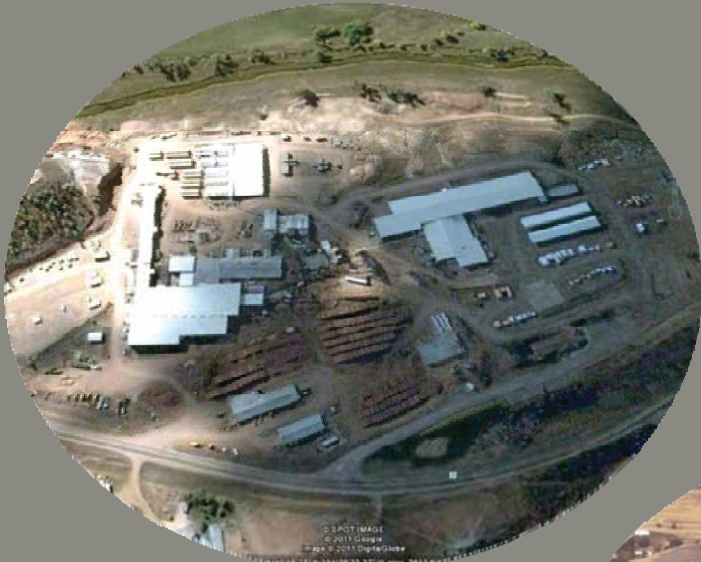
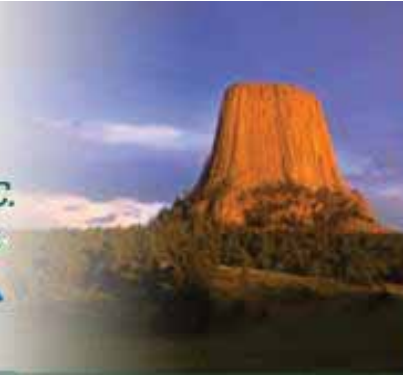




Renewable Resources For A Sustainable World.



Devils Tower
Forest Products



Rushmore
Forest Products



Spearfish Forest Products

Devils Tower Forest Products

Produces predominantly 5/4 shop
Log supply – Ponderosa Pine
Sorted greater than 12" in diameter



Rushmore Forest Products

Produces 1" boards
Log supply – Ponderosa Pine
Sorted logs Less than 12" in diameter



Spearfish Forest Products

Produces 1" boards
Log supply – Ponderosa Pine
Predominantly logs Less than 14" in diameter,
but can be any sort size



Log Sources for 2010

- Black Hills National Forest (88%)
- Private Land Owners (09%)
- State of South Dakota (03%)
- State of Wyoming
- BLM
- Custer National Forest

Log Characteristics

- 97 % Ponderosa Pine
- 3% Black Hills Spruce (White Spruce)
- 16' Maximum delivered log length
- No logs delivered less than 1/3 sound.
- Majority of logs are sorted by diameter and delivered by sort group.

Accounting

- All three locations have state certified scales.
- All scales connected to central log accounting database.
- All loads are weighed at each location.
- All load weights are converted to BF volume by a predetermined weight factor as the loads are weighed in.
- All loads are assigned to a deck in the yard as it is weighed in.

Payments

- Contract logging is paid by the ton.
- Trucking is paid by the ton.
- All stumpage on private land is paid by the ton.
- Forest Service stumpage is all weighed, some of which is sample scaled by the Forest Service and converted to CCF. Some is Tree measurement in which we use weight for our own information. The Forest Service gets only a load count.

Payments

- Most recent Forest Service sales in the Black Hills are sold by CCF on a fixed weight factor. They can't sell by weight, but using a fixed weight factor is the same as selling by weight.
- We convert \$/CCF to \$/ Ton using this formula:
- $\$/\text{TON} = \$/\text{CCF} / (\text{FWF}/20)$

Inventory

- Log Inventories are tracked in MBF
- Each load is converted to volume, at the time it is weighed in, using a fixed BF weight factor assigned to the sort for that sale.
- Each load is assigned to a deck in inventory as it is weighed in.
- We know the BF volume of each deck in inventory at any time, as the deck is being built.

Sale Sort Setup Screen

Tract (11667 / WOODCHUCK) Brand (008841 / WOODCHUCK)

Tract Brand Tickets **Sample Freq**

Active Disabled All
Site ALL All Sites

Site	Sort Code	Freq Code	Description
01	5	LQ	Spearfish >12" Sort
02	2	LQ	Hill City < 12" Sort

Description: Spearfish >12" Sort Disable

Site: 01 SPEARFISH Total Loads:

Sort Code: 5 Greater than 12 inch sort Total Forced Scaled:

Scale Code: LQ Log Quality Sample Net Scaled:

Sample Frequency: 5 1:20 Percentage Scaled:

First Sample Frequency: No First Sample Frequency Sele Refresh

Number First Scale Loads: 0

Find Add Delete Cancel Save Return

Fixed BF Factors for Green P. Pine

Current Log System Weight Factors

Jan. 1st, 2011

Sort code	Description		BF Factor
1	< 11"	Green	18.00
2	< 12"	Green	17.00
3	< 14"	Green	16.00
7	No Sort	Green	15.25
4	> 11"	Green	13.50
5	> 12"	Green	12.00
6	> 14"	Green	11.30

Potential Problems with Weight

- Log Quality -Trucks get paid for the weight they haul so they can deliver all kinds of junk as weight.
- Weight loss of logs due to fire or beetle kill can cause problems with fixed weight factors causing inventory to be understated.
- Trucks may try to manipulate their weights on the scales.



Log Quality

- 5% of the loads from each contractor are sampled for Quality.
- The quality loads for the month are averaged at the end of the month.
- Each contractor is assessed a penalty or a bonus based on his quality summary

SPEARFISH HILL CITY HULETT FSS CSY
 DATE QC 2/9/11 QC'd by JWT CONTRACTOR Munoz
 DATE DLV 2/9/11 TRUCKER Dowd WYRON WEIGHT 64240
 SALE NAME Hoodoo SALE SPECS TYPE FIBER DBH 9 LEN 8OP 6
 LOAD # 756170 CONV. CUTTER ARR MECH.

COMMENTS:

VALUES	DEDUCTIONS	TOTAL		
TRIM LENGTHS(4-6"):				
LONG > 8" (1/4) (1/4)		1/4		
SHORT < 3" (3/4)				
BAD (1/2)				
PARTIAL LONG OR SHORT TRIM DUE TO UNSQUARED END (1/4)				
TOPS & ENDS:				
(1/2)ea. BROKEN	BUCKING FRACTURES	FELLING FRACTURES	1/2	
SMALL TOP (1/4) (5 1/2)		SMALL TOP 14' (1/2) (5 1/2) (5 1/2)	1/4	
LIMBING: PIG EARS (1/4)	MISSED LIMBS (1/4)	LIMB PULL (1/2)	1/4	
BIAS BUTT CUTS:				
EXCESSIVE ROT (1/2)				
PISTOL BUTT (1/4)				
HINGE (1/4)				
LOG MANUFACTURE:				
CROOK (1/4)				
SWEEP (1/4)				
STUMP PULL (1/4)				
BUCKING STRAP (1/4)	BUCKING TEAR (1/4)		1/2	
SAW CUT INTO LOG (1/2)				
MIS-BUCKED FORKS (1/4)				
"INSULT" LOG/CULL [1]				
MULTIPLE DEFECT LOGS [1]				
MECHANICAL DAMAGE: MANUFACTURING (1/4) LOG LOADER (1/4)				
DEAD [1]				
NON-SAMPLE LOGS (1/2) (smll. end X lrg. end X length)				
BRANDS/SKID/SPREAD: (1/4) ea. CONTRACTOR BRAND <u>OV</u> DATE SKID <u>2-4</u> LOAD SPREAD				
LOG LENGTHS		Total Deduct Logs	23/4	
16'	14'	12'	10'	8'
10				
BLUE LOGS- 16'	14'	12'	10'	8'
Mis-Sorted Logs		Total Blue Logs		
		18		
TOTAL LOGS	87/79	(23/4 Total Deduct Logs / 116 Total Logs) X 100 = 1.7 % Deduction		
PERCENT DEDUCTION	1.7	(Mis-Sorted Logs / Total Logs) X 100 = % Mis-Sorts		

Weight loss due to beetle kill



Percent Blue Logs from QC Tallies for the Last 30 Days

Site	Sale	Contractor	Total	Blue	Percent
Hill City					
Bluebird					
		Woodward	303	0	0.0%
		Sum	303	0	0.0%
Fourmile					
		Shook	113	0	0.0%
		Woodford	173	0	0.0%
		Sum	286	0	0.0%
Gooseberry					
		Ballard	355	30	8.5%
		Linde	335	0	0.0%
		Shook	442	230	52.0%
		Zuhr	270	8	3.0%
		Sum	1402	268	19.1%
HooDoo					
		Carlson	285	84	29.5%
		Munoz	709	136	19.2%
		Woodford	304	3	1.0%
		Woodward	1058	152	14.4%
		Sum	2356	375	15.9%

Bugs-<12"-<50% Blue

SORT	SName	CntrName	brandno	SITE	TICKET	ScaleDate	WEIGHT	#logs	GROSS	DEF	NET	%Def	LBS/BF	Bug Logs	% Blue
<12	ZIMMER	MUNOZ LOGGI	008803	RFP	714935	1/13/2011	66960	164	4600	500	4100	10.9%	16.33	4	2.4%
	CORRAL	SHOCKEY ENTE	008814	SFP	741907	1/12/2011	59120	123	4180	320	3860	7.7%	15.32	4	3.3%
	STORM HILL	MEZA LOGGIN	008808	RFP	697731	1/13/2011	68240	195	5120	990	4130	19.3%	16.52	7	3.6%
	STORM HILL	MEZA LOGGIN	008808	RFP	697724	1/13/2011	62880	145	5060	740	4320	14.6%	14.56	13	9.0%
	TIGER	CENTRAL HILLS	008667	RFP	725699	1/18/2011	59280	156	4110	430	3680	10.5%	16.11	15	9.6%
	ZIMMER	MACIEJEWSKI,	008805	RFP	714896	1/26/2011	65940	151	4810	600	4210	12.5%	15.66	15	9.9%
	GOOSEBERRY	BALLARD TRUC	008796	RFP	731002	1/20/2011	66320	140	5050	490	4560	9.7%	14.54	17	12.1%
	STORM HILL	MEZA LOGGIN	008808	RFP	697759	1/18/2011	58800	184	4590	850	3740	18.5%	15.72	25	13.6%
	STORM HILL	MEZA LOGGIN	008808	RFP	697674	1/5/2011	61460	167	4650	800	3850	17.2%	15.96	29	17.4%
	GOOSEBERRY	SHOOK LOGGI	008675	RFP	731162	2/22/2011	62340	132	4850	480	4370	9.9%	14.27	27	20.5%
	GOOSEBERRY	LINDE LOGGIN	008686	RFP	730977	1/20/2011	61860	146	4910	620	4290	12.6%	14.42	31	21.2%
	ZIMMER	MACIEJEWSKI,	008805	RFP	714911	1/5/2011	65580	181	4880	780	4100	16.0%	16.00	41	22.7%
	HOODOO	CARLSON LOG	008813	RFP	755895	1/26/2011	55960	165	4110	560	3550	13.6%	15.76	42	25.5%
	GOOSEBERRY	ZUHR LOGGIN	008818	RFP	730958	1/18/2011	59800	114	5060	550	4510	10.9%	13.26	32	28.1%
	ZIMMER	HOHN LOGGIN	008806	RFP	714976	1/13/2011	58340	141	4570	640	3930	14.0%	14.84	40	28.4%
	GOOSEBERRY	LINDE LOGGIN	008686	RFP	730945	1/18/2011	58920	137	4860	520	4340	10.7%	13.58	46	33.6%
	ZIMMER	HOHN LOGGIN	008806	RFP	714727	1/5/2011	53860	150	4470	700	3770	15.7%	14.29	70	46.7%

Summary for 'SORT' = <12 (17 detail records)

Sum 1045660 2591 79880 10570 69310 13.2% 15.09 458 17.7%

Grand Total 1045660 2591 79880 10570 69310 13.2% 15.09 458 17.7%

Wednesday, March 23, 2011

Bugs-<12"->50% Blue

SORT	SName	CntrName	brandno	SITE	TICKET	ScaleDate	WEIGHT	#logs	GROSS	DEF	NET	%Def	LBS/BF	Bug Logs	% Blue
<12	GOOSEBERRY	LINDE LOGGIN	008686	RFP	730946	1/18/2011	57560	116	5350	430	4920	8.0%	11.70	60	51.7%
	GOOSEBERRY	SHOOK LOGGIN	008675	RFP	730417	2/22/2011	55860	175	5150	250	4900	4.9%	11.40	99	56.6%
	SUNDAY GULCH	CRAGO LOGGIN	008810	RFP	757444	1/6/2011	55940	138	5230	850	4380	16.3%	12.77	81	58.7%
	HOODOO	CARLSON LOGG	008813	RFP	755789	1/13/2011	52240	129	4850	620	4230	12.8%	12.35	77	59.7%
	GOOSEBERRY	LINDE LOGGIN	008686	RFP	730990	1/26/2011	52660	131	4850	480	4370	9.9%	12.05	89	67.9%
	ZIMMER	MUNOZ LOGGIN	008803	RFP	714773	1/6/2011	50560	155	4340	420	3920	9.7%	12.90	110	71.0%
	ZIMMER	SHOOK LOGGIN	008802	RFP	714839	1/20/2011	58660	158	5390	500	4890	9.3%	12.00	114	72.2%
	HOODOO	WOODWARD L	008812	RFP	755744	1/6/2011	48620	142	4890	710	4180	14.5%	11.63	119	83.8%
	HOODOO	MUNOZ LOGGIN	008820	RFP	756016	1/26/2011	43040	171	4440	750	3690	16.9%	11.66	154	90.1%
	SUNDAY GULCH	SHOOK LOGGIN	008811	RFP	757392	1/5/2011	48520	149	5080	950	4130	18.7%	11.75	139	93.3%

Summary for 'SORT' = <12 (10 detail records)

Sum							523660	1464	49570	5960	43610	12.0%	12.01	1042	71.2%
Grand Total							523660	1464	49570	5960	43610	12.0%	12.01	1042	71.2%

Wednesday, March 23, 2011

Current Log System Weight Factors

21-Mar-11

Sort code	Description		BF Factor
1	< 11"	Green	18.00
2	< 12"	Green	17.00
F	< 12"	< 50% Blue	15.00
G	< 12"	> 50% Blue	12.00
3	< 14"	Green	16.00
C	Bugwood < 14"		15.00
7	No Sort	Green	15.25
H	No Sort	< 50% Blue	14.50
E	No Sort	> 50% Blue	12.00
4	> 11"	Green	13.50
5	> 12"	Green	12.00
J	> 12"	<50% Blue	11.50
I	> 12"	> 50% Blue	9.50
6	> 14"	Green	11.30
9	Transfer Loads Oversized		12.00



BLACK HILLS
National
Forest

U.S. DEPARTMENT OF AGRICULTURE





Weight Manipulation

- Trucks cannot add weight to their load at the scale. They can only reduce it.
- The only reason a truck would reduce his weight is to avoid an overweight fine.
- Our Forest service contracts require us to control overweights. To do that we have to fine truckers for overweights on Forest Service sales.

Weight Manipulation

- Scales are operated by a computer system that records a weight once every second as a truck pulls on the scale. When the driver prints his weight ticket the system records that weight and also the heaviest weight as he pulled on the scale. Reports can be printed showing the differences.

Weight Monitoring



NEIMAN TIMBER CO.

Page # 1

Check Overweights

Run Time - 02/10/2011 08:51

Date Range: 02/10/11 Through 02/10/11 Mill:

Date/Time	Ticket	Truck #	Driver	Mill	GWV	Max Gross	Printed Gross	Driver WT	Overweight	Fine Sale
02/10/11 08:45	757726	00068	Turnbow, Cody	01	104000	104120	103900	220	-100	Yes
02/10/11 08:38	753596	00170	Fenner, Chris	01	104000	104420	104140	280	140	Yes
02/10/11 08:23	757898	00182	L&J16	01	96700	96440	96140	300	-560	Yes
02/10/11 07:53	728118	00154	Henwood #2, R	01	104000	104000	103840	160	-160	Yes
02/10/11 07:45	753546	00213	Meza, Jorge	01	96700	97320	97160	160	460	Yes
02/10/11 07:42	728117	00016	Cichosz, Eric	01	104000	103560	103300	260	-700	Yes
02/10/11 07:37	737948	00180	Ryan, Wayne	01	96700	91980	91820	160	-4,880	Yes
02/10/11 07:35	742197	00111	Jahner, Larry	01	96700	96260	96040	220	-660	Yes
02/10/11 07:33	742196	00074	Christian Inc., P	01	104000	104540	104380	160	380	Yes
02/10/11 07:32	742195	00107	Wheeler, Lloyd	01	96700	93860	93700	160	-3,000	Yes
02/10/11 07:28	66924	00132	JR'S - Don Q	01	104000	105840	105620	220	1,620	No
02/10/11 07:26	741896	00139	Eddy, Steve	01	104000	103460	103200	260	-800	Yes
02/10/11 07:24	66922	00005	JR's - Roy P	01	104000	106280	106120	160	2,120	No
02/10/11 07:13	753595	00202	Mailloux, Jerry	01	104000	104420	104220	200	220	Yes
02/10/11 07:10	741832	00031	Johnson, Lary	01	104000	104380	104140	240	140	Yes
02/10/11 07:08	757725	00029	Hartl, Mark	01	96700	85480	85300	180	-11,400	Yes
02/10/11 06:57	734452	00077	Christian, R	01	104000	103560	103360	200	-640	Yes
02/10/11 06:25	757897	00179	Benedict, Keith	01	104000	97100	96880	220	-7,120	Yes
02/10/11 06:22	757896	00183	L&J18	01	96700	96740	96500	240	-200	Yes
02/10/11 06:08	741966	00215	Drentlaw, Mike	01	96700	97080	96840	240	140	Yes
02/10/11 05:37	753593	00076	Frasier, Paul	01	96700	94420	94200	220	-2,500	Yes
02/10/11 04:50	728114	00016	Cichosz, Eric	01	104000	103660	103400	260	-600	Yes
02/10/11 04:48	757724	00068	Turnbow, Cody	01	104000	104000	103780	220	-220	Yes
02/10/11 04:01	728113	00154	Henwood #2, R	01	104000	104800	104640	160	640	Yes

Weight Monitoring

- All the scales have video cameras that monitor activity on the scale.
- The cameras record and save video clips any time there is movement on the scale.
- The video clips are time stamped and can be matched with delivery date and time of each load.

Scale Video Clips



Scale Video Clips



Simulation



Advantages of Buying by Weight

- Log sellers understand weight and are less inclined to challenge us on their payments.
- Log sellers do not understand the various log scaling rules currently being used and are always suspicious of being cheated on the log scale.
- We don't have the expense of maintaining a crew of trained scalers.

- Using fixed weight factors to determine BF, we avoid all the inadequacy of the scribner rules in scaling small logs.

Disadvantages of buying by weight

- ① We have no scale data for individual sales such as average diameter, BF log size, and amount or type of defect.
- ② If the overrun starts to fluctuate management suspects the weight factors are off and it is difficult to prove where they are off and if they are, by how much.

Matt's Question

- Do you think in tons or do you think volume converted from tons?
 - Front end payments – tons and \$/ton
 - Inventories – MBF (Converted from tons)
 - Financial Statements – MBF
 - Audits – MBF converted from CF of deck area