

BOX CANYON REOFFER TIMBER SALE  
BRUSH CREEK-HAYDEN RANGER DISTRICT  
MEDICINE BOW-ROUTT NATIONAL FORESTS  
  
TIMBER SALE REPORT AND LOGGING PLAN



---

Prepared by: Joshua P. Peck, TMA

---

Date

---

Reviewed by:

---

Date

---

Recommended by: Melanie Fullman, District Ranger

---

Date

I certify that the Box Canyon Reoffer Timber Sale is consistent with the plans, environmental standards, and other management requirements in accordance with 36 CFR223.30.

---

Approved by: Dennis Jaeger, Forest Supervisor

---

Date

## Table of Contents

<b>A. Box Canyon Reoffer Timber Sale Statistics.....</b>	<b>3</b>
<b>B. Timber Sale Report.....</b>	<b>3</b>
<b>1. Location: .....</b>	<b>3</b>
<b>2. Compliance with Forest Plan:.....</b>	<b>4</b>
<b>3. Sale Preparation:.....</b>	<b>4</b>
<b>4. Land Status:.....</b>	<b>5</b>
<b>5. Measurement:.....</b>	<b>5</b>
<b>6. Cutting Methods: .....</b>	<b>5</b>
<b>7. Appraisal Points:.....</b>	<b>5</b>
<b>8. Contract and Appraisal:.....</b>	<b>5</b>
<b>9. Knutson-Vandenberg (KV) Plan:.....</b>	<b>6</b>
<b>10. Brush Disposal (BD) Plan:.....</b>	<b>6</b>
<b>11. POL Volume:.....</b>	<b>6</b>
<b>12. Dead Volume: .....</b>	<b>6</b>
<b>C. Timber Logging Plan.....</b>	<b>7</b>
<b>D. Sale Administrator Notes .....</b>	<b>8</b>

Box Canyon Reoffer Timber Sale Report and Logging Plan

**A. Box Canyon Reoffer Timber Sale Statistics**

Table 1 displays Box Canyon Reoffer Timber Sale statistics.

**TABLE 1: Box Canyon Reoffer Timber Sale Statistics**

<b>Sale Number:</b>	<b>Stars Number:</b>					
<b>Species/Products</b>	<b>LP</b>	<b>ES</b>	<b>TF</b>	<b>LP-POL</b>	<b>LP-POL &lt;7.0"</b>	<b>Total/AVG</b>
Utilization Specifications <ul style="list-style-type: none"> <li>• DBH</li> <li>• Top Diameter</li> <li>• Minimum Piece</li> </ul>	9.0" min 7.0" min 8.0' min	7.0" min 6.0" min 8.0' min	7.0" min 6.0" min 8.0' min	7.0-8.9" 4.0" min 6.5' min	5.0-6.9" 4.0" min 6.5' min	N/A
Net Volume (CCF) without ROW	4,527	105	477	1,517	602	6,622
Net Additional Volume (CCF) in Specified ROW Construction and Reconstruction	4	8	9	0	N/A	21
Net Additional Volume in Temporary Roads, Landings and Skid Trails	0	0	0	0	N/A	0
Net Volume (CCF) All products and ROW	4,527	113	486	1,517	602	6,643
Total Estimated Number of Trees	29,313	420	6794	21,089	18,248	57,616
Quadratic Mean DBH	11.8	13.7	9.5	7.9	6.1	10.8 (AVG)
Net MBF/CCF Ratio	.4944	.5855	.4355	.5277	N/A	.4992 (AVG)
Net CF per Tree	15.44	26.90	7.15	7.19	3.3	13.1 (AVG)
Trees per Acre	91	1	21	65	56	178 (TOTAL)

**TABLE 1a: Box Canyon Reoffer Timber Sale Statistics**

Acres to be Harvested (without ROW)	318
Acres to be Harvested (with ROW)	323
Gross Sale Area Acres	1,210
Average Slope (Percent)	14
Average Yarding Distance Tractor (Feet)	493
Average Yarding Distance Cable (Feet)	N/A

**B. Timber Sale Report**

The appraisal is based on FSM 2420 and FSH 2409.22, Bulletin Number BU211014 effective November 7, 2014.

**1. Location:**

The Box Canyon Reoffer Timber Sale is located in T13N R84W Sections 13, 24, and 25; T13N R83W Sections 19, 20, 29, 30 and 31; T12N R84W Sections 1, 2, 11, 12 and 14, 6th PM, Carbon County, Wyoming. It is approximately 19 miles south of Encampment, Wyoming.

The sale can be accessed from Encampment by traveling east on WY HWY 230 for approximately 1 mile to CR 211 (Blackhall Mountain Road). Travel South on CR 211 for approximately 6.5 miles where it becomes NFSR 409 (Blackhall Road). Continue southeast for approximately 5.7 miles to NFSR 496 (Rim Road). Turn west onto NFSR 496 and proceed for approximately 4.7 miles.

Box Canyon Reoffer Timber Sale Report and Logging Plan

**2. Compliance with Forest Plan:**

This sale is addressed in the Record of Decision (ROD) for Dinner Park and Box Canyon TS, Billie POL & Beaver Dam Park Restoration (analyzed under the Tie Camp Timber Sale Final EIS). It was signed by Forest Supervisor, Mary Peterson on February 28, 2003. This sale is consistent with the requirements of the Revised Forest Plan and contributes to meeting the goals of the Plan. This sale is compliant with 36 CFR223.30. The Timber Sale Purpose Code is: FS, Forest Stewardship, Activity Code 10, Forest and Ecosystem Health, 100%.

**3. Sale Preparation:**

The Box Canyon Reoffer Timber Sale consists of 29 cutting units and 2 ROW with 323 acres designated for harvest. See Table 2 for cutting unit descriptions.

**TABLE 2: Box Canyon Reoffer Timber Sale Unit Description**

<u>Cutting Unit</u>	<u>Acres</u>	<u>SILV. Rx</u>	<u>Designation</u>	<u>Logging Method</u>
11	30.46	Overstory Removal	LTM-P	RTS
12	3.89	Overstory Removal	LTM-O	RTS
13	24.36	Overstory Removal	LTM-O	RTS
14	5.27	Overstory Removal	LTM-P	RTS
15	10.06	Overstory Removal	LTM-O	RTS
17	6.54	Overstory Removal	LTM-O	RTS
18	13.46	Overstory Removal	LTM-O	RTS
22	13.93	Overstory Removal	LTM-O	RTS
33	20.17	Overstory Removal	LTM-O	RTS
35	4.74	Overstory Removal	LTM-O	RTS
36	5.18	Overstory Removal	LTM-O	RTS
38	10.2	Overstory Removal	LTM-O	RTS
39	18.78	Overstory Removal	LTM-O	RTS
40	3.28	Overstory Removal	LTM-O	RTS
52	6.43	Overstory Removal	LTM-O	RTS
61	2.39	Overstory Removal	LTM-O	RTS
62	3.05	Overstory Removal	LTM-O	RTS
78	23.48	Overstory Removal	LTM-O	RTS
80	2.26	Overstory Removal	LTM-O	RTS
81	15.6	Overstory Removal	LTM-O	RTS
82	6.65	Overstory Removal	LTM-O	RTS
83	15.97	Overstory Removal	LTM-O	RTS
86	9.25	Overstory Removal	LTM-O	RTS
87	10.52	Overstory Removal	LTM-O	RTS
154	15.41	Overstory Removal	LTM-O	RTS
163	28.34	Overstory Removal	LTM-O	RTS
164	2.63	Overstory Removal	LTM-O	RTS
166	3.03	Overstory Removal	LTM-O	RTS
169	2.55	Overstory Removal	LTM-O	RTS
991(New Const.)	3.27	Land Clearing	ITM - B	RTS
992 (496.1A)	2.22	Land Clearing	ITM - B	RTS
<b>Total</b>	<b>323</b>			

## Box Canyon Reoffer Timber Sale Report and Logging Plan

### 4. Land Status:

All boundaries have been surveyed, and there are no encumbrances. The area of all cutting units was determined using global positioning system (GPS) receivers. Data was collected in accordance with FSH 2409.12 Section 52.21.

### 5. Measurement:

The Box Canyon Reoffer Timber Sale is a 3P sample weight scaled sale. It was cruised using variable plot (point-count-measure) and sample tree methods. The aggregated error for the cruise is 18.12% (2t, net required removal volume).

- a. Cruise Design: Christie Schneider on 9-22-2013
- b. Addendum 1: Marissa Bowen on 12-13-2013
- c. Cruiser of Record: Tom Funka, Cruise Completed: 7-7-2014
- d. Check Cruise completed on 7-9-2014 by Chuck Morris

### 6. Cutting Methods:

Table 3 displays the harvest unit prescriptions with approximate sale acres.

<b>Prescription (Cutting Unit Method)</b>	<b>Approximate Sale Acres</b>
Overstory Removal	318
Permanent Land Clearing (ROW)	5

### 7. Appraisal Points:

<b>Product/Species</b>	<b>Appraisal Point(s)</b>	<b>Weighted Haul Miles</b>	<b>Round Trip Minutes (RTM)</b>
Sawtimber	Saratoga, WY	39	228
POL	Grandby, CO	119	476

### 8. Contract and Appraisal:

The contract and appraisal are available for review at the Brush Creek-Hayden Ranger District in Saratoga, WY or at the Forest Supervisor's Office in Laramie, Wyoming.

Box Canyon Reoffer Timber Sale Report and Logging Plan

**TABLE 5: Box Canyon Reoffer Appraisal Summary**

	<b>01-03 LP (108)</b>	<b>02-03* ES (093)</b>	<b>02-03* AF (025)</b>	<b>03-09 LP (108)</b>	<b>TOTAL / AVERAGE</b>
Est. Volume CCF	4528	113	486	1,517	6644
Advertised Rate (Per CCF)	\$8.45	\$10.45	\$8.45	\$6.45	\$53,312.88 (TV)
Base Rates (Per CCF)	\$8.45	\$10.45	\$8.45	\$6.45	\$8.02 (A)
Required Deposits:					
Slash Disposal (BD) (18 U.S.C. 490)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 (TV)
Surface Rock Replacement (SRR) (16 U.S.C. 537) (is included in RMD)	\$3.12	\$3.12	\$3.12	\$3.12	\$20,726 (TV)
Road Maint. Dep. (16 U.S.C. 537)	\$2.36	\$2.36	\$2.36	\$2.36	\$15,678 (TV)
WWPA:	WWPAB	WWPAD	WWPAA	N/A	N/A
Index CCF Basis	\$185.99	\$225.14	\$166.41	N/A	N/A
MBF/CCF Ratio	.4944	.5855	.4355	.5277	.4992
Sale Temporary Roads	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95
Quadratic Mean DBH	11.8	13.7	9.5	7.9	10.8
Unusual Adjustment	(-\$16.35)	(-\$0.71)	(-\$0.71)	(-\$0.71)	(-\$75,535)
Quality Adjustment	(-\$12.43)	(-\$15.63)	(-\$13.41)	\$0.00	NA

**9. Knutson-Vandenberg (KV) Plan:**

The total eligible collections on the Sale Area Improvement and KV Collection Plans are \$141,408. Essential KV collections are \$51,642. These costs include overhead.

**10. Brush Disposal (BD) Plan:**

There are no purchaser required deposits.

**11. POL Volume:**

POL volume within all timber sale units will be mandatory removal. The estimated quantity of POL 7.0" DBH to 8.9" DBH is 1,517 ccf. There is an estimated 602 ccf of POL volume from 5.0-6.9" DBH that will be subject to agreement in all units.

**12. Dead Volume:**

There are approximately 5,398 ccf of dead lodgepole pine volume (4,312 of dead lodgepole sawtimber and 1,087 ccf of dead lodgepole POL). A deteriorating live adjustment for lodgepole pine sawtimber was added to the appraisal.

## Box Canyon Reoffer Timber Sale Report and Logging Plan

### C. Timber Logging Plan

1. This is a load count sale.
2. This sale consists of approximately 3,295 gross acres of which 323 are planned for harvest. An estimated 46 landings will be needed to log the sale. The average external skid distance is 493 feet.
3. This sale contains 29 cutting units and 2 ROW units.
4. All units except 11, 14, 991 and 992 are marked with an orange “W” and band on the bole at or above DBH and a stump mark. Units 11 and 14 are marked with a pink “W” and band on the bole at or above DBH and a stump mark.

Units 991 and 992 are cut tree marked with blue paint tracer paint.

5. All Unit boundaries are designated with orange tracer paint. Boundary marks consist of three vertical stripes with the shorter stripe facing to the interior of the unit and longer stripes facing along the unit boundary. Unit Numbers are painted on approximately every 5<sup>th</sup> boundary tree.
6. The normal operating season for the sale will be June 15 to October 31.
7. Approximately 2.4 miles of non-system (temporary) roads may be needed to log the sale. This sale will include .77 miles of specified road construction and .78 miles of specified road reconstruction.
8. Road maintenance costs were appraised for as follows:
  - Purchaser Blade Maintenance - \$2.83
  - Snow Removal - \$0.25
  - Blade Maintenance Deposit - \$2.36
  - Surface Rock Replacement - \$3.12
  - **Total Road Maintenance and Deposits - \$8.56**
9. Unusual adjustments appraised for are as follows:
  - -\$0.71/ccf for adverse skid
  - -\$15.64/ccf for deteriorating live – lodgepole pine sawtimber
10. Per C5.12# - Use of Roads by Purchaser (6/99): Public Use is restricted on NFSR 496.1A. Forest Service will post closed to public signs on NFSR 496.1A prior to hauling.
11. Per C5.41# - Closure to Use by Others (4/04): The gates on NFSRs 496.1B, 496.1C, 496.2B and 496.4A will be closed after the passage of each vehicle.
12. Per C6.312# - Sale Operation Restrictions (4/04): In all units, unless agreed to in writing, no wheeled or tracked equipment will be allowed except during dry or frozen conditions. Frozen conditions exist when there are 6” or more of frozen ground or 12” or more of packed snow.
13. Per C6.411# - Felling and Bucking (Special Objectives) (11/98): In all cutting units, trees shall be felled insofar as safety permits to angle in the direction of skid.
14. Per C6.50# - Streamside Management Zones (11/98): Areas identified as Streamside Management Zones (SMZ's) are shown on the Sale Area Map and designated on the ground with boundary trees marked with white tracer paint.

In Unit 154, no wheeled or tracked equipment will be permitted within the SMZs.

## Box Canyon Reoffer Timber Sale Report and Logging Plan

15. Per C6.6# - Erosion Prevention and Control (11/98): Unless otherwise agreed to in writing, Purchaser shall keep erosion control work current with operations under the sale and in any case not later than 15 days after completion of skidding on each payment unit or cutting unit.

Seeding costs are included in the appraisal.

16. Per C6.7# - Slash Treatment (4/03): In all units, unless agreed to in writing, whole tree yarding is prohibited. All Included Timber shall have tops and limbs cut from stems prior to skidding/yarding. Such limbing shall be done to a top diameter of approximately 6 inches inside bark, at which point the top will be cut from the remainder of the stem.

In all cutting units Purchaser shall manipulate all logging slash and unmerchantable damaged trees that do not meet utilization standards. Manipulation shall result in all un-merchantable damaged trees being severed from the stump and all slash lying within twenty-four inches of the ground.

### **D. Sale Administrator Notes**

1. This is a reoffer of the Box Canyon Timber Sale. Units 63, 88 and 162 from the original sale were dropped. Also the hazard tree corridors along NFSR 496 were dropped from units and included in the FHTR 496 Rim Road Task Order.
2. Where feasible, locate landings at least 100 feet away from NFSR 496 per Record of Decision (ROD) for Dinner Park and Box Canyon TS.