for every count plot.
- 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 (usually 6 or 8 inches). The log segments are broken out and graded accordingly.

MINIMUM D.B.H.:

10.0” D.B.H. (Must have a minimum of 20 board feet.)

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 D.B.H.

VOLUME COMPUTATION:

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

CRUISERS: Ed Scheick, Sarah Stack.

FINAL CRUISE RESULTS:

Pokegama Timber Sale			
	CV %	SE %	Acres
Total Sale Area	50	9.7	65

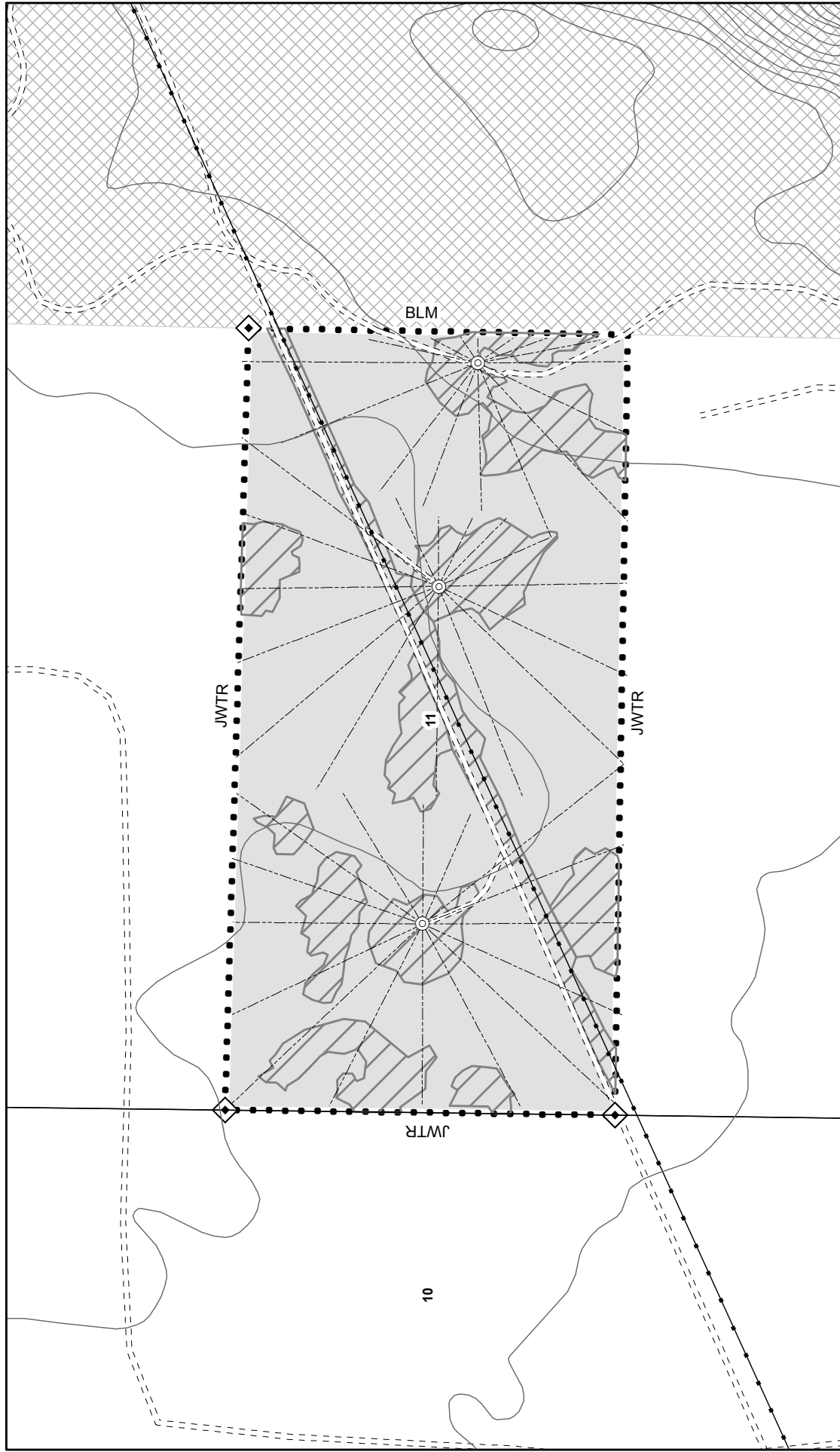
TIMBER DESCRIPTION

Total Sale Area	Species	Average DBH	Gross Volume (MBF)	Net Volume (MBF)
	Ponderosa Pine	18.7	358	356
	Douglas Fir	16.2	93	91
Total MBF				447

(Volumes taken from Species, Sort Grade –Board Foot Volumes Report)

TC TLOGSTVB				Log Stock Table - MBF Project: PKGMASAL																
T041 R005 S11 TVARI												T041 R005 S11 TVARI								
Twp	Rge			Sec	Tract			Type	Acres		Plots		Sample Trees		Page 1					
041	005			11	600			VARI	65.00		26		67		Date 8/25/2014					
														Time 11:55:42AM						
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	6-8	9-10	11-12	13-14	15-16	17-19	20-21	22-29	30-39	40+
PP	CR	CR	17		15		15	4.1			13		2							
PP	CR	CR	26		18		18	4.9			18									
PP	CR	CR	34		326	.5	324	91.0			43	53	75	85	44	15	9			
PP Totals					358		356	79.7			73	53	77	85	44	15	9			
DF	CR	CR	17		13	5.9	12	13.5			5	3		5						
DF	CR	CR	26		10		10	10.8			7	2								
DF	CR	CR	34		71	2.7	69	75.7			11	15	14	15	9	6				
DF Totals					93	2.8	91	20.3			23	19	14	20	9	6				
Total All Species					451		447	100.0			96	73	90	105	52	21	9			

TC TSTATS				STATISTICS				PAGE	1		
				PROJECT	PKGMASAL		DATE	8/25/2014			
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt		
041	005	11	600	VARI	65.00	26	109	1	E		
				TREES	ESTIMATED	PERCENT					
				PER PLOT	TOTAL	SAMPLE					
					TREES	TREES					
TOTAL				26	109	4.2					
CRUISE				15	67	4.5	2,102	3.2			
DBH COUNT											
REFOREST											
COUNT				10	42	4.2					
BLANKS				1							
100 %											
STAND SUMMARY											
SAMPLE		TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET	
TREES		/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC	
PPINE		47	23.2	18.7	61	10.2	44.0	5,502	5,476	1,141	1,141
DOUG-FIR		20	9.2	16.2	45	3.3	13.1	1,438	1,397	322	322
TOTAL		67	32.3	18.0	57	13.5	57.1	6,940	6,874	1,463	1,463
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		
PPINE		60.2	8.8	269	295	321					
DOUG-FIR		77.7	17.8	180	219	258					
TOTAL		65.2	8.0	251	272	294	170	43	19		
CL:	68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
PPINE		52.0	7.6	56	60	65					
DOUG-FIR		66.8	15.3	41	49	56					
TOTAL		56.1	6.9	53	57	61	126	32	14		
CL:	68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
PPINE		62.1	12.4	20	23	26					
DOUG-FIR		156.5	31.3	6	9	12					
TOTAL		54.6	10.9	29	32	36	124	31	14		
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
PPINE		55.6	11.1	39	44	49					
DOUG-FIR		123.0	24.6	10	13	16					
TOTAL		44.3	8.9	52	57	62	82	20	9		
CL:	68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
PPINE		60.7	12.1	4,811	5,476	6,141					
DOUG-FIR		117.2	23.5	1,070	1,397	1,725					
TOTAL		48.6	9.7	6,206	6,874	7,542	98	25	11		
CL:	68.1 %	COEFF	NET CUFT FT/ACRE				# OF PLOTS REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
PPINE		58.8	11.8	1,007	1,141	1,275					
DOUG-FIR		117.9	23.6	246	322	398					
TOTAL		46.4	9.3	1,327	1,463	1,599	90	22	10		



- Pokagama Salvage Timber Sale
- Unsurfaced Road
- ▨ Excusions
- ◆ Land Survey Monument
- ▤ US Bureau of Land Management
- Electric Transmission Lines
- ⊙ Landings
- Skid Trails

LOGGING PLAN
OF TIMBER SALE CONTRACT 343-15-808
POKEGAMA SALVAGE
PORTION OF SECTION 11, T41S, R5E, W.M.,
KLAMATH COUNTY, OREGON
1 inch = 500 feet

0 250 500 1,000 1,500 Feet

N

Gross Area: 82 acres
Exclusions: 17 acres
Net Acres: 65 acres

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

Klamath-Lake District GIS
August 20, 2014