



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Hansen Falls
Sale 341-10-69

District: Tillamook

Date: February 10, 2010

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$85,142.10	\$0.00	\$85,142.10
		Project Work:	\$(18,860.00)
		Advertised Value:	\$66,282.10



Timber Sale Appraisal
 Hansen Falls
 Sale 341-10-69

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District: Tillamook

Date: February 10, 2010

timber description

Location: Portions of Sections 9, 10, 15, and 16, T3N, R9W, W.M., Tillamook County, Oregon.

Stand Stocking: 60%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	17	0	95
Western Hemlock / Fir	18	0	95

Volume by Grade	2S	3S	4S	SM	Total
Douglas - Fir	22	60	11	0	93
Western Hemlock / Fir	331	213	58	102	704
Total	353	273	69	102	797



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Sale 341-10-69

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District: Tillamook

Date: February 10, 2010

comments: Pond Values Used: 4th Quarter Calendar Year 2009 + Local Pond Values.

Western Red Cedar & Other Cedars Stumpage Price = Pond Value minus Logging Cost

$\$610/\text{MBF} = \$790/\text{MBF} - \$180/\text{MBF}$

Red Alder & Other Hardwoods Stumpage Price = Pond Value minus

Logging Cost

$\$285/\text{MBF} = \$465/\text{MBF} - \$180/\text{MBF}$

SCALING COST ALLOWANCE = \$5.00/MBF

FUEL COST ALLOWANCE = \$3.00/Gallon

HAULING COST ALLOWANCE

Hauling costs equivalent to \$700 daily truck cost.

Other Costs (with Profit & Risk to be added):

Brand and Paint: $\$2/\text{MBF} \times 797 \text{ MBF} = \$1,594$

TOTAL Other Costs (with Profit and Risk to be added) = \$1,594

Other Costs (No Profit & Risk added):

Tank Trap Installation at both ends of Road C to D: $2 \times \$75 = \150

TOTAL Other Costs (No Profit & Risk added) = \$150

ROAD MAINTENANCE:

Fall Helloff Road un-named roads between Areas, and un-named road that connects with Gods Valley County Road.

Final Grading: $\$500/\text{mile} \times 1.4 \text{ miles} / 797 \text{ MBF} = \$ 0.87/ \text{MBF}$

Spot rocking: $(50 \text{ cy crushed} \times \$ 11/ \text{cy}) / 797 \text{ MBF} = \$ 0.69/ \text{MBF}$

TOTAL ROAD MAINTENANCE COST: \$ 1.56/MBF



Timber Sale Appraisal
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"STEWARDSHIP IN FORESTRY"

District: Tillamook

Date: February 10, 2010

logging conditions

combination#: 1 Douglas - Fir 74.19%

yarding distance: Short (400 ft) **downhill yarding:** No
logging system: Track Skidder **Process:** Manual Falling/Delimiting
tree size: Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 10.0 **bd. ft / load:** 4,500
cost / mbf: \$76.45

machines: Log Loader (B)
Track Skidder

combination#: 2 Western Hemlock / Fir 85.51%

yarding distance: Short (400 ft) **downhill yarding:** No
logging system: Track Skidder **Process:** Manual Falling/Delimiting
tree size: Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 10.0 **bd. ft / load:** 4,500
cost / mbf: \$76.45

machines: Log Loader (B)
Track Skidder

combination#: 3 Douglas - Fir 10.75%
Western Hemlock / Fir 11.22%

yarding distance: Medium (800 ft) **downhill yarding:** No
logging system: Track Skidder **Process:** Manual Falling/Delimiting
tree size: Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 8.0 **bd. ft / load:** 4,500
cost / mbf: \$95.57

machines: Log Loader (B)
Track Skidder

combination#: 4 Douglas - Fir 15.05%
Western Hemlock / Fir 3.27%

yarding distance: Short (400 ft) **downhill yarding:** No
logging system: Track Skidder **Process:** Manual Falling/Delimiting
tree size: Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF
loads / day: 6.0 **bd. ft / load:** 3,500
cost / mbf: \$163.83

machines: Log Loader (B)
Track Skidder



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Hansen Falls
Sale 341-10-69

District: Tillamook

Date: February 10, 2010

logging costs

Operating Seasons:	1.00	Profit Risk:	15.00%
Project Costs:	\$18,860.00	Other Costs (P/R):	\$1,594.00
Slash Disposal:	\$0.00	Other Costs:	\$150.00

Miles of Road

Road Maintenance: \$1.56

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

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	3.0	4.0
Western Hemlock / Fir	\$0.00	3.0	4.0

Local Pond Values

Date	Specie	Grade	Value
2/10/10	Douglas - Fir	2S	\$355.00
2/10/10	Douglas - Fir	3S	\$320.00
2/10/10	Douglas - Fir	4S	\$310.00
2/10/10	Western Hemlock / Fir	SM	\$300.00
2/10/10	Western Hemlock / Fir	2S	\$275.00
2/10/10	Western Hemlock / Fir	3S	\$260.00
2/10/10	Western Hemlock / Fir	4S	\$255.00



Timber Sale Appraisal
 Hansen Falls
 Sale 341-10-69

"STEWARDSHIP IN FORESTRY"

District: Tillamook

Date: February 10, 2010

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$91.66	\$1.64	\$5.50	\$53.26	\$2.00	\$23.11	\$0.00	\$5.00	\$0.19	\$182.36
Western Hemlock / Fir									
\$81.45	\$1.64	\$5.50	\$53.26	\$2.00	\$21.58	\$0.00	\$5.00	\$0.19	\$170.62

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$327.10	\$144.74	\$0.00
Western Hemlock / Fir	\$0.00	\$272.44	\$101.82	\$0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Hansen Falls
Sale 341-10-69

District: Tillamook

Date: February 10, 2010

summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Western Hemlock / Fir	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	93	\$144.74	\$13,460.82
Western Hemlock / Fir	704	\$101.82	\$71,681.28

Gross Timber Sale Value

Recovery: \$85,142.10

Prepared by: David Wells

Phone: 503-842-2545



"STEWARDSHIP IN FORESTRY"

Hansen Falls

Volume Summary

Area 1-Partial cut				
28 acres				
SPECIES	Gross MBF/ Acre	Gross MBF	Hidden D&B	Net Vol MBF
Douglas-fir	2.5	70	5%	67
Hemlock	21.5	603	5%	574
TOTAL	24.0	673		641

Area 2-Partial cut				
4 acres				
SPECIES	Gross MBF/ Acre	Gross MBF	Hidden D&B	Net Vol MBF
Douglas-fir	3.0	9	5%	9
Hemlock	20.3	83	5%	79
TOTAL	23.3	92		88

Area 3-Partial cut				
5 acres				
SPECIES	Gross MBF/ Acre	Gross MBF	Hidden D&B	Net Vol MBF
Douglas-fir	2.8	14	2%	14
Hemlock	4.7	24	2%	23
TOTAL	7.5	38		37

Area 4-Salvage				
1 acre				
SPECIES	Gross MBF/ Acre	Gross MBF	Hidden D&B	Net Vol MBF
Douglas-fir	3.5	3	15%	3
Hemlock	32.9	33	15%	28
TOTAL	36.4	36		31

TOTAL SALE VOLUME			38 acres	
SPECIES	Gross Vol. (MBF)	Net Vol. (MBF)		
Douglas-fir	97	93		
Hemlock	742	704		
TOTAL	839	797		



"STEWARDSHIP IN FORESTRY"

PROJECT SUMMARY SHEET

Sale: Hansen Falls

CONSTRUCTION

SUBTOTAL CONSTRUCTION \$0.00

IMPROVEMENT

Point	A to B	31+80	stations =	\$2,923.16
Point	E to F	5+00	stations =	\$8,234.56
SUBTOTAL IMPROVEMENT				<u>\$11,157.72</u>

RECONSTRUCTION

Point	C to D	28+25	stations =	\$5,194.44
SUBTOTAL RECONSTRUCTION				<u>\$5,194.44</u>

MOVE IN \$2,507.84

GRAND TOTAL \$18,860.00

Operating Periods for Hansen Falls

	January	February	March	April	May	June	July	August	September	October	November	December
Harvesting												
Tractor Yarding-Areas 1 and 4	*	*	*					6th	15th		*	*
Tractor Yarding-Areas 2 and 3	*	*	*					15th			*	*
Cable Yarding - Areas 1 and 4								6th	15th			
Cable Yarding - Areas 2 and 3												
Loading - Areas 1 and 4	*	*	*					6th	15th		*	*
Loading - Areas 2 and 3	*	*	*					15th			*	*
Felling - Areas 1 and 4								6th	15th			
Felling - Areas 2 and 3								15th				
Complete all Felling by March 15, 2011												

	January	February	March	April	May	June	July	August	September	October	November	December
Hauling												
Hauling as shown on Vicinity map								6th	15th			
Use of Engine Compression Brakes (Jake Brakes)									15th			
Log Hauling on Unsurfaced Roads	*	*	*					6th	15th		*	*

	January	February	March	April	May	June	July	August	September	October	November	December
Project Work												
Project Work - Road segment A-B									15th			
Project Work - Road segment C-D								6th	15th			
Project Work - Road segment E-F												
Activity in Live Streams										16th		
Seeding						16th		14th				

Operations Allowed

Operations Restricted

Activity Restricted 2 hours before sunset and 2 hours after sunrise

*** WITH PRIOR APPROVAL IN WRITING BY STATE.**

Sale expires April 1, 2011

TC TLOGSTVB

Log Stock Table - MBF
Project: HANSFLLS

T03N R09W S10 TSALE

T03N R09W S10 TSAL

Twp 03N **Rge** 09W **Sec** 10 **Tract** AREA1 **Type** SALE **Acres** 28.00 **Plots** 13 **Sample Trees** 88 **Page** 1
Date 12/16/2009 **Time** 2:46:37PM

SPP	T	S	So	Gr	Log	Gross	%	Net	%	Net Volume by Scaling Diameter in Inches																		
										rt	de	Len	MBF	Def	MBF	Spc	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
WL		8	S		40	249	5.0	236	23.7								97	98	42									
WL		8	2		40	561	5.0	533	53.5					18		105	271	120	19									
WL		8	3		32	73	5.0	69	6.9				27	23	19													
WL		8	3		35	2	5.0	2	.2				2															
WL		8	3		36	2	5.0	2	.2				2															
WL		8	3		40	109	5.0	103	10.4			3	17	5	50	14	14											
WL		8	4		12	1	5.0	1	.1				1															
WL		8	4		14	1	5.0	1	.1				1	0														
WL		8	4		15	3	5.0	3	.3				2	0														
WL		8	4		16	3	5.0	3	.3				3															
WL		8	4		17	2	5.0	2	.2				1	1														
WL		8	4		19	5	5.0	5	.5				5															
WL		8	4		21	3	5.0	3	.3				3															
WL		8	4		22	4	5.0	3	.3				3															
WL		8	4		25	2	5.0	2	.2				2															
WL		8	4		27	3	5.0	2	.2				2															
WL		8	4		34	13	5.0	13	1.3				13															
WL		8	4		40	16	5.0	15	1.5				15															
WL		Totals				1,049	5.0	996	43.1		3	68	35	73	51	119	368	219	61									
WH		8	S		40	93	5.0	88	15.4								88											
WH		8	2		40	300	7.8	277	48.3					148		46	83											
WH		8	3		32	47	5.0	44	7.7				3	21	21													
WH		8	3		38	4	5.0	3	.6				3															
WH		8	3		40	124	5.0	118	20.6			3	6	15	67	8	18											
WH		8	4		14	1	5.0	1	.1				1															
WH		8	4		15	1	5.0	1	.2				1															
WH		8	4		17	6	5.0	6	1.0				6															
WH		8	4		20	3	5.0	3	.5				3															
WH		8	4		21	2	5.0	2	.3				2															
WH		8	4		22	1	5.0	1	.2				1															
WH		8	4		23	3	5.0	2	.4				2															
WH		8	4		27	1	5.0	1	.2				1															
WH		8	4		29	3	5.0	3	.4				3															
WH		8	4		30	2	5.0	2	.3				2															
WH		8	4		31	3	5.0	3	.4				3															
WH		8	4		32	2	5.0	2	.4				2															
WH		8	4		35	3	5.0	3	.5				3															
WH		8	4		40	14	5.0	14	2.4					14														
WH		Totals				612	6.4	573	24.8		3	41	36	101	156	65	171											
DL		8	S		40	184	5.0	175	28.3								53	57	44	21								
DL		8	2		40	403	5.0	383	62.0					16		45	127	117	58	21								
DL		8	3		32	26	5.0	24	3.9					6	5	13												
DL		8	3		34	2	5.0	2	.3				2															
DL		8	3		40	25	5.0	24	3.9				2	7	8													
DL		8	4		14	3	5.0	3	.5				1	2														
DL		8	4		15	1	5.0	1	.1				1															
DL		8	4		16	2	5.0	2	.3					2														

TC		ILOGSTVB		Log Stock Table - MBF																		
				Project: HANSFLLS																		
T03N R09W S10 TSALE										T03N R09W S10 TSAL												
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	2													
03N	09W	10	AREA1	SALE	28.00	13	88	Date	12/16/2009													
								Time	2:46:37PM													
SPP	T	S	So	Gr	Log	Gross	%	Net	%	Net Volume by Scaling Diameter in Inches												
										MBF	Def	MBF	SpC	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23
DL		8	4	17		1	5.0	1	.2			1										
DL		8	4	19		1	5.0	1	.1				1									
DL		8	4	27		1	5.0	1	.2			1										
DL		8	4	40		1	5.0	1	.2		1											
DL		Totals				650	5.0	617	26.7		1	7	15	15	29	45	187	174	102	42		
DF		8	2	40		16	5.0	15	23.2							15						
DF		8	3	40		49	5.0	47	70.6			2		20	8	16						
DF		8	4	25		2	5.0	2	2.6			2										
DF		8	4	28		3	5.0	2	3.6			2										
DF		Totals				70	5.0	66	2.9			6		20	8	16	15					
RA		8	3	22		8	5.0	8	43.5					8								
RA		8	3	24		3	5.0	3	15.8			3										
RA		8	4	40		8	5.0	7	40.6			7										
RA		Totals				19	5.0	18	.8			10		8								
SS		8	2	40		20	5.0	19	48.3							19						
SS		8	3	32		9	5.0	9	23.0					9								
SS		8	3	40		9	5.0	8	21.7					8								
SS		8	4	16		1	5.0	1	3.3			1										
SS		8	4	27		1	5.0	1	3.6			1										
SS		Totals				40	5.0	38	1.7			3		17		19						
Total All Species						2,440	5.3	2,309	100.0		8	136	87	227	252	245	759	393	162	42		

Log Stock Table - MBF

Project: HANSFLLS

T03N R09W S10 TSALE

T03N R09W S10 TSAL

Twp 03N Rge 09W Sec 10 Tract AREA4 Type SALE Acres 1.00 Plots 11 Sample Trees 73 Page 1 Date 12/16/2009 Time 2:50:59PM

Spp	T	S	So	Gr	Log	Gross	% Def	Net	% 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+	
WH		8	S		40	5	15.0	4	14.8								4					
WH		8	2		40	14	17.3	12	41.7					5	3		4					
WH		8	3		32	4	15.0	3	12.0				0	2	1	0						
WH		8	3		38	0	15.0	0	.5				0									
WH		8	3		40	7	15.0	6	20.6		0		0	1	4	0	1					
WH		8	4		14	0	15.0	0	.1				0									
WH		8	4		15	0	15.0	0	.4				0									
WH		8	4		16	0	15.0	0	.4				0									
WH		8	4		17	0	15.0	0	.8				0									
WH		8	4		19	0	15.0	0	.3				0									
WH		8	4		20	0	15.0	0	.4				0									
WH		8	4		21	0	15.0	0	.3				0									
WH		8	4		22	0	15.0	0	.2				0									
WH		8	4		23	0	15.0	0	.3				0									
WH		8	4		25	0	15.0	0	.2				0									
WH		8	4		27	0	15.0	0	.4				0									
WH		8	4		29	0	15.0	0	.3				0									
WH		8	4		32	0	15.0	0	.3				0									
WH		8	4		34	1	15.0	0	1.7				0									
WH		8	4		35	0	15.0	0	.4				0									
WH		8	4		40	1	15.0	1	3.9				1									
WH		Totals				33	16.0	28	37.6		0	3	2	5	6	4	8					
WL		8	S		40	10	15.0	8	36.5								3	4	2			
WL		8	2		40	14	15.0	12	52.4						2	6	4					
WL		8	3		32	0	15.0	0	1.6				0		0							
WL		8	3		35	0	15.0	0	.3				0									
WL		8	3		36	0	15.0	0	.3				0									
WL		8	3		40	2	15.0	2	8.0		0		0	0	1	0						
WL		8	4		14	0	15.0	0	.1				0									
WL		8	4		15	0	15.0	0	.1				0									
WL		8	4		22	0	15.0	0	.6				0									
WL		8	4		27	0	15.0	0	.2				0									
WL		Totals				26	15.0	22	30.4		0	1	0	0	1	2	9	8	2			
DL		8	S		40	8	15.0	7	35.0								2	2	2	1		
DL		8	2		40	12	15.0	10	54.8					0	1	3	3	2				
DL		8	3		32	1	15.0	1	4.3				0	0								
DL		8	3		34	0	15.0	0	.3				0									
DL		8	3		40	1	15.0	1	4.0				0	0			0					
DL		8	4		14	0	15.0	0	.4				0									
DL		8	4		15	0	15.0	0	.1				0									
DL		8	4		16	0	15.0	0	.4				0									
DL		8	4		17	0	15.0	0	.2				0									
DL		8	4		19	0	15.0	0	.2				0									
DL		8	4		40	0	15.0	0	.3		0											
DL		Totals				22	15.0	19	25.6		0	0	0	0	1	1	5	5	4	1		
DF		8	2		40	1	15.0	1	23.2								1					

TC TLOGSTVB

Log Stock Table - MBF

Project: HANSFLLS

T03N R09W S10 TSALE

T03N R09W S10 TSAL

Twp Rgc Sec Tract Type Acres Plots Sample Trees Page
 03N 09W 10 AREA4 SALE 1.00 11 73 2
 Date 12/16/2009
 Time 2:50:59PM

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		8	3	40	2	15.0	2	70.6			0		1	0	1						
DF		8	4	25	0	15.0	0	2.6			0										
DF		8	4	28	0	15.0	0	3.6			0										
DF		Totals			3	15.0	3	3.4			0		1	0	1	1					
RA		8	3	22	0	15.0	0	43.5					0								
RA		8	3	24	0	15.0	0	15.8			0										
RA		8	4	40	0	15.0	0	40.6			0										
RA		Totals			1	15.0	1	.9			0			0							
SS		8	2	40	1	15.0	1	48.3								1					
SS		8	3	32	0	15.0	0	23.0					0								
SS		8	3	40	0	15.0	0	21.7					0								
SS		8	4	16	0	15.0	0	3.3			0										
SS		8	4	27	0	15.0	0	3.6			0										
SS		Totals			2	15.0	1	2.0			0		1			1					
Total All Species					87	15.4	74	100.0		0	4	3	8	8	8	24	13	5	1		

TC		TSTNDSUM		Stand Table Summary												
Project													HANSFLLS			
T03N R09W S10 TSALE										T03N R09W S10 TSALE						
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1		Date:	12/16/2009				
03N	09W	10	AREA3	SALE	5.00	5	27	Time:	2:45:02PM							
Spc	S T	Sample			Av	Trees/ Acres	BA/ Acres	Logs Acres	Average Log		Tons/ Acres	Net	Net	Totals		
		DBH	Trees	16'	Tot				Net	Net		Cu.Ft.	Bd.Ft.	Tons	Cunits	MBF
WL		14	1	88	91	7.484	8.00	14.97	18.9	73.5	9.04	282	1,100	45	14	6
WL		15	2	88	86	13.038	16.00	26.08	20.3	78.4	16.98	531	2,044	85	27	10
WL		16	2	88	99	11.459	16.00	22.92	26.6	98.0	19.52	610	2,246	98	30	11
WL		17	3	86	86	15.226	24.00	30.45	27.1	98.0	26.41	825	2,984	132	41	15
WL		18	2	86	76	9.054	16.00	13.58	34.7	104.5	15.10	471	1,420	76	24	7
WL		19	2	88	99	8.126	16.00	16.25	38.2	134.8	19.87	621	2,190	99	31	11
WL		Totals	12	87	89	64.387	96.00	124.25	26.9	96.5	106.92	3,340	11,984	535	167	60
WH		10	2	85	81	29.335	16.00	29.34	14.8	58.8	13.93	435	1,725	70	22	9
WH		11	3	86	88	36.366	24.00	60.61	12.0	47.0	23.19	725	2,851	116	36	14
WH		Totals	5	86	84	65.702	40.00	89.95	12.9	50.9	37.12	1,160	4,576	186	58	23
RA		9	2	86	57	36.217	16.00	36.22	8.8	29.4	8.74	318	1,065	44	16	5
RA		11	2	84	45	24.244	16.00	24.24	12.2	34.3	8.14	296	832	41	15	4
RA		25	1	84	38	2.347	8.00	2.35	59.5	49.0	3.84	140	115	19	7	1
RA		26	1	84	71	2.170	8.00	4.34	56.3	186.2	6.71	244	808	34	12	4
RA		Totals	6	85	52	64.977	48.00	67.15	14.9	42.0	27.43	997	2,819	137	50	14
DF		9	1	87	64	18.108	8.00	18.11	8.3	39.2	4.26	149	710	21	7	4
DF		11	1	87	95	12.122	8.00	24.24	9.9	44.1	6.87	241	1,069	34	12	5
DF		13	1	84	89	8.679	8.00	17.36	13.8	53.9	6.81	239	936	34	12	5
DF		Totals	3	86	79	38.910	24.00	59.71	10.5	45.5	17.94	630	2,715	90	31	14
DL		15	1	84	76	6.519	8.00	13.04	16.1	53.9	5.78	210	703	29	11	4
DL		Totals	1	84	76	6.519	8.00	13.04	16.1	53.9	5.78	210	703	29	11	4
Totals			27	86	76	240.495	216.00	354.09	17.9	64.4	195.19	6338	22,797	976	317	114

TC		ILOGSTVB		Log Stock Table - MBF																	
				Project: HANSFLLS																	
T03N R09W S10 TSALE										T03N R09W S10 TSAL											
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	1												
03N	09W	10	AREA2	SALE	4.00	13	88	Date	12/16/2009												
									Time	2:48:13PM											
Spp	T	So	Gr	Log	Gross	%	Net	%	Net Volume by Scaling Diameter in Inches												
									MBF	Def	MBF	SpC	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23
WL		8	S	40	38	5.0	37	25.0								17	14	6			
WL		8	2	40	78	5.0	74	50.7					7	13	37	14	3				
WL		8	3	32	11	5.0	10	7.0			0	4	3	3							
WL		8	3	35	0	5.0	0	.2				0									
WL		8	3	36	0	5.0	0	.2				0									
WL		8	3	38	1	5.0	0	.3				0									
WL		8	3	40	18	5.0	17	11.4		0	3	1	6	2	5						
WL		8	4	12	0	5.0	0	.1			0										
WL		8	4	14	0	5.0	0	.1			0	0									
WL		8	4	15	0	5.0	0	.0				0									
WL		8	4	16	0	5.0	0	.3				0									
WL		8	4	17	0	5.0	0	.3				0	0								
WL		8	4	19	1	5.0	1	.4				1									
WL		8	4	20	0	5.0	0	.2				0									
WL		8	4	21	0	5.0	0	.3				0									
WL		8	4	22	1	5.0	0	.3				0									
WL		8	4	25	0	5.0	0	.1				0									
WL		8	4	27	0	5.0	0	.1				0									
WL		8	4	32	0	5.0	0	.2				0									
WL		8	4	40	4	5.0	4	2.8				2									
WL		Totals			154	5.0	146	44.2		0	9	5	12	12	17	54	28	9			
WH		8	S	40	10	5.0	10	12.5							10						
WH		8	2	40	45	7.7	42	53.3					17	9	13	3					
WH		8	3	32	6	5.0	6	7.6				3	3								
WH		8	3	40	16	5.0	15	19.1		0	1	2	10	1							
WH		8	4	14	0	5.0	0	.2			0										
WH		8	4	15	0	5.0	0	.5			0										
WH		8	4	17	1	5.0	1	.9			1										
WH		8	4	20	0	5.0	0	.2			0										
WH		8	4	21	0	5.0	0	.3			0										
WH		8	4	22	0	5.0	0	.2			0										
WH		8	4	23	0	5.0	0	.4			0										
WH		8	4	27	0	5.0	0	.5			0										
WH		8	4	29	0	5.0	0	.5			0										
WH		8	4	30	0	5.0	0	.3			0										
WH		8	4	31	0	5.0	0	.5			0										
WH		8	4	34	2	5.0	2	2.3			2										
WH		8	4	35	0	5.0	0	.5			0										
WH		Totals			84	6.4	78	23.7		0	7	5	13	18	9	23	3				
DL		8	S	40	26	5.0	25	28.2							8	8	6	3			
DL		8	2	40	54	5.0	51	58.1					1	6	16	17	8	3			
DL		8	3	32	4	5.0	3	3.9				1	1	2							
DL		8	3	34	0	5.0	0	.3			0										
DL		8	3	40	7	5.0	7	7.9			0	1	2		2	1					
DL		8	4	14	0	5.0	0	.5			0	0									
DL		8	4	15	0	5.0	0	.1			0										
DL		8	4	16	0	5.0	0	.3					0								

Log Stock Table - MBF
Project: **HANSFELS**

T03N R09W S10 TSALE

T03N R09W S10 TSAL

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page
03N	09W	10	AREA2	SALE	4.00	13	88	2
								Date
								12/16/2009
								Time
								2:48:13PM

Spp	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches												
									MBF	MBF	Sp	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29
DL	8	4	17		0	5.0	0	.2				0									
DL	8	4	19		0	5.0	0	.1				0									
DL	8	4	25		0	5.0	0	.3				0									
DL	8	4	40		0	5.0	0	.2			0										
DL	Totals				93	5.0	88	26.8		0	1	2	3	3	9	24	25	15	6		
DF	8	2	40		6	5.0	6	60.2						1		4					
DF	8	3	40		3	5.0	3	34.2			0		2	1							
DF	8	4	27		0	5.0	0	1.9			0										
DF	8	4	28		0	5.0	0	3.7			0										
DF	Totals				10	5.0	9	2.8			1		2	2		4					
RA	8	3	22		1	5.0	1	43.5						1							
RA	8	3	24		0	5.0	0	15.8			0										
RA	8	4	40		1	5.0	1	40.6			1										
RA	Totals				3	5.0	3	.8			1			1							
SS	8	2	40		3	5.0	3	48.3								3					
SS	8	3	32		1	5.0	1	23.0					1								
SS	8	3	40		1	5.0	1	21.7					1								
SS	8	4	16		0	5.0	0	3.3			0										
SS	8	4	27		0	5.0	0	3.6			0										
SS	Totals				6	5.0	5	1.7			0		2			3					
Total All Species					349	5.3	330	100.0		1	19	12	32	36	35	108	56	23	6		

TC		Stand Table Summary											Page		1					
PSTNDSUM													Date:		12/16/2009					
T03N R09W S10 TySALE		28.00		Project											HANSFLLS		Time:		2:42:53PM	
T03N R09W S10 TySALE		4.00		Acres											32.00		Grown Year:			
S Spc	T	Sample		Tot		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals						
		DBH	Trees	FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF				
WL	9	3	87	75	17.776	7.85	17.78	10.9	52.6	6.19	193	934	198	62	30					
WL	13	2	88	78	4.544	4.19	9.09	13.9	52.2	4.05	127	475	130	41	15					
WL	14	3	89	100	7.346	7.85	18.12	16.2	71.9	9.39	293	1,303	300	94	42					
WL	15	3	86	68	3.840	4.71	7.68	17.4	68.1	4.27	134	523	137	43	17					
WL	16	1	89	128	.375	.52	1.12	21.7	91.8	.78	24	103	25	8	3					
WL	17	2	90	69	2.657	4.19	5.31	22.6	90.2	3.84	120	480	123	38	15					
WL	19	1	89	99	.266	.52	.53	37.5	142.5	.64	20	76	20	6	2					
WL	20	3	87	135	2.160	4.71	6.48	36.0	153.1	7.47	233	992	239	75	32					
WL	21	1	90	133	1.524	3.66	4.57	40.7	180.5	5.95	186	825	190	59	26					
WL	22	3	90	143	1.785	4.71	5.35	47.6	205.1	8.15	255	1,098	261	82	35					
WL	23	5	89	151	3.085	8.90	10.71	48.2	230.1	16.51	516	2,463	528	165	79					
WL	24	6	89	131	4.000	12.57	12.00	53.3	244.9	20.47	640	2,938	655	205	94					
WL	25	9	89	134	5.990	20.42	19.20	56.0	263.1	34.43	1,076	5,051	1,102	344	162					
WL	26	4	89	134	2.272	8.38	6.82	64.0	300.8	13.96	436	2,050	447	140	66					
WL	27	4	89	148	2.107	8.38	6.32	75.0	370.5	15.16	474	2,342	485	152	75					
WL	28	6	90	137	2.939	12.57	8.82	77.1	373.7	21.74	679	3,294	696	217	105					
WL	29	9	90	148	4.451	20.42	15.18	76.0	384.4	36.92	1,154	5,835	1,182	369	187					
WL	30	2	87	71	.853	4.19	1.71	74.2	266.0	4.05	127	454	130	41	15					
WL	31	4	89	141	1.598	8.38	4.79	97.3	490.8	14.93	467	2,353	478	149	75					
WL	32	2	89	145	.750	4.19	2.25	105.0	516.2	7.56	236	1,161	242	76	37					
WL	33	2	87	119	.705	4.19	2.12	94.4	446.5	6.39	200	945	204	64	30					
WL	Totals	75	88	108	71.023	155.50	165.94	45.7	215.1	242.86	7,590	35,696	7,772	2,429	1,142					
DL	19	1	90	136	.266	.52	.80	32.8	148.8	.72	26	119	23	8	4					
DL	24	4	91	148	2.666	8.38	9.33	49.5	236.1	12.70	462	2,204	406	148	71					
DL	25	4	91	137	2.457	8.38	8.60	48.3	226.6	11.43	415	1,949	366	133	62					
DL	26	1	88	133	.994	3.66	2.98	57.8	256.5	4.74	172	765	152	55	24					
DL	27	6	89	146	3.160	12.57	10.53	63.0	307.8	18.26	664	3,242	584	212	104					
DL	30	2	87	150	.853	4.19	2.56	83.6	395.8	5.88	214	1,013	188	68	32					
DL	31	6	88	156	2.397	12.57	8.79	80.1	409.4	19.35	704	3,598	619	225	115					
DL	33	4	87	180	1.410	8.38	5.64	90.7	478.6	14.08	512	2,700	450	164	86					
DL	34	2	90	155	.664	4.19	2.66	87.6	467.9	6.40	233	1,243	205	74	40					
DL	37	4	90	167	1.122	8.38	4.49	111.1	629.4	13.72	499	2,824	439	160	90					
DL	40	2	90	150	.480	4.19	1.44	160.8	874.0	6.37	232	1,258	204	74	40					
DL	42	2	90	138	.435	4.19	1.31	163.3	874.0	5.86	213	1,141	188	68	37					
DL	Totals	38	89	150	16.906	79.58	59.13	73.5	373.0	119.50	4,346	22,058	3,824	1,391	706					
WH	9	1	85	70	1.185	.52	1.19	10.8	47.5	.41	13	56	13	4	2					
WH	14	1	89	131	.490	.52	1.47	16.9	76.0	.79	25	112	25	8	4					
WH	15	1	89	80	2.986	3.66	5.97	19.3	80.7	3.69	115	482	118	37	15					
WH	16	3	89	105	5.625	7.85	13.87	21.8	89.1	9.69	303	1,236	310	97	40					
WH	18	12	89	114	14.221	25.13	37.92	28.5	117.6	34.59	1,081	4,458	1,107	346	143					
WH	19	5	90	130	6.116	12.04	16.49	35.8	156.0	18.89	590	2,572	604	189	82					
WH	20	1	90	142	1.680	3.66	5.04	39.9	186.8	6.43	201	942	206	64	30					
WH	21	5	90	124	3.700	8.90	11.10	38.9	171.6	13.83	432	1,905	443	138	61					
WH	22	9	90	138	7.735	20.42	24.79	43.9	189.2	34.79	1,088	4,690	1,113	348	150					
WH	23	7	90	131	5.625	16.23	16.88	47.6	216.0	25.69	803	3,646	822	257	117					
WH	25	1	87	120	.154	.52	.46	53.3	234.3	.79	25	108	25	8	3					
WH	29	1	91	143	.114	.52	.34	84.1	414.8	.92	29	142	29	9	5					
WH	Totals	47	89	119	49.631	100.00	135.52	34.7	150.1	150.52	4,704	20,348	4,817	1,505	651					
DF	16	2	84	96	3.000	4.19	6.00	24.6	85.5	4.21	148	513	135	47	16					
DF	19	1	90	136	1.861	3.66	5.58	32.8	148.8	5.21	183	831	167	59	27					
DF	23	2	88	151	1.452	4.19	4.36	48.0	209.0	5.96	209	910	191	67	29					

S		Sample		Tot		Trees/			Average Log		Net		Totals			
Sp	T	DBH	Trees	FF 16'	Av Ht	Acre	BA Acre	Logs Acre	Net Cu.Ft.	Net Bd.Ft.	Tons/ Acre	Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF
DF		26	1	88	133	.142	.52	.43	57.8	256.5	.70	25	109	22	8	3
DF		Totals	6	87	121	6.455	12.57	16.36	34.5	144.4	16.08	564	2,364	515	181	76
SS		18	2	87	63	2.370	4.19	4.74	22.8	76.0	2.82	108	360	90	35	12
SS		21	2	90	136	1.741	4.19	5.22	42.9	193.2	5.83	224	1,009	186	72	32
SS		Totals	4	88	94	4.112	8.38	9.96	33.4	137.4	8.64	332	1,369	277	106	44
RA		13	2	80	61	4.544	4.19	4.54	22.4	57.0	2.79	102	259	89	33	8
RA		17	2	80	68	2.657	4.19	5.31	20.4	71.2	2.97	108	379	95	35	12
RA		Totals	4	80	64	7.201	8.38	9.86	21.3	64.7	5.77	210	638	185	67	20
RC		25	2	83	109	1.229	4.19									
RC		Totals	2	83	109	1.229	4.19									
Totals			176	88	114	156.557	368.58	396.78	44.7	207.9	543.38	17,746	82,473	17,388	5,679	2,639

TC	PSTNDSUM	Stand Table Summary		Page	2
				Date:	12/16/2009
T03N R09W S10 TySALE		28.00		Project	HANSFLLS
T03N R09W S10 TySALE		4.00		Acres	32.00
				Time:	2:42:53PM
				Grown Year:	

TC TLOGSTVB

Log Stock Table - MBF

Project: **HANSELLS**

T03N R09W S10 TSALE

T03N R09W S10 TSAL

Twp Rge Sec Tract Type Acres Plots Sample Trees
03N 09W 10 AREA3 SALE 5.00 5 27

Page 1
Date 12/16/2009
Time 2:49:34PM

SPP	S T	So Gr rt de	Log Len	Gross MBF	% Def	Net MBF	% Spe	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+		
WL		CO	2	40	9	2.0	9	14.6						9							
WL		CO	3	40	44	2.5	43	71.4			1	11	31								
WL		CO	4	19	1	2.0	1	1.1		1											
WL		CO	4	26	2	2.0	2	3.1		2											
WL		CO	4	27	1	2.0	1	1.2		1											
WL		CO	4	28	1	2.0	1	1.2		1											
WL		CO	4	29	1	2.0	1	1.1		1											
WL		CO	4	30	1	2.0	1	1.6		1											
WL		CO	4	31	1	2.0	1	1.4		1											
WL		CO	4	35	1	2.0	1	1.3		1											
WL		CO	4	40	1	2.0	1	1.9		1											
WL		Totals			61	2.4	60	52.6		8	1	11	31	9							
RA		H	3	40	4	2.0	4	27.2						4							
RA		H	4	20	0	2.0	0	1.5			0										
RA		H	4	26	2	2.0	2	12.6			2										
RA		H	4	27	3	2.0	3	18.9			3										
RA		H	4	28	3	2.0	3	18.9			3										
RA		H	4	31	2	2.0	2	16.9			2										
RA		H	4	35	1	2.0	1	4.1			1										
RA		Totals			14	2.0	14	12.4			10			4							
WH		CO	3	40	17	2.0	17	74.0			17										
WH		CO	4	18	1	2.0	1	5.2		1											
WH		CO	4	21	1	2.0	1	5.2		1											
WH		CO	4	40	4	2.0	4	15.6			4										
WH		Totals			23	2.0	23	20.1		2	21										
DF		CO	3	40	8	2.0	8	58.8			4	4									
DF		CO	4	18	1	2.0	1	8.8		1											
DF		CO	4	20	1	2.0	1	6.3		1											
DF		CO	4	34	4	2.0	4	26.1		4											
DF		Totals			14	2.0	14	11.9		6	4	4									
DL		CO	3	40	3	2.0	3	81.8				3									
DL		CO	4	16	1	2.0	1	18.2		1											
DL		Totals			4	2.0	4	3.1		1		3									
Total All Species					117	2.2	114	100.0		17	36	17	31	9	4						



OREGON DEPARTMENT OF FORESTRY CRUISE REPORT *Hansen Falls*

1. Type of Sale

Thinning harvest, Recovery

2. Legal Description

Sections 9, 10, 15, and 16, T3N, R9W, W.M. Tillamook County, Oregon

3. Sale Acreage

Sale acreage was determined by GPS and orthophotographs along with GIS.

	ACRES	
	<u>Gross</u>	<u>Net</u>
Area 1 (Partial Cut)	28	28
Area 2 (Partial Cut)	7	4
Area 3 (Partial Cut)	5	5
Area 4 (Salvage)	1	1

Gross Acres

Area within the Timber Sale Boundary signs

Net acres

Used for calculating the advertised volume.

Gross acres, less green tree retention, roads, Non-required thinning areas, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

4. Cruising Procedures

A. Cruise Method

A total of 18 variable radius plots were taken on the sale Areas. Area 4's volume was estimated from the adjacent stand. Plots were located on a square grid using a N45°W bearing. All conifers 8 inches DBH and greater containing 20 net board feet and all hardwoods 10 inches DBH and greater containing 30 net board feet were recorded on all plots. Species were recorded on all trees, and they were measured for merchantable height, diameter, and form factor.

B. Plot size

A basal area factor of 40 and 54.45 was used for Area 3 and Areas 1,2, and 4, respectively. The point of observation was 4.5 feet.

C. Grading System

All trees were graded according to Columbia River Log Scaling and Grading Rules. Tree heights were recorded to a 6 inch top outside bark for all conifers and 7 inches outside bark for hardwoods; or three tenths (0.3) of DBH for all species, whichever was greater. Log lengths all favored 40 feet for all species. Heights and diameter measurement standards were to the nearest foot or inch

respectively.

5. Computation Procedure

Plot data was entered into SuperAce for computation of basal area, stand tables, and volume for each species and type. Take and leave trees were determined from the plot data to meet prescription targets. For the combined cruise all areas the standard error was 10.2% and the coefficient of variation was 43.1% on board foot volumes.

6. Hidden Defect and Breakage

Hidden defect and breakage was adjusted to the size and type of timber; for Areas 1 and 2's 90 year old trees 5%, Area 3's 40 year old trees 2%, and for Area 4, salvage 15%.

7. Timber Description

Areas 1, 2, and 4 naturally regenerated following logging in the 1900's and have had no previous stand management. Windthrow has opened up the stand to varying degrees. Area 3 naturally regenerated following windthrow salvage about 40 years ago and has had no previous stand management.

8. Cruiser Names/Dates

Cruised by ODF staff 2007 and 2009

9. Revenue Distribution

FDF 100%

Tax Code: 56-1

Deed Numbers: 35, 146, 441

10. Attachments

Stand Tables

Volume Summary

Log Stock Tables

Logging Plan

11. Stand and Log Stock Tables Species Key

DL – Douglas-fir leave

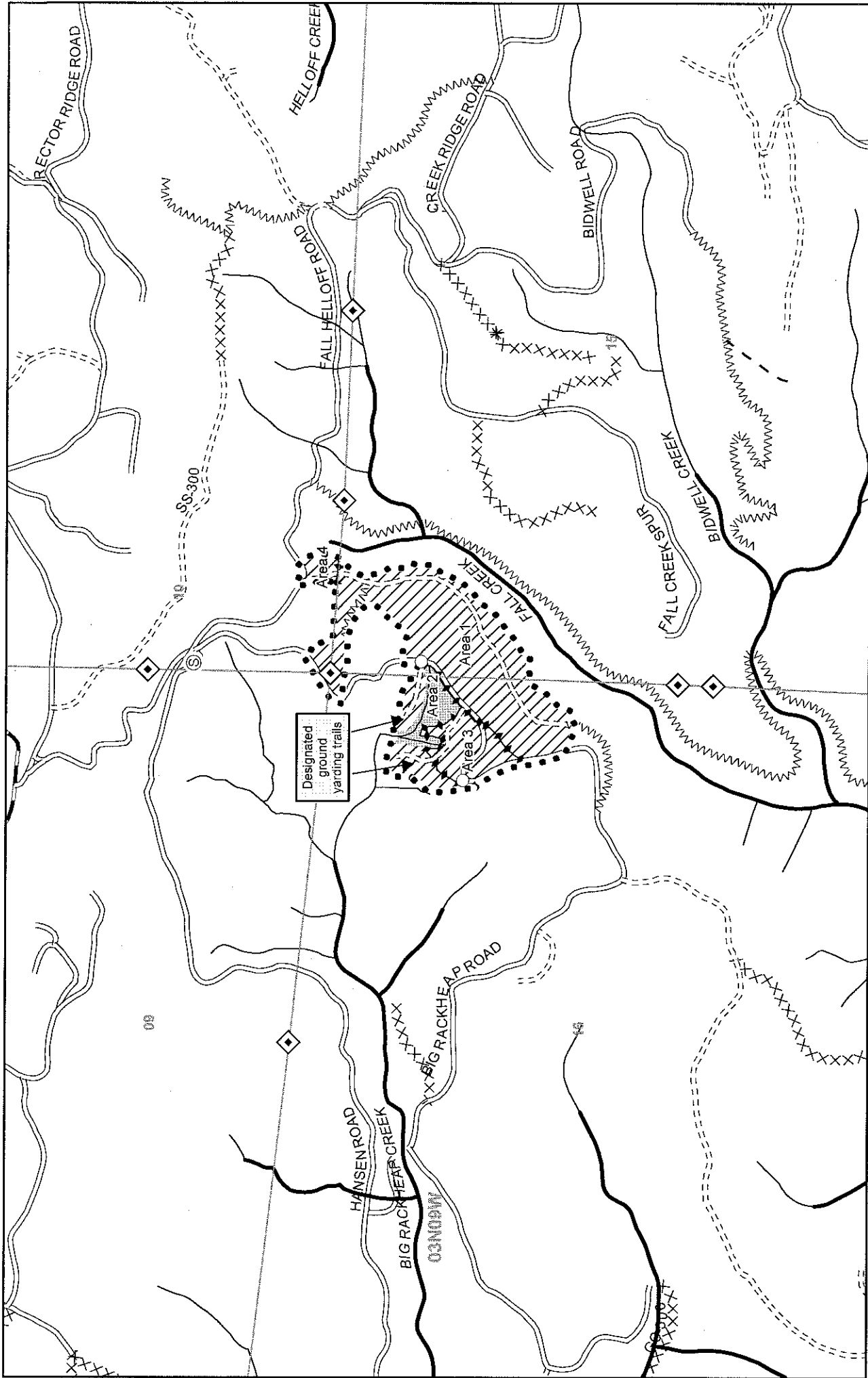
DF – Douglas-fir take

WL – Western hemlock leave

WH – Western hemlock take

SS – Sitka Spruce

RA – Red alder



Rock source
 Stock pile
 Waste area
 Bridge
 Gate
 Survey corner
 Domestic water supply intake
 Truck turn-around
 Helicopter landing zone
 Landing

Buffer
 Non-required thinning
 Cable yarding
 Ground yarding
 Helicopter yarding
 Downhill yarding
 Green tree retention area

Area boundary
 Sale boundary
 Ownership boundary
 Perennial Type-F stream
 Perennial Type-N stream
 Unsurfaced road
 Surfaced road
 Paved road
 Legacy road

Swing road
 Non-project road
 Blocked road
 Road construction
 OHV trail
 Non-motorized trail
 Transmission line
 Railroad

Area Operation

Area	Type of Operation	Gross	Net
1	Partial cut	28	28
2	Partial cut	7	4
3	Partial cut	5	5
4	Partial cut	1	1
Total		41	38

Tillamook District GIS
 12/07/2009

This product is for informational use and may not have been prepared or suitable for legal, engineering, or surveying purposes.

LOGGING PLAN
 Timber Sale Contract No. 341-10-69
 Hansen Falls
 Portions of Sections 9, 10, 15 and 16
 T3N, R9W, W.M.,
 Tillamook County, Oregon

Scale: 0 to 1,000 Feet