

IDAHO PANHANDLE NATIONAL FORESTS

2450
Commercial Sales - Proposed

04-2420-01

STARS 12402

HOB KNOB TIMBER SALE REPORT
AND
APPRAISAL

DISTRICT

SUPERVISOR'S OFFICE

Prepared Edwin R. Odegaard/s
By

Reviewed for Advertisement

Date 4/24/12
By

Date

Reviewed _____
By

Date _____

Reviewed _____
By

Date _____

I hereby certify that this sale meets
the requirements of Secretary's
Regulation 36 CFR 223.30.

Staff Officer, Timber

Date

Hob Knob Timber Sale Timber Sale Report

I. Location

The sale area is 3683 acres in size and is located in sections 16, 17, 20, 21, 22, 23, 26, 27, 28, 33, 34 and 35, T43N, R2W Boise Meridian, Benewah County, Idaho. The timber stand atlas compartment number is 417, St. Joe Ranger District, Idaho Panhandle National Forests. Timber harvest is planned on 339 acres. The Sale Area lies within the Charlie Creek drainage.

II. Relationship to the Environmental Document and Other Uses

This sale is prepared under the direction of the Charlie Preston Environmental Assessment, approved by Forest Supervisor Mary Farnsworth on February 6, 2012. The purpose of this sale is vegetation management. This sale lies in Forest Plan Management Area 1

A. Relationship to Private Land/Rights-of-Way: All harvest units and landing locations are located on Forest Service lands.

B. Special Uses, Mining Claims, Range Allotments: One range allotment does overlap the Hobknob Sale area. The Purchaser should be aware of the possible presence of livestock within the sale area.

C. Noxious Weeds: All off-road logging and constructions equipment will be cleaned prior to entering the project area to remove any dirt which may contain weed seeds or plant materials which may contribute to the spread of noxious weeds.

All grass seed and mulching material will be certified "weed-free".

D. Cultural Resources: The Forest Service shall be notified upon discovery of any artifacts discovered during Purchaser operations. All discoveries will be protected in accordance with the timber sale contract and the National Historic Preservation Act.

E. To the degree practicable stockpiled gravel used for road maintenance will be noxious weed free. If possible, the stockpile will be inspected for noxious weeds growth prior to use. The district botanist should be notified if weeds are found on the stockpiled gravel.

III. Timber Volumes

The Hobknob Timber Sale units were cruised in 2011 field season. All cruise design and implementation procedures adhered to the standards prescribed in the Forest Service Cruising Handbook 2409.12 and all R1 and IPNF Supplements.

ERROR TERM, VOLUME AND CONFIDENCE INTERVAL based on the AGGREGATED cubic foot product volume is 17.24%. Maximum allowable for a scaled sale is 20%. Acreages have been determined using global positioning systems with data collected in accordance with forest service manual FSH 2409.12.

Check Cruiser: Edwin R. Odegaard

Qualified Cruiser: Michael Hicks, William Brandt, Cassidy Russell, Cynthia Johnston

I certify that this sale was cruised by competent cruisers as determined by adequate testing. The estimated cut volumes shown below are within Meet the standards set forth in the Timber Cruising Handbook (FSH 2409.12) as required for Weight Scale sales.

By: Edwin R. Odegaard/s Date: 11/18/2011 Title: Zone Check Cruiser

Net Volume CCF, Conventional Logging Systems

Unit	Ac	C	DF	GF	H	L	LP	WP	TOTAL Sawlog Net CCF	TOTAL Sawlog Net MBF	Non-Saw CCF	Gross Tons *	Logging System
5	41	125	239	277	56	99	102	23	921	488	64	3127	SKY
8A	54	164	315	365	74	131	134	30	1213	643	84	4120	GB
8B	12	37	70	81	17	29	30	7	271	143	19	916	SKY
16A	7	21	41	47	10	17	17	4	157	83	11	534	GB
16B	32	97	187	216	44	78	80	18	720	381	50	2441	SKY
17	20	73	212	116	14	38	5	0	458	238	36	1559	GB
19	10	30	58	68	14	24	25	6	225	119	16	763	GB
23A	21	76	223	122	15	40	6	0	482	249	38	1636	GB
23B	82	298	871	475	57	155	22	0	1878	974	149	6389	SKY
33A	14	51	149	81	10	26	4	0	321	166	25	1091	GB
33B	28	102	297	162	19	53	8	0	641	333	51	2181	SKY
34	16	58	170	93	11	30	4	0	366	190	29	1246	SKY
ROW	2	75	26	13	5	1	0	1	121	63	2	340	GB
TOTALS	339	1207	2858	2116	346	721	437	89	7774	4070	574	26343	

* From cruise processing report WT4, combined sawlog & non-saw.
(Non-sawlog volume is topwood)

Conversion Factors and Ratios:

Sale Wide Conversion Factor (CCF/MBF): .52378

Conversion Factor (CCF to Ton): 3.16

IV. Marking Plan

Cutting Unit Boundary: The cutting unit boundaries are marked with three vertical orange stripes with the central stripe facing into the cutting unit and two opposing stripes facing in the directions of the previous and next boundary tree along the unit boundary. Boundary marks are generally located near eye level or higher. In addition, a horizontal stump mark is painted on the downhill side of the tree using orange paint.

Leave Trees Marking (LTM): In units designated LTM leave trees are marked with an Orange paint band located near DBH and an Orange stump mark painted horizontally on the downhill side of the tree.

Cut Tree Marking (CTM): In units designated CTM cut trees are marked with a Blue paint band located near DBH and a Blue horizontal stump mark located on the downhill side of the tree.

RESERVE TREES (LTM): White Pine reserve trees or groups of reserve trees within such cutting units or clearings shall be left uncut. Reserve trees are identified by an Orange painted X on the uphill and downhill side of the tree and an orange band located below the X near DBH. A horizontal stump mark painted in orange is also located on the downhill side of the tree at ground level. Reserve Trees shall be protected in accordance with C2.3# and C6.32#. Units with reserve trees are shown on Sale Area Map.

Unit Number	Cut Timber Designation	Acres	Marking Code	Marking Paint Colors
5	Leave Tree Mark	41	LTM	Orange
8A	Leave Tree Mark	54	LTM	Orange
8B	Leave Tree Mark	12	LTM	Orange
16A	Leave Tree Mark	7	LTM	Orange
16B	Cut Tree Mark	32	CTM	Blue
17	Cut Tree Mark & Reserve Trees	20	CTM/RES	Blue (cut) & Orange (res)
19	Leave Tree Mark	10	LTM	Orange
23A	Cut Tree Mark	21	CTM	Blue
23B	Cut Tree Mark	82	CTM	Blue
33A	Cut Tree Mark	14	CTM	Blue
33B	Cut Tree Mark	28	CTM	Blue
34	Leave Tree Mark	16	LTM	Orange

V. Logging Plan

1. General Information:

1. Intermediate supports: All skyline analyses were completed using Logger PC. Profiles analysis in unit 23B & 16B shows that intermediate supports will be needed on a few sets. Other skyline units may need intermediate supports on some sets. Timber designated for cutting should be used as jack trees whenever possible.
2. Mechanical felling: Mechanical felling will be allowed by agreement in all tractor units and skyline units 5, 8B, 16B, 23B & 34 on slopes up to 45%.
3. The Hob Knob Timber Sale has been designed to utilize a Link-belt size yarder with a 50 foot tower.

2. Sale Averages

Skyline

1. In units labeled “SKY” on the Sale Area Map a Linkbelt type yarding with a 50 foot tower will be used for the yarding of designated timber. Except where converging, corridors shall be spaced 150 feet apart. Landings will be piled and roads used as landing will be kept clear of debris and restored to original condition upon completion of yarding activities.
2. Longest Set: Profile and map analysis indicated that the longest skyline span with the sale is located along the eastern ridge of unit 16B. This span will require an estimated 1,340 feet of skyline and 1,120 feet of mainline.
3. Intermediate Supports: In unit 23B intermediate supports will be required on some sets in the lower western half of unit 23B. In addition, supports may be needed near mid ridge in the eastern half of unit 16B. In unit 23B spans below the support trees are short, no more the 400 feet. In some cases, the use of intermediate supports may be avoided if a yarder with a larger tower is used.
4. Skyline corridors within Riparian Areas: In some cases it may be necessary for skyline corridors to cross riparian areas to gain adequate deflection for log yarding operations. In such cases any timber felled within these riparian areas not designated for cutting within A2 will be left in place and not removed from the riparian area.
5. The external yard distance (average) for skyline is 594 feet.

Ground Based Skidding (tractor/log forward)

1. In units marked "GB" on the sale area map a ground based yarding system will be used for harvest activities. All skid trails will be spaced 100 feet apart except where converging.
2. The longest skidding distance is estimated to be 1041 feet in unit 8A (slope distance).
3. The average external yarding distance for ground based unit is 352 feet.

IDL1: IDAHO DEPARTMENT OF LANDS SUMMARY OF CRUISE DATA
 ALL CUT TREES -- LIVE TREES ONLY
 PRIMARY PRODUCT ONLY
 CRUISE#: 04112 SALE#: 04112
 SALENAME: Hob Knob
 RUN DATE & TIME: 05-02-2012 11:02:23

VERSION: 04.12.2011
 VOLUME LIBRARY VERSION: 03.18.2011

Total Sale Acres: 339

	SPECIES OR SPECIES GROUP										TOTALS & AVERAGES
	WP	PP	DF	L	GF	C	S	LP	AF	H	
Avg. DBH (inches)	12.7	0.0	12.3	10.6	11.0	9.7	0.0	10.3	0.0	10.1	10.9
Avg. Tree Height (feet)	79.2	0.0	82.4	85.4	75.9	61.7	0.0	80.9	0.0	68.8	74.3
Avg. Tree Height (logs)	4.2	0.0	4.1	4.1	3.9	2.8	0.0	4.2	0.0	3.3	3.6
Basal Area/Acre (sq.ft.)	1.2	0.0	31.5	8.4	22.4	21.9	0.0	4.3	0.0	4.3	94.0
Trees/Acre	1.3	0.0	34.9	13.0	29.1	39.1	0.0	7.2	0.0	7.0	131.6
Trees/MBF (Gross)	8.8	0.0	7.2	10.9	7.0	17.7	0.0	9.8	0.0	10.4	9.4
Logs/Acre	5.4	0.0	143.5	53.2	112.3	111.4	0.0	30.0	0.0	22.8	478.5
Logs/MBF (Gross)	36.6	0.0	29.6	44.6	26.9	50.4	0.0	41.1	0.0	34.0	34.2
Logs/MBF (Net)	44.4	0.0	32.0	48.1	32.9	66.0	0.0	44.6	0.0	43.2	39.8
Total Defect(%)	17.5%	0.0%	7.6%	7.4%	18.2%	23.5%	0.0%	7.9%	0.0%	21.5%	14.1%
Gross Cut Volume (MBF)	49.7	0.0	1642.7	404.4	1416.3	748.9	0.0	247.3	0.0	227.4	4736.7
Net Cut Volume (MBF)	41.0	0.0	1518.0	374.4	1158.3	572.6	0.0	227.6	0.0	178.5	4070.5
Avg. Net Vol/Tree (BF)	94.0	0.0	128.4	85.1	117.2	43.2	0.0	93.8	0.0	75.2	91.3
Avg. Net Vol/Acre (MBF)	0.1	0.0	4.5	1.1	3.4	1.7	0.0	0.7	0.0	0.5	12.0

R102: SALE SUMMARY BY LOGGING METHOD
 FOR CUT TREES ONLY
 -- BOARD FOOT --
 CRUISE#: 04112 SALE#: 04112
 SALENAME: Hob Knob
 RUN DATE & TIME: 05-02-2012 11:02:23

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VERSION: 04.12.2011
 VOLUME LIBRARY VERSION: 03.18.2011

L O R G O D M U T C H T	GROSS BF	TOTAL DEF%	NET BF	ESTIM TREES	GROSS BF/ ACRE	NET BF/ ACRE	TREES/ ACRE	MEAN DBH	MEAN HGT	NET BF/ TREE	16' LOGS/ GROSS MBF	AVG SLOPE	ACRES
TRA 01 P	1815130	14.0	1561639	16685	14181	12200	130.3	10.9	74.4	94	28.2	0.0	128.0
01 TOTAL	1815130	14.0	1561639	16685	14181	12200	130.3	10.9	74.4	94	28.2	0.0	128.0
TRA 08 S	137023	0.0	137023	0	1070	1070	0.0	0.0	0.0	0	0.0	0.0	128.0
TRA 08 R	0	0.0	43439	0	0	339	0.0	0.0	0.0	0	0.0	0.0	128.0
08 TOTAL	137023	0.0	180462	0	1070	1410	0.0	0.0	0.0	0	0.0	0.0	128.0
TRA TOTAL	1952153	10.8	1742102	16685	15251	13610	130.3	10.9	74.4	104	26.2	0.0	128.0
SKY 01 P	2921558	14.1	2508869	27913	13846	11890	132.3	10.8	74.2	90	29.3	0.0	211.0
01 TOTAL	2921558	14.1	2508869	27913	13846	11890	132.3	10.8	74.2	90	29.3	0.0	211.0
SKY 08 S	231158	0.0	231158	0	1096	1096	0.0	0.0	0.0	0	0.0	0.0	211.0
SKY 08 R	0	0.0	77959	0	0	369	0.0	0.0	0.0	0	0.0	0.0	211.0
08 TOTAL	231158	0.0	309117	0	1096	1465	0.0	0.0	0.0	0	0.0	0.0	211.0
SKY TOTAL	3152716	10.6	2817985	27913	14942	13355	132.3	10.8	74.2	101	27.1	0.0	211.0
TOTALS/AVE	5104869	10.7	4560087	44597	15059	13452	131.6	10.9	74.3	102	26.8	0.0	339.0

R103: SALE SUMMARY BY LOGGING METHOD
 FOR CUT TREES ONLY
 -- CUBIC FOOT --
 CRUISE#: 04112 SALE#: 04112
 SALENAME: Hob Knob
 RUN DATE & TIME: 05-02-2012 11:02:23

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VERSION: 04.12.2011
 VOLUME LIBRARY VERSION: 03.18.2011

L O R G O D M U T C H T	GROSS CF	TOTAL DEF%	NET CF	ESTIM TREES	GROSS CF/ ACRE	NET CF/ ACRE	TREES/ ACRE	MEAN DBH	MEAN HGT	NET CF/ TREE	16' LOGS/ GROSS CCF	AVG SLOPE	ACRES
TRA 01 P	345114	13.8	297629	16685	2696	2325	130.3	10.9	74.4	18	14.8	0.0	128.0
01 TOTAL	345114	13.8	297629	16685	2696	2325	130.3	10.9	74.4	18	14.8	0.0	128.0
TRA 08 S	21242	0.0	21242	0	166	166	0.0	0.0	0.0	0	0.0	0.0	128.0
TRA 08 R	0	0.0	7013	0	0	55	0.0	0.0	0.0	0	0.0	0.0	128.0
08 TOTAL	21242	0.0	28255	0	166	221	0.0	0.0	0.0	0	0.0	0.0	128.0
TRA TOTAL	366356	11.0	325884	16685	2862	2546	130.3	10.9	74.4	20	14.0	0.0	128.0
SKY 01 P	557064	13.9	479511	27913	2640	2273	132.3	10.8	74.2	17	15.4	0.0	211.0
01 TOTAL	557064	13.9	479511	27913	2640	2273	132.3	10.8	74.2	17	15.4	0.0	211.0
SKY 08 S	36062	0.0	36062	0	171	171	0.0	0.0	0.0	0	0.0	0.0	211.0
SKY 08 R	0	0.0	12676	0	0	60	0.0	0.0	0.0	0	0.0	0.0	211.0
08 TOTAL	36062	0.0	48738	0	171	231	0.0	0.0	0.0	0	0.0	0.0	211.0
SKY TOTAL	593126	10.9	528249	27913	2811	2504	132.3	10.8	74.2	19	14.4	0.0	211.0
TOTALS/AVE	959482	11.0	854133	44597	2830	2520	131.6	10.9	74.3	19	14.3	0.0	339.0

VI. Transportation System

To access the Hob Knob Timber Sale area from St. Maries, Idaho, drive 14.4 miles south on State Highway 3 to its junction with State Highway 6. Turn right on State Highway 6 and proceed west approximately 7 miles to Emida, Idaho. From Emida, access units 16A and 19 by turning left onto the Charlie Creek Road (FR 299) and proceeding .4 miles until you reach its junction with the Hume Creek Road (FR 1479). Turn right onto the Hume Creek Road and proceed approximately 2.4 miles until its junction with FR 1950 is reached. Turn left on FR 1950. Pass through the 1st and 2nd gates staying on Road 1950 until unit 16A or 19 is reached (approximately 4.7 miles). **These gates are locked and prospective purchasers will need to get keys from the St. Maries district office prior to visiting the sale area.**

From Emida, units 16B, 17, 23A, 23B, 33A, 33B and unit 34 can be accessed by continuing on from Emida on Highway 6 to its junction with Forest Road 377 at White Pine Pass. From White Pine Pass, proceed 5.5 miles on FR 377 to the sale center.

Units 5, 8A and 8B can be accessed from Emida by proceeding up the Charlie Creek Road (FR 299) for approximately 5.2 miles until its junction with the Lacy Creek Road (FR 1947) is reached. To access unit 8B, proceed up Lacy Creek another 3.5 miles to the unit boundary. To access units 5 and 8A, proceed up Lacy Creek for approximately .8 miles until its junction with FR 1955 is reached. Proceed on FR 1955 for 2.3 miles. This will bring you to the center of unit 8 and the eastern boundary of unit 5.

Temporary Roads, Landings and Skid Trails:

Temporary roads will be constructed to access unit 5, portions of units 23B and 33B. Temporary roads will be obliterated when harvest operations have been completed.

Total miles of temporary road = .7 miles
Total Allowance \$8,606.43 or \$1.11/CCF

Road Reconditioning:

Road 1955A will be brushed and bladed by the purchaser in accordance with specifications set forth in C5.31#. The estimated appraisal allowance for this work is \$1,031.00 or \$0.13 cents per CCF for .3 miles of road work. Road work specifications are listed under C5.31# T-specs.

Road Construction/Reconstruction

Road No.	Miles	Miles	Purchaser Costs	
	Construction	Reconstruction	Construction	Reconstruction
377JA	.7		\$57,722.12	
TOTAL			\$57,722.12	

Road Construction Completion Date: October 15, 2013

System Road Stabilization - C5.419# = \$1,870.00 or \$ 0.24/CCF

(See timber sale contract provision for further information)

For winter recreation purposes, use is prohibited on Roads 377 and 1479 between December 1 and March 31. (C5.12#)

VII. Erosion Control

Purchaser shall be required to seed and fertilize areas of disturbed/exposed mineral soils caused during logging operations.

Seed and Fertilizer application periods shall be between the periods June 1st to June 15th and from September 15 to October 31. Seed shall be applied evenly at the rate of 19 pounds per acre and 200 pounds of fertilizer per acre.

Seed quantity:

SPECIES	PLS LBS/AC
Slender wheatgrass "Pryor" or "Revenue" (<i>Elymus trachycaulus</i> ssp. <i>trachycaulus</i>)	3.0
Hard fescue "Durar" (<i>Festuca brevipila</i> , synonym: <i>Festuca ovina</i> var. <i>duriuscula</i>)	5.0
Mountain brome "Bromar" (<i>Bromus marginatus</i>)	5.0
Annual rye (<i>Lolium multiflorum</i>)	4.0
*Alsike clover (<i>Trifolium hybridum</i>)	2.0
TOTAL	19.0

Acceptable substitutes:

Blue wildrye "Arlington" or "Elkton" (*Elymus glaucus*) @ 3 PLS LBS/AC for slender wheatgrass
 Streambank wheatgrass "Sodar" @ 3 PLS LBS/AC for slender wheatgrass

Type of Fertilizer	Pounds Per Acre
16-16-16	200

Material Costs

Seeding Cost/Acre		\$31.00
Fertilization Cost/Acre		\$51.00
Seed and Fertilizer Cost/Acre		\$82.00
Laborer (AD-C)		\$17.40
Total Labor Cost@3ac/hr per Acre		\$5.80
Total Cost/Acre		\$87.80

Total Acres To be Hand Seeded

Logging System	Estimated Percent of acres to be seeded	Total Acres	Acres to be Seeded	Total Cost
Tractor	5%	128	6	\$526.80
Skyline	4%	211	9	\$790.20
		339		
Total Cost				\$1,317.00
Total Sawlog		7774		
Cost/CCF		\$0.17		

VIII. Sale Area Improvement - Reforestation

N/A

IX. Hazard Reduction

Purchaser Requirements

Unit	Landing Piles	Grapple Pile	Over-winter Slash	Leave Tops and Lop	Yard Tops and Limbs	Fell Damaged Residual
5	X	X			X	X
8A	X	X	X	X		X
8B	X	X	X	X		X
16A	X	X			X	X
16B	X	X			X	X
17	X	X			X	X
19	X	X			X	X
23A	X	X			X	X
23B	X	X			X	X
33A	X	X			X	X

33B	X	X			X	X
34	X	X			X	X

Purchaser Allowances

Unit	Unit Acres	*Pile Landings ac.	Grapple Pile ac.	Lopping ac.	Fell Damaged Residual ac.
5	41	15	6		6
8A	54	15	25	29	25
8B	12	5	5	7	5
16A	7	5	6		6
16B	32	10	8		8
17	20	10	18		18
19	10	5	9		9
23A	21	13	19		19
23B	82	30	17		17
33A	14	5	13		13
33B	28	15	3		3
34	16	5	4		4

*Landing Piling Assumes 5 landing piles = 1 acre

Forest Service Collections

Unit	Burn Landing Piles ac.	Burn Grapple Piles ac.	Burn Evaluation ac.
5	3	6	41
8A	3	25	54
8B	1	5	12
16A	1	6	7
16B	2	8	32
17	2	18	20
19	1	9	10
23A	2	19	21
23B	6	17	82
33A	1	13	14
33B	3	3	28
34	1	4	16

X. Other Provisions

A. Period of contract:

1. Normal operating season: May 1 to October 15
2. Termination date: October 15, 2016
3. Road Completion Date: October 15, 2013

B. Purchaser Fire Liability:

1. Personnel and Equipment	
Item	Personnel
Sawyer	3
Yarder	4
Skidder	2
Truck drivers	4
Loader	1
Woods Boss	1

2. Cost Calculations

Total number of personnel	15
Number of hours per day	12
Total hours per crew day	180
Hourly rate for ADC firefighter	\$17.40
Average daily cost	\$3,132.00
Average fire length (Days)	5
Purchaser obligation for operation fire	\$15,660.00
Rounded up to nearest \$100	\$15,700.00

C. Other unique requirements:

C6.632# - TEMPORARY ROAD AND TRACTOR ROAD OBLITERATION. (2/02)

Notwithstanding the provisions of B6.63 and B6.65, unless otherwise agreed, temporary roads accessing all units and tractor roads within all units constructed for use with this sale shall be obliterated after they have served the Purchaser's purpose. Obliteration shall consist of recontouring road prism including all cut and fill slopes to natural ground contour. Equipment will not be permitted to operate outside the clearing limits. In addition, from 4 to 6 tons per acre of clearing or logging slash, stumps or other woody debris shall be placed and scattered uniformly on the top of the recontoured corridor.

C6.7 - HAZARD REDUCTION AND SITE PREPARATION. (3/89)

Overwintering Slash, Harvest Units 8A and 8B

In Units 8A and 8B, activity slash will remain in place before machine (grapple) piling for one season from the time that harvest occurs. For winter harvest (December-February), logging slash should remain untreated for up to 15 months and for spring harvest (March- May), untreated slash should remain on the ground for up to 12 months; and for summer and fall harvest (June-November), slash should remain on

the ground for up to 9 months

XI. Sale Objective Code

PURPOSE	ACTIVITY	PERCENTAGE
TC	01	100%

VALID PURPOSE CODES:

TC -- Timber Commodity Purpose
FS -- Forest Stewardship Purpose
PP -- Personal Use

VALID ACTIVITY CODES:

TC 01 -- Timber Purpose
FS 10 -- Forest and Ecosystem Health
FS 20 -- Recreation/Visual/Cultural Resource Enhancements
FS 30 -- Wildlife Habitat Management
FS 40 -- Fisheries Habitat Management and Watershed Improvement
FS 50 -- T&E Species Habitat Management
FS 60 -- Range Resource Enhancements
FS 70 -- Non-Timber Products
FS 90 -- Other
PP 80 -- Personal Use Products