"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Bear Claw
Sale WO-341-2020-W00376-01

District: West Oregon

Date: September 26, 2019

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$245,600.25	$9,851.82	$255,452.07
		Project Work:	($24,889.00)
		Advertised Value:	$230,563.07

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Bear Claw
Sale WO-341-2020-W00376-01

District: West Oregon **Date: September 26, 2019**

Timber Description

Location: PORTIONS OF SECTION 7, T11S,R09W,W.M.
LINCOLN COUNTY, OREGON

Stand Stocking: 70%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	16	0	97
Western Hemlock / Fir	19	0	95
Alder (Red)	14	0	95

Volume by Grade	2S	3S & 4S 6"-11"	Camprun	Total
Douglas - Fir	278	458	0	736
Western Hemlock / Fir	10	9	0	19
Alder (Red)	0	0	46	46
Total	288	467	46	801

Comments: Pond Values Used: Local Pond Values, September, 2019

Other Conifers Stumpage Price = Pond Value minus Logging Cost:
$196/MBF = $534/MBF - $338/MBF

Western redcedar and Other Cedars Stumpage Price = Pond Value minus Logging Cost:
$600/MBF = $938/MBF - $338/MBF

Bigleaf maple and Other Hardwoods Stumpage Price = Pond Value minus Logging Cost:
$87/MBF = $415/MBF - $328/MBF

PULP (Conifer and Hardwood Price) = $2.5/TON

Other Costs (with Profit & Risk to be added):
Intermediate Support/Tail Trees: 3 supports @ $100/support = $300
TOTAL Other Costs (with Profit & Risk to be added) = $300

Other Costs (No Profit & Risk added):
Equipment Cleaning (Invasive Species): $1,200
Water Bar Dirt Roads (Project Points 5 to 6): 4 stations @ $15.96/station = $64
Landing Slash Piling: Landings 3 @ $100/Landing = $300
Landing Slash Piling and sorting out firewood: 2 Landings @ $180/Landing = $360
TOTAL Other Costs (No Profit & Risk added) = $1,924

ROAD MAINTENANCE
Move-in: (Grader) $875
Final Road Maintenance: $7,456
TOTAL Road Maintenance: $8,331/801 MBF = $10.40/MBF

SLASH DISPOSAL
Move-In: $1,290
Machine Wash: $300
Project Work: 25 hrs @ $150/hr = $3,750
TOTAL Slash Disposal = $5,340

District: West Oregon **Date: September 26, 2019**

Logging Conditions

Combination#: 1

Douglas - Fir	58.42%
Western Hemlock / Fir	83.00%
Alder (Red)	43.30%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Manual Falling/Delimbing

yarding distance: Medium (800 ft) **downhill yarding:** No

tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 10 **bd. ft / load:** 3800

cost / mbf: $173.68

machines: Log Loader (A)
Tower Yarder (Medium)

Combination#: 2

Douglas - Fir	41.58%
Western Hemlock / Fir	17.00%
Alder (Red)	56.70%

Logging System: Shovel **Process:** Manual Falling/Delimbing

yarding distance: Medium (800 ft) **downhill yarding:** No

tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 12 **bd. ft / load:** 3800

cost / mbf: $86.35

machines: Shovel Logger

Logging Costs

Operating Seasons:	2.00	**Profit Risk:**	10%
Project Costs:	$24,889.00	**Other Costs (P/R):**	$300.00
Slash Disposal:	$5,340.00	**Other Costs:**	$1,924.00

Miles of Road

Road Maintenance: $10.40

Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	0.0	0.0	0.0

Hauling Costs

Species	$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	$108.73	2.0	4.5
Western Hemlock / Fir	$110.84	2.0	4.5
Alder (Red)	$134.80	2.0	3.7

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Bear Claw
Sale WO-341-2020-W00376-01

District: West Oregon **Date: September 26, 2019**

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
$137.36	$10.71	$10.96	$111.99	$0.37	$27.14	$6.67	$2.00	$2.40	$309.60
Western Hemlock / Fir									
$158.83	$10.92	$10.96	$116.38	$0.37	$29.75	$6.67	$2.00	$2.40	$338.28
Alder (Red)									
$124.17	$10.92	$10.96	$141.54	$0.37	$28.80	$6.67	$2.00	$2.40	$327.83

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$638.95	$329.35	$0.00
Western Hemlock / Fir	$0.00	$506.63	$168.35	$0.00
Alder (Red)	$0.00	$542.00	$214.17	$0.00

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Bear Claw
Sale WO-341-2020-W00376-01

District: West Oregon **Date: September 26, 2019**

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	736	$329.35	$242,401.60
Western Hemlock / Fir	19	$168.35	$3,198.65
Alder (Red)	46	$214.17	$9,851.82

Gross Timber Sale Value

Recovery: $255,452.07

Prepared By: Cody Valencia **Phone:** 541-929-3266

SUMMARY OF ALL PROJECT COSTS

Sale Name: Bear Claw Date: September 2019
Time: 11:28

Project #1 - Road Improvement

Road Segment	Length	Cost
1 to 2	243.1 sta	$10,910
3 to 4	37.2 sta	$562
5 to 6	4.0 sta	$541
7 to 8	29.0 sta	$4,114
9 to 10	2.5 sta	$4,115
11 to 12	8.4 sta	$339
13 to 14	5.2 sta	$190
TOTALS	329.4 sta	$20,771

Project #2 - Move in	Cost	On-site move	
Excavator, C325 or equiv.	$1,450	$140.00	
Grader, Cat 14-G or equiv.	$875		
Vibratory roller	$875		
Road Brusher	$778		
TOTAL			$4,118

GRAND TOTAL **$24,889**

Compiled by Leo Williamson Date 09/26/2019

SUMMARY OF CONSTRUCTION COST

SALE Bear Claw Project # 1 LENGTH improve 243.1 sta
ROAD 1 to 2 (Surfaced)

IMPROVEMENT

Brush road (medium) (Sta. 126+40 to Sta. 188+90)	1.2	mile	@	$1,100.00	/mile	=	$1,320
Brush road (heavy) (Sta. 188+90 to Sta. 243+10)	1.0	mile	@	$1,400.00	/mile	=	$1,400
Remove sod and brushing debris (with grader) (Sta. 126+40 to Sta. 243+10)	116.7	sta	@	$15.40	/sta	=	$1,797
Shape surface (Sta. 126+40 to Sta. 243+10)	116.7	sta	@	$20.63	/sta	=	$2,408
Compact subgrade (Sta. 126+40 to Sta. 243+10)	116.7	sta	@	$16.00	/sta	=	$1,867
Spot grade (Sta. 0+00 to Sta. 126+40)	10.0	sta	@	$20.63	/sta	=	$206
Spot compaction (Sta. 0+00 to Sta. 126+40)	10.0	sta	@	$16.00	/sta	=	$160

TOTAL IMPROVEMENT = $9,158

SURFACING

			Size	Cost/yd		
Spot rock (Sta. 126+40 to Sta. 243+10)	80	cy of	1½"-0"	$20.40	=	$1,632

TOTAL ROCK COST = $1,632

SPECIAL PROJECTS

Clean out culverts (inlets and outlets)	3	culverts	@	$25.00	ea =	$75
Cut culvert outlet (Sta. 179+40)	1	hrs	@	$45.00	/hr =	$45

TOTAL SPECIAL PROJECTS COST = $120

Compiled by: Leo Williamson
Date: Sep 26, 2019

GRAND TOTAL =====> $10,910

SUMMARY OF CONSTRUCTION COST

SALE Bear Claw Project # 1 LENGTH improve 37.2 sta
ROAD 3 to 4 (Surfaced)

IMPROVEMENT

Brush road (medium) (Sta. 26+90 to Sta. 37+20)	0.2 mile	@	$1,100.00	/mile	=	$220
Remove sod and brushing debris (with grader) (Sta. 26+90 to Sta. 37+20)	10.3 sta	@	$15.40	/sta	=	$159
Spot grade (Sta. 0+00 to Sta. 37+20)	5.0 sta	@	$20.63	/sta	=	$103
Spot compaction (Sta. 0+00 to Sta. 37+20)	5.0 sta	@	$16.00	/sta	=	$80

TOTAL IMPROVEMENT = $562

Compiled by: Leo Williamson
Date: Sep 26, 2019

GRAND TOTAL =====> $562

SUMMARY OF CONSTRUCTION COST

SALE	Bear Claw		Project #	1	LENGTH	improve		4.0 sta
ROAD	5 to 6	(Unsurfaced)						

IMPROVEMENT

Brush road (heavy)	0.08	mile	@	$1,400.00	/mile	=	$112	
Remove sod and brushing debris (with grader)	4.0	sta	@	$15.40	/sta	=	$62	
Shape surface (with grader)	4.0	sta	@	$20.63	/sta	=	$83	
Compact subgrade (with vibratory roller)	4.0	sta	@	$16.00	/sta	=	$64	
					TOTAL IMPROVEMENT =			$321

SURFACING

				Size	Cost/yd			
Junction Rock (Sta. 0+00 to Sta. 0+50)	10	cy of		3"-0"	$20.15	=	$202	
Process surfacing (with grader)	0.5	sta	@	20.63	/sta	=	$10	
Compact surfacing (with vibratory roller)	0.5	sta	@	16.00	/sta	=	$8	
					TOTAL ROCK COST =			$220

Compiled by:	Leo Williamson		
Date:	Sep 26, 2019	**GRAND TOTAL =====>**	**$541**

SUMMARY OF CONSTRUCTION COST

SALE Bear Claw Project # 1 LENGTH improve 29.0 sta
ROAD 7 to 8 (Surfaced)

EXCAVATION With C325 or equivalent

Construct Turnout/Turn around (Sta. 26+90)	1 hr	@	$140.00	/hr	=	$140
				TOTAL EXCAVATION =		$140

IMPROVEMENT

Re-open road (Sta. 18+40 to Sta. 29+00)	10.6 sta	@	$15.40	/sta	=	$163
Re-open Landing (with grader)	1 hrs	@	$114.00	/hr	=	$114
Shape surface (with grader)	29.0 sta	@	$20.63	/sta	=	$598
Compact surface (with vibratory roller)	29.0 sta	@	$16.00	/sta	=	$464
				TOTAL IMPROVEMENT =		$1,339

SURFACING

		Size	Cost/yd		
Turnaround rock (Sta. 26+90)	20 cy of	3"-0"	$20.15	=	$403
Spot rock	80 cy of	1½"-0"	$20.40	=	$1,632
Landing rock (Pt. 8)	30 cy of	Jaw-Run	$19.15	=	$575
			TOTAL ROCK COST =		$2,610

SPECIAL PROJECTS

Clean out culverts (inlets and outlets)	1 culvert	@	$25.00	ea	=	$25
			TOTAL SPECIAL PROJECTS COST =			$25

Compiled by: Leo Williamson
Date: Sep 26, 2019

GRAND TOTAL =====> $4,114

SUMMARY OF CONSTRUCTION COST

SALE Bear Claw Project # 1 LENGTH improve 2.5 sta
ROAD 9 to 10 (Surfaced)

EXCAVATION	With C325 or equivalent						
Reconstruct Landing and open road	1.5 hr	@	$140.00	/hr	=	$210	
				TOTAL EXCAVATION =			$210
IMPROVEMENT							
Re-open road (with grader)	2.5 sta	@	$15.40	/sta	=	$39	
Shape subgrade (with grader)	2.5 sta	@	$20.63	/sta	=	$52	
Compact subgrade (with vibratory roller)	2.5 sta	@	$16.00	/sta	=	$40	
Shape surface (with grader)	2.5 sta	@	$20.63	/sta	=	$52	
Compact surface (with vibratory roller)	2.5 sta	@	$16.00	/sta	=	$40	
				TOTAL IMPROVEMENT =			$223

SURFACING			Size	Cost/yd			
Base rock (8")	110	cy of	Jaw-Run	$19.15	=	$2,107	
Surface rock (2" lift)	30	cy of	3"-0"	$20.15	=	$605	
Landing rock	40	cy of	Jaw-Run	$19.15	=	$766	
Junction rock	10	cy of	1½"-0"	$20.40	=	$204	
				TOTAL ROCK COST =			$3,682

Compiled by: Leo Williamson
Date: Sep 26, 2019

GRAND TOTAL =====> $4,115

SUMMARY OF CONSTRUCTION COST

SALE	Bear Claw		Project #	1	LENGTH	improve	8.4 sta
ROAD	11 to 12	(Surfaced)					

IMPROVEMENT

Brush road (heavy)	0.15	mile	@	$1,400.00	/mile	=	$210
Remove sod and brushing debris (with grader)	8.4	sta	@	$15.40	/sta	=	$129

TOTAL IMPROVEMENT = $339

Compiled by: Leo Williamson

Date: Sep 26, 2019

GRAND TOTAL =====> $339

SUMMARY OF CONSTRUCTION COST

SALE Bear Claw Project # 1 LENGTH improve 5.2 sta
ROAD 13 to 14 Surfaced

IMPROVEMENT

Brush road (medium)	0.1 mile	@	$1,100.00	/mile	=	$110
Remove sod and brushing debris (with grader)	5.2 sta	@	$15.40	/sta	=	$80

15.4 TOTAL IMPROVEMENT = $190

Compiled by: Leo Williamson
Date: Sep 26, 2019

GRAND TOTAL =====> $190

ROAD SEGMENT	1 to 2			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	1 to 2		0+00 to 243+10			
				Volume (CY) per		Number of			
Spot rock	1½"-0"	As directed by STATE	N/A	10	Load	8	Loads	80	108

ROAD SEGMENT	5 to 6			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	5 to 6		0+00 to 0+50			
				Volume (CY) per		Number of			
Spot rock	3"-0"	0+00 to 0+50	N/A	10	Load	1	Loads	10	14

ROAD SEGMENT	7 to 8			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	7 to 8		0+00 to 29+00			
				Volume (CY) per		Number of			
Spot Rock	1½"-0"	As directed by STATE	N/A	10	Load	8	Loads	80	108
Turnout rock	3"-0"	26+90	N/A	20	Turnout	1	Turnouts	20	27
Landing rock	Jaw-Run	29+00	N/A	30	Landing	1	Landings	30	41

ROAD SEGMENT	9 to 10			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	9 to 10		0+00 to 2+50			
				Volume (CY) per		Number of			
Base rock	Jaw-Run	0+00 to 2+50	8	44	Station	2.5	Stations	110	149
Surface rock	3"-0"	0+00 to 2+50	2	11	Station	2.5	Stations	30	41
Landing rock	Jaw-Run	2+50	N/A	40	Landing	1	Landings	40	54
Junction Rock	1½"-0"	0+00 to 0+50	N/A	10	Junction	1	Junction	10	14

ROCK CONVERSION FACTORS

Size	3/4-0"	1 1/2-0"	3-0"	4-0"	jaw-run	pit run
Tons/CY	1.35	1.35	1.35	1.35	1.35	1.35

(Conversion factors from Hardrock Quarry)

	Maintenance Rock Volumes in CY		
Rock Size	1 1/2-0"	3-0"	jaw-run
Rock Totals CY	200	-	-
Rock Totals TONS	270	-	-

TOTAL ROCK VOLUMES for Project No. 1			
Rock Size	1 1/2-0"	3-0"	jaw-run
Rock Totals CY	170	60	180
Rock Totals TONS	230	81	243

Rock Haul Cost Computation

SALE NAME: Bear Claw — DATE: Sep 26, 2019
ROAD NAME: All Rocked roads — CLASS: Medium
ROCK SOURCE: Hard Rock — 10 CY truck
Route: Hwy 20

TIME Computation:
Road speed time factors:

1.	55 MPH	53.6	MRT		58.5	minutes
2.	50 MPH		MRT		0.0	minutes
3.	45 MPH		MRT		0.0	minutes
4.	40 MPH		MRT			minutes
5.	35 MPH		MRT		0.0	minutes
6.	30 MPH		MRT	0.00	0.0	minutes
7.	25 MPH	6.8	MRT		16.3	minutes
8.	20 MPH		MRT		0.0	minutes
9.	15 MPH	0.5	MRT		2.0	minutes
10.	10 MPH		MRT		0.0	minutes
11.	05 MPH		MRT		0.0	minutes

Dump or spread time per RT		0.50	minutes
Total hauling cycle time for this setting (100% efficiency)		77.30	minutes
Operator efficiency correction	0.85	90.94	minutes
Job efficiency correction	0.90	101.04	minutes
Truck capacity (CY)	10.00	10.10	min/CY
Loading time, delay time per CY		0.25	min/CY
TIME (minutes) per cubic yard		10.35	min/CY

COST per CY computation

Cost of truck and operator per hour	$68.88	/hr.
Cost of truck and operator per minute	$1.15	/min
Cost per CY	$11.90	/CY
Spread and compact — Water truck, Grader & Roller	$1.50	/CY

Size	**Cost/Yd (Pit)**	**Cost Delivered w/o processing**	**Cost Delivered with processing**
1½ - 0"	$ 8.50	$20.40	$21.90
3 - 0"	$ 8.25	$20.15	$21.65
Jaw Run	$ 7.25	$19.15	$20.65
Pit-Run	$ 6.50	$18.40	$19.90

SUMMARY OF MAINTENANCE COST

SALE Bear Claw - Final Maintenance Cost Estimate

(Costed in appraisal, not in project costs)

Grading Move-in $ 875

Road Segment	Length	Cost/Sta	Cost	Mileage
1 to 2	160.8	$15.40	$2,476.32	3.05
3 to 4	26.9	$15.40	$414.26	0.51
7 to 8	29.0	$15.40	$446.60	0.55
9 to 10	2.5	$15.40	$38.50	0.05
Total	219.2		$3,375.68	4.16

Maintenance Rock:

	Volume	Cost/CY	Cost
1½-0"	200	$20.40	$4,080.00

Grand Total $ 8,331

TS Volume 801 MBF

Cost / MBF = $10.40

NOTES: Spot rocking and grading shall be performed on the following road segments as part of final maintenance: Points 1 to 2, 3 to 4, 7 to 8, and 9 to 10.

Bear Claw (WO-341-2020-W00376-01)
FY 2020

TIMBER CRUISE REPORT

1. **Sale Area Location**: Portions of Section 7, T11S, R9W, W.M., Lincoln County, Oregon.

2. **Fund Distribution:**
   a. **Fund** BOF 100%
   b. **Tax Code**

3. **Sale Acreage by Area:**

Area	Treatment	Gross Acres	Stream Buffers	Existing Roads	Green Tree Retention Acres	Net Sale Acres	Acreage Comp. Method
1	Modified Clearcut	38	2	1	<1	35	Ortho photo, GIS, GPS
2	Modified Clearcut	10	0	<1	0	10	Ortho photo, GIS, GPS
Total		48	2	1	0	45	

4. **Cruisers and Cruise Dates:** All sale areas were cruised by Aaron McEwen, Leo Williamson, Zane Sandborg, and Zena Greenwald. Both areas were cruised in July of 2019.

5. **Cruise Method and Computation:** All Areas of the sale were cruised using variable radius plot sampling using a 20 BAF for conifers, and a 20 BAF for hardwoods. A total of 30 plots were taken in Area 1 consisting of 17 measure and 13 count plots 3 chains by 3 chains apart. A total of 13 plots were taken in Area 2 consisting of 7 measure and 6 count plots spaced 3 chains by 3 chains apart.

6. Digital ortho photos, LiDar, and ArcMap 10.6 were used to map the boundaries for the sale, and ArcMap 10.6 was used to determine gross and net acreage.

7. **Measurement Standards:** Measure plots were measured for DBH, height, form factor, grade, and defect. Data was entered into the Atterbury SuperACE cruise program to determine stand statistics and net board foot volume. Additional volume was removed to account for hidden defect and breakage.

8. **Timber Description:** Timber in the sale areas consists of 44-49 year-old planted Douglas-fir and natural hardwoods. The average DBH of Douglas fir in Area 1 is approximately 17 inches, approximately 19 inches for Western hemlock, and approximately 13 inches DBH for red alder. The average volume per acre of Douglas fir to be harvested (net) in Area 1 is approximately 15 MBF, and .7 MBF of red alder. The average DBH of Douglas fir for Area 2 is approximately 16 inches, and approximately 15 inches DBH for red alder. The average volume per acre of Douglas fir to be harvested (net) in Area 2 is approximately 22 MBF, and 2 MBF of red alder. Western redcedar are reserved from cutting in both sale areas.

9. **Statistical Analysis:** Statistics shown are for all species combined, net board feet.

Area	Target CV	Target SE	Actual CV	Actual SE
1	-	-	29.5	5.5
2	-	-	41.7	12.0

10. **Total Volume (MBF) by Species and Grade:** (See attached volume report "Species, Sort Grade – Board Foot Volumes - Project").

Area	Species	Gross Cruise Volume	Cruised D&B	Cruised D&B (MBF)	Hidden D&B	Hidden D&B (MBF)	Net Sale Volume
1	Douglas-fir	555	5.6%	(31)	1%	(6)	518
	Red alder	25	5.0%	(1)	1%	(<1)	24
	Western Hemlock	22	13.1%	(3)	1%	(<1)	19
2	Douglas-fir	229	3.8%	(9)	1%	(2)	218
	Red alder	23	3.1%	(1)	1%	(<1)	22
Total		854	5.2%	(45)	1%	(9)	801

Grade % Breakdown / Volume by Grade

Area	Species	Ave. DBH	Tot. Net Vol.	2-Saw	3-Saw	4-Saw	SM	Camp Run
1	Douglas-fir	17	Grade %	38%	48%	14%	-	-
			518	197	249	72	-	-
	Red alder	13	Grade %	-	-	-	-	100%
			24	-	-	-	-	24
	Western hemlock	19	Grade %	53%	36%	11%	-	-
			19	10	7	2	-	-
2	Douglas-fir	16	Grade %	37%	53%	10%	-	-
			218	81	116	21	-	-
	Red alder	15	Grade %	-	-	-	-	100%
			22	-	-	-	-	22
	Total All Areas		Grade %	36%	46%	12%	-	6%
			801	288	372	95	-	46

Attachments:

- Project Statistics (All Areas)
- Species/Sort/Grade-BF Vol. (All Areas)
- Stand Table Summary (All Areas)
- Log Stock Table (All Areas)

Prepared by: Leo Williamson Date: 9/6/2019

Unit Forester: Evelyn Hukari Date: 10/8/19

TC PSTATS

PROJECT STATISTICS

PROJECT BEARCLAW

DATE 9/26/2019

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
11S	09	07	AREA1RERUN	CC	35.00	30	235	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	30	235	7.8		
CRUISE	17	129	7.6	3,678	3.5
DBH COUNT					
REFOREST					
COUNT	13	98	7.5		
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DF	102	87.9	16.8	61	33.0	135.3	15,854	14,971	4,593	4,593
R ALDER	12	10.3	13.3	26	2.7	10.0	705	670	210	210
WR CEDAR	8	3.9	16.8	42	1.5	6.0	404	371	165	165
WHEMLOCK	6	2.4	18.8	66	1.1	4.7	620	539	177	177
S SPRUCE	1	.5	15.0	15	0.2	.7				
TOTAL	*129*	*105.1*	*16.5*	*57*	*38.5*	*156.7*	*17,583*	*16,551*	*5,145*	*5,145*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	SAMPLE TREES - BF LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
DF	51.8	5.1	190	201	211			
R ALDER	91.6	27.6	84	117	149			
WR CEDAR	64.1	24.2	87	115	143			
WHEMLOCK	47.1	21.0	204	258	312			
S SPRUCE								
TOTAL	*57.7*	*5.1*	*179*	*189*	*198*	*133*	*33*	*15*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	SAMPLE TREES - CF LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
DF	42.9	4.2	58	61	63			
R ALDER	82.8	24.9	28	38	47			
WR CEDAR	55.8	21.0	41	53	64			
WHEMLOCK	50.6	22.5	67	86	106			
S SPRUCE								
TOTAL	*49.6*	*4.4*	*56*	*59*	*61*	*98*	*25*	*11*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	TREES/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	40.1	7.4	81	88	94			
R ALDER	253.6	47.1	5	10	15			
WR CEDAR	284.4	52.8	2	4	6			
WHEMLOCK	473.3	87.9	0	2	5			
S SPRUCE	547.7	101.7		1	1			
TOTAL	*31.8*	*5.9*	*99*	*105*	*111*	*42*	*10*	*5*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	BASAL AREA/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	36.5	6.8	126	135	145			
R ALDER	239.3	44.4	6	10	14			
WR CEDAR	329.3	61.1	2	6	10			
WHEMLOCK	473.3	87.9	1	5	9			
S SPRUCE	547.7	101.7		1	1			
TOTAL	*24.2*	*4.5*	*150*	*157*	*164*	*24*	*6*	*3*

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
11S	09	07	AREA1RERUN	CC	35.00	30	235	1	W

CL 68.1	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	38.9	7.2	13,890	14,971	16,053			
R ALDER	236.7	43.9	375	670	964			
WR CEDAR	324.9	60.3	147	371	594			
WHEMLOCK	473.3	87.9	65	539	1,013			
S SPRUCE								
TOTAL	*29.5*	*5.5*	*15,644*	*16,551*	*17,458*	*36*	*9*	*4*

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
DF	38.2	7.1	4,267	4,593	4,919			
R ALDER	245.3	45.5	115	210	306			
WR CEDAR	331.1	61.5	63	165	266			
WHEMLOCK	473.3	87.9	21	177	332			
S SPRUCE								
TOTAL	*28.3*	*5.3*	*4,875*	*5,145*	*5,415*	*33*	*8*	*4*

TC PSTNDSUM

Stand Table Summary

Page 1
Date: 9/26/2019

T11S R09W S07 TyCC 35.00

Project BEARCLAW
Acres 35.00

Time: 2:03:26PM
Grown Year:

Spc	S T	DBH	Sample Trees	FF 16'	Tot Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		11	3	81	59	6.031	3.98	6.03	15.3	46.7		92	281		32	10
DF		12	3	83	69	5.068	3.98	5.07	21.0	60.0		106	304		37	11
DF		13	3	88	59	4.318	3.98	4.32	21.3	60.0		92	259		32	9
DF		14	3	87	76	3.723	3.98	6.21	19.4	62.0		120	385		42	13
DF		15	8	85	81	8.649	10.61	17.30	19.1	59.4		331	1,027		116	36
DF		16	15	86	82	14.254	19.90	29.46	22.2	71.6		655	2,110		229	74
DF		17	17	86	89	14.310	22.56	28.62	27.8	89.4		795	2,559		278	90
DF		18	15	87	89	11.262	19.90	22.52	31.3	100.7		706	2,267		247	79
DF		19	13	87	91	8.760	17.25	17.52	35.3	112.7		618	1,974		216	69
DF		20	8	88	91	4.865	10.61	10.34	35.6	126.5		368	1,308		129	46
DF		21	2	91	97	1.103	2.65	2.21	46.5	165.0		103	364		36	13
DF		22	6	89	99	3.016	7.96	6.53	47.8	160.0		313	1,045		109	37
DF		23	2	84	91	.920	2.65	1.84	48.5	157.5		89	290		31	10
DF		24	2	88	88	.845	2.65	2.11	43.0	164.0		91	346		32	12
DF		25	2	90	108	.778	2.65	2.34	48.7	193.3		114	451		40	16
DF		Totals	102	86	83	87.903	135.33	162.41	28.3	92.2		4,593	14,971		1,608	524
RA		9	1	87	17	1.886	.83	1.89	5.0	20.0		9	38		3	1
RA		10	3	87	43	4.584	2.50	4.58	10.3	40.0		47	183		17	6
RA		13	2	86	49	1.808	1.67	1.81	20.5	55.0		37	99		13	3
RA		18	1	87	39	.472	.83	.47	29.0	50.0		14	24		5	1
RA		20	2	87	51	.764	1.67	1.53	25.7	80.0		39	122		14	4
RA		23	2	86	53	.578	1.67	1.16	35.5	107.5		41	124		14	4
RA		26	1	86	58	.226	.83	.45	50.0	175.0		23	79		8	3
RA		Totals	12	87	41	10.317	10.00	11.88	17.7	56.3		210	670		74	23
WH		15	1	86	82	.634	.78	1.27	22.0	70.0		28	89		10	3
WH		17	1	88	86	.493	.78	.99	29.5	105.0		29	104		10	4
WH		18	1	86	80	.440	.78	.88	31.5	90.0		28	79		10	3
WH		19	1	90	81	.395	.78	.79	34.5	105.0		27	83		10	3
WH		25	2	89	98	.456	1.56	.91	70.8	202.5		65	185		23	6
WH		Totals	6	88	85	2.419	4.67	4.84	36.5	111.5		177	539		62	19
RC		11	1	76	66	1.136	.75	1.14	18.0	60.0		20	68		7	2
RC		15	1	65	61	.611	.75	.61	31.0	50.0		19	31		7	1
RC		17	1	81	55	.476	.75	.48	38.0	60.0		18	29		6	1
RC		19	2	77	68	.762	1.50	1.52	29.0	65.0		44	99		15	3
RC		20	2	80	55	.688	1.50	1.03	35.7	86.7		37	89		13	3
RC		24	1	77	82	.239	.75	.48	55.0	115.0		26	55		9	2
RC		Totals	8	76	63	3.912	6.00	5.26	31.3	70.5		165	371		58	13
SS		15	1	60	17	.543	.67									
SS		Totals	1	60	17	.543	.67									
Totals			129	86	78	105.094	156.67	184.39	27.9	89.8		5,145	16,551		1,801	579

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T11S R09W S07 TyCC 35.00

Project: BEARCLAW
Acres 35.00

Date 9/26/2019
Time 2:03:25PM

Spp	S T	So Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent of Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log: Ln Ft	Dia In	Bd Ft	CF/ Lf	Logs Per /Acre
DF		DO2M	38	6.0	6,203	5,832	204			94	6	1	10	8	81	36	13	214	1.56	27.3
DF		DO3M	48	5.5	7,574	7,157	250		100			0	3	11	85	36	9	102	0.89	70.4
DF		DO4M	14	4.5	2,077	1,983	69	29	71			17	51	14	18	26	6	31	0.46	64.7
DF	**Totals**		90	5.6	15,854	14,971	524	4	57	37	2	3	12	10	75	32	8	92	0.88	162.4
RC		DO2M	29	8.0	119	110	4			100					100	38	12	188	1.98	.6
RC		DO3M	44	10.9	184	164	6		67	33			10	40	50	35	8	75	1.14	2.2
RC		DO4M	27	3.8	101	97	3	22	78			12	18		70	28	6	39	0.50	2.5
RC	**Totals**		2	8.3	404	371	13	6	50	44		3	9	17	70	32	7	71	0.99	5.3
WH		DO2M	53	12.9	329	287	10			100				52	48	36	13	184	1.54	1.6
WH		DO3M	36	15.0	229	195	7		53		47				100	40	10	148	1.23	1.3
WH		DO4M	11	7.1	62	58	2	37	63			22	36	43		26	5	30	0.48	2.0
WH	**Totals**		3	13.1	620	539	19	4	26	53	17	2	4	32	62	33	9	111	1.10	4.8
RA		DOCR	100	5.0	705	670	23		56	44		22	41	28	8	22	8	56	0.79	11.9
RA	**Totals**		4	5.0	705	670	23		56	44		22	41	28	8	22	8	56	0.79	11.9
Totals				5.9	17,583	16,551	579	4	56	38	3	4	13	12	72	32	8	90	0.89	184.4

TC PLOGSTVB

Log Stock Table - MBF

T11S R09W S07 TyCC 35.00

Project: BEARCLAW
Acres 35.00

Page 1
Date 9/26/2019
Time 2:03:25PM

Spp	S T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF		DO	2M	16	2		2	.4							2					
DF		DO	2M	21	4	10.5	4	.8							4					
DF		DO	2M	22	4	18.2	3	.6								3				
DF		DO	2M	26	4	18.8	3	.7						3						
DF		DO	2M	30	10	2.2	9	1.8						4	6					
DF		DO	2M	32	18	9.0	16	3.1						16						
DF		DO	2M	36	29	4.9	28	5.3						18	10					
DF		DO	2M	40	146	5.4	138	26.4						79	42	17				
DF		DO	3M	14	1		1	.2			1									
DF		DO	3M	26	4	18.2	3	.6					3							
DF		DO	3M	28	5	6.1	5	.9					5							
DF		DO	3M	32	28	6.9	26	4.9			8	8	10							
DF		DO	3M	34	2		2	.4			2									
DF		DO	3M	36	64	6.4	60	11.4			13	27	20							
DF		DO	3M	38	6		6	1.2			6									
DF		DO	3M	40	155	4.9	148	28.2			13	11	124							
DF		DO	4M	12	0		0	.1		0										
DF		DO	4M	16	3	12.5	2	.4		1	1									
DF		DO	4M	18	1		1	.1				1								
DF		DO	4M	20	9		9	1.6		4	4									
DF		DO	4M	21	1	33.3	1	.1			1									
DF		DO	4M	22	2		2	.5		1	2									
DF		DO	4M	24	19		19	3.7		6	14									
DF		DO	4M	26	3		3	.6		1	2									
DF		DO	4M	28	2		2	.4		2	1									
DF		DO	4M	30	9	6.5	8	1.5		2	6									
DF		DO	4M	31	4		4	.8			4									
DF		DO	4M	32	6	12.3	5	1.0		1	5									
DF		DO	4M	36	6	19.8	5	.9		2	3									
DF		DO	4M	40	8	2.3	8	1.5		1	7									
DF		Totals			555	5.6	524	90.5		20	93	46	161	119	65	20				
RC		DO	2M	36	2		2	16.7						2						
RC		DO	2M	40	2	16.7	2	12.9						2						
RC		DO	3M	28	1		1	4.6			1									
RC		DO	3M	32	1		1	9.2				1								
RC		DO	3M	35	1		1	8.2			1									

TC PLOGSTVB

Log Stock Table - MBF

T11S R09W S07 TyCC 35.00

Project: BEARCLAW
Acres 35.00

Date 9/26/2019
Time 2:03:25PM

Spp	ST	Sort	Grade	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
RC		DO	3M	36	2	22.2	2	14.4						2						
RC		DO	3M	40	1	14.3	1	7.7			1									
RC		DO	4M	16	0		0	2.1		0										
RC		DO	4M	20	0	50.0	0	1.0		0										
RC		DO	4M	24	0		0	2.8		0										
RC		DO	4M	26	0		0	1.9			0									
RC		DO	4M	36	2		2	18.4			2									
RC		Totals			14	8.3	13	2.2		1	5	1		6						
WH		DO	2M	34	6	5.9	5	27.7						5						
WH		DO	2M	40	6	19.4	5	25.5						2		2				
WH		DO	3M	39	1	14.3	0	2.5			0									
WH		DO	3M	40	7	15.0	6	33.6			0	3				3				
WH		DO	4M	20	0		0	2.4		0										
WH		DO	4M	24	0		0	2.2			0									
WH		DO	4M	30	0	33.3	0	1.6		0										
WH		DO	4M	32	1		1	4.6			1									
WH		Totals			22	13.1	19	3.3		1	2	3		8		6				
RA		DO	CR	12	2		2	6.6			2									
RA		DO	CR	16	2	6.0	2	9.0			2									
RA		DO	CR	20	2		2	6.8			2									
RA		DO	CR	22	0		0	1.7			0									
RA		DO	CR	24	4		4	18.9						2		2				
RA		DO	CR	28	4	10.4	3	14.7			2			2						
RA		DO	CR	29	2	33.3	1	6.0							1					
RA		DO	CR	32	7		7	28.0			4					3				
RA		DO	CR	36	2		2	8.1			2									
RA		Totals			25	5.0	23	4.0			13			4	1	5				
Total		All Species			615	5.9	579	100.0		22	113	50	161	137	66	31				

TC PSTATS

PROJECT STATISTICS

PROJECT BEARCLAW

DATE 9/26/2019

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
11S	09	07	AREA2RERUN	CC	10.00	13	123	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	13	123	9.5		
CRUISE	7	54	7.7	1,334	4.0
DBH COUNT					
REFOREST					
COUNT	6	66	11.0		
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DF	48	115.9	16.0	62	40.4	161.5	22,853	21,966	6,091	6,091
R ALDER	6	17.5	15.0	48	5.6	21.5	2,309	2,236	692	692
TOTAL	*54*	*133.4*	*15.9*	*60*	*46.0*	*183.1*	*25,162*	*24,202*	*6,783*	*6,783*

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
DF	135.4	19.5	286	355	424			
R ALDER	71.0	31.6	120	175	230			
TOTAL	*136.6*	*18.6*	*273*	*335*	*397*	*746*	*186*	*83*

CL 68.1	COEFF		**SAMPLE TREES - CF**			# OF TREES REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	109.0	15.7	76	90	104			
R ALDER	68.2	30.4	38	54	71			
TOTAL	*109.0*	*14.8*	*73*	*86*	*99*	*475*	*119*	*53*

CL 68.1	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	61.9	17.8	95	116	137			
R ALDER	160.2	46.2	9	17	26			
TOTAL	*45.8*	*13.2*	*116*	*133*	*151*	*90*	*23*	*10*

CL 68.1	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	51.4	14.8	138	162	185			
R ALDER	162.9	47.0	11	22	32			
TOTAL	*39.3*	*11.3*	*162*	*183*	*204*	*67*	*17*	*7*

CL 68.1	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	49.7	14.3	18,819	21,966	25,113			
R ALDER	165.5	47.7	1,170	2,236	3,303			
TOTAL	*41.7*	*12.0*	*21,290*	*24,202*	*27,114*	*75*	*19*	*8*

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
DF	50.0	14.4	5,213	6,091	6,969			
R ALDER	165.5	47.7	362	692	1,022			
TOTAL	*40.6*	*11.7*	*5,989*	*6,783*	*7,577*	*71*	*18*	*8*

TC PSTNDSUM

Stand Table Summary

Page 1
Date: 9/26/2019

T11S R09W S07 TyCC 10.00

Project BEARCLAW
Acres 10.00

Time: 2:01:45PM
Grown Year:

Spc	S T	DBH	Sample Trees	FF 16'	Tot Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		9	1	76	48	7.618	3.37	7.62	8.0	20.0		61	152		6	2
DF		10	2	87	79	12.341	6.73	12.34	13.5	50.0		167	617		17	6
DF		11	1	88	87	5.099	3.37	5.10	19.0	70.0		97	357		10	4
DF		13	5	85	75	18.255	16.83	32.86	15.4	47.8		507	1,570		51	16
DF		14	6	89	91	18.889	20.19	34.63	20.1	70.9		696	2,456		70	25
DF		15	1	86	101	2.742	3.37	5.48	22.5	75.0		123	411		12	4
DF		16	4	85	102	9.641	13.46	19.28	26.7	95.0		516	1,832		52	18
DF		17	7	86	104	14.945	23.56	29.89	31.8	114.3		950	3,416		95	34
DF		18	2	86	102	3.809	6.73	7.62	34.8	122.5		265	933		26	9
DF		19	3	81	105	5.128	10.10	10.26	37.2	113.3		381	1,162		38	12
DF		20	6	87	104	9.255	20.19	21.60	38.1	130.0		822	2,807		82	28
DF		21	1	92	96	1.399	3.37	4.20	28.7	106.7		120	448		12	4
DF		23	2	82	110	2.333	6.73	7.00	40.0	138.3		280	968		28	10
DF		26	1	92	117	.913	3.37	2.74	55.7	243.3		152	666		15	7
DF		27	1	81	106	.846	3.37	2.54	50.7	160.0		129	406		13	4
DF		28	1	85	102	.787	3.37	2.36	57.0	230.0		135	543		13	5
DF		30	1	86	127	.686	3.37	2.06	74.3	320.0		153	658		15	7
DF		37	1	86	133	.451	3.37	1.35	125.3	556.7		169	753		17	8
DF		39	2	87	148	.811	6.73	2.43	151.0	743.3		368	1,809		37	18
DF		Totals	48	86	91	115.949	161.54	211.35	28.8	103.9		6,091	21,966		609	220
RA		12	2	87	75	9.141	7.18	13.71	15.0	50.0		206	686		21	7
RA		14	1	86	83	3.358	3.59	6.72	18.5	60.0		124	403		12	4
RA		17	1	86	72	2.277	3.59	4.55	25.0	80.0		114	364		11	4
RA		20	1	86	79	1.645	3.59	3.29	38.0	110.0		125	362		13	4
RA		25	1	86	79	1.053	3.59	2.11	58.5	200.0		123	421		12	4
RA		Totals	6	87	77	17.475	21.54	30.38	22.8	73.6		692	2,236		69	22
Totals			54	86	89	133.424	183.08	241.73	28.1	100.1		6,783	24,202		678	242

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T11S R09W S07 TyCC 10.00

Project: BEARCLAW
Acres 10.00

Date 9/26/2019
Time 2:01:44PM

Spp	S T	So Grt ad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent of Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log: Ln Ft	Dia In	Bd Ft	CF/ Lf	Logs Per /Acre
DF		DO2M	37	3.4	8,551	8,263	83			59	41	6	4		90	37	14	303	2.00	27.2
DF		DO3M	53	3.5	12,040	11,620	116		92	4	4			11	89	38	8	104	0.80	111.8
DF		DO4M	10	7.9	2,262	2,083	21	35	65			29	28	25	18	25	6	29	0.39	72.3
DF	**Totals**		91	3.9	22,853	21,966	220	3	55	24	18	5	4	8	83	33	8	104	0.86	211.4
RA		DOCR	100	3.2	2,309	2,236	22		68	32		9	31	13	47	27	8	74	0.84	30.4
RA	**Totals**		9	3.2	2,309	2,236	22		68	32		9	31	13	47	27	8	74	0.84	30.4
Totals				3.8	25,162	24,202	242	3	56	25	16	5	7	9	79	33	8	100	0.86	241.7

TC PLOGSTVB

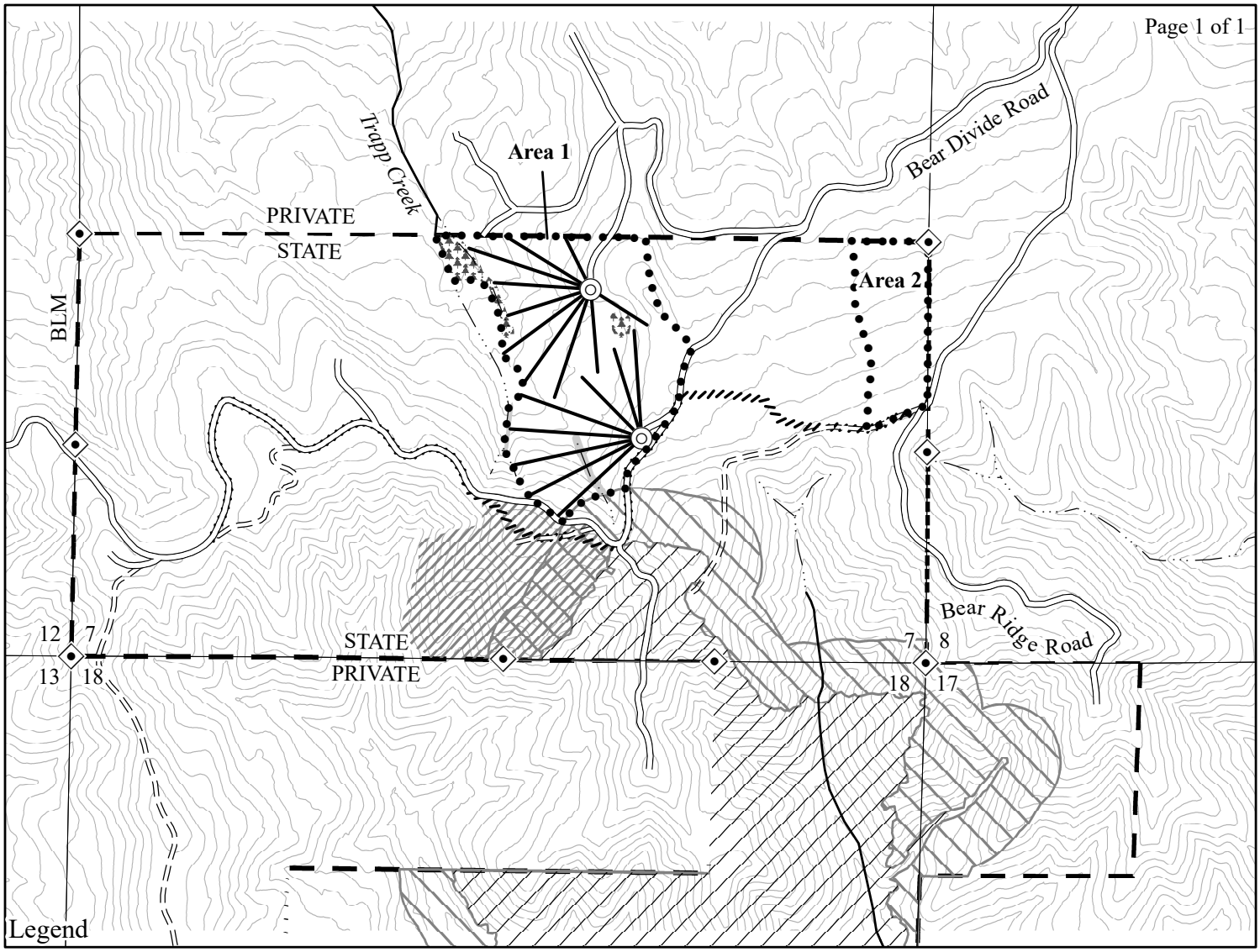
Log Stock Table - MBF

T11S R09W S07 TyCC 10.00

Project: BEARCLAW
Acres 10.00

Page 1
Date 9/26/2019
Time 2:01:44PM

Spp	ST	Sort	Grade	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF		DO	2M	16	3	16.7	2	1.0								2				
DF		DO	2M	20	3	5.6	3	1.2							3					
DF		DO	2M	26	4		4	1.7									4			
DF		DO	2M	36	7	2.9	7	3.2						7						
DF		DO	2M	40	69	3.0	67	30.6						24	11	12	2	17		
DF		DO	3M	32	11	12.5	10	4.4			0	8	2							
DF		DO	3M	34	3		3	1.4				3								
DF		DO	3M	36	24	4.7	22	10.2			10	9	2	2						
DF		DO	3M	40	83	2.1	81	36.9			14	18	42			5	3			
DF		DO	4M	14	0		0	.1			0									
DF		DO	4M	16	1		1	.4		1	0									
DF		DO	4M	19	1		1	.3			1									
DF		DO	4M	20	4		4	1.9		3	1									
DF		DO	4M	24	3	23.6	2	1.1		2	1									
DF		DO	4M	26	2		2	.8			2									
DF		DO	4M	28	1		1	.4			1									
DF		DO	4M	30	1		1	.4			1									
DF		DO	4M	32	6	16.6	5	2.4			5									
DF		DO	4M	36	3		3	1.5		2	1									
DF		DO	4M	40	0		0	.1		0										
DF		Totals			229	3.9	220	90.8		7	37	37	46	33	14	19	9	17		
RA		DO	CR	16	1	33.3	1	3.0			1									
RA		DO	CR	18	1		1	6.1			1									
RA		DO	CR	21	1		1	3.1			1									
RA		DO	CR	22	0	33.3	0	1.5			0									
RA		DO	CR	24	0		0	1.9			0									
RA		DO	CR	30	5		5	24.5			2	3								
RA		DO	CR	32	3	7.1	3	13.2					3							
RA		DO	CR	36	3		3	15.0				3								
RA		DO	CR	40	7		7	31.7						3	4					
RA		Totals			23	3.2	22	9.2			6	7	3	3	4					
Total		All Species			252	3.8	242	100.0		7	43	44	49	36	18	19	9	17		



LOGGING PLAN

OF TIMBER SALE CONTRACT NO.
WO-341-2020-W00376-01
BEAR CLAW
PORTIONS OF SECTION 7
OF T11S, R9W, W.M.
LINCOLN COUNTY, OREGON.

AREA	NET ACRES TRACTOR	NET ACRES CABLE
1 (MC)	6	29
2 (MC)	10	0
TOTAL	16	29

Boundaries
- Ownership
- Green Tree Retention Area
- Reforested Area
- Stream Buffer

Murrelet Management Area
- Occupied Habitat
- Non-Habitat Buffer

Roads
- Surfaced Road
- Unsurfaced Road
- Motorized Trail

Streams
- Type F Stream
- Type N Stream
- Cable Corridor
- Landing
- Land Survey Monument

1 inch = 1,000 feet

0 500 1,000 2,000 Feet

N