

TIMBER SALE APPRAISAL APPENDIX (TE) 04-2420-3

1. Sale Name: TWIN SKIN
 District: Bonners Ferry RD
 Appraisal Point: Moyie Springs

Sale No. 012 TIM # 07705
 Compartment: 737, 742, 744
 Total Sale Acres: 1,140

2. Species Group	C, WP	DF, L	GF, H, LP, PP, S	Sawlog Total	Nonsawlog Total	Total All Products
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Net Volume	631 CCF 289 MBF	2,662 CCF 1,294 MBF	3,033 CCF 1,513 MBF	6,326 CCF 3,096 MBF 20,685 Tons	1,296 CCF 880 MBF 4,442 Tons	7,622 CCF 3,976 MBF 25,127 Tons
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3. Weighted Averages For Species Grouping

	Net	Gross					Appraisal	WWPA	Esc.	WWPA
Species	Volume	Volume	Percent	Gross	Number	Average	Conv.	Species	Conv.	Index
Group	CCF	CCF	Defect	Logs /ccf	Trees	DBH	Factor	Index	Factor	Name
C	598	651	8	21	5,644	10.0				
WP	33	36	7	9	64	15.2				
Total (T) Wt. Avg. (A)	T 631	T 687	A 8	A 20	T 5,708	A 10.1	NA	NA	NA	NA

	Net	Gross					Appraisal	WWPA	Esc.	WWPA
Species	Volume	Volume	Percent	Gross	Number	Average	Conv.	Species	Conv.	Index
Group	CCF	CCF	Defect	Logs /ccf	Trees	DBH	Factor	Index	Factor	Name
DF	2,449	2,592	6	22	23,175	9.7				
L	213	221	4	24	1,809	9.5				
Total (T) Wt. Avg. (A)	T 2,662	T 2,813	A 5	A 22	T 24,984	A 9.7	NA	NA	NA	NA

	Net	Gross					Appraisal	WWPA	Esc.	WWPA
Species	Volume	Volume	Percent	Gross	Number	Average	Conv.	Species	Conv.	Index
Group	CCF	CCF	Defect	Logs /ccf	Trees	DBH	Factor	Index	Factor	Name
GF	1,345	1,500	10	16	7,566	10.7				
H	832	895	7	20	6,599	9.9				
LP	800	846	5	19	5,239	10.0				
PP	14	14	2	26	170	9.4				
S	42	42	2	18	243	10.9				
Total (T) Wt. Avg. (A)	T 3,033	T 3,297	A 8	A 18	T 19,817	A 10.3	NA	NA	NA	NA

Combined Species Average DBH: 10 inches
 Sale Wide Conversion Factor (MBF/CCF): .5216

4. Skidding

a. Tractor:	Acres 352	Volume 3,494 CCF	Distance 825 ft
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b. Skyline:	Acres 258	Volume 2,832 CCF	Distance 675 ft
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5. Transportation

Haul Route

Appraised to: Moyie Springs, Idaho

(a) Road Miles – Sale Center to Appraisal Point:

(1) Paved:

Road Number	Termini	Miles
C72	From Rd 435 to the junction with US2.	3.1
US2	From County Rd 72 to the junction with Mill Rd Cty83.	1.5
Cty83	From US 2 to the mill.	0.5
Total		5.1

(2) Unpaved:

Road Number	Termini	Miles
2215A	From m.p. 1.9 to thr junction with Rd 2215.	1.9
2215	From Rd 2215A to the junction with Rd 2533.	0.9
2533	From Rd 2215 to the junction with Rd 435.	0.2
435	From Rd 2533 to the junction with county road 72.	3.1
Total		6.1

Total Haul Miles (Paved and Unpaved) = **11.2**

(b) Road Maintenance

(1) Roads to be Maintained:

Road No.	Name	Termini	Surface	Miles
2269	Tuin	From m.p. 3.3 to the junction with Rd 435.	Native	3.3
2269UL	Private	From m.p. 0.9 to County Road 72.	Native	0.9
2215	Southwick	From m.p. 1.5 to the junction with Rd 2533.	Native	1.5
2215A	Southwick A	From m.p. 1.9 to the junction with Rd 2215.	Native	1.9
2215B	Southwick B	From m.p. 0.3 to the junction with Rd 2215A.	Native	0.3
627	Skin Creek	From Rd 2404 to the junction with county 73.	Gravel	1.8
2404	Solomon Lake	From 2404A to the junction with Rd 627.	Native	0.1
2404A	Solomon Lake	From Rd 2549 to the junctionwith Rd 2404.	Native	0.2
2549	Solomon Mountain	From m.p. 0.9 to the junction with Rd 2404A.	Native	0.9
2584	Knife	From m.p. 0.9 to the junction with Rd 2269.	Native	0.9
2584A	Knife A	From m.p. 0.5 to the junction with Rd 2584.	Native	0.5
2533	Pork	From Rd 2215 to the junction with Rd 435.	Native	0.2
435	Deer Creek Spread Creek	From m.p. 3.6 to the county portion m.p.2.6.	Gravel	1.0
Total				13.5

(2) Recurrent Maintenance:

Road Number	Miles	Cost/ccf/mile	% Total Vol.	Cost/CCF	Cost/CCF
				Purchaser	Forest Service
2215A	1.9	.10	100	.19	
2215	0.9	.10	100	.09	
2533	0.2	.10	100	.02	
435	1.0	.13	100	.13	
Dust Abatement				1.29	
Snowplowing				.28	
Total	4.0			2.00	

(3) Surface Replacement:

Road Number	Miles	Cost/CCF/Mile	% Total Vol.	Cost/ CCF
2215A	1.9	.06	100	.11
2215	0.9	.06	100	.05
2533	0.2	.06	100	.01
435	1.0	.11	100	.11
Total	4.0			.28

(4) Roadside Vegetative Brushing:

Road Number	Miles	Cost/CCF/Mile	% Total Vol.	Cost/ CCF
2215A	1.9	.06	100	.11
2215	0.9	.06	100	.05
2533	0.2	.06	100	.01
435	1.0	.06	100	.06
Total	4.0			.23

(5) Road Maintenance Summary:

	Cost/CCF	Cost/Ton
Recurrent Maintenance (Purchaser)	2.00	
Recurrent Maintenance (FS)		
Surface Replacement (FS)	0.28	
Roadside Vegetative Brushing (FS)	0.23	
Total Deposit	0.51	0.16
Total Road Maintenance	2.51	

6. Slash Disposal

	Cost/CCF	Cost/Ton
Forest Service	19.90	5.01
Purchaser	10.31	
Total	30.21	

7. Erosion Control

(See Erosion Control Plan in Timber Sale Report) \$.89/CCF

8. Other Environmental Protection Costs

Description	Unit Costs	Total Cost
Mobile Tailholds for Unit 9	\$85/hr x 8 hr/day x 10 days	6,800
Road Reconditioning	see below	9,130
Install powder river type gates – pvt rd 2269UL & Unit 17 Temp Rd	\$500/gate	1,000
Total		16,930
Total Cost/CCF		\$2.68/CCF

8a. Road Reconditioning:

Road Number	Road Work	Unit Costs	Costs
627	Blade	1.8 mi x \$1000/mi	1,800
2269UL	Brush	0.9 mi x \$800/mi	720
	Blade	0.9 mi x \$1000/mi	900
2215	Brush	1.5 mi x \$600 mi	900
	Blade	1.5 mi x \$700/mi	1,050
2215A	Brush	1.9 mi x \$600 mi	1,140
	Blade	1.9 mi x \$700/mi	1,330
2215B	Brush	0.3 mi x \$600/mi	180
	Blade	0.3 mi x \$700/mi	210
2584A	Brush	0.5 mi x \$800/mi	400
	Blade	0.5 mi x \$1000/mi	500
Total		6.9 miles	9,130

9. Small Product Adjustment - See attachment

\$ 5.73 /CCF

10. Temporary Road Costs

Reference: Cost estimating procedures taken from the R1 Cost Estimating Guide for Road Construction, dated 2/07.

(a) **Construction:** 0.7 miles for units 2 and 10.

Average Side Slope: 15 %		
Average Timber Volume: 10 Mbf/Acre		
	Cost/Mile	Cost
1. Clearing and Grubbing (Table T-1)	2,720	
2. Excavation (Table T-1)	1,370	
3. Seeding (Table T-1)	620	
4. Obliteration (Table T-3) level	750	
5. Total Unit Cost (1+ 2 + 3 + 4)	5,460	
6. Basic Cost (5) x Length		3,822
7. Drainage:		
_____ dips x Cost/dip (Section 157)		
_____ CMP x Cost/CMP (Table T-2)		
8. Subtotal (6 + 7)		3,822
9. Mobilization (Table T-4) (8 + 7%)		268
10. Subtotal (8 + 9)		4,090
11. Minus Profit (10 / 1.06)		-232

12. Total Construction Cost		3,858
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(b) Reconstruction: 0.3 miles for units 17 and 18.

	Miles	Unit Cost	Total Cost
Reconstruction: Brush & Blade	0.3 miles	\$1,800/mi	540
Obliteration:	0.3 miles	\$750/mi	225
Mobilization:			100
Total Reconstruction			865
Total Minus Profit			816

Total Temporary Road Miles = **1.0 miles**

Total Temporary Road Cost = **\$ 4,674**

Cost Estimate per CCF (All Species) = **\$.74/CCF**

11. Specified Roads - (See Schedule of Items for more detailed information)

Road No.	Miles Construction	Miles Reconstruction	Purchaser Costs	
			Construction	Reconstruction
2269		2.00		16,283.00
2404A		0.22		213.25
2549		0.90		5,524.09
2584		0.90		5,375.33
TOTAL		4.02		27,395.67

Total Purchaser Costs: \$27,395.67

Estimated Cost per CCF (All Species): \$ 4.33/CCF

12. Base Rates

Adjustments of Base Rates (to protect regeneration costs)	Costs
Min NFF: Sale volume 7,622 x \$0.25/CCF	1,906
Regeneration Costs	199,276
Regeneration Costs plus min NFF	201,182
Total value at minimum rates *	41,832
Amount of increase needed	159,350
Increase per CCF	25.19

* Total Value at Minimum Rates:

Species	Rate/ccf	Volume	Total Value
C,WP	10.00	631	6,310
DF,L	6.00	2,662	15,972
GF,H,LP,PP,S	6.00	3,019	18,114
PP	10.00	14	140
Nonsawlog	1.00	1,296	1,296
Total		7,622	41,832

Species Group	C,WP	DF,L	GF,H,LP, PP,S	Nonsawlog	Total Rate/Ton
Base Rate/CCF	\$35.19/CCF	\$31.19/CCF	\$31.21/CCF	\$1.00/CCF	\$8.01/Ton

