

District: Astoria

Date: July

July 07, 2008

### cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,683,296.04	\$528,149.88	\$2,211,445.92
		Project Work:	\$(338,821.00)
		Advertised Value:	\$1,872,624.92



"STEWARDSHIP IN FORESTRY"

District: **Astoria**  Date:

July 07, 2008

### timber description

Location: Portions of Sections 17, 18, 19, and 20, T4N, R8W, W.M., Clatsop County, Oregon

Stand Stocking: 80%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	20	0	96
Western Hemlock / Fir	20	0	90
Sitka Spruce	23	0	98
Alder (Red)	16	0	90

Volume by Grade	28	38	<b>4</b> S	Camprur	SM	Total
Douglas - Fir	3,561	1,178	184	0	193	5,116
Western Hemlock / Fir	1,183	306	57	0	0	1,546
Sitka Spruce	152	127	17	0	0	296
Alder (Red)	0	0	0	1,227	0	1,227
Total	4,896	1,611	258	1,227	193	8,185



"STEWARDSHIP IN FORESTRY"

District: Astoria Date: July 07, 2008

comments: Pond Values Used: 2nd Quarter Calendar Year 2008.

Log Markets: Mist, Clatskanie, Tillamook, Forest Grove.

Western Red Cedar Stumpage Price = Pond Value minus Logging Cost

\$894.16/MBF = \$1,075/MBF - \$180.84/MBF

SCALING COST ALLOWANCE = \$5.00/MBF

FUEL COST ALLOWANCE = \$4.50/Gallon

HAULING COST ALLOWANCE

Hauling costs equivalent to \$700 daily truck cost.

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

100% Branding and Painting: \$1MBF x 8,185 MBF = \$8,185

Additional log loader piling: 3hrs/landing x 12 landings x 85/hr

= \$3,060

Logger's Choice Landing Area 5

Construction = 1 @ \$375

Rock = 60 cubic yards Rock Haul = \$5.34/cy X 60 = \$320

TOTAL Other Costs (with Profit & Risk to be added) = \$11,940

OTHER COSTS (No Profit and Risk added):

Excavator Slash Piling: 104 hrs x \$120/hr = \$12,480

Excavator move-in: 1 move in x \$945/move in = \$945

TOTAL Other Costs (No Profit and Risk added) = \$13,425



"STEWARDSHIP IN FORESTRY"

**Astoria** District:

Date:

July 07, 2008

### logging conditions

combination#: 1

Douglas - Fir

22.28%

Western Hemlock / Fir

24.37%

Sitka Spruce Alder (Red)

24.79% 20.70%

yarding distance: Medium (800 ft)

downhill yarding:

Process: Manual Delimbing

logging system: tree size:

Shovel

Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF

loads / day:

7.0

bd. ft / load:

4,100

cost / mbf:

\$87.27

machines:

Shovel Logger

combination#: 2

Douglas - Fir

54.55%

Western Hemlock / Fir

59.66%

Sitka Spruce

60.69%

Alder (Red) varding distance: Medium (800 ft) 50.69% downhill yarding:

logging system:

Cable: Large Tower >=70

Process: Manual Delimbing

tree size:

Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF

bd. ft / load:

4,200

loads / day: cost / mbf:

\$97.71

machines:

Log Loader (A) Tower Yarder (Large)

combination#: 3

Douglas - Fir

3.24%

Western Hemlock / Fir

2.24%

Sitka Spruce

Alder (Red)

2.03%

yarding distance: Medium (800 ft)

4.00%

bd. ft / load:

downhill varding:

logging system:

Track Skidder

Process: Manual Falling/Delimbing Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF

tree size:

loads / day:

8.0

4,000

cost / mbf:

\$107.51

machines:

Log Loader (B)

Track Skidder

combination#: 4

Douglas - Fir

19.92%

Western Hemlock / Fir

13.74%

Sitka Spruce

12.49%

Alder (Red)

24.60%



"STEWARDSHIP IN FORESTRY"

### Timber Sale Appraisal **Progeny Split** Sale 341-09-24

July 07, 2008

District: **Astoria** 

yarding distance: Medium (800 ft)

downhill yarding:

Date:

No logging system: Cable: Medium Tower >40 - <70 Process: Manual Falling/Delimbing

4,000

tree size:

loads / day:

machines:

Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF 6.0 bd. ft / load:

\$144.17 cost / mbf:

Log Loader (A)

Tower Yarder (Medium)

7/7/08

5



"STEWARDSHIP IN FORESTRY"

District: Astoria

Date:

July 07, 2008

### logging costs

**Operating Seasons:** 

2.00

**Profit Risk:** 

12.00%

**Project Costs:** 

\$338,821.00

Other Costs (P/R):

\$11,940.00

Slash Disposal:

\$0.00

**Other Costs:** 

\$13,425.00

### Miles of Road

**Road Maintenance:** 

\$3.48

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	4.6
Western Hemlock / Fir	\$0.00	3.0	3.0
Sitka Spruce	\$0.00	2.0	4.0
Alder (Red)	\$0.00	3.0	3.0



"STEWARDSHIP IN FORESTRY"

District: Astoria

Date:

July 07, 2008

### logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas -	Fir								
\$104.96	\$3.62	\$1.07	\$47.10	\$1.46	\$18.99	\$0.00	\$5.00	\$1.64	\$183.84
Western F	lemlock /	Fir							
\$101.77	\$3.83	\$1.07	\$76.38	\$1.46	\$22.14	\$0.00	\$5.00	\$1.64	\$213.29
Sitka Spru	ice								
\$101.13	\$3.55	\$1.07	\$79.68	\$1.46	\$22.43	\$0.00	\$5.00	\$1.64	\$215.96
Alder (Red	d)	<del> </del>							
\$107.37	\$3.83	\$1.07	\$76.38	\$1.46	\$22.81	\$0.00	\$5.00	\$1.64	\$219.56

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$465.30	\$281.46	\$0.00
Western Hemlock / Fir	\$0.00	\$341.23	\$127.94	\$0.00
Sitka Spruce	\$0.00	\$369.85	\$153.89	\$0.00
Alder (Red)	\$0.00	\$650.00	\$430.44	\$0.00



"STEWARDSHIP IN FORESTRY"

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July 07, 2008

### summary

### Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Western Hemlock / Fir	0	\$0.00	\$0.00
Sitka Spruce	0	\$0.00	\$0.00
Alder (Red)	0	\$0.00	\$0.00

### Unamortized

	1	T	T
Specie	MBF	Value	Total
Douglas - Fir	5,116	\$281.46	\$1,439,949.36
Western Hemlock / Fir	1,546	\$127.94	\$197,795.24
Sitka Spruce	296	\$153.89	\$45,551.44
Alder (Red)	1,227	\$430.44	\$528,149.88

### **Gross Timber Sale Value**

Recovery:

\$2,211,445.92

Prepared by: John Tillotson

Phone: 503-325-5451

### **SUMMARY OF ALL PROJECT COSTS**

SALE NAME:	Progeny Split					
NEW CONSTR	RUCTION:					
Project No. 1	Road segment Sale Access Road Construction	_	Length/Sta 67.35		<u>Cost</u> \$54,409.00	
		_		· · · · · · · · · · · · · · · · · · ·		
	TOTALS 1	.28 miles		67.35 Stations	<u> </u>	\$54,409
ROAD IMPRO	VEMENT					
Project No. 2	Road segment Road Improvement	_	<u>Length/Sta</u> 219.50	<del></del>	<u>Cost</u> \$102,876	
		<u> </u>				
		_				
	TOTALS 4	.16 miles	2	19.50 Stations		\$102,876
SPECIAL PRO	JECTS					
<u> </u>		Description			Cost	
Project No. 3	Cole Mountain Crushing				\$113,705	
Project No. 4 Project No. 5	Quarry Test Drilling Vacating				\$28,808 \$9,964	
Project No. 6	Fall Creek Stream Enhancement				\$5,895	
	Project Road Maintenance				\$15,300	
	TOTALS	1.00			410,000	\$173,672
MOVE IN:						
MOVE III.	F	Equipment			<u>Cost</u>	
	Grader (14G)				\$653	
	Vibratory Roller x 2 @ \$653 each Water Truck (2,500 gal)				\$1,306 \$160	
	D-8 Dozer x 1 @ \$1,180 each				\$1,180	
	Excavator (C330) x 1 @ \$1,180 e	each			\$1,180	
	FE Loader (C966) x 1 @ \$664 ea	ich			\$664	
	12cy Dump Trucks x 6 @ \$137 e 20cy Dump Trucks x 4 @ \$161 e	ach			\$822 \$644	
	Drill and Compressor x1 @ \$653 Rubber Tired Skidder x 1 @ \$602	each			\$653 \$602	
		-				
	TOTAL					\$7,864
ODANO TOTA						£220 024
GRAND TOTA	<u> </u>					\$338,821
Compiled By	John Tillotson				Date:	02/26/2008
Joniphou by.						

### SUMMARY OF CONSTRUCTION COSTS

LE NAME: DAD:			-1F(11.15), 4A-4B J(4.5), 4K, 4L, 5A-		NEW C	ONSTRUCTION: _ IMPROVEMENT: _	67.35	STATIONS	1.28 
INTS:	4E-4F(3.0), 4G-4	п(1.5), 41-4	3(4.5), 4K, 4L, 5A-	3B(2.3), 3C					
EARING &	GRUBBING								
	Method	1014	*	Acres/amount	x	Rate	=	Cost	
	Scatter Outside of	OT HUVV	\$/ac	7.00	×	\$756.00	=	\$5,292.00	
	-		~ ~	-	x x		=		
B TOTAL F	OR CLEARING &	GRUBBING	3				•		\$5,292
		-							
CAVATION	Material		ı	Cy/amount	x	Rate	= 1	Cost	
	Material			Oylaniodii	×	Neic	=	0031	
	Field design upto	200' drift	\$/sta	67.35	×	\$160.00	= 1	\$10,776.00	
					×		=	V.10(1.1.0.00	
	End haul from 4L	to 4I-4J (0	+00 to 0+50) \$/cy	60.00	×	\$3.40	= [	\$204,00	
	Embankment cor	mpaction \$	/cy	60.00	x	\$0.60	= [	\$36.00	
					×		= [		
	Landing Construction	ction	\$/landing	15.00	x	\$327.00	<b>=</b>	\$4,905.00	
					x		= <u>j</u>		
					×		=		
					x x		= -		
	OR EXCAVATION								\$15,921
Location	TERIALS AND IN: Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost
0+00	18" CPP	40	\$17.64	\$705.60	Location	Dientype	Cinoarte	Itale	CUSI
1+70	18" CPP	35	\$17.64	\$617.40					
18+00	18" CPP	35	\$17.64	\$617.40					
0.00	400.000		1			1			
3+00	18" CPP	30	\$17.64	\$529.20		-			
0+00	18" CPP	35	\$17.64	\$617.40		1			
0+00	18" CPP	35	\$17.64	\$617.40	-				
0+00	18" CPP	35	\$17.64	\$617,40					
	-								
	•			Description		Quantity	Rate	Cost	
	Other/miscellane	ous:		Pescribrion		wantey	Nate	COSI	
						1 1			
		markers:	6 X 2.5 Fibero	lass Carsonite Po	st	7	\$18,00	\$126.00	
	Culvert stakes &	markers:	6' X 2.5' Fiberg	lass Carsonite Po	st	7	\$18.00	\$126.00	

Subtotal of Clearing, Exc., Culv.

1A to 1B

4A to 4B 4C to 4D 4E to 4F 4I to 4J

Paper	SURFACING	Subgrade prep:	Grade, Shape Grade, Shape Subgrade Con	and Ditch 1					Stations/ amount 58.65 8.70 58.65	x x x	Rate/ sta/amt \$20.85 \$15.40 \$16.95	Cost \$1,222.85 \$133.98 \$994.12
Description   4-07 Colabeled   1A	Application	Rock Size and Type		Rock (inches)	1A to Volume pe	1B (CY) r	26+4 Numi of	40 ber	VOLUME (CY)	Sta J amt.		
Total Food Segment	Junctions Turnouts	4"-0" Crushed 4"-0" Crushed	1A 3+40, 7+85, 12+85, 17+70	9	junction TO	24 22	junctions TO's	1	24 88	\$4.58 \$4.58	\$110 \$403	
Second Color   Color	Total Rock for Road Segr ROAD SEGMENT	ment 1C to 1D		1A to 18 Depth of Rock	POINT TO 1C to	POINT 1D	Sta. to 8+0 Num	i0 ber	991 TOTAL VOLUME	Rate! Sta.!		\$4,540
Landrigue	Base Rock Junctions Turnouts	4"-0" Crushed 4"-0" Crushed 4"-0" Crushed	1C to 1D 1C	9 9 9	station junction TO	49 24 22	stations junctions TO's	8.00 1 1	392 24 22	\$4.58 \$4.58 \$4.58	\$110 \$101	
Application	Landings Total Rock for Road Segr	6"-0" Pit-run ment:		N/A 1C to 1D	Landing POINT TO	80 POINT	Landings Sta. to	1 Sta.	80 530 TOTAL	\$5.34	\$427	\$2,488
Turnarounds	Base Rock Junctions	and Type 4"-0" Crushed 4"-0" Crushed	1E-1F 1E	(inches) 9 9	pe station junction	r 49 24	of stations junctions	11.15 1	(CY) 546 24	amt. \$4.58 \$4.58	\$2,502 \$110	
Application   Rock Size   Location   Continue (CV)   Number   Volume (Stat   Cost   State   Cost	Turnarounds Landings Total Rock for Road Segr	4"-0" Crushed 6"-0" Pit-run ment:		N/A N/A	TA Landing	12 60	TA's Landings	1	12 60	\$4.58	\$55	\$3,189
Junctions	Application Base Rock	Rock Size and Type 4"-0" Crushed	0+00 to 8+50	Rock (inches)	Volume pe station	: (CY) r 49	0+00 to Num of stations	8+50 ber 8.50	VOLUME (CY) 417	Sta./ amt. \$4.58	\$1,908	
Total Rock for Road Segment	Junctions Turnouts Turnarounds	3/4" -0" Crushed 4"-0" Crushed 4"-0" Crushed	4A 2+50 5+00	N/A 9 N/A	junction TO TA	20 24 12	junctions TO's TA's	1 1	20 24 12	\$9.43 \$4.58 \$4.58	\$189 \$110 \$55	
Base Rock	Total Rock for Road Segr ROAD SEGMENT	ment 4C to 4D	•	4A to 4B Depth of	POINT TO 4C to	POINT 4D	Sta. to 0+00 to	Sta. 1+80	641 TOTAL	Ratel		\$3,122
Total Rock for Road Segment:   4C to 4D   PCINT TO POINT   Sta to Sta   Sta	Base Rock Junctions Junctions	4"-0" Crushed 4"-0" Crushed 3/4"-0" Crushed	0+00 to 1+80 4C 4C	9 9 N/A	station junction junction	49 24 20	stations junctions junctions	1.80 1 1	88 24 20	\$4.58 \$4.58 \$9.43	\$110 \$189	
Base Rock	Total Rock for Road Seg ROAD SEGMENT	ment: 4E to 4F	1 40	4C to 4D Depth of	POINT TO 4E to	POINT 4F	Sta. to 0+00 to	• <b>Sta</b> . 3+00	192 TOTAL	Ratel		\$1,023
Total Rock for Road Segment	Base Rock Junctions Junctions	and Type 4"-0" Crushed 4"-0" Crushed 3/4"-0" Crushed	0+00 to 3+00 4E 4E	(inches) 9 9 N/A	station junction junction	49 24 20	stations junctions junctions	3.00 1.00	147 24 20	\$4.58 \$4.58 \$9.43	\$110 \$189	
Base Rock	Total Rock for Road Seg ROAD SEGMENT	ment: 4G to 4H	4-	4E to 4F Depth of	POINT TO 4G to	POINT 4H	<b>Sta. t</b> o 0+00 to	Sta. 1+50	251 TOTAL	Rate!		\$1,292
Cost	Base Rock Junctions Landings	and Type 4"-0" Crushed 4"-0" Crushed 6"-0" Pit-run	0+00 to 1+50 4G	(inches) 9 9 N/A	pe station junction	F 49 24	stations junctions	1.50	(CY) 74 24 60	amt. \$4.58 \$4.58	\$110	
Base Rock	ROAD SEGMENT	4i to 4J Rock Size	( praties	Depth of Rock	4 to Volume	4J ≘(CY)	O+00 to Num	4+50 bet	TOTAL VOLUME	Sta./	Cost	\$767
ROAD SEGMENT	Junctions Turnarounds Landings	4"-0" Crushed 4"-0" Crushed 4"-0" Crushed 6"-0" Pit-run	0+00 to 4+50 4I 2+90	9 9 N/A N/A	station junction TA	49 24 12	stations ĵunctions TA's	4.50 1 1	221 24 12 120	\$4.58 \$4.58 \$4.58	\$110 \$55	
Junctions   3/4"-0" Crushed   4K   N/A   junction   20   junctions   1   20   \$9.43   \$189     Landings   6"-0" Pit-run   4K   N/A   Landing   60   Landings   1   60   \$5.34   \$320     Total Rock for Road Segment   4K   ROAD SEGMENT   4L   POINT TO POINT   Sta. to Sta.	ROAD SEGMENT	4K Rock Size	Location	Depth of Rock	Volumi	c e (CY)	N/. Num	A ber	TOTAL VOLUME	Sta./	Cost	\$1,816
Depth of   Rock Size   Rock   Volume (CY)   Number   VoluME   Sta. J	Junctions Landings Total Rock for Road Seg	3/4"-0" Crushed 6"-0" Pit-run ment:	4K	N/A N/A	junction Landing	20 60	junctions Landings	1 1	20 60	\$9.43		
Total Rock for Road Segment	Application Junctions	Rock Size and Type 4"-0" Crushed	4L	Rock (inches) N/A	4l Volum pe junction	a (CY) of 12	N/. Num o junctions	A iber f 1	VOLUME (CY) 12	Sta./ amt. \$4.58	\$55	
Application Rock Size Rock Volume (C1) Number Volume Star	Total Rock for Road Seg ROAD SEGMENT	ment:	<u>4</u> L	4L	POINT TO	O POINT	Sta. to 0+00 to	Sta. 2+50	72	Rate/		

	GRAND TOTAL											\$54,409
										of Surfacing & tal of Clearing,		\$28,748 \$25,661
	SUB TOTAL FOR	SPECIAL PRO	JECTS						Subtatal.	of Curfoning P	Snoo Proi	\$100.745
		AMMAIAI BT.								-		
				De	scription				Cost			
****	SPECIAL PROJEC	CTS										
	OUD TOTAL TOR	OUTH HOUTO		1	0.10	0,004		, 50	1,507	1,004		420,170
	SUB TOTAL FOR	SURFACING	-		6"-0"pr 840	4*-0" er 3,364	1/2"-0" cr 20	3/4"+0" cr 80	Totai 4,304	4.304		\$28,748
			······································			•						
					oact: 9" d	epth in two lifts			117.30	\$47.42	\$5,562	
		Processing:		Description					No.sta	Rate/sta	Cost	
Total Rock for Road Se	gment		5C					100			\$616	
Landings	6"-0"	5C	N/A	Landing	80	Landings	1	80	\$5.34	\$427		
Junctions	1 1/2"-0" Crushed	5C	N/A	junction	20	junctions	1	20	\$9.43	\$189		
Application	Rock Size and Type	Location	Rock (Inches)	Volume per		Numb of	er	VOLUME (GY)	Sta./ and.	COST		
		••••••	Depth of	5C				TOTAL	Rater	Cost		
ROAD SEGMENT	5C		OA 10 00	POINT TO	POINT	Sta.to.	Sta				Ψ1,000	
Total Rock for Road Se		36	5A to 5B	Lancing	00	Landings	<del>'</del>	227	30.04	\$7 <u>21</u> ]	\$1,098	
Junctions Landings	4"-0" Crushed 6"-0" Pit-run	5A 5B	N/A	junction Landing	80	Landings	- 1	80	\$5.34	\$427		
Base Rock	4"-0" Crushed	0+00 to 2+50	9	station	49 24	stations junctions	2.50	123 24	\$4.58 \$4.58	\$561 \$110		

### SUMMARY OF CONSTRUCTION COSTS

OAD:	Progeny Split 11-I2(140.2),I3-I4	(10.0),15-16(36	6.4),17-18(2.0),1	<u>9</u> -110(30.9)		ONSTRUCTION: _ MPROVEMENT: _		STATIONS	MI 4.16 MI
OINTS:									
LEARING &	GRUBBING								
	Method			Acres/amount	х	Rate	=	Cost	
to I2	Turnout Improvem	ent 65+70 C31	15 \$/hr	2.00	×	\$89.00	= L	\$178.00	
to 16	Turnout Improvem	ent 7+00 C315	5 \$/hr	2.00	×	\$89.00	= [	\$178.00	
to I6	Turnout Improvem	ent 16+00 C31	5 \$/hr	2.00		\$89.00	L	\$178.00	
to I8	Landing Improvem	ent 2+00 C315	5 \$ <i>l</i> hr	2.00	×	\$89.00	=	\$178.00	
to 110	LandingImprovem	ent 30+90 C31	18 \$/hr	2.00		\$89.00		\$178.00	
UB TOTAL F	OR CLEARING &	GRUBBING							\$890
XCAVATION									
	Material			Cy/amount	x	Rate	=	Cost	
to 1B 119+40	Remove bank mat	terial \$/hr		1.00	x	\$89.00	=	\$89.00	
	Haul bank materia	ıl \$/hr		1.00	x	\$70.00	=	\$70.00	
	Remove bank mat			3.00	×	\$89.00	=	\$267.00	
34 <del>+6</del> 5	Haut bank materia	l \$/hr		3.00	x	\$70.00	=	\$210.00	
					×		= [		
					x		= [		
					x		= [		
					×		= . [		
					x		= '		
					×		=		
					×		=		
ID TOTAL E	ヘロ にとぐないなせいき	M							\$636
ULVERT MA	OR EXCAVATION TERIALS AND IN Dia/type	ISTALLATION		Cost	Location	Dia/type	Lineal ft.	Rate	\$636 Cost
ULVERT MA Location	TERIALS AND IN	ISTALLATION	Rate	Cost \$617.40	Location	Dia/type	Lineal ft.	Rate	\$636
CULVERT MA Location 7+75	TERIALS AND IN Dia/type 18" CPP	ISTALLATION Lineal ft. 35	Rate \$17.64	\$617.40	Location	Dia/type	Lineal ft.	Rate	
CULVERT MA Location 7+75 20+80	TERIALS AND IN Dia/type 18" CPP 18" CPP	ISTALLATION Lineal ft. 35 35	Rate \$17.64 \$17.64	\$617.40 \$617.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00	TERIALS AND IN Dia/type 18" CPP 18" CPP 18" CPP	ISTALLATION Lineal ft. 35 35 35	Rate \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA' Location 7+75 20+80 30+00 30+50	TERIALS AND IN Dia/type 18" CPP 18" CPP 18" CPP 24" CPP*	ISTALLATION Lineal ft. 35 35 35 40	Rate \$17.64 \$17.64 \$17.64 \$24.64	\$617.40 \$617.40 \$617.40 \$985.60	Location	Dia/type	Lineal ft.	Rate	
CULVERT MA Location 7+75 20+80 30+00 30+50 32+55	TERIALS AND IN Dia/type 18" CPP 18" CPP 18" CPP 24" CPP* 30" CPP*	ISTALLATION Lineal ft. 35 35 35 40 40	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30	TERIALS AND IN  Dia/type  18" CPP  18" CPP  18" CPP  24" CPP*  30" CPP*  18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 35	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00	TERIALS AND IN Dia/type 18" CPP 18" CPP 18" CPP 24" CPP* 30" CPP* 18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 40 35 30	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20	TERIALS AND IN Diatype 18" CPP 18" CPP 18" CPP 24" CPP* 30" CPP* 18" CPP 18" CPP 18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 35 30 40	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20 \$705.60	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00	Dia/type 18" CPP 18" CPP 18" CPP 18" CPP 24" CPP* 30" CPP* 18" CPP 18" CPP 18" CPP 18" CPP 18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 40 35 30 40	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20 \$705.60 \$617.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25	Dia/type 18" CPP 18" CPP 18" CPP 18" CPP 18" CPP 18" CPP 24" CPP* 30" CPP* 18" CPP 18" CPP 18" CPP 18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 35 30 40 35 30 40 35 30	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20 \$705.60 \$617.40 \$817.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25 136+40	Dia/type  18" CPP  18" CPP  18" CPP  24" CPP*  30" CPP*  18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 35 30 40 35 30 40 35 35	Rate \$17.64 \$17.64 \$17.64 \$22.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20 \$705.60 \$617.40 \$617.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25 136+40 0+00	Dia/type 18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 35 30 40 35 35 35 35 35 30 40 35 35	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20 \$705.60 \$617.40 \$817.40 \$617.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25 136+40 0+00 12+55	Dia/type  18" CPP  18" CPP  18" CPP  24" CPP*  30" CPP*  18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 35 30 40 35 30 40 35 35 30 35 35 35 35	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20 \$705.60 \$617.40 \$617.40 \$617.40 \$617.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25 136+40 0+00 12+55 17+00	Dia/type 18" CPP 18" CPP 18" CPP 18" CPP 18" CPP 24" CPP* 30" CPP* 18" CPP	ISTALLATION Lineal ft. 35 35 35 35 40 40 35 30 40 35 30 40 35 35 30 40 35 35 35 35 35	Rate \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$529.20 \$517.40 \$517.40 \$617.40 \$617.40 \$617.40 \$517.40 \$517.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25 136+40 0+00 12+55	Dia/type  18" CPP  18" CPP  18" CPP  24" CPP*  30" CPP*  18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 35 30 40 35 30 40 35 35 30 35 35 35 35	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20 \$705.60 \$617.40 \$617.40 \$617.40 \$617.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25 136+40 0+00 12+55 17+00	Dia/type 18" CPP 18" CPP 18" CPP 18" CPP 18" CPP 24" CPP* 30" CPP* 18" CPP	ISTALLATION Lineal ft. 35 35 35 35 40 40 35 30 40 35 30 40 35 35 30 40 35 35 35 35 35	Rate \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$529.20 \$517.40 \$517.40 \$617.40 \$617.40 \$617.40 \$517.40 \$517.40	Location	Dia/type	Lineal ft.	Rate	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25 136+40 0+00 12+55 17+00	Dia/type 18" CPP 18" CPP 18" CPP 18" CPP 18" CPP 24" CPP* 30" CPP* 18" CPP	ISTALLATION Lineal ft. 35 35 35 35 40 40 35 30 40 35 30 40 35 35 30 40 35 35 35 35 35	Rate \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20 \$705.60 \$617.40 \$617.40 \$617.40 \$617.40 \$517.40 \$529.20 \$529.20	Location				
2ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25 136+40 0+00 12+55 17+00	Dia/type 18" CPP 18" CPP 18" CPP 18" CPP 18" CPP 24" CPP* 30" CPP* 18" CPP	ISTALLATION Lineal ft. 35 35 35 35 35 40 40 35 30 40 35 30 30 30 30	Rate \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$529.20 \$517.40 \$517.40 \$617.40 \$617.40 \$617.40 \$517.40 \$517.40	Location	Dia/type  Dia/type  Quantity  54.00	Lineal ft.  Rate \$1.00	Rate  Cost  \$54.00	
2ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25 136+40 0+00 12+55 17+00	Dia/type 18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 36 30 40 35 35 30 30 30 30 30 30 according to the second of th	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20 \$705.60 \$617.40 \$817.40 \$617.40 \$617.40 \$529.20 \$529.20		Quantity	Rate	Cost	
ULVERT MA Location 7+75 20+80 30+00 30+50 32+55 33+30 38+00 44+20 48+00 78+25 136+40 0+00 12+55 17+00	TERIALS AND IN  Dia/type  18" CPP  18" CPP  18" CPP  24" CPP*  30" CPP*  18" CPP  18" CPP	ISTALLATION Lineal ft. 35 35 35 40 40 36 30 40 35 35 30 30 30 30 30 30 according to the second of th	Rate \$17.64 \$17.64 \$17.64 \$24.64 \$31.14 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64 \$17.64	\$617.40 \$617.40 \$617.40 \$985.60 \$1,245.60 \$617.40 \$529.20 \$705.60 \$617.40 \$817.40 \$617.40 \$617.40 \$617.40 \$620.20 \$529.20 \$529.20		Quantity 54.00	Rate \$1.00	Cost \$54.00	

11-12

17-18 19-110

SURFACING	Subgrade prep:	ı	Description					Stations/ amount	×	Rate/ sta/amt	Cost	
	Babgiado prop.	Grade, Shape and Ditch						219.50	x	\$17.80	\$3,907.10	
		Subgrade Compaction						219.50	x	\$41.40	\$9,087.30	
OAD SEGMENT	II to I2			POINT TO	OCHAT	Sta to	Sea	1				
OAD GEGINEIS)	II WIZ		Depth of	i1 to		140+	20	TOTAL	Rate/	Cost	•	
pplication	Rock Size		Rock	Volume		Numi		VOLUME	Sta./	004		
ase Rock, Turnouts	and Type	Location	(inches) N/A	pe TO	F	of TO's		(CY) 76	amt. \$4,58	\$348		
·	4"-0" Crushed	5+60, 10+00, 65+70										
ase Rock	4"-0" Crushed	30+50,32+55	9 N/A	Fill	24 81	Fills	2	48 81	\$4.58 \$4.58	\$220 \$371		
lase Rock Subgrade Leveling	4"-0" Crushed 1 1/2"-0" Crushed	Butress	N/A				•	540	\$9.43	\$5,092		
urve Widening	1 1/2"-0" Crushed							360	\$9.43			
urface Rock urnouts	1 1/2"-0" Crushed 1 1/2"-0" Crushed		3 N/A	station TO	16 10	stations TO's	140.2 18	2,243 180	\$9.43 \$9.43	\$21,153 \$1,697		
unctions	1 1/2"-0" Crushed		N/A	junction	20	junctions	6	120	\$9.43	\$1,132		
uivert Backfill	1 1/2"-0" Crushed	7+75,20+80, 33+30,38+65,	N/A	culvert	30	culverts	4.00	120	\$9.43	\$1,132		
ulvert Bedding/Backfill	1 1/2"-0" Crushed	30+00,32+55	N/A	culvert	30	culverts	2.00	60	\$9.43	\$566		
ulvert Backfill	1 1/2"-0" Crushed	44+20,48+00,										
issipator	1 1/2 -0 01431164	78+25,136+40 30+00,32+55,30+50,32+55	N/A	culvert	30	culverts	4.00	120	\$9.43	\$1,132		
issipatoi	6"-24" Rip Rap	, 44+20,61+70,										
	0 -24 Kip Kap	75+50,78+25, 84+10,126+50,136+40	N/A	diss	12	dissipator	11	132	\$8.79	\$1,160		
otal Rock for Road Segn	nent:	04110,120130,130140	11 to 12	<u> </u>	12	dissipator		4,080	ψ0.70	\$1,1001	\$34,003	
OAD SEGMENT	13 to 14	ı	D*	POINT TO	***************************************		Sta.	7	E-1 ·			
	Rock Size		Depth of Rock	l3 to Volume		10+0 Numi		TOTAL VOLUME	Ratel Stal	Cost		
pplication	and Type	Location	(inches)	pe		of		(CY)	amt			
ubgrade Leveling	4"-0" Crushed		N/A		90		40.0	44	\$4.58	\$202		
urface Rock urnouts	4"-0" Crushed 4"-0" Crushed	7+15	6	station TO	33 24	stations TO's	10.0 2	330 48	\$4,58 \$4.58	\$1,511 \$220		
unctions	4"-0" Crushed	0+00, 4+00	6	junction	24	junctions	2	48	\$4,58	\$220		
unctions otal Rock for Road Segn	3/4"-0" Crushed	0+00	N/A 13 to 14	junction	20	junctions	1	20 490	\$9.43	\$189	\$2,341	
OAD SEGMENT	15 to 16		13 10 14	POINT TO	POINT	Sta. to	Sta.	430			\$2,54 I	
			Depth of	15 to		36+		TOTAL	Rate/	Cost		
pplication	Rock Size and Type	Location	Rock (inches)	Volume pe		Num of		VOLUME (CY)	Sta.i amt.			
ubgrade Leveling	4"-0" Crushed	Location	N/A	ps.				168	\$4.58	\$769		
urve Widening	4"-0" Crushed		6					108	\$4.58	\$495		
urface Rock	4"-0" Crushed	0.50 00.00 0 00.00 05.0	6	station	33 11	stations	36.4 7.5	1,201	\$4.58 \$9.43	\$5,501 \$778		
raction Rock rench Backfill	3/4"-0" Crushed 4"-0" Crushed	6+50-20+00 & 22+00-26+0 19+70	N/A	station	- 11	stations	1.5	83 36	\$4.58	\$165		
urnouts	4"-0" Crushed	10-10	6	ТО	24	TO's	4	96	\$4.58	\$440		
rurnarounds	4"-0" Crushed 4"-0" Crushed		N/A 6	TA junction	12 24	TA's junctions	1	24	\$4.58 \$4.58	\$110 \$110		
unctions otal Rock for Road Segn		1	15 to 16	junouon	27			1,740	Ψ4.50	9,10	\$8,368	
OAD SEGMENT	17 to 18	1	-	POINT TO		Sta. to			_			
	Rock Size		Depth of Rock	I7 to Volume		2+0 Num		TOTAL VOLUME	Rate/ Sta./	Cost		
application	and Type	Location	(inches)	pe		Ŏ1		(CY)	amt			
Surface Rock	4"-0" Crushed		6	station	33	stations	2.0	66	\$4.58	\$302		
unctions unctions	4"-0" Crushed 3/4"-0" Crushed	0+00	6 N/A	junction junction	24 20	junctions junctions	1	24	\$4.58 \$9.43	\$110 \$189		
Culvert Bedding/Backfill	3/4"-0" Crushed	D+00	N/A	culvert	30	culverts	1	30	\$9.43	\$283		
anding	6"-0" Pitrun	18	NT 4 - 10	landing	80	landing	1	80	\$5.34	\$427	<b>64.044</b>	
otal Rock for Road Segr OAD SEGMENT	ment:  9 to 110		17 to 18	POINT TO	POINT	Sta. to	Sta	220 1			\$1,311	
			Depth of	19 to	110	30+	90	TOTAL	Rate/	Cost		
pplication	Rock Size	Landies	Rock	Volume		Num of		YOLUME	Sta.i			
Subgrade Leveling	and Type 4"-0" Crushed	Location	(inches) N/A	pe		OI		(CY) 202	2mt. \$4.58	\$925		
Surface Rock	4"-0" Crushed		6	station	33	stations	30.9	1,020	\$4.58	\$4,670		
uivert Bedding/Backfill	3/4"-0" Crushed	12+55, 17+00, 18+65	N/A	culvert	30	culverts	3.00	90	\$9.43	\$849		
urnouts unctions	4"-0" Crushed 4"-0" Crushed		N/A N/A	junction	24 24	TO's junctions	4	96	\$4.58 \$4.58	\$440 \$110		
unctions	3/4"-0" Crushed	0+00	N/A	junction	20	junctions	1	20	\$9.43	\$189		
issipator otal Rock for Road Segr	6"-24" Rip Rap	12+55, 17+00, 18+65	N/A I9 to I10	diss	12	dissipator	3	1,488	\$8.79	\$316	\$7,499	
oral Rock for Road Segr	HALL		10 110					1,400			\$1,438	
				Description					No.sta	Rate/sta	Cost	
		Processing:	141 : -						219.50	\$41.40	\$9,087	
		Processing:	Water, Pro	cess & Com	pact							
		Processing:	Water, Pro	ocess & Com			y					
	SUB TOTAL FOR C	-	Water, Pro	24-6" Rr	6'-0"pr			3/4"-0" 263	Total 8 018	8.018		<b>67</b> 5
	SUB TOTAL FOR S	URFACING	Water, Pro	ocess & Com		<b>4"-0"</b> 3,764	1 1/2"-0" 3,743	3/4"-40" 263	Total 8,018	8,018		\$75,
	SUB TOTAL FOR S	URFACING	Water, Pro	24-6" Rr 168	<b>6"-0" pr</b> 80	3,764			8,018	8,018		\$75,
		URFACING	Water, Pro	24-6" Rr 168	6%0"pr 80	3,764	3,743			8,018		\$75,
		URFACING	Water, Pro	24-6" Rr 168	6'-0"br 80 escription	3,764 1 @ 38.52 on l	3,743		8,018 Cost	8,018		\$75,
	SPECIAL PROJECT	URFACING TS	Water, Pro	24-6 Rr 168	6'-0"br 80 escription	3,764 1 @ 38.52 on l	3,743		8,018 Cost	8,018		
	SPECIAL PROJECT	URFACING	Water, Pro	24-6 Rr 168	6'-0"br 80 escription	3,764 1 @ 38.52 on l	3,743		8,018 Cost \$15,126	8,018	Spec. Proj.	\$75, \$15, \$90,
	SPECIAL PROJECT	URFACING TS	Water, Pro	24-6 Rr 168	6'-0"br 80 escription	3,764 1 @ 38.52 on l	3,743		8,018  Cost \$15,126	-		\$15,

GRAND TOTAL
Compiled By:

SURFACING

John Tillotson

Date: <u>02/27/2008</u>

Sale Name: Progeny Split Prepared by: d.mellison

Project: No. 2 (Road Segment 11-I2 station 38+52 - 38+85)

Project Type: Buttressing Date: 01/23/08

### Phase I: Mobilization (Special to Buttress)

Qty.	Equipment or Activity	Rate	Hours	Cost (\$)
2	C330 Excavator	\$1,200		\$2,400.00
1	Off Highway Dump Truck	\$661		\$661.00
	Rubber Tired Skidder	\$85	1	\$85.00
1	Powder Truck/Explosives/labor	\$327		\$327.00
1	Cat D8	\$1,200		\$1,200.00
				\$4,673.00

### Phase II: Development and Staging of Riprap

Qty.	Equipment or activity	Qty (Cy)	(\$/Cy)	Hours	(\$/Hr)	Cost (\$)
	C330 Excavator			2	\$138.00	\$276.00
	Drilling and Shooting (60"-48" Riprap)	183		4	\$258.00	\$1,032.00
	Drilling and Shooting (36"-12" Riprap)	68		1.5	\$258.00	\$387.00
	Staging (60"-48" Riprap)	183	\$3.41			\$624.03
	Haul and dump (36"-12" Riprap)	68	\$2.91			\$197.88
L	l in internal control of the control					\$2,516.91

### Phase III: Site Preparation

Qty.	Equipment or Activity	Unit	(\$/unit)	Hours	(\$/Hr)	Cost (\$)
<u> </u>	Remove existing culvert @ Sta. 38+65					
.,,,,,,,,	C330 Excavator			1	\$138.00	\$138.00
	Excavate access ramp and buttress site					
167	Material to be endhauled to waste area	bcy	\$4.02			\$671.34
713	Material to be staged for road prism use	bcy	\$1.51			\$1,076.63
20	Straw bales stream edge	bale	\$10.00			\$200.00
	Labor to place and deliver bales			8	\$37.00	\$296.00
	Remove onsite Alder trees (C330 Excavator)			1	\$138.00	\$138.00
						\$2,519.97

### **Phase IV: Buttress Construction**

Qty.	Equipment or Activity	Qty (Cy)	(\$/Cy)	Hours	(\$/Hr)	Cost (\$)
	Placing (60"-48") Riprap material (C330 Exc)	183	•	20	\$138.00	\$2,760.00
	Placing (36"-12") Riprap material	68		4	\$138.00	\$552.00
Luna	<u> </u>					\$3,312.00

### Phase V: Repair Road Prism

Qty.	Equipment or Activity	Unit	(\$/Unit)	Hours	(\$/Hr)	Cost (\$)
713	Place material staged for road prism	bcy	\$1.51			\$1,076.63
713	Compact placed material	bcy	\$0.60			\$427.80
	Cat D8 (Ditchline construction)			1	\$132.00	\$132.00
	1					\$1,636.43

### Phase VI: Miscellaneous

Qty.	Equipment or Activity	Unit	(\$/Unit)	Hours	(\$/Hr)	Cost (\$)
167	Compact Waste Area	су	\$0.30			\$50.10
0.1	Seed and mulch waste area	acres	\$1,532.00			\$153.20
	Winterize Fall Creek quarry (Cat D8)			2	\$132.00	\$264.00
***						\$467.30

### CRUSHED ROCK COST

SALE NAME: \_ Progeny Split No. 1 and 2 DATE: \_ 02/25/2008 ROCK TYPE: 1 1/2"-0" Crushed PROJECT: BY: John Tillotson 3/4"-0" Crushed QUARRY: Hamlet

UMRK1.		паппес					3/4 -0 CIU	31100				
Road	Stations	Cubic						AY HAUL IN				Total
Segment	Stations	Yards	50	MPH	30	MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH	Haul
4A to 4B		20		-			1.09	1.75	2.12	1.37	0.18	6.51
4C to 4D		20					1.09	1.75	2.32	1.41	0.18	6.75
4E to 4F		20					1.09	1.75	2.32	1.47	0.18	6.81
4K		20					1.09	1.75	1.97	1.47	0.18	6.46
5C		20					1.09	2.18	3.09	0.85	0.13	7.34
											· = 111	
***************************************												
I1 to I2	140.20	3,743					1.09	1.75	1.32	0.74	1.51	6.41
13 to 14	10.00	20					1.09	1.75	2.11	1.43	0.27	6.65
15 to 16	36.40	83					1.09	1.75	2.21	2.11	0.28	7.44
17 to 18	2.00	50					1.09	1.75	2.21	2.23	0.18	7.46
19 to 110	30.90	110					1.09	1.75	2.21	1.95	0.28	7.28
*********												
												-
OTAL	219.50 STA./NO.	4,106 CU. YD.							,			AVERAC HAUL
UBIC YARD	WEIGHTED						1.09	1.75	1.40	0.84	1.40	6.48
								verage Rou			12.95	

### ROCK HAUL:

Truck type:	D20	No. trucks:	4		
Delay min.:	8	Efficiency:	85%	Ave haul: \$8.03	/cy
				Load: \$0.50	/cy
Truck type:	D12	No. trucks:	6	Spread: \$0.90	/cy
Delay min.:	6	Efficiency:	85%		
Truck type:	D10	No. trucks:		Production: cy/day =	810
Delay min.:	5	Efficiency:	85%	,	

CRUSHED ROCK HAUL COSTS 4,106 cy @ \$9.43 /cy

### CRUSHED ROCK COST

 SALE NAME:
 Progeny Split
 DATE:
 01/18/2008

 PROJECT:
 No. 1 and 2
 ROCK TYPE: 4"-0" Crushed
 BY: Tillotson

 QUARRY:
 Cole Mtn.

Segment	Road	T	Cubic	ı				ONE W	AV HALL 1	N MILEO			Total
1A to 1B		Stations		ا در	MOUL	20	84DUI				І 40 меці	E MDU	
1C to 1D	Segment		Talus	50	IVIFI	30	IVIFI	20 MIFT	ZU IVIPT	I IS WIFFI	וארוען ענ	3 MILU	Паш
1C to 1D	1A to 1B	17.70	991					0.39		1.57	0.56	0.29	2.81
TOTAL 277.85 7,129 13.34 1.73 0.75 0.23 3.10 1.73 0.75 0.23 3.10 1.73 0.75 0.23 3.10 1.73 0.75 0.23 3.10 1.73 0.75 0.23 3.10 1.73 0.75 0.23 3.10 1.73 0.75 0.23 3.10 1.73 0.75 0.23 3.10 1.73 0.75 0.26 0.20 0.28 1.75 0.29 1.75 0.28 1.75 0.29 1.75 0.16 1.59 0.76 0.14 2.8 1.59 1.59 0.77 0.16 2.91 1.59 0.77 0.16 2.91 1.59 0.77 0.16 2.91 1.59 0.77 0.16 2.91 1.59 1.30 0.16 3.23 1.59 1.59 1.30 0.16 3.23 1.59 1.59 1.30 0.16 3.23 1.59 1.59 1.30 0.16 3.23 1.59 1.59 1.30 0.16 3.24 1.59 1.59 1.30 1.59 1.59 1.30 0.16 3.24 1.59 1.59 1.59 1.30 0.16 3.24 1.59 1.59 1.59 1.59 1.59 1.59 1.59 1.59			450	<del>                                     </del>				0.39				0.20	3.07
## At to 4B			626				1			1.73	0.75	0.23	3.10
4C to 4D       1.80       112       0.39       1.59       0.76       0.14       2.86         4E to 4F       3.00       171       0.39       1.59       0.77       0.16       2.91         4G to 4H       1.50       98       0.39       1.59       1.30       0.16       3.24         4L       12       0.39       1.69       1.21       0.12       3.44         5A to 5B       2.20       147       0.39       1.69       1.52       0.17       3.77         11 to 12       140.20       205       0.42       3.48       0.75       1.32       0.13       6.10         13 to 14       10.00       470       0.39       1.69       0.56       0.21       2.86         15 to 16       36.40       1,657       0.39       1.69       0.99       0.46       3.50         17 to 18       2.00       90       0.39       1.69       0.99       0.41       3.56         19 to 110       30.90       1,342       0.39       1.69       0.99       0.41       3.48         TOTAL       277.85       7,129       7,129       AVERJ		8.50	501				Ì	0.39		1.67	0.56	0.20	2.82
4G to 4H     1.50     98     0.39     1.59     1.10     0.15       4I to 4J     4.50     257     0.39     1.59     1.30     0.16       3.44       4L     12     0.39     1.69     1.21     0.12       5A to 5B     2.20     147     0.39     1.69     1.52     0.17       11 to 12     140.20     205     0.42     3.48     0.75     1.32     0.13       13 to 14     10.00     470     0.39     1.69     0.56     0.21       15 to 16     36.40     1,657     0.39     1.69     0.99     0.46       17 to 18     2.00     90     0.39     1.69     0.99     0.41       19 to 110     30.90     1,342     0.39     1.69     0.99     0.41       3.48			112				i	0.39		1.59	0.76	0.14	2.88
4I to 4J       4.50       257       0.39       1.59       1.30       0.16       3.44         4L       12       0.39       1.69       1.21       0.12       3.47         5A to 5B       2.20       147       0.39       1.69       1.52       0.17       3.77         11 to 12       140.20       205       0.42       3.48       0.75       1.32       0.13       6.10         13 to 14       10.00       470       0.39       1.69       0.56       0.21       2.86         15 to 16       36.40       1,657       0.39       1.69       0.99       0.46       3.56         17 to 18       2.00       90       0.39       1.69       0.99       0.41       3.46         19 to 110       30.90       1,342       0.39       1.69       0.99       0.41       3.46         10 <td< td=""><td>4E to 4F</td><td>3.00</td><td>171</td><td></td><td></td><td></td><td></td><td>0.39</td><td></td><td>1.59</td><td>0.77</td><td>0.16</td><td>2.91</td></td<>	4E to 4F	3.00	171					0.39		1.59	0.77	0.16	2.91
4L 12 0.39 1.69 1.21 0.12 3.44 5.4 to 5B 2.20 147 0.39 1.69 1.52 0.17 1.52 0.17 1.52 0.17 1.52 0.17 1.52 0.17 1.52 0.17 1.52 0.18 0.56 0.21 0.39 1.69 0.99 0.46 0.31 1.69 0.99 0.46 0.39 1.69 0.99 0.46 0.39 1.69 0.99 0.41 0.56 0.14 0.56 0.14 0.56 0.39 0.39 1.69 0.99 0.41 0.56 0.14 0.56 0.39 0.39 0.56 0.41 0.56 0.41 0.56 0.41 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56	4G to 4H	1.50						0.39				0.15	3.23
5A to 5B	4l to 4J	4.50	257					0.39		1.59	1.30	0.16	3.44
11 to  2	4L		12	1				0.39		1.69	1.21	0.12	3.41
11 to  2				,									
13 to 14	5A to 5B	2.20	147					0.39		1.69	1.52	0.17	3.77
13 to 14	14 5- 10	440.00	205					0.40	2.40	0.75	4 22	0.42	640
15 to 16				<del>                                     </del>					3.40	1			
17 to 18				<u> </u>						<u> </u>			-
19 to 110 30.90 1,342 0.39 1.69 0.99 0.41 3.48				<del> </del>									
TOTAL 277.85 7,129				<del> </del>									
	19 10 110	30.90	1,342	<del> </del>				0.39		1.09	0.99	0.41	3.40
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			T 405										43 (mem a C m)
	TOTAL			4									AVERAGE
	011010 7455								0.40	1 4 64	ا مم	0.04	HAUL
CUBIC YARD WEIGHTED HAUL         0.39         0.10         1.64         0.86         0.31         3.3°           Average Round Trip Distance (miles)         6.61	CUBIC YARD	WEIGHTEL	HAUL	<u> </u>									3.31

### **ROCK HAUL:**

Truck type:	D20	No. trucks:	4		
Delay min.:	8	Efficiency:	85%	Ave haul: \$4.13 Load:	/cy /cy
Truck type:	D12	No. trucks:	6	Spread: \$0.45	/cy
Delay min.:	6	Efficiency:	85%	•	
Truck type:	D10	No. trucks:		Production: cy/day =	1,575
Delay min.:	5	Efficiency:	85%	-	

CRUSHED ROCK HAUL COSTS

7,129 cy @

\$4.58 /cy

### RIP RAP ROCK COST

SALE NAME:	F	Progeny Sp	lit		_	001/7				ı	DATE: BY:		01/18	/2008
PROJECT: QUARRY:		Fall Creek			К	OCK I	YPE: F	Rip Rap	-		BY:		Lillo	tson
Road	Ctations	Cubic					ONE W	AY HAUL II	N MILES					Total
Segment	Stations	Yards	50	MPH	30	MPH	25 MPH			10	MPH	5	MPH	
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			<u> </u>											
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14.4- 10	440.00	400								<u> </u>				
I1 to I2	140.20	132								1 0	.50	. 0	.50	1.00
										╁──				1
I9 to I10	30.90	36							3.56	1	.88	0	.25	5.69
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			<b></b>							_				
TOTAL	171.10	168	1											AVERAGE
	STA./NO.		1											HAUL.
CUBIC YARD	WEIGHTED	HAUL							0.76		.80		.45	2.01
							A	verage Rou	ınd Trip Dist	ance (	miles)	4	.01	

### ROCK HAUL:

Truck type:	D12	No. trucks:	1			
Delay min.:	6	Efficiency:	85%	Ave haul:	\$3.75	/cy
				Load:	\$5.04	/cy
Truck type:	D10	_ No. trucks: _		Develop: _		/cy
Delay min.:	5	Efficiency:	85%	<u>-</u>		

Production: cy/day = 155

RIP RAP ROCK HAUL COSTS 168 cy @ \$8.79 /cy

### RIP RAP ROCK COST

SALE NAME: PROJECT:		Progeny Sp	lit		D	00K T	YPE:	Din Da				D.			01/18 Tillo	
QUARRY:		Fall Creek				OOK I	1 F L.	Kip Ka	.p				ъ,.		11110	19011
				****												•
Road	Stations	Cubic			۱ ۵۵					MILES	nul.	40	s and al	_		Total
Segment		Yards	50	MPH	30	MPH	25 MP	H 20	MPH	15 MI	PH	10	MPH		MPH	Haul
			<del>                                     </del>													
			<del>                                     </del>					+			$\dashv$					
								1			7					
								1						·		
I1 to I2	140.20	120						<u> </u>			_	0.5	50	0.	.50	1.00
			<u> </u>									······································				
. 19 to 110	30.90	36	<del>                                     </del>					+		3.56	+	1.8	20	Δ.	.25	5.69
.19 (0 1 10	30.50	30	<del>                                     </del>					+		3.00	$\dashv$	1.0	00	U.	.20	5.09
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TOTAL	171.10	156	-					-								AVERAGE
CUBIC YARD	STA./NO.	LO. YD.	1							0.82		0.8	22	_	.44	HAUL 2.08
CODIC TARD	VVEIGHTEL	INAUL	<u> </u>		L	i		Averag	e Rou	nd Trip D	listar				.16	2.00
								Averag	C 1100	na mp b	13(61	1100 (11	illicoj		. 10	
ROCK HAUL:																
	Truck type:			rucks:		1										
	Delay min.:	6	Effic	iency:	8	5%					\$3.8		/cy			
		540	NI - 1								\$5.0		/cy			
	Truck type:			rucks:	- 01	50/			Dev	elop:			/cy			
	Delay min.:	5	⊏⊞C	iency:	Q:	5%										

Production: cy/day = 152

RIP RAP ROCK HAUL COSTS 156 cy @ \$8.87 /cy

PR	ROJECT NO.				nber Sale Name: <u>Prog</u>				
Quarry:	Cole Mounta				Swel	_	1001		
		1/4, Sec. 14, T4	N, R9W, W.	M	Shrin	1k: _	16%		
County:	Clatsop					**			,
By:	S. Bushnell				Loading	g Hopper: _	Yes		
Date:	02/26/2008				_				
					GTAGIZBII E	an)			TOTAL
	DOOK GIZE	DDIEGT	OD ADATIO	<b>NN</b> T	STOCKPILE	1.	RUCK MEAS		TOTAL
	ROCK SIZE	E REJECT	GRADATIO	JN	CU. YDS.		CU. YDS.		CU. YDS.
	3/4"-0"		CR	•		-	<del></del>	_	
	1-1/2"-0"	400/	CR	•		-	7 400	_	12.020
	<u>4"-0"</u> 6"-0"	10%	CR		5,000	-	7,128 920	_	12,928 920
	24"-6"		PR RR	•		-	100		100
	36"		RR	•		-	100	_	100
			KK	i		-		_	
	TOTAL CU	UBIC YARDS	OF ROCK:		5,000		8,148		13,948
1) MOB	ILIZATION	& SET UP:							
EQUIPM	ENT	QUANTITY	RATE	COST	EQUIPMENT	I	QUANTITY	RATE	COST
2 Stage C		1	\$2,027	\$2,027	Excavator		1	\$1,200	\$1,200
Screening		1	\$515	\$515	Loading Hopper		1	\$515	\$1,200 \$515
D8 Cat	j 1 10111	1	\$1,200	\$1,200			1	4515	<b>4</b> 313
D6 Cat		1	\$664	\$664					
Loader		1	\$688	\$688					
Drill and C	Compressor	1	\$1,180	\$1,180					
Powder		1	\$327	\$327					
Dump Tru	ıcks	2	\$137	\$274					
		L FOR MOBIL			"	<u> </u>	•	•	\$8,590
	EQUIPMEN	NT SET UP			TIMES		RATE	COST	
	2 Stage Cru	sher			1		\$2,027	\$2,027	
	Screening P	lant			11		\$273	\$273	
	Loading Hop	oper			<u> </u>		\$273	\$273	
	Original Cali	ibration			1		\$507	\$507	
				_					
				_					
				_					
								•	
	SUB TOTA	L FOR SET UI	P COSTS					\$3,080	
	TOTAL M	OBILIZATIO	N & SET II	P COSTS					<b>\$</b> 11,670
					****				~~,···
2) CLEA	ARING & GI				OT LANDSTOWN I	range I	DATE I	COST	
	DESCRIPT		A		_ `	UNIT	RATE	COST	
		Haul to Waste		•	2.0	hr	\$211	\$422	
	Stasti and S	tumps (1 truck,	i exc.)						
				-					
				•	-				
	•			-					
				-		<del>  </del>			
	<del></del>			-		<u></u>			
	TOTAL CI	LEARING & O	GRUBBING	COSTS					\$422
				<del></del>					•

DETTEL OBTENCE AND OBTICITING COCTO

1,900   boy   \$1,80   \$3,420		DESCRIPTION			QUANTITY	UNIT	RATE	COST	
No.   STEST   COST		· · · · · · · · · · · · · · · · · · ·		<u>)                                    </u>		bcy		,	
METHOD			ite, load	<u>.</u>	1,000	bcy	\$3.40	\$3,400	
No.   Street   Stre	haul, spread	)		_					
No.   Street   Stre									
No.   Street   Stre		umann		_					
No.   Street   Stre				_					
No.   Street   Stre						<u> </u>			
METHOD	TOTAL EX	CAVATION C	OSTS					······································	5
ROCK SUMMARY   Type	ELOP ROCK								
Type				METHOD	%	QUANTITY	RATE	COST	
Crushed   12,928   93%   Drill & shoot   50%   7,620   \$2.30   \$17,527     pit run   920   7%   Oversize red   5%   692   \$5.80   \$4,016     Total   13,948     reject   1,293   9.3%     TOTAL ROCK DEVELOPMENT COSTS   \$5.80      LIBRATION & TESTING     DESCRIPTION   NO, \$/TEST   COST     Calibrate   7   \$57.30   \$401     Test   7   \$57.30   \$401     Test   7   \$57.30   \$401      Total Calibrate   7   \$57.30   \$401     Test   7   \$57.30   \$401      Total Calibrate   7   \$57.30     DESCRIPTION   QUANTITY   CU. YD.   COST     Dig & Feed Rock   14,221   \$0.68   \$9,650      TOTAL FEEDING & LOADING COSTS      TOTAL FEEDING & LOADING COSTS				<u> </u>					
pit run   y20									
Total   13,948   reject   1,293   9,3%   TOTAL ROCK DEVELOPMENT COSTS   \$.									
Total	-	1		3	5%	692	\$5.80	\$4,016	
TOTAL ROCK DEVELOPMENT COSTS   S			1%	Other		<u> </u>		·····	
TOTAL ROCK DEVELOPMENT COSTS   S.			0.007						
DESCRIPTION	-			COCTC					e.
DESCRIPTION	TOTAL NO	CK DE VELOI	IVILETY	COSIS				***************************************	φ
DESCRIPTION	JERATION &	TESTING							
Calibrate						NO.	\$/TEST	COST	
Calibrate   Test   7		<u> </u>			·	210.	<u> </u>		
Test									
TOTAL CALIBRATION & TESTING COSTS						7	\$57.30	\$401	
CU. YD.   COST   TOTAL									
CU. YD.   COST   TOTAL									
CU. YD.   COST   TOTAL				_					
CU. YD.   COST   TOTAL	•			_					
CU. YD.   COST   TOTAL	TOTAL CA	LIBRATION &	& TEST	NG COSTS					
CU. YD.   COST   TOTAL									
DESCRIPTION   QUANTITY   CU. YD.   COST	DING & LOA	DING				l l		l	
Dig & Feed Rock									
TOTAL FEEDING & LOADING COSTS  CK CRUSHING  ROCK ROCK CU. YD. CRUSHER HOURLY RATE TOTAL SIZE TYPE QUANTITY TYPE PRODUCTION CU. YD. COST  3/4"-0" crushed 1-1/2"-0" crushed									
PCK CRUSHING  ROCK ROCK CU. YD. CRUSHER HOURLY RATE TOTAL SIZE TYPE QUANTITY TYPE PRODUCTION CU. YD. COST  3/4"-0" crushed 1-1/2"-0" crushed	Dig & Feed I	Rock		14,221	4	\$0.68		\$9,650	
PCK CRUSHING  ROCK ROCK CU. YD. CRUSHER HOURLY RATE TOTAL SIZE TYPE QUANTITY TYPE PRODUCTION CU. YD. COST  3/4"-0" crushed 1-1/2"-0" crushed									
PCK CRUSHING  ROCK ROCK CU. YD. CRUSHER HOURLY RATE TOTAL SIZE TYPE QUANTITY TYPE PRODUCTION CU. YD. COST  3/4"-0" crushed 1-1/2"-0" crushed	-					[		İ	
ROCK ROCK CU. YD. CRUSHER HOURLY RATE TOTAL SIZE TYPE QUANTITY TYPE PRODUCTION CU. YD. COST  3/4"-0" crushed 1-1/2"-0" crushed	TOTAL FE	EDING & LOA	DING (	COSTS					
ROCK ROCK CU. YD. CRUSHER HOURLY RATE TOTAL SIZE TYPE QUANTITY TYPE PRODUCTION CU. YD. COST  3/4"-0" crushed 1-1/2"-0" crushed		_							
SIZE         TYPE         QUANTITY         TYPE         PRODUCTION         CU. YD.         COST           3/4"-0"         crushed				<b></b>	L as	l		l mom	
3/4"-0" crushed 1-1/2"-0" crushed		1 .							
1-1/2"-0" crushed				QUANTITY	TYPE	PRODUCTION	CU. YD.	COST	
						ļI			
4"-0" crushed 12,928 2 stage w/s 140 \$2.48 \$32,043				10.000			<b>MO 40</b>	M20 040	
	4"-0"	crushed		12,928	2 stage w/s	140	\$2.48	\$32,043	
						<del>                                     </del>	•		
						<del> </del>			
						<u> </u>		l	
TOTAL ROCK CRUSHING COSTS	LOIALK	TOR CRUSHIN	G CO3	. 1.7	······································				9

8) STOC	KPILING								
-	STOCKPILE S	SITE PREPA	ARATION						
	Equipment	Hours	Rate	Total					
	Dozer		\$120.00		Rock	for Floor (CY)	\$/CY Haul	Total	
	Compactor		\$72.00						
	Grader	3	\$90.00	\$270.00			- 111		
	Excavator		\$138.00		•				
					\$270.00				
	SUB TOTAL							\$270	
					·	ī			
	HAUL & STO				# of			•	
	STOCKPILE I	LOCATION		SIZE	TRUCKS	CU. YDS.	RATE	COST	
1.									
2.					_				
	Cole Mountain	Quarry		4"-0"	2	5,800	\$1.67	\$9,694	
4.	***************************************								
5.									
6.									
								<b>*** *** ** ** ** ** ** *</b>	
	SUB TOTAL							\$9,694	
	TOTAL CTO	CHADLE AND	COCTO						<b>\$0.064</b>
	TOTAL STO	CAPILING	COSIS						\$9,964
o) Micci	ELLANEOUS	COSTS							
9) MISCI	DESCRIPTIO							COST	
	Load, Haul, an		roject meteric	al et the wests	nro.a			\$3,542	
		2.74/CY	1,293 (		area.			Φ3,542	
	Φ	2.74/01	1,293 (	J1				<u> </u>	
	Final Quarry D	làv Δccass	Road Const 1	Materharring F	)rainana			\$2,100	
		Block Quarry		rvaterbarring, E	namage,			Ψ2,100	
		NOOK GEGGITY	, 100000						
	Seed, Mulch, a	and Fertilize	Waste Area (0	2 ac @\$536/a	c))			\$107	
	Straw Bales (1		<u> </u>	40 60 40 60 14	9//			\$100	
		7 6 7 7 7 7 7 7							
	TOTAL MIS	CELLANE	OUS COSTS						\$5,849
							***************************************		42,015
10) GRA	ND TOTAL:								\$113,705
								\$/Cubic Yard	\$8.80
Footnotes	s:								\$3.30
					<del></del>				

### SUMMARY OF TEST DRILLING COSTS

PROJECT NO. 4

Timber Sale Name: Progeny Split
By: S. Bushnell
Date: 02/26/2008

	FALL	CREEK	<b>QUARRY:</b>	NW1/4.	, S20, T4N	I, R8W, W.M.
--	------	-------	----------------	--------	------------	--------------

FALL CREEK QUARRY: NW1/4, S20, T4N, R8W, W.M.  DESCRIPTION	COST
Hydraulic Rock Drill (16hr @\$258/hr) + \$1200 Move-In	\$5,328
Small Excavator (10hr @ \$94/hr) +688 Move-In	\$1,628
COLE MOUNTAIN QUARRY: SE1/4, S14, T4N, R9W, W.M.	COST
DESCRIPTION Hydraulic Rock Drill (16hr @\$258/hr)	COST \$4,128
IUNCE QUARRY: NE1/4, S31, T5N, R8W, W.M.  DESCRIPTION	COST
Hydraulic Rock Drill (16hr @\$258/hr) + \$1200 Move-In	\$5,328
Small Excavator (10hr @ \$94/hr) +688 Move-In	\$1,628
ALLY RIDGE ROAD: NW1/4, S24, T4N, R9W, W.M.  DESCRIPTION	COST
Hydraulic Rock Drill (11hr @\$258/hr) + \$1200 Move-In	\$4,038
Small Excavator (10hr @ \$94/hr) +688 Move-In	\$1,628
OAPSTONE SITE: SW1/4, S15, T4N, R9W, W.M.	
DESCRIPTION	COST
Hydraulic Rock Drill (11hr @\$258/hr) + \$1200 Move-In	\$4,038
Small Excavator (4\hr @ \$94/hr) +688 Move-In	\$1,064
TOTAL TEST DRILLING COSTS	
	\$28,86

## **Progeny Split**

# Project No. 5 Road Vacating

V1 to V2

\$2,500.00	\$522	\$370	\$174	\$662	\$1,320	\$4,416	Cost
\$10.00 /bale	\$580 /ac	\$37 /hr	\$29 /waterbar	\$138 /sta	\$132 /hr	\$138 /hr	Rate
250	0.9 ac	10 hr	6 waterbars	4.8 sta.	10 hrs	32 hrs	Total
						2 hrs	Walk excavator between sites.
200 bales	0.6 ac	ω	4 waterbars	4.8 sta.		hrs	V3 and V4 Sidecast Pulback Waterbar
50 bales	0.3 ac	2	2 waterbars	sta.	10 hrs	25 hrs 5 hrs	Fill Removal Fill Removal Waterbar
Erosion Control	Grass Seed	Labor	C330 Excavator	C330 Excavator		C330 D8 Excavator Cat	Location/Description V1 to V2

Prepared by: John Tillotson

Date:

01/18/2008

x:\Document\2008 FY Sales\Progeny Split\Sale Prep\Projects\Vacating Costs -Progeny.xls

### Progeny Split Stream Enhancement Project No. 6

Location	No. of Boulders	No. of Trees	C330 hrs @ \$138/hr	24 yd of highway dump @ \$125/hr	Log truck @ \$73/hr	hr \$1,432/ac
SE1 to SE2	60	30				
Rock Development and load		-	10	)		
Rock Haul				10		
Tree Haul					3	
Rock and Tree Placement			20	)		
Erosion Control						0.
Total Time, Length or Acres			30	) 10	3	0.
			\$138	\$125	\$73	\$1,432
Total Cost			\$4,140	\$1,250	\$219	\$286

### **Projects Road Maintenance Cost Summary**

Sale:

**Progeny Split** 

Date:

Febuary 26, 2008

By:

John Tillotson

Туре	Equipment/Rationale	Hours	Rate	Cost		
	·					
				<b>4 7 1 0 0</b>		
Post-Projects	Grader 14G	57	\$90	\$5,100		
Road	Dump Truck 12CY (2 trucks)	30	\$73	\$2,190		
Maintenance	FE Loader C966	15	\$74	\$1,110		
	Vibratory Roller	46	\$72	\$3,312		
	Water Truck 2500 gallon	46	\$78	\$3,588		
		ļ				
					•	
					Tatal	A41
					Total	\$1:

### **Interim Maintenance**

Production Rates Grader Vibratory Roller

Miles/day	Distance(miles)	Days	Hours
2.0	2.0	1.0	10.00

### **Final Road Maintenance**

Production Rates Grader Vibratory Roller

Miles/day	Distance(miles)	Days	Hours
1.5	7.0	4.7	46.67
1.5	7.0	4.7	46.67

### \*Maintenance calculations were determined as follows:

Grade and Compact Cole Mountain Road, Progeny Ridge Road, Fall Creek Road, and Hamlet Stockpile Road **Total Miles: 7 miles.** 

Grade Hill Road

**Total Miles: 2 Miles** 

### Progeny Split FY 2008 TIMBER CRUISE REPORT

1. Sale Area Location: Areas 1, 2, 4, and 3 R/W are located in portions of Sections 17, 18, 19, and 20, T4N, R8W, W.M., Clatsop County, Oregon.

All timber sale areas are posted with ODF "Timber Sale Boundary" signs, pink ribbon. The boundary between Areas 4 and 5 is posted with "Area Boundary" signs and pink ribbon. R/W areas are posted with ODF "Right-of-Way Boundary" signs and orange ribbon.

2. Fund Distribution:

Fund:

BOF (100%)

Tax Code:

8-01 (96.6%)

10-02 (3.4%)

3. Sale Acreage by Area:

Area	Harvest Type	Gross Acreage	New R/W Acreage	Existing R/W Acreage	Stream Buffer Acreage	GTRA	Net Acreage
1	MC	66.0		-0	-6.4	-0.9	58.7
2	MC	54.4		-0	-1.6	-0.0	52.8
3	R/W	1.8		-0	-0.0	-0.0	4.9
4	PC	124.7	-3.1	N/A	-21.7	-0.0	99.9
5	MC	35.0		-0	-3.8	-0.0	31.2
Totals		281.9	3.1*	0.0	-33.5	-0.9	247.5

<sup>\*</sup>Additional 1.8 acres of R/W located outside of sale area to access areas 1 and 5.

- 4. Cruisers and Cruise Dates: Areas 1, 2 and 5 were cruised by John Tillotson, Kraig Kirkpatrick, Dave Horning, Ed Holloran, Kirkpatrick and Bryce Rodgers. Area 4 was cruised by Jay Morey, Dave Horning, Dan Goody, and Kraig Kirkpatrick. All areas were cruised on 11/30/07.
- 5. Cruise Method and Computation: All cruises used Corvallis MicroTechnology (CMT) or Allegro data collectors, and were downloaded to the Atterbury <u>Super A.C.E.</u> program in District for computing. See the attached <u>Cruise Design</u> for more details on the cruise method. The cruise calculations were processed in the Astoria district office.

<u>Areas 1, 2, and 5 (Modified Clear Cut)</u>, were variable plot cruised with a 54.44 BAF for Conifer and 33.6 BAF for Alder. 62 plots were sampled on a cruise grid of 5 chains by 5 chains, with a count/cruise plot ratio of 2:1.

Area 4 (Partial Cut), was variable plot cruised with a 40 BAF for Conifer and 33.6 BAF for Alder. 25 grade plots were sampled on a cruise grid of 6 chains by 4 chains with a count/cruise plot ration of 2:1.

All "take" and "leave" trees were measured and graded.

<u>AREAS</u>	PROJECT	<b>CRUISE TYPE</b>
1, 2, 5	04N08WS17	0001
4	04N08WS17	0002
3 R/W	04N08WS17	0002

### 6. Timber Description:

Areas 1. 2 and 5 (Modified Clear cut) – These stands are approximately 70 years old, consisting of Douglas-fir with some hemlock and some patches of alder. The harvest will remove approximately 126 trees per acre and 42.3 MBF/acre. The average tree size is 19.3 inches in DBH, with an average merchantable height of 64 feet to a merchantable top(6" d.i.b.).

Area 4 (Partial Cut) – This stand is an "automark" partial cut, approximately 70 years old, Douglas-fir dominated mixed conifer stand with patches and stringers of alder. The stand will be harvested to a Stand Density Index (SDI) of approximately 34% with a target basal area of 160 square feet. The "biggest and best" conifer trees will be retained. All alder over 12 inches DBH will be harvested except in buffers. All alder 12 inches or less will be reserved, and will not count toward the basal area requirements. The harvest will remove approximately 75 trees per acre and 18.3 MBF/acre. The average "take" tree size is 17.2" DBH and 64 feet to a merchantable top (6" d.i.b).

7. Statistical Analysis: (See also "Statistics Reports," attached.)

Area	Target CV	Target SE%	Actual CV	Actual SE%
1,2,5	55%	10%	51.9%	6.6%
4	55%	10%	44.9%	6.5%

The statistics for all cruises are "Take" and "Leave" stands combined.

8. Volumes by Species and Log Grades for All Sale Areas by MBF: (See "Species, Sort, Grade, Length % Type Reports" attached, of the thinning and regeneration harvest areas combined.) Volumes do not include "ingrowth." The majority of defect and breakage was culled out during the cruise.

Species	DBH	Net Vol.	2 Saw	3Saw	4 Saw	SM	Camp Run	% D&B	% Sale
Douglas-fir	20	5,116	3,561	1,178	184	193		4	62.5
Hemlock/fir	20	1,546	1,183	306	57			10	18.9
Sitka spruce	23	296	152	127	17			3	3.6
Red Alder	16	1,227					1,227	5	15.0
TOTAL		8,185	4,896	1,611	258	193	1,227	5.2	100

9.	Prepared	by:	المادر
	•		. 1

Date: Z/4/08

10. Approved by:

Date: <u>2/4/08</u>

11. Attachments:

Species, Sort, Grade Reports (4 pages)

Statistics Stand Summary Reports (4 pages)

Log Stock Table Reports (4 pages)

Leave Tree Stand Table Reports (2 pages)

Cruise Plans & Maps (6 pages )

### CRUISE DESIGN ASTORIA DISTRICT

Sa	le N	ame:	Progeny Split	Area(s) <u>1, 2, and 5</u>
				(Net BF) or (Net BF) or
Pla	Ianned Sale Volume:   9.9   MMBF   Estimated Sale Area Value/Acre: \$11,000			
Α.	(b) thin tree	Sample <u>64</u> aning standard species and Determine	cruise plots; Grade ds; <u>X</u> Determine sizes; Detern "diameter limit" ha	33 plots; (c) Other goals ( Determine "automark" log grades for sale value; X Determine snag and leave mine LWD (down wood) cubic feet and decay classes; vest parameters; )
B.	1.	Plot Cruises	: BAF <u>33.6 – Ald</u> Fixed Plot Size Cruise Line Dire  Cruise Line Spa Cruise Plot Spac Grade/Count Ra Tree) Cruises: M	ler 54.44 – Conifer ((Full point)); Half point) (circle one)  Plot Radius feet ction(s) Area 1 – East / West;  Area 2 – North South;  Area 5 – North South cing 5 chains 330 feet ctio Grade 1 out of 2 leasure-grade ratios: D-fir Hemlock
C.	1.	Diameter: 18" or at least 3 Record DBH for trees > 24 then record t (wildlife) tre	Minimum DBH to cr to board feet (10' to a to nearest ½" for tr ". If tree diameters to closest estimate.	uise is 8" or at least 20 board feet for conifers and 8" top 16' to a 7" top). for hardwoods . ees < 16", to nearest 1" for trees 16-24", and to nearest 2" are estimated (only estimate on variable plot cruises), Cruise snags 15 DBH inches and over. Cruise all "W" d trees (cedar) as Leave trees by species. 100% all
				th to nearest foot at TCD. For trees greater than 100 feet ng to the nearest 5 feet is acceptable.
		<b>7"</b> , or <b>40</b> %		Minimum top <b>outside bark</b> for conifer and for hardwoods is m point. Generally, use 7" outside bark for trees < 18" trees > 18" DBH.

**4. Form Factors:** (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer

species on the cruise area, and use these to calculate average FF for the species on the cruise. **Hardwood** form factors are a Standard **87**.

- **5. Tree Segments:** Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch. segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.
- 6. Species, Sort, and Grade Codes: A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); SF (Silver fir); A (Red alder); M (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DL, HL, CL, etc.) B. Sort: Use code "1" (Domestic).
  - C. <u>Grade</u>: A = #1 Peeler; B = #2 Peeler; C = #3 Peeler; D = Special Mill; 2 = 2 sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull; 9 = Utility

    Hardwoods: Grade all hardwoods as Camp Run = R. Lengths for Alder are 8 and

10 foot multiples.

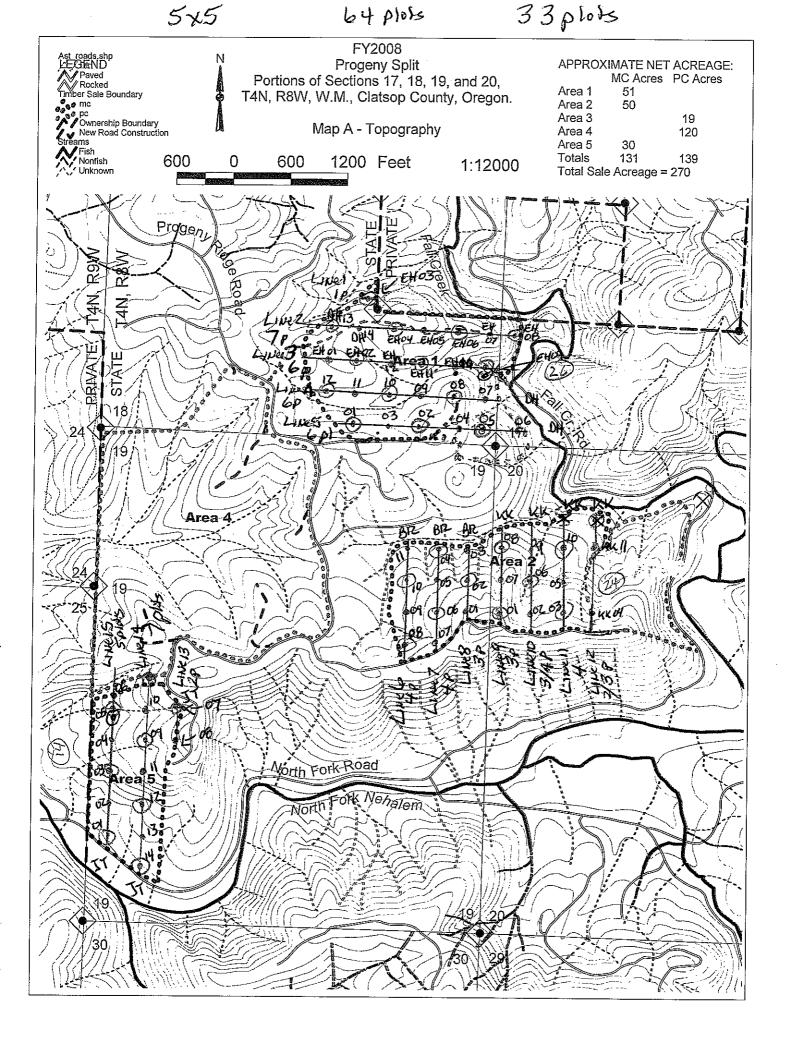
Wildlife Trees: Estimate Grades for all Wildlife Trees.

- 7. **Deductions:** Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.
- 8. Standard Field Procedures: Plot Type Cruises: Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at indivisible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.

<u>ITS and 100% Cruises</u>: Mark cruise "strips" with various colored flagging (not pink). Mark trees measured and graded with <u>yellow</u> paint.

- 9. Cruising Equipment: Relaskop Rangefinder Logger's Tape (with DBH on back) Biltmore Stick, Compass, Cruise Cards in Tatum OR Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint.
- **10.Attachments:** A. <u>Cruise Map</u> (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

Cruise Design by:	Ed Holloran	11/27/07
Approved by:	Day Goods	
Date:	u/28/07 ()	



### CRUISE DESIGN ASTORIA DISTRICT

Sale Name:

Progeny Split

- Togony opin Aleas 4
larvest Type: MC PC CT "Automark Thinning" (circle one Net BP or Net BP or Net BP or September 115 Estimated CV% 50% BA/Acre SE% Objective 10% BA/Acre
BAAACIE
lanned Sale Volume: (Area 4) 1.7 MMBF Estimated Sale Area Value/Acre: \$5,250
Cruise Goals: (a) Grade minimum 130 conifer and 50 hardwood trees:  (b) Sample 54 cruise plots; Grade 27 plots; (c) Other goals ( Determine "automark" thinning standards; X Determine log grades for sale value; X Determine snag and leave tree species and sizes; Determine LWD (down wood) cubic feet and decay classes; Determine "diameter limit" harvest parameters; )  Basal Area leave target 160-180 sq. ft. Cruiser needs to select 4 or 5 leave trees per plot.
Truise Design:  1. Plot Cruises: BAF 33.6 – Alder 40.0 – Conifer (Full point) Half point) (circle one)  Fixed Plot Size Plot Radius feet  Cruise Line Direction(s) Area 4 – East/West  Cruise Line Spacing Chains) (feet)  Cruise Plot Spacing Grade/Count Ratio Grade 1 out of 2
Orace/Count Natio Glade Fout Of Z
2. ITS (Sample Tree) Cruises: Measure-grade ratios: D-fir Hemlock
Spruce True FirCedar Hardwood
. Tree Measurements:
1. Diameter: Minimum DBH to cruise is 8" or at least 20 board feet for conifers and 10" for hardwoods.  Record DBH to nearest ½" for trees < 16", to nearest 1" for trees 16-24", and to nearest 2" for trees > 24". If tree diameters are estimated (only estimate on variable plot cruises), then record to closest estimate.
<ol><li>Bole Length: Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.</li></ol>
3. Top Cruise Diameter (TCD): Minimum top outside bark for conifer is 7", 7" for hardwoods or 40 % of DOB at 16' form point for conifers. Generally, use 7" outside bark for trees < 18" DBH and 40% of DOB @ FP for trees > 18" DBH.  Cruise snags 15 DBH inches and over. Cruise all reserved trees (cedar and maple trees) as Leave trees by species. Alder less than 10" DBH are to be Leave Trees, but will not count toward the Leave Basal Area requirements. Alder 10" DBH and larger can be Leave trees and will count toward the Basal Area leave requirements (Biggest & Best). Record all conifer less than 10" DBH as Leave Trees. Where

4. Form Factors: (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area, and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.

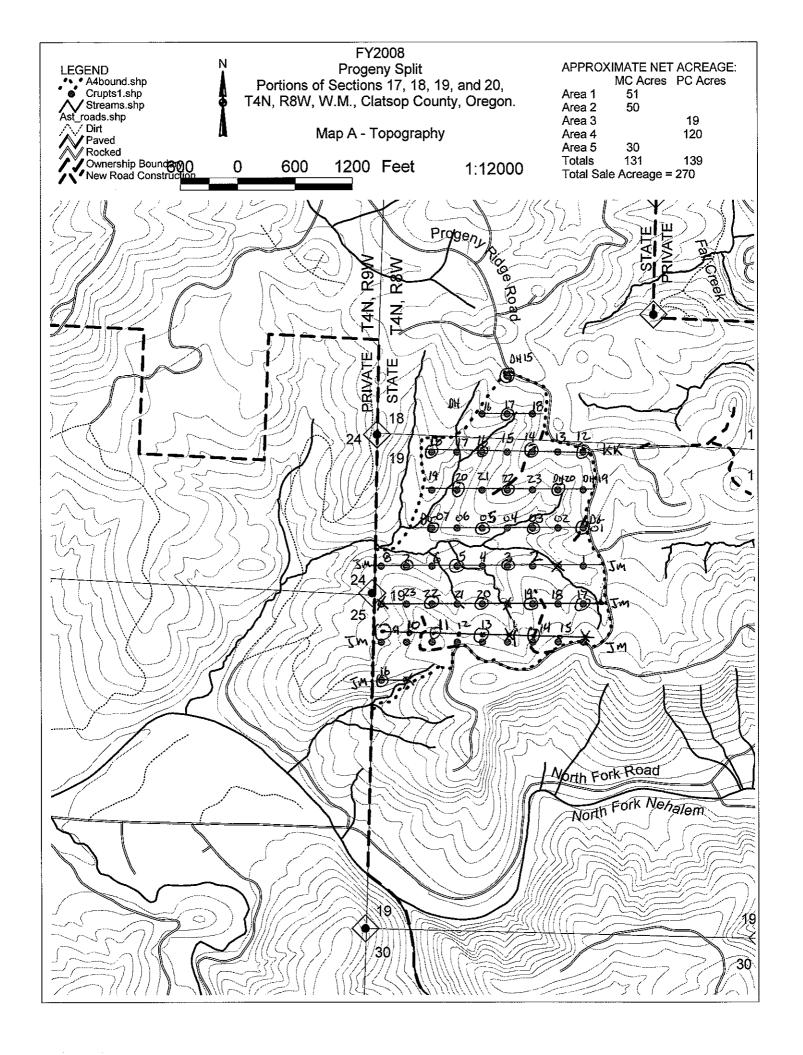
available, record an intermediate conifer as a Leave Tree on every other grade plot.

- 5. Tree Segments: Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch. segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.
- 6. Species, Sort, and Grade Codes: A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); SF (Silver fir); A (Red alder); M (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DL, HL, CL, etc.)
  - B. <u>Sort</u>: Use code "1" (Domestic).
     C. <u>Grade</u>: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull; 9 = Utility
     Hardwoods: Grade all Alder and Maple as Camp Run. Lengths for Alder are 8 and

10 foot multiples.
Cruise snags 15 DBH inches and over. Cruise all reserved trees (cedar and maple trees) as Leave trees by species. Alder less than 10" DBH are to be Leave Trees, but will not count toward the Leave Basal Area requirements. Alder 10" DBH and larger can be Leave trees and will count toward the Basal Area leave requirements (Biggest & Best). Record all conifer less than 10" DBH as Leave Trees. Where available, record an intermediate conifer as a Leave Tree on every other grade plot.

- 7. **Deductions:** Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.
- 8. Standard Field Procedures: Plot Type Cruises: Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at indivisible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.
- 9. Cruising Equipment: Relaskop Rangefinder Logger's Tape (with DBH on back) Biltmore Stick, Compass, Cruise Cards in Tatum OR Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint.
- **10.Attachments:** A. <u>Cruise Map</u> (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

Cruise Design by:	Jay Morey	
Approved by:	The Tellet	
Date:	11-28-07	



TC	PSPCSTGR		$\mathbf{S}_{\mathbf{j}}$	pecies,	Sort G	rade - Boar	d Fo	ot Vo	olum	es (P	roject	)						
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То	tals		5.2	34,894	33,070	8,185	0	29	30	41	5	7	25	63	29	148	1.23	222.9

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s 1	Totals		4	3.3	1,756	1,699	242		16	36	47	<u> </u>	6	34	60	30	177	1.69	9
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Т	TSPCSTG	R			Species,	Sort G Projec	rade - Boar t: PRC		ot V	olur	nes (T	Гуре)				]	Page Date Fime	2/9/20 3:36:5	
T04 Tv 04		ge	Sec	Tract 3R/W		Туре 0002			Piot		•	le Trees 93		C 1	CuFt	Bd) W	Ft	SW S17 T	°0002
Spp		Gr ad	% Net BdFt	Bd. Def%	Ft. per Ac	re Net	Total Net MBF		og Sca	ale D		Log	Len	_	36-99	Av Ln Ft	Bd Ft	Log CF/ Lf	Logs Per /Acre
D D D	DO DO DO	CU 2S 3S 4S	78 18 4	.7 .5	854 27,503 6,546 1,140	27,321 6,513 1,140	134 32 6		92 100	41 8	59	1 5 43	3 13 36	19 28 11	78 54 9	9 37 32 21	400 91 29	0.00 2.27 0.82 0.43	10.0 68.4 71.4 39.0
D A	Totals DO	CU	73	3.0	36,044 299	34,974	171		20	33	46	3	6	20	71	31 8	185	0.00	188.8
A <b>A</b>	DO Totals	CR	100	6.1	4,626 4,926	4,626 4,626	23		74 74	22	4	20 20	34	31	15 15	26 25	65 61	0.74	71.4 75.6
н н н	DO DO DO	CU 2S 3S 4S	70 22 8	1.2	186 4,165 1,306 419	4,114 1,306 419	20 6 2		4 100 100	34	61	2 2 30	30 26	27 9 10	71 59 34	6 36 34 23	370 107 37	0.00 2.20 0.97 0.55	1.4 11.1 12.3 11.3
Н	Totals		12	3.9	6,076	5,839	29		33	24	43	4	9	22	65	30	162	1.31	36.1
S S S	DO DO DO	CU 2S 3S 4S	61 18 21	100.0 2.9 .0	15 1,397 390 442	1,356 390 442	7 2 2	17	6 17	20 66	100 75	4 48	23 17		100 73 35	14 40 31 21	1381 328 69	0.00 7.49 2.84 1.04	.8 1.0 1.2 6.5
S	Totals Totals		5	2.5	2,244 49,290	2,188 47,628	233	3	4 26	17 30	75 ·	10	8	21	82 65	23 29	233 154	2.45	9.4

T	TSPCSTG	R			Species,	Sort G Projec	rade - Boar t: PRC		ot V	olun	nes (	Гуре)				I	Page Date Time	2/9/20 3:36:5	
T04 Tv 04	-	ge	Sec	Tract A4TAK	E <b>2</b>	Type 0002			Piots		Samp	le Trees 88	3	C 1	uFt	T04 Bd1 W		W S17	T0002
			%					Perc	ent N	let Bo	oard F	oot Volu	ıme			Av	erage l	Log	T aga .
Spp	S So T rt	Gr ad	Net BdFt	Bd. Def%	Ft. per Ac Gross	re Net	Total Net MBF	Lo 4-5	g Sca 6-11		ia. 6 17+	Log	Len 21-30	_	36-99	Ln Ft	Bd Ft	CF/ Lf	Logs · Per /Acre
D	DO	CU		100.0	215											12		0.00	4.8
D	DO	2S	59	1.7	7,220	7,100	709			65	35		2	20	78	37	310	1.87	22.9
D	DO	3S	33	.6	3,934	3,909	390		93	7		2	6	30	62	34	94	0.77	41.7
D	DO	48	8		855	855	85		100			51	36		13	20	27	0.41	31.4
D	Totals		65	3.0	12,224	11,864	1,185		38	41	21	4	6	22	68	29	118	1.00	100.8
Α	DO	CU		00.0	255											9		0.00	2.8
Α	DO	CR	100		3,515	3,515	351		70	25	5	19	30	34	17	27	77	0.84	45.9
A	Totals		19	6.8	3,770	3,515	351		70	25	5	19	30	34	17	26	72	0.83	48.7
Н	DO	CU		00.0	72											6		0.00	.8
Н	DO	28	80	.4	1,997	1,990	199			45	55	3		8	89	37	367	2.11	5.4
Н	DO	38	15		356	356	36		100			5	34	23	39	31	92	0.90	3.9
Н	DO	48	5		117	117	12		100			55	13	32		18	29	0.55	4.0
H	Totals		13	3.1	2,542	2,463	246		19	37	44	6	6	11	78	28	175	1.44	14.1
S	DO	38	100		428	428	43			17	83				100	40	605	3.86	.7
s	Totals		2		428	428	43			17	83				100	40	605	3.86	.7
Туре	Totals			3.7	18,964	18,269	1,825		41	37	23	7	10	22	60	28	111	1.01	164.3

04N 00 04N 00 04N 00 TOTAL CRUISE		SC TRACT			JECT OJECT		ISTICS OSP			PAGE DATE	1 2/9/2008
04N 00 04N 00 TOTAL CRUISE	8W		•	ГҮРЕ		A	CRES	PLOTS	TREES	CuFt	BdFt
CRUISE		<ul><li>17 A3R/W</li><li>17 A4TAKE2</li><li>17 TAKE125</li></ul>	1	0002 0002 0001			247.50	158	835	1	W
CRUISE					TREES		ESTIMATED TOTAL		ERCENT SAMPLE		
CRUISE		PLOTS	TREES		PER PLO	Т	TREES		TREES		
		158	835		5.3						
DDITO	3	83	450		5.4		26,268		1.7		
REFORI	DUNT EST										
COUNT	•	72	363		5.0						
BLANK	.S	3									
100 %										*	
				STA	ND SUM	MARY					
		SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
		TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG F		263	49.8	20.0	77		108.8	21,534	20,672	4,938	4,807
R ALDE	ER.	119	37.0	15.6	48		49.2	5,199	4,957	1,495	1,452
WHEMI		54	16.0	20.2	64		35.6	6,931	6,245	1,596	1,478
S SPRU		14	3.4	22.6	56		9.4	1,230	1,196	344	339
TOTAL	_	450	106.1	18.7	64		203.0	34,894	33,070	8,373	8,075
	8.1	COEFF VAR.%	S.E.%	т.	SAMP:	LE TREE	S - BF HIGH	#	OF TREES		INF. POP.
DOUG F	1.0	74.6	3.E.76 4.6	L/	701	734	768		5	10	1
R ALDE		97.4	8.9		149	164	178				
WHEMI		75.3	10.2		581	648	714				
S SPRU	CE	144.0	39.9		895	1,489	2,083				
TOTAL		109.8	5.2		566	597	627		481	120	5.
	8.1	COEFF			TREES	S/ACRE		#	OF PLOTS	REQ.	INF. POP.
SD:		VAR.%	S.E.%	L	<u>ow</u>	AVG	HIGH		5	10	1
DOUG F		166.4	13.2		43	50	56				
R ALDE		191.1 264.0	15.2 21.0		31 13	37 16	<b>4</b> 3 19				
AA LIEIAH		393.6	31.3		2	3	4				
C CDRII		102.6	8.2		97	106	115		420	105	4
S SPRUC		COEFF				L AREA/		#	OF PLOTS		
S SPRUCTOTAL	8.1	37AD 0/	S.E.%	L	ow	AVG	HIGH		5	10	INF. POP.
CL 6	8.1 1.0	VAR.%			0.0	100					INF. POP.
CL 6 SD:	1.0 FIR	151.9	12.1		96	109	122				
CL 6 SD: DOUG F R ALDE	1.0 FIR ER	151.9 183.3	14.6		42	49	122 56				
CL 6 SD: DOUG F R ALDE WHEMI	1.0 FIR ER LOCK	151.9 183.3 256.5	14.6 20.4		42 28	49 36	122 56 43				
CL 6 SD: DOUG F R ALDE WHEMI S SPRUG	1.0 FIR ER LOCK CE	151.9 183.3 256.5 366.6	14.6 20.4 29.1		42 28 7	49 36 9	122 56 43 12		20.	00	1
CL 6 SD: DOUG F R ALDE WHEMI	1.0 FIR ER LOCK CE	151.9 183.3 256.5	14.6 20.4		42 28	49 36	122 56 43		391	98	
CL 6 SD: DOUG F R ALDE WHEMI S SPRUG TOTAL	1.0 FIR ER LOCK CE	151.9 183.3 256.5 366.6 98.9 COEFF	14.6 20.4 29.1 7.9		42 28 7 187 <b>NET B</b>	49 36 9 203 F/ACRE	122 56 43 12 219	#	391 OF PLOTS		1
CL 6 SD:  DOUG F R ALDE WHEMI S SPRUG TOTAL  CL 6 SD:	1.0 FIR ER LOCK CE - 8.1 1.0	151.9 183.3 256.5 366.6 98.9 COEFF VAR.%	14.6 20.4 29.1 7.9 S.E.%	<del></del>	42 28 7 187 <b>NET B</b> OW	49 36 9 203 F/ACRE AVG	122 56 43 12 219	#			<u>1</u>
CL 6 SD:  DOUG F R ALDE WHEMI S SPRUC TOTAL  CL 6 SD:  DOUG F	1.0 FIR ER LOCK CE 58.1 1.0	151.9 183.3 256.5 366.6 98.9 COEFF VAR.% 152.4	14.6 20.4 29.1 7.9 S.E.% 12.1	1	42 28 7 187 <b>NET B</b> OW 8,167	49 36 9 203 F/ACRE AVG 20,672	122 56 43 12 219 HIGH 23,176	#	OF PLOTS	REQ.	1 4. INF. POP.
CL 6 SD:  DOUG F R ALDE WHEMI S SPRUG TOTAL  CL 6 SD:  DOUG F R ALDE	1.0 FIR ER LOCK CE 58.1 1.0 FIR ER	151.9 183.3 256.5 366.6 98.9 COEFF VAR.% 152.4 189.2	14.6 20.4 29.1 7.9 S.E.% 12.1 15.0	1	42 28 7 187 <b>NET B</b> OW 8,167 4,212	49 36 9 203 F/ACRE AVG 20,672 4,957	122 56 43 12 219 HIGH 23,176 5,703	#	OF PLOTS	REQ.	1 4. INF. POP.
CL 6 SD:  DOUG F R ALDE WHEMI S SPRUC TOTAL  CL 6 SD:  DOUG F	1.0 FIR ER LOCK CE - 8.1 1.0 FIR ER LOCK	151.9 183.3 256.5 366.6 98.9 COEFF VAR.% 152.4	14.6 20.4 29.1 7.9 S.E.% 12.1	1	42 28 7 187 <b>NET B</b> OW 8,167	49 36 9 203 F/ACRE AVG 20,672	122 56 43 12 219 HIGH 23,176	#	OF PLOTS	REQ.	1 4. INF. POP.

TC TST	TATS				S7 PROJE	TATIS CT	TICS PROSP			PAGE DATE 2	1 2/9/2008
TWP	RGE	SECT	TRACT		TYPE		CRES	PLOTS	TREES	CuFt	BdFt
04N	08W	17	TAKE125		0001		142.70	62	333	1_	W
					TREES		ESTIMATED TOTAL		ERCENT AMPLE		
		PLOTS	TREES		PER PLOT	Γ	TREES	T	REES		
TOTA	AL.	62	333		5.4						
	COUNT PREST	32			5.3		18,018		.9		
BLAN 100 %											
.,,				STA	ND SUM	MARY	WMW.111.				
		SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
		TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG	G FIR	89		21.2	78		134.4	27,554	26,347	6,175	5,982
R ALI		53		15.7	49		56.9	6,209	5,979	1,779	1,741
WHE	MLOCK	2:	3 23.5	20.1	61		51.8	10,033	8,907	2,308	2,113
S SPR	RUCE	4	4 5.4	21.9	56		14.1	1,756	1,699	502	492
TOT	AL	169	9 126.3	19.3	64		257.2	<i>45,551</i>	42,931	10,764	10,328
CON			OF THE SAMPL JT OF 100 THE		WILL BI	E WITHI	N THE SAMPI	LE ERROR			
CL:	68.1 %	COE	FF		SAMPI	E TREE	S - BF	#	OF TREES	REO.	INF. POP.
SD:	1.0	VAR	R.% S.E.%	L	OW	AVG	HIGH		5	10	15
DOUG	G FIR	74.	1 7.8		771	837	902				
R ALI	DER	102.	4 14.1.		174	202	230				
	MLOCK	75.			637	759	881				
S SPR		79.			269	493	716				
TOTA	AL	94.	7 7.3		574	619	664		358	89	40
CL:	68.1 %	COE	FF		TREES	/ACRE		#	OF PLOTS	REO.	INF. POP.
SD:	1.0	VAR	8.% S.E.%	L	OW	AVG	HIGH		5	10	15
DOUG	G FIR	129.	1 16.4		46	55	64				-
R ALI	DER	158.			34	43	51				
	MLOCK	178.			18	23	29		•		
S SPR		258.			4	5	7				
TOTA		61		******	116	126	136		149	37	17
	68.1 %	COE				AREA/	ACRE	#	OF PLOTS	REQ.	INF. POP.
SD:	1.0	VAR		Le	OW	AVG	HIGH		5	10	15
DOUG		107.			116	134	153				
R ALI		149.			46	57	68				
	MLOCK	173.			40	52	63				
S SPR		252.			10	14	19 274		104	37	
TOTA		51		· · · · · · · · · · · · · · · · · · ·	240	257	274		104	26	12
	68.1 %	COE				F/ACRE		#	OF PLOTS		INF. POP.
SD:	1.0	VAR			OW .	AVG	HIGH		5	10	15
DOUG		105.			2,837	26,347	29,857				
R ALI		149.			4,848	5,979	7,109				
	MLOCK	177.			6,905	8,907	10,908				
S SPR		256.			1,146	1,699	2,252		1.46	25	•
TOTA	AL	60	5 7.7	35	7,633	42,931	46,229		146	37	16

TC TSTATS				ST. PROJEC	ATIST T	TICS PROSP			PAGE DATE	1 2/9/2008
TWP RGE	SECT T	RACT		TYPE	· AC	RES	PLOTS	TREES	CuFt	BdFt
04N 08W	17 A	3R/W		0002		4.90	48	347	1	W
			T	REES		ESTIMATED TOTAL		PERCENT SAMPLE		
	PLOTS	TREES	Pl	ER PLOT		TREES	7	TREES		
TOTAL	48	347		7.2						
CRUISE	27	193		7.1		720		26.8		
DBH COUNT										
REFOREST										
COUNT	21	141		6.7						
BLANKS										
100 %										
			STAN	D SUMM	IARY					
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	S NET
<u></u>	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR ·	125	71.7	21.1	84		174.2	36,044	34,974	8,207	8,064
R ALDER	37	51.4	14.0	39		54.6	4,926	4,626	1,445	1,388
WHEMLOCK	22	17.1	19.4	67		35.0	6,076	5,839	1,454	
S SPRUCE	9	6.7	20.2	34		15.0	2,244	2,188	544	
TOTAL	193	147.0	18.6	64		278.8	49,290	47,628	11,650	11,413
69.1	TIMES OUT	OF 100 THE	VALUATE V	WILL DE	$u_{T}$	TTLE CANDI	1 6 6 6 6 6 6 6			
CL: 68.1 %	TIMES OUT COEFF			VILL BE SAMPLI				FOF TREE	S REQ.	INF. POP.
CL: 68.1 % SD: 1.0	COEFF VAR.%	S.E.%	LO	SAMPLI W	E TREE AVG	S - BF HIGH			S REQ.	INF. POP.
CL: 68.1 % SD: 1.0 DOUG FIR	COEFF VAR.% 66.9	S.E.% 6.0	LO	SAMPLI W 728	E TREE AVG 775	S - BF HIGH 821		FOF TREE		
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER	COEFF VAR.% 66.9 80.9	S.E.% 6.0 13.3	LO	<b>SAMPLI</b> W 728 106	E TREE AVG 775 122	S - BF HIGH 821 138		FOF TREE		
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK	COEFF VAR.% 66.9 80.9 80.9	S.E.% 6.0 13.3 17.6	LO	SAMPLI W 728 106 449	E TREE AVG 775 122 545	S - BF HIGH 821 138 641		FOF TREE		
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER	COEFF VAR.% 66.9 80.9 80.9 131.4	5.E.% 6.0 13.3 17.6 46.4	LO'	SAMPLI W 728 106 449 053	E TREE AVG 775 122 545 1,963	S - BF HIGH 821 138 641 2,874		FOR TREE	10	15
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9	5 S.E.% 6.0 13.3 17.6 46.4 8.3	LO'	SAMPLI W 728 106 449 053	E TREE AVG 775 122 545 1,963 679	S - BF HIGH 821 138 641	#	# OF TREE	134	60
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL CL: 68.1 %	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF	5.E.% 6.0 13.3 17.6 46.4 8.3	LO'	SAMPLE W 728 106 449 053 522 TREES/A	E TREE AVG 775 122 545 1,963 679	S - BF HIGH 821 138 641 2,874 735	#	# OF TREE: 5  536 # OF PLOT	10 134 S REQ.	60 INF. POP.
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL CL: 68.1 % SD: 1.0	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.%	S.E.% 6.0 13.3 17.6 46.4 8.3	LO'	SAMPLE W 728 106 449 053 522 TREES/A	E TREE AVG 775 122 545 1,963 679 ACRE AVG	S - BF HIGH 821 138 641 2,874 735	#	# OF TREE	134	60
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL CL: 68.1 % SD: 1.0 DOUG FIR	COEFF VAR.% 66.9 80.9 131.4 115.9 COEFF VAR.%	S.E.% 6.0 13.3 17.6 46.4 8.3 5 5 S.E.% 13.8	LO'	SAMPLE W 728 106 449 053 522 TREES/A	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72	S - BF HIGH 821 138 641 2,874 735 HIGH	#	# OF TREE: 5  536 # OF PLOT	10 134 S REQ.	60 INF. POP.
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL CL: 68.1 % SD: 1.0	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.%	S.E.% 6.0 13.3 17.6 46.4 8.3	LO'	SAMPLE W 728 106 449 053 522 TREES/A W 62	E TREE AVG 775 122 545 1,963 679 ACRE AVG	S - BF HIGH 821 138 641 2,874 735	#	# OF TREE: 5  536 # OF PLOT	10 134 S REQ.	60 INF. POP.
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE	COEFF VAR.% 66.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6	S.E.% 6.0 13.3 17.6 46.4 8.3 5.E.% 13.8 19.1 22.9 40.6	LO'	SAMPLE W 728 106 449 053 522 TREES/A W 62 42	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61	#	# OF TREE 5 536 # OF PLOT 5	10 134 S REQ.	60 INF. POP.
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9	S.E.% 6.0 13.3 17.6 46.4 8.3 5.E.% 13.8 19.1 22.9	LO' LO'	SAMPLE W 728 106 449 053 622 TREES/A W 62 42 13	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21	#	# OF TREE: 5  536 # OF PLOT	10 134 S REQ.	60 INF. POP.
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE	COEFF VAR.% 66.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3	S.E.% 6.0 13.3 17.6 46.4 8.3 5 S.E.% 13.8 19.1 22.9 40.6 6.9	LO'	SAMPLI W 728 106 449 053 522 TREES/A W 62 42 13 4	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157	<i>‡</i>	# OF TREE 5 536 # OF PLOT 5	10 134 S REQ. 10	60 INF. POP. 15
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL CL: 68.1 % SD: 1.0	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.%	S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 7. S.E.% 7. S.E.% 8. S.E.% 8. S.E.% 8. S.E.% 8. S.E.% 9. S.E.% 9. S.E.% 9. S.E.%	LO' LO'	SAMPLE W 728 106 449 053 622 TREES/A W 62 42 13 4 737 BASAL A	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147 AREA/A AVG	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157	<i>‡</i>	# OF TREE. 5  536  # OF PLOT 5	10 134 S REQ. 10	60 INF. POP. 15
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.% 76.0	S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 6. S.E.% 7. 11.0	LO' LO'	SAMPLE W 728 106 449 053 622 TREES/A W 62 42 13 4 737 BASAL A W	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147 AREA/A AVG 174	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157 ACRE HIGH 193	<i>‡</i>	# OF TREE. 5  536  # OF PLOT 5	10  134 S REO. 10  23 S REQ.	60 INF. POP. 15 10 INF. POP.
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.% 76.0 117.5	S.E.% 6. S.E.% 6. S.E.% 13.3 17.6 46.4 8.3 6. S.E.% 13.8 19.1 22.9 40.6 6.9  5. S.E.% 11.0 16.9	LO' LO'	SAMPLE W 728 106 449 053 622 TREES/A W 62 42 13 4 737 BASAL A W 155 45	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147 AREA/A AVG 174 55	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157 ACRE HIGH 193 64	<i>‡</i>	# OF TREE. 5  536  # OF PLOT 5	10  134 S REO. 10  23 S REQ.	60 INF. POP. 15 10 INF. POP.
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.% 76.0 117.5 144.6	S.E.% 6.0 13.3 17.6 46.4 8.3 6. S.E.% 13.8 19.1 22.9 40.6 6.9 6. S.E.% 11.0 16.9 20.9	LO' LO'	SAMPLE W 728 106 449 053 622 TREES/A W 62 42 13 4 737 BASAL A W 155 45 28	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147 AREA/A AVG 174 55 35	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157 CCRE HIGH 193 64 42	<i>‡</i>	# OF TREE. 5  536  # OF PLOT 5	10  134 S REO. 10  23 S REQ.	60 INF. POP. 15 10 INF. POP.
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.% 76.0 117.5 144.6 224.3	S.E.% 6.0 13.3 17.6 46.4 8.3 6. S.E.% 13.8 19.1 22.9 40.6 6.9 6. S.E.% 11.0 16.9 20.9 32.3	LO' LO'	SAMPLE W 728 106 449 053 622 TREES/A W 62 42 13 4 737 BASAL A W 155 45 28 10	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147 AREA/A AVG 174 55 35	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157 CCRE HIGH 193 64 42 20	<i>‡</i>	# OF TREE. 5  536 # OF PLOT 5  92 # OF PLOT 5	134 S REO. 10 23 S REQ. 10	60 INF. POP. 15  10 INF. POP. 15
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.% 76.0 117.5 144.6 224.3 30.9	S.E.% 6.0 13.3 17.6 46.4 8.3 6. S.E.% 13.8 19.1 22.9 40.6 6.9 6. S.E.% 11.0 16.9 20.9 32.3 4.5	LO' LO'	SAMPLE W 728 106 449 053 622 TREES/A W 62 42 13 4 737 BASAL A W 155 45 28 10 266	E TREE AVG 775 122 545 1,963 679  ACRE AVG 72 51 17 7 147  AREA/A AVG 174 55 35 15 279	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157 CCRE HIGH 193 64 42	#	# OF TREE. 5  536  # OF PLOT 5  92  # OF PLOT 5	10  134 S REO. 10  23 S REQ. 10	15 60 INF. POP. 15 10 INF. POP. 15
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 %	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.% 76.0 117.5 144.6 224.3 30.9 COEFF	S.E.% 6. S.E.% 6. S.E.% 13.3 17.6 46.4 8.3 6. S.E.% 13.8 19.1 22.9 40.6 6.9 11.0 16.9 20.9 32.3 4.5	LO' LO'	SAMPLE W 728 106 449 053 622 TREES/A W 62 42 13 4 737 BASAL A W 155 45 28 10 266 NET BF/	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147 AREA/A AVG 174 55 35 15 279	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157 ACRE HIGH 193 64 42 20 291	#	# OF TREE 5  536  # OF PLOT 5  92  # OF PLOT 5	10  134 S REO. 10  23 S REQ. 10  10  S REQ.	15 60 INF. POP. 15 10 INF. POP. 15
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SPRUCE TOTAL	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.% 76.0 117.5 144.6 224.3 30.9 COEFF VAR.%	S.E.% 6.0 13.3 17.6 46.4 8.3 6. S.E.% 13.8 19.1 22.9 40.6 6.9  11.0 16.9 20.9 32.3 4.5 6. S.E.%	LO' LO' LO'	SAMPLE W 728 106 449 053 622 TREES/A W 62 42 13 4 737 BASAL A W 155 45 28 10 266 NET BF/W	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147 AREA/A AVG 174 55 35 15 279 ACRE AVG	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157 CCRE HIGH 193 64 42 20 291 HIGH	#	# OF TREE. 5  536  # OF PLOT 5  92  # OF PLOT 5	10  134 S REO. 10  23 S REQ. 10	15 60 INF. POP. 15 10 INF. POP. 15
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.% 76.0 117.5 144.6 224.3 30.9 COEFF VAR.% 73.7	S.E.% 6.0 13.3 17.6 46.4 8.3 6. S.E.% 13.8 19.1 22.9 40.6 6.9 11.0 16.9 20.9 32.3 4.5 6. S.E.% 10.6	LO'  LO'  LO'  1,  1,  1,  1,  1,  1,  1,  1,  1,  1	SAMPLE W 728 106 449 053 622 TREES/A W 62 42 13 4 737 BASAL A W 155 45 28 10 266 NET BF/W W 2554 3	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147 AREA/A AVG 174 55 35 15 279 ACRE AVG	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157 CCRE HIGH 193 64 42 20 291 HIGH 38,694	#	# OF TREE 5  536  # OF PLOT 5  92  # OF PLOT 5	10  134 S REO. 10  23 S REQ. 10  10  S REQ.	15 60 INF. POP. 15 10 INF. POP. 15
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.% 76.0 117.5 144.6 224.3 30.9 COEFF VAR.% 73.7 117.2	S.E.% 6.0 13.3 17.6 46.4 8.3 6.S.E.% 13.8 19.1 22.9 40.6 6.9 6.S.E.% 11.0 16.9 20.9 32.3 4.5 6.S.E.% 10.6 16.9	LO'  LO'  LO'  1,  1,  1,  1,  1,  1,  1,  1,  1,  1	SAMPLE W 728 106 449 053 522 TREES/A W 62 42 13 4 737 BASAL A W 155 45 28 10 266 NET BF/ W 254 3845	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147 AREA/A AVG 174 55 35 15 279 ACRE AVG 4,974 4,626	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157 CRE HIGH 193 64 42 20 291 HIGH 38,694 5,408	#	# OF TREE 5  536  # OF PLOT 5  92  # OF PLOT 5	10  134 S REO. 10  23 S REQ. 10  10  S REQ.	15 60 INF. POP. 15 10 INF. POP. 15
CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUG FIR R ALDER WHEMLOCK S SPRUCE TOTAL	COEFF VAR.% 66.9 80.9 80.9 131.4 115.9 COEFF VAR.% 95.9 132.6 158.9 281.3 48.1 COEFF VAR.% 76.0 117.5 144.6 224.3 30.9 COEFF VAR.% 73.7	S.E.% 6.0 13.3 17.6 46.4 8.3 6. S.E.% 13.8 19.1 22.9 40.6 6.9 11.0 16.9 20.9 32.3 4.5 6. S.E.% 10.6	LO'  LO'  LO'  1,  C  LO'  31,  3, 4,	SAMPLI W 728 106 449 053 522 TREES/A W 62 42 13 4 737 BASAL A W 155 45 28 10 266 NET BF/W 254 3845 631	E TREE AVG 775 122 545 1,963 679 ACRE AVG 72 51 17 7 147 AREA/A AVG 174 55 35 15 279 ACRE AVG	S - BF HIGH 821 138 641 2,874 735 HIGH 82 61 21 9 157 CCRE HIGH 193 64 42 20 291 HIGH 38,694	#	# OF TREE 5  536  # OF PLOT 5  92  # OF PLOT 5	10  134 S REO. 10  23 S REQ. 10  10  S REQ.	15 60 INF. POP. 15 10 INF. POP. 15

TC TST	ATS					TATIS				PAGE	1
	DOE	OECO n	5D 4 600		PROJE		PROSP	DI OTO		-	/9/2008
TWP	RGE		TRACT		TYPE	A	CRES	PLOTS	TREES	CuFt	BdFt
04N	08W	<u> 17 A</u>	A4TAKE2		0002		99.90	48	155	<u> </u>	W
					TREES		ESTIMATED TOTAL		ERCENT AMPLE		
		PLOTS	TREES		PER PLOT	Γ	TREES	T	REES		
TOTA	AL	48	155		3.2						
CRUI	SE	24	88		3.7		7,530		1.2		
DBH	COUNT										
	REST										
COU		21	64		3.0						
BLAN		3									
100 %	Ó .			COD 4	ND CVIDE						
		2 4 3 M I D	FF-17-0		ND SUM		DAGAI	OD OGG	) TOTAL	CD OCC	) TTTT
		SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG	G FIR	49	41.4	17.5	75		69.2	12,224	11,864	3,010	2,969
R ALI	DER	29	28.3	15.7	47		37.8	3,770	3,515	1,090	1,042
	MLOCK	9	5.3	20.7	77		12.5	2,542	2,463	586	574
S SPR		1	.4	36.0	83		2.5	428	428	109	109
TOT	AL	88	75.4	17.2	64		122.0	18,964	18,269	4,795	4,694
CON			F THE SAMPL COF 100 THE		E WILL BI	E WITHI	N THE SAMP	LE ERROR			
CL:	68.1 %	COEF	F		SAMPI	LE TREI	ES - BF	#	OF TREES	REQ.	INF. POP.
SD:	1.0	VAR.9	% S.E.%	L	.OW	AVG	HIGH		5	10	15
DOU	G FIR	81.3			394	446	498				
R AL		67.2			128	147	165				
S SPF	MLOCK	50.7	17.9		504	613	723				
TOT		92.4	9.8		336	373	410		341	85	38
CL:	68.1 %	COEF	F		TREES	/ACRE		#	OF PLOTS	REO.	INF. POP.
SD:	1.0	VAR.S	% S.E.%	L	OW	AVG	HIGH	"	5	10	15
DOU		134.6			33	41	49				<del>     </del>
R AL		115.4	16.6		24	28	33				
	MLOCK	246.2			3	5	7				
S SPF		391.4			0	0	1			<b>50</b>	
TOT		71.0			68	75	83		201	50	22
	68.1 %	COEF		_		AREA/		#	OF PLOTS		INF. POP.
	1.0	VAR.9		I	OW 57	AVG	HIGH		5	10	15
DOU	G FIR	119.7			57 32	69 38	81 44				
	MLOCK	109.4 230.2			32 8	38 13	44 17				
	RUCE	391.4			1	3	4				
TOT		59.7			111	122	132		142	<i>36</i>	16
	68.1 %	COEF				F/ACRE		#	OF PLOTS		INF. POP.
SD:	1.0	VAR.	% S.E.%	L	.ow	AVG	HIGH		5	10	15
	G FIR	121.9			9,777	11,864	13,950				
R AL		116.3			2,925	3,515	4,104				
	MLOCK	238.3			1,616	2,463	3,309				
	RUCE	391.4		_	186	428	670		244		25
тот	AL	78.1	11.3	I	6,211	18,269	20,327		244	61	27

				ST. PROJEC	ATIS:	ΓICS PROSP			PAGE DATE 3	1 3/20/2008
TWP RGE	SECT TI	RACT	**	TYPE		CRES	PLOTS	TREES	CuFt	BdFt
04N 08W	17 ST	TAY125		0001		142.70	62	82	1	W
		,		TREES		ESTIMATED TOTAL		PERCENT SAMPLE		
	PLOTS	TREES		PER PLOT		TREES	•	TREES	÷	
TOTAL	62	82		1.3				*****		
CRUISE DBH COUNT REFOREST COUNT	20	39 43		2.0		2,045		1.9		
BLANKS 100 %	20	7,3		2.0						
			STA	ND SUMM	IARY				,,,,,	
	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
SNAG	14	5.7	33.1	36		33.9	326		71	
CEDLEAV DOUGLEAV	12 7	4.6 2.1	25.1 30.5	47 103		15.8 10.5	1,046 2,493		450 516	429 516
SPRUCELV	5	1.5	30.3	72		8.8	1,637	-	365	516 340
HEMLEAV	1	.5	32.0	110		2.6	764	,	143	95
TOTAL	39	14.3	30.3	55		71.7	6,266	5,447	1,545	1,380
CL: 68.1 %	E LIMITS OF TIMES OUT COEFF		_			***************************************				
SD: 1.0	VAR.%	S.E.%	L	<b>SAMPLI</b> OW	L I REE AVG	S - BF HIGH	7	# OF TREES 5	8 REQ. 10	INF. POP.
SNAG	72.0								***************************************	
CEDLEAV		41.5			2.62					
		21.7		284	363	441				
DOUGLEAV	47.7	19.4		1,121	1,391	1,661				
	47.7 89.5	19.4 44.5		1,121				985	246	109
DOUGLEAV SPRUCELV HEMLEAV TOTAL	47.7	19.4		1,121 1,229 502	1,391 2,214 <i>671</i>	1,661 3,199	******	985		109
DOUGLEAV SPRUCELV HEMLEAV TOTAL	47.7 89.5 157.1	19.4 44.5 25.1		1,121 1,229 502 TREES/A	1,391 2,214 <i>671</i> ACRE	1,661 3,199 839		<i>985</i> # OF PLOTS 5	S REQ.	INF. POP.
DOUGLEAV SPRUCELV HEMLEAV TOTAL CL: 68.1 % SD: 1.0 SNAG	47.7 89.5 157.1 COEFF VAR.% 166.5	19.4 44.5 25.1 S.E.% 21.1		1,121 1,229 502 TREES/A	1,391 2,214 <i>671</i>	1,661 3,199	į	# OF PLOTS		
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3	19.4 44.5 25.1 S.E.% 21.1 47.6		1,121 1,229 502 TREES/A OW 4 2	1,391 2,214 671 ACRE AVG 6 5	1,661 3,199 839 HIGH 7	7	# OF PLOTS	S REQ.	INF. POP.
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6		1,121 1,229 502 TREES/A OW 4 2 1	1,391 2,214 671 ACRE AVG 6 5 2	1,661 3,199 839 HIGH 7 7 3	7	# OF PLOTS	S REQ.	INF. POP.
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0		1,121 1,229 502 TREES/A OW 4 2 1	1,391 2,214 671 ACRE AVG 6 5 2 2	1,661 3,199 839 HIGH 7 7 3 2	#	# OF PLOTS	S REQ.	INF. POP.
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6		1,121 1,229 502 TREES/A OW 4 2 1	1,391 2,214 671 ACRE AVG 6 5 2	1,661 3,199 839 HIGH 7 7 3	3	# OF PLOTS 5	S REQ. 10	INF. POP.
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7		1,121 1,229 502 TREES/A OW 4 2 1 1 0 12	1,391 2,214 671 ACRE AVG 6 5 2 2 0 14	1,661 3,199 839 HIGH 7 7 3 2 1		# OF PLOTS 5 678	S REQ. 10	INF. POP. 15
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 %	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5	L	1,121 1,229 502 TREES/A OW 4 2 1 1 0 12 BASAL A	1,391 2,214 671 ACRE AVG 6 5 2 2 0 14	1,661 3,199 839 HIGH 7 7 3 2 1 17		# OF PLOTS 5  678 # OF PLOTS	5 REQ. 10 169 5 REQ.	INF. POP. 15 75 INF. POP.
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5	L	1,121 1,229 502 TREES/A OW 4 2 1 1 0 12 BASAL A	1,391 2,214 671 ACRE AVG 6 5 2 2 0 14	1,661 3,199 839 HIGH 7 7 3 2 1		# OF PLOTS 5 678	S REQ. 10	INF. POP. 15
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF VAR.% 156.0 401.2	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5 S.E.% 19.8 50.9	L	1,121 1,229  502  TREES/A  OW  4 2 1 0 12  BASAL A  OW  27 8	1,391 2,214 671 ACRE AVG 6 5 2 2 0 14 AREA/A AVG 34 16	1,661 3,199 839 HIGH 7 7 3 2 1 17 ACRE HIGH 41 24		# OF PLOTS 5  678 # OF PLOTS	5 REQ. 10 169 5 REQ.	INF. POP. 15  75  INF. POP.
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF VAR.% 156.0 401.2 244.7	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5 S.E.% 19.8 50.9 31.0	L	1,121 1,229  502  TREES/A  OW  4 2 1 1 0 12  BASAL A  OW  27 8 7	1,391 2,214 671 ACRE AVG 6 5 2 0 14 AREA/A AVG 34 16 11	1,661 3,199 839 HIGH 7 7 7 3 2 1 17 ACRE HIGH 41 24 14		# OF PLOTS 5  678 # OF PLOTS	5 REQ. 10 169 5 REQ.	INF. POP. 15 75 INF. POP.
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF VAR.% 156.0 401.2 244.7 255.8	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5 S.E.% 19.8 50.9 31.0 32.5	L	1,121 1,229 502 TREES/A OW 4 2 1 1 0 12 BASAL A OW 27 8 7 6	1,391 2,214 671 ACRE AVG 6 5 2 0 14 AREA/A AVG 34 16 11 9	1,661 3,199 839 HIGH 7 7 3 2 1 17 ACRE HIGH 41 24 14		# OF PLOTS 5  678 # OF PLOTS	5 REQ. 10 169 5 REQ.	INF. POP. 15 75 INF. POP.
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF VAR.% 156.0 401.2 244.7 255.8 447.1	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5 S.E.% 19.8 50.9 31.0 32.5 56.7	L	1,121 1,229 502 TREES/A OW 4 2 1 0 12 BASAL A OW 27 8 7 6 1	1,391 2,214 671 ACRE AVG 6 5 2 0 14 AREA/A AVG 34 16 11 9 3	1,661 3,199 839 HIGH 7 7 3 2 1 17 ACRE HIGH 41 24 14 12 4		# OF PLOTS 5  678 # OF PLOTS 5	169 S REQ. 10	75 INF. POP. 15
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0  SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0  SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF VAR.% 156.0 401.2 244.7 255.8 447.1 113.3	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5 S.E.% 19.8 50.9 31.0 32.5	L	1,121 1,229  502  TREES/A  OW  4 2 1 0 12  BASAL A  OW  27 8 7 6 1 61	1,391 2,214 671 ACRE AVG 6 5 2 0 14 AREA/A AVG 34 16 11 9 3 72	1,661 3,199 839 HIGH 7 7 3 2 1 17 ACRE HIGH 41 24 14	*	# OF PLOTS 5 678 # OF PLOTS 5	169 S REQ. 10	75 INF. POP. 15  75 INF. POP. 15
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % CEDLEAV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF VAR.% 156.0 401.2 244.7 255.8 447.1 113.3 COEFF	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5 S.E.% 19.8 50.9 31.0 32.5 56.7 14.4	L	1,121 1,229  502  TREES/A  OW  4 2 1 1 0 12  BASAL A  OW  27 8 7 6 1 61  NET BF/	1,391 2,214 671 ACRE AVG 6 5 2 0 14 AREA/A AVG 34 16 11 9 3 72	1,661 3,199 839 HIGH 7 7 7 3 2 1 17 ACRE HIGH 41 24 14 12 4 82	*	# OF PLOTS  678  # OF PLOTS  5  512	169 S REQ. 10	75 INF. POP. 15  75 INF. POP. 15
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SPRUCELV HEMLEAV TOTAL	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF VAR.% 156.0 401.2 244.7 255.8 447.1 113.3 COEFF VAR.%	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5 S.E.% 19.8 50.9 31.0 32.5 56.7 14.4	L	1,121 1,229  502  TREES/A  OW  4 2 1 1 0 12  BASAL A  OW  27 8 7 6 1 61  NET BF/OW	1,391 2,214 671 ACRE AVG 6 5 2 0 14 AREA/A AVG 34 16 11 9 3 72 ACRE	1,661 3,199 839 HIGH 7 7 3 2 1 17 ACRE HIGH 41 24 14 12 4 82 HIGH	*	# OF PLOTS 5 678 # OF PLOTS 5	169 S REQ. 10	75 INF. POP. 15  75 INF. POP. 15
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF VAR.% 156.0 401.2 244.7 255.8 447.1 113.3 COEFF VAR.%	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5 S.E.% 19.8 50.9 31.0 32.5 56.7 14.4 S.E.%	L	1,121 1,229  502  TREES/A  OW  4 2 1 1 0 12  BASAL A  OW  27 8 7 6 1 61  NET BF/OW  451	1,391 2,214 671 ACRE AVG 6 5 2 0 14 AREA/A AVG 34 16 11 9 3 72 ACRE AVG	1,661 3,199 839 HIGH 7 7 3 2 1 17 CRE HIGH 41 24 14 12 4 82 HIGH 1,546	*	# OF PLOTS  678  # OF PLOTS  5  512	169 S REQ. 10	75 INF. POP. 15  75 INF. POP. 15
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV DOUGLEAV DOUGLEAV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF VAR.% 156.0 401.2 244.7 255.8 447.1 113.3 COEFF VAR.%	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5 S.E.% 19.8 50.9 31.0 32.5 56.7 14.4 S.E.%	L	1,121 1,229 502 TREES/A OW 4 2 1 1 0 12 BASAL A OW 27 8 7 6 1 61 NET BF/OW 451 1,716	1,391 2,214  671  ACRE AVG 6 5 2 0 14  AREA/A AVG 34 16 11 9 3 72  ACRE AVG 998 2,471	1,661 3,199 839 HIGH 7 7 3 2 1 17 CCRE HIGH 41 24 14 12 4 82 HIGH 1,546 3,226	*	# OF PLOTS  678  # OF PLOTS  5  512	169 S REQ. 10	75 INF. POP. 15 57 INF. POP.
DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV DOUGLEAV SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SPRUCELV HEMLEAV TOTAL  CL: 68.1 % SD: 1.0 SNAG CEDLEAV	47.7 89.5 157.1 COEFF VAR.% 166.5 375.3 249.0 299.5 447.1 130.3 COEFF VAR.% 156.0 401.2 244.7 255.8 447.1 113.3 COEFF VAR.%	19.4 44.5 25.1 S.E.% 21.1 47.6 31.6 38.0 56.7 16.5 S.E.% 19.8 50.9 31.0 32.5 56.7 14.4 S.E.%	L	1,121 1,229 502 TREES/A OW 4 2 1 1 0 12 BASAL A OW 27 8 7 6 1 61 NET BF/OW 451 1,716	1,391 2,214 671 ACRE AVG 6 5 2 0 14 AREA/A AVG 34 16 11 9 3 72 ACRE AVG	1,661 3,199 839 HIGH 7 7 3 2 1 17 CRE HIGH 41 24 14 12 4 82 HIGH 1,546	*	# OF PLOTS  678  # OF PLOTS  5  512	169 S REQ. 10	75 INF. POP. 15 57 INF. POP.

	ATS				ST. PROJEC	ATIST	FICS PROSP			PAGE · DATE 2	1 2/9/2008
TWP	RGE	SECT	TRACT		TYPE	AC	CRES	PLOTS	TREES	CuFt	BdFt
04N	08W	17	A4LEAVE2		0002		99.90	48	216	1	W
				-	TREES		ESTIMATED TOTAL		PERCENT SAMPLE		
		PLOTS	TREES	I	PER PLOT		TREES	1	TREES		
TOTA	L	48	216		4.5						
CRUIS	SE	27	119		4.4		8,088		1.5		
	COUNT										
REFOI COUN		21	90		4.3						
BLAN		21	90		4.5						
100 %			-								
				STAI	ND SUMM	1ARY					
		SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
		TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG		71		25.0	96		102.5	22,925	22,308	4,968	4,879
HEML		13		18.6	61		22.5	3,442	3,283	852	833
ALDRI SNAG		12	8 27.6 2 3.5	10.6 29.4	26 55		16.8 16.7	921 654	921	296 161	296
SPRUC			8 6.1	19.4	32		12.5	1,837	1,784	442	436
CEDLE			7 1.8	24.2	70		5.8	703	684	206	206
TOTA	L	119	9 81.0	20.0	60		176.8	30,481	28,981	6,926	6,651
CL:	68.1 68.1 %	TIMES OU COE	JT OF 100 THE FF	VOLUME	WILL BE SAMPLI				OF TREES	REQ.	INF. POP.
	1.0	VAR		LC	)W	AVG	HIGH		5	10	15
DOUG		50.			923	982	1,040				
HEML							(47				
ALDRI SNAG	LEAV	104. 22.			348 31	498 34	647 37				
	LEAV		0 8.3	1							
SNAG SPRUC CEDLI	LEAV CELV EAV	22. 133. 125.	0 8.3 2 50.2 1 50.9	1	31 1,024 332	34 2,058 676	37 3,091 1,020				
SNAG SPRUC CEDLI TOTA	LEAV CELV EAV	22. 133. 125. 115.:	0 8.3 2 50.2 1 50.9 5 10.6		31	34 2,058	37 3,091		533	133	59
SNAG SPRUC CEDLI TOTA CL:	CELV EAV AL	22. 133. 125. 115.:	0 8.3 2 50.2 1 50.9 5 10.6		31 ,024 332 <i>734</i> TREES/A	34 2,058 676 820 ACRE	3,091 1,020 907	#	OF PLOTS	REQ.	INF. POP.
SNAG SPRUC CEDLI TOTA CL: SD:	CELV EAV AL 68.1 %	22. 133. 125. 115.: COE VAR	0 8.3 2 50.2 1 50.9 5 10.6 EFF 8.% S.E.%		31 ,,024 332 734 TREES/A	34 2,058 676 820 ACRE AVG	37 3,091 1,020 907 HIGH	#		-	
SNAG SPRUC CEDLI TOTA CL: SD: DOUG	CELV EAV AL 68.1 % 1.0	22. 133. 125. 115.: COE VAR 76.	0 8.3 2 50.2 1 50.9 5 10.6 FF 8.% S.E.% 0 11.0		31 ,024 332 734 TREES/A	34 2,058 676 820 ACRE AVG 30	37 3,091 1,020 907 HIGH 33	#	OF PLOTS	REQ.	INF. POP.
SNAG SPRUC CEDLI TOTA CL: SD:	CELV EAV AL 68.1 % 1.0 GLEAV EAV	22. 133. 125. 115.: COE VAR	0 8.3 2 50.2 1 50.9 5 10.6 EFF 8.% S.E.% 0 11.0 4 22.3		31 ,,024 332 734 TREES/A	34 2,058 676 820 ACRE AVG	37 3,091 1,020 907 HIGH	#	OF PLOTS	REQ.	INF. POP.
SNAG SPRUC CEDLI TOTA CL: SD: DOUG HEML ALDRI SNAG	CELV EAV AL 68.1 % 1.0 ELEAV LEAV	22. 133. 125. 115.: COE VAR 76. 154. 187. 228.	0 8.3 2 50.2 1 50.9 5 10.6 EFF 8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0		31 ,024 332 734 TREES/A	34 2,058 676 820 ACRE AVG 30 12	37 3,091 1,020 907  HIGH 33 15 35 5	#	OF PLOTS	REQ.	INF. POP.
SNAG SPRUC CEDLI TOTA CL: SD: DOUG HEML ALDRI SNAG SPRUC	CELV EAV 68.1 % 1.0 ELEAV EAV LEAV	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290.	0 8.3 2 50.2 1 50.9 5 10.6 EFF 8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9		31 ,024 332 734 TREES/A DW 27 9 20 2 4	34 2,058 676 820 ACRE AVG 30 12 28 4 6	37 3,091 1,020 907  HIGH 33 15 35 5 9	#	OF PLOTS	REQ.	INF. POP.
SNAG SPRUC CEDLI TOTA CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI	CELV EAV 68.1 % 1.0 ELEAV EAV LEAV CELV EAV	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676.	0 8.3 2 50.2 1 50.9 5 10.6 EFF 8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6		31 ,024 332 734 TREES/A DW 27 9 20 2 4 0	34 2,058 676 820 ACRE AVG 30 12 28 4 6 2	37 3,091 1,020 907  HIGH 33 15 35 5 9 4	#	OF PLOTS 5	REQ. 10	INF. POP. 15
SNAG SPRUC CEDLI TOTA CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA	CELV EAV 1.0 ELEAV LEAV LEAV CELV EAV	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.:	0 8.3 2 50.2 1 50.9 5 10.6 EFF 8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5		31 ,024 332 734 TREES/A DW 27 9 20 2 4 0 74	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88		OF PLOTS 5	REQ. 10	INF. POP. 15
SNAG SPRUC CEDLI TOTA CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA CL:	CELV EAV 1.0 ELEAV EAV LEAV CELV EAV LEAV 68.1 %	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.: COE	0 8.3 2 50.2 1 50.9 5 10.6 EFF  8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5	LC	31 ,024 332 734 TREES/A DW 27 9 20 2 4 0 74 BASAL	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88		OF PLOTS 5  138	REQ. 10	INF. POP. 15 15 INF. POP.
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD:	CELV EAV 1.0 ELEAV EAV LEAV CELV EAV 1.0 68.1 %	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.: COE	0 8.3 2 50.2 1 50.9 5 10.6 EFF  8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5 EFF  8.% S.E.%	LC	31 ,024 332 734 TREES/A DW 27 9 20 2 4 0 74 BASAL A	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH		OF PLOTS 5	REQ. 10	INF. POP. 15
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD: DOUG	CELV EAV 1.0 EAV LEAV LEAV CELV EAV 1.0 68.1 % 1.0 68.1 %	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.: COE VAR 64.	0 8.3 2 50.2 1 50.9 5 10.6 EFF 8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5 EFF 8.% S.E.% 9 9.4	LC	31 32 734 TREES/A DW 27 9 20 2 4 0 74 BASAL A DW 93	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A AVG 103	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH 112		OF PLOTS 5  138	REQ. 10	INF. POP. 15 15 INF. POP.
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD:	CELV EAV 1.0 EEAV LEAV CELV EAV 1.0 68.1 % 1.0 68.1 % 1.0 GLEAV	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.: COE	0 8.3 2 50.2 1 50.9 5 10.6 EFF 8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5 EFF 8.% S.E.% 9 9.4 8 21.7	LC	31 ,024 332 734 TREES/A DW 27 9 20 2 4 0 74 BASAL A	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH		OF PLOTS 5  138	REQ. 10	INF. POP. 15 15 INF. POP.
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SNAG SPRUC SD:	CELV EAV 1.0 EEAV LEAV CELV EAV 1.0 68.1 % 1.0 EEAV LEAV LEAV LEAV LEAV	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.: COE VAR 64. 150. 189.	0 8.3 2 50.2 1 50.9 5 10.6 EFF  8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5 EFF  8.% S.E.% 9 9.4 8 21.7 1 27.3 1 26.6	LC	31 32 734  TREES/A  DW 27 9 20 2 4 0 74  BASAL A  DW 93 18 12 12	34 2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A AVG 103 23 17 17	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH 112 27 21 21		OF PLOTS 5  138	REQ. 10	INF. POP. 15 15 INF. POP.
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC SD: SPRUC SD: SPRUC SD: SPRUC SNAG SPRUC	CELV EAV 1.0 EEAV LEAV CELV EAV 1.0 68.1 % 1.0 EEAV LEAV LEAV LEAV CELV EAV LEAV	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.: COE VAR 64. 150. 189. 184. 220.	0 8.3 2 50.2 1 50.9 5 10.6 EFF  8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5 EFF  8.% S.E.% 9 9.4 8 21.7 1 27.3 1 26.6 5 31.8	LC	31 32 734 TREES/A  DW 27 9 20 2 4 0 74 BASAL A  DW 93 18 12 12 9	34 2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A AVG 103 23 17 17 13	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH 112 27 21 21 16		OF PLOTS 5  138	REQ. 10	INF. POP. 15 15 INF. POP.
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI	CELV EAV  1.0 ELEAV  LEAV  CELV EAV  1.0 ELEAV  CELV EAV  LEAV  LEAV  CELV EAV  LEAV	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.: COE VAR 64. 150. 189. 184. 220. 600.	0 8.3 2 50.2 1 50.9 5 10.6 EFF  8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5 EFF  8.% S.E.% 9 9.4 8 21.7 1 27.3 1 26.6 5 31.8 0 86.5	LC	31 32 734 TREES/A  TREES/A  OW 27 9 20 2 4 0 74 BASAL A  OW 93 18 12 12 9 1	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A AVG 103 23 17 17 13 6	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH 112 27 21 21 16 11		OF PLOTS 5  138  FOF PLOTS 5	34 REQ. 10	INF. POP. 15 15 INF. POP. 15
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: TOTA	CELV EAV 1.0 HEAV EAV LEAV 1.0 68.1 % 1.0 68.1 % LEAV LEAV LEAV LEAV LEAV LEAV LEAV LEAV	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.: COE VAR 64. 150. 189. 184. 220. 600. 24	0 8.3  2 50.2 1 50.9 5 10.6  EFF  8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5  EFF  8.% S.E.% 9 9.4 8 21.7 1 27.3 1 26.6 5 31.8 0 86.5 1 3.5	LC	31 32 734  TREES/A  OW 27 9 20 2 4 0 74  BASAL A  OW 93 18 12 12 9 1 171	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A AVG 103 23 17 17 13 6 177	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH 112 27 21 21 16	#	138 FOF PLOTS 5  23	34 REQ. 10	15 15 INF. POP. 15
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: CEDLI TOTA  CL: CEDLI CEDLI CEDLI CEDLI CEDLI CEDLI CEDLI CEDLI CEDLI CEDLI CEDLI CEDLI CEDLI CEDLI	CELV EAV 1.0 68.1 % 1.0 EAV LEAV CELV EAV 1.0 68.1 % 1.0 ELEAV LEAV LEAV LEAV LEAV LEAV LEAV	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.: COE VAR 64. 150. 189. 184. 220. 600. 24 COE	0 8.3  2 50.2 1 50.9 5 10.6  EFF  8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5  EFF  8.% S.E.% 9 9.4 8 21.7 1 27.3 1 26.6 5 31.8 0 86.5 1 3.5	LC	31 32 734 TREES/A  TREES/A  DW 27 9 20 2 4 0 74 BASAL A  DW 93 18 12 12 9 1 171 NET BF/	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A AVG 103 23 17 17 13 6 177	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH 112 27 21 16 11 183	#	138 FOF PLOTS 5  23 FOF PLOTS	34 REO. 10 6	15 15 INF. POP. 15 INF. POP.
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SO: CEDLI TOTA  CL: SD: CEDLI TOTA  CL: SD: CEDLI TOTA	CELV EAV 1.0 68.1 % 1.0 EAV LEAV CELV EAV 1.0 GLEAV LEAV 1.0 GLEAV 1.0 GLEAV LEAV LEAV LEAV LEAV LEAV LEAV LEAV	22.  133. 125. 115.:  COE  VAR  76. 154. 187. 228. 290. 676. 58.:  COE  VAR  64. 150. 189. 184. 220. 600. 24  COE  VAR	0 8.3  2 50.2 1 50.9 5 10.6  EFF  8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5  EFF  8.% S.E.% 9 9.4 8 21.7 1 27.3 1 26.6 5 31.8 0 86.5 1 3.5  EFF  8.% S.E.%		31  32  734  TREES/A  DW  27  9  20  2  4  0  74  BASAL A  DW  93  18  12  12  9  1  171  NET BF/DW	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A AVG 103 23 17 17 13 6 177 (ACRE AVG	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH 112 27 21 16 11 183	#	138 FOF PLOTS 5  23	34 REQ. 10	15 15 INF. POP. 15
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: CEDLI TOTA  CL: CEDLI TOTA  CL: CEDLI TOTA  CL: CEDLI TOTA	CELV EAV 1.0 ELEAV LEAV CELV EAV 1.0 68.1 % 1.0 ELEAV LEAV LEAV LEAV LEAV LEAV LEAV LEA	22. 133. 125. 115.: COE VAR 76. 154. 187. 228. 290. 676. 58.: COE VAR 64. 150. 189. 184. 220. 600. 24 COE VAR 64.	0 8.3  2 50.2 1 50.9 5 10.6  EFF  8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5  EFF  8.% S.E.% 9 9.4 8 21.7 1 27.3 1 26.6 5 31.8 0 86.5 1 3.5  EFF  8.% S.E.% 3 9.3	LC LC 20	31  32  734  TREES/A  DW  27  9  20  2  4  0  74  BASAL A  DW  93  18  12  12  9  1  171  NET BF/DW  0,238  2	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A AVG 103 23 17 17 13 6 177 'ACRE AVG	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH 112 27 21 16 11 183  HIGH 24,378	#	138 FOF PLOTS 5  23 FOF PLOTS	34 REO. 10 6	15 15 INF. POP. 15 3 INF. POP.
SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD: DOUG HEML ALDRI SNAG SPRUC CEDLI TOTA  CL: SD: DOUG DOUG TOTA  CL: SD: DOUG DOUG TOTA	CELV EAV  1.0 ELEAV  CELV EAV  LEAV   22.  133. 125. 115.:  COE  VAR  76. 154. 187. 228. 290. 676. 58.:  COE  VAR  64. 150. 189. 184. 220. 600. 24  COE  VAR	0 8.3  2 50.2 1 50.9 5 10.6  EFF  8.% S.E.% 0 11.0 4 22.3 7 27.1 9 33.0 7 41.9 5 97.6 7 8.5  EFF  8.% S.E.% 9 9.4 8 21.7 1 27.3 1 26.6 5 31.8 0 86.5 1 3.5  EFF  8.% S.E.% 3 9.3 4 20.8	LC LC 20	31  32  734  TREES/A  DW  27  9  20  2  4  0  74  BASAL A  DW  93  18  12  12  9  1  171  NET BF/DW  0,238  2	2,058 676 820 ACRE AVG 30 12 28 4 6 2 81 AREA/A AVG 103 23 17 17 13 6 177 (ACRE AVG	37 3,091 1,020 907  HIGH 33 15 35 5 9 4 88  ACRE HIGH 112 27 21 16 11 183	#	138 FOF PLOTS 5  23 FOF PLOTS	34 REO. 10 6	INF. POP.  15  INF. POP.  15  INF. POP.	

TC TST	ATS					STATI JECT	STICS PROSP			PAGE DATE 2	2 2/9/2008
TWP	RGE	SECT	TRA	СТ	TYP]	E .	ACRES	PLOTS	TREES	CuFt	BdFt
04N	08W	17	A4L	EAVE2	0002	ı	99.90	48	216	1	W
CL:	68.1%	СО	EFF		NET	BF/ACR	E		# OF PLO	TS REQ.	INF. POP.
SD:	1.0	VA	R.	S.E.%	LOW	AVG	HIGH		5	10	15
SPRU	ICELV	251	1.0	36.2	1,138	1,784	2,430				
CEDI	.EAV	590	).4	85.1	102	684	1,267				
TOT	AL	33	.3	4.8	27,588	28,981	30,373		44	11	5

TC TSTA	ATS				ST PROJEC	ATIST	TICS PROSP			PAGE DATE 2	1 :/9/2008
TWP	RGE	SECT	TRACT		TYPE	AC	RES	PLOTS	TREES	CuFt	BdFt
04N	08W	17	A125		0001		142.70	62	415	1	W
		PLOTS	TREES	S.	TREES PER PLOT		ESTIMATED TOTAL TREES	S	ERCENT SAMPLE REES		
TOTA	т	62			6.7		114225				
CRUIS	SE COUNT	32			6.5		20,063		1.0		
COUN BLAN 100 %	IT IKS	30	20	)	6.7			•			
				STA	ND SUMI	MARY	•			·	
		SAMPLE TREES		AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG	} FIR		9 54.9		78		134.4	27,554	26,347	6,175	5,982
R ALE			3 42.5		49		56.9	6,209	5,979	1,779	1,741
	MLOCK		3 23.5		61		51.8	10,033	8,907	2,308	2,113
SNAG			4 5.7		36		33.9	326		71	
CEDL	EAV	1	2 4.6	25.1	47		15.8	1,046	998	450	429
S SPR	UCE		4 5.4	21.9	56		14.1	1,756	1,699	502	492
DOUG	JLEAV		7 2.1	30.5	103		10.5	2,493	2,471	516	516
SPRU	CELV		5 1.5	32.3	72		8.8	1,637	1,505	365	340
немі	LEAV		1	32.0	110		2.6	764	472	143	95
X 11//(V1E									10.000		11,708
CON	FIDENC	TIMES O	OF THE SAM UT OF 100 TH	IPLE	63 E WILL BE	WITHIN	328.8 I THE SAMP	51,817 LE ERROR	48,378	12,309	11,708
CL: SD:	FIDENC: 68.1 68.1 % 1.0	E LIMITS TIMES O	OF THE SAM UT OF 100 TH EFF R.% S.E.S	IPLE IE VOLUMI 6 I	E WILL BE SAMPL LOW	E TREE AVG	I THE SAMP S - BF HIGH	LE ERROR	48,378  FOR TREES 5		INF. POP.
CL: SD:	FIDENC: 68.1 68.1 % 1.0 3 FIR	E LIMITS TIMES OF COLUMN VAI	OF THE SAM UT OF 100 TE EFF R.% S.E.9	IPLE HE VOLUMI 6 I	E WILL BE SAMPL LOW 771	E TREE AVG 837	N THE SAMP S - BF HIGH 902	LE ERROR	OF TREES	REQ.	INF. POP.
CL: SD: DOUG R ALI	FIDENCE 68.1 68.1 % 1.0 G FIR DER MLOCK	E LIMITS TIMES OF COR VA 74 102	OF THE SAM UT OF 100 TE EFF R.% S.E.9	IPLE HE VOLUMI  6 I	E WILL BE SAMPL LOW	E TREE AVG	I THE SAMP S - BF HIGH	LE ERROR	OF TREES	REQ.	INF. POP.
CL: SD: DOUG R ALL WHEM SNAG CEDL	FIDENCE 68.1 68.1 % 1.0 FIR DER MLOCK F	E LIMITS TIMES OF  COL  VAI  74  102  75	OF THE SAM UT OF 100 TE EFF R.% S.E.9 .1 7. .4 14. .4 16.	IPLE HE VOLUMI  6 I  8 1 1	SAMPL .OW 771 174 637	E TREE AVG 837 202 759 363	N THE SAMP S - BF HIGH 902 230 881 441	LE ERROR	OF TREES	REQ.	INF. POP.
CL: SD: DOUG R ALL WHEM	FIDENCE 68.1 68.1 % 1.0 FIR DER MLOCK F	E LIMITS TIMES OF  VAI  74  102  75  72  79	OF THE SAM UT OF 100 TE EFF R.% S.E.9 1.1 7. 1.4 14. 1.4 16. 1.0 21. 1.5 45.	IPLE HE VOLUMI  6 I  8 1 1 1 7	SAMPL SAMPL OW 771 174 637 284 269	AVG 837 202 759 363 493	N THE SAMP S - BF HIGH 902 230 881 441 716	LE ERROR	OF TREES	REQ.	INF. POP.
CL: SD: DOUC R ALL WHEM SNAG CEDL S SPR	FIDENCE 68.1 68.1 % 1.0 FIR DER MLOCK F	E LIMITS TIMES O  COI  VAI  102  75  72  79  47	OF THE SAM UT OF 100 THE EFF R.% S.E.S. 1.4 14. 1.4 16. 1.0 21. 1.5 45. 1.7 19.	IPLE HE VOLUMI  6 I  8 1 1 7 4 4	SAMPL COW 771 174 637 284 269 1,121	E TREE AVG 837 202 759 363 493 1,391	N THE SAMP S - BF HIGH 902 230 881 441 716 1,661	LE ERROR	OF TREES	REQ.	INF. POP.
CL: SD: DOUG R ALD WHEN SNAG CEDL S SPR DOUG	68.1 % 1.0 3 FIR DER MLOCK 3. EAV UCE GLEAV CELV	E LIMITS TIMES O COI VA 74 102 75 72 79 47 89	OF THE SAM UT OF 100 THE EFF R.% S.E.9 .1 7. .4 14. .4 16. .0 21. .5 45. .7 19. .5 44.	IPLE HE VOLUMI  6 I  8 1 1 7 4 4	SAMPL SAMPL OW 771 174 637 284 269	AVG 837 202 759 363 493	N THE SAMP S - BF HIGH 902 230 881 441 716	LE ERROR	OF TREES	REQ.	INF. POP.
CL: SD: DOUC R ALL WHEN SNAG CEDL S SPR DOUC SPRUG HEMI TOTA	FIDENCE 68.1 % 1.0 FIR DER MLOCK FILEAV CUCE GLEAV CELV LEAV	E LIMITS TIMES OF VARIABLE TO	OF THE SAM UT OF 100 THE EFF R.% S.E.9 .1 7. .4 14. .4 16. .0 21. .5 45. .7 19. .5 44.	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5	SAMPL COW 771 174 637 284 269 1,121 1,229 580	E TREE AVG 837 202 759 363 493 1,391 2,214	N THE SAMP S - BF HIGH 902 230 881 441 716 1,661	LE ERROR #	OF TREES 5	REO. 10	INF. POP. 15
CL: SD: DOUG R ALD WHEN SNAG CEDL S SPRU HEMI TOTA	FIDENCE 68.1 % 1.0 FIR DER MLOCK EAV UCE GLEAV CELV LEAV AL 68.1 %	E LIMITS TIMES OF COLUMN COLUM	OF THE SAM UT OF 100 THE EFF R.% S.E.9 .1 7. .4 14. .4 16. .0 21. .5 45. .7 19. .5 44. .5 7.	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7	SAMPL COW 771 174 637 284 269 1,121 1,229 580 TREES	E TREE AVG 837 202 759 363 493 1,391 2,214 629	S - BF HIGH 902 230 881 441 716 1,661 3,199 677	LE ERROR #	OF TREES 5  488 FOR PLOTS	122 3 REQ.	INF. POP. 15 54 INF. POP.
CL: SD: DOUG R ALD WHEN SNAG CEDL S SPRU HEMI TOTA	FIDENCE 68.1 % 1.0 FIR DER MLOCK EAV UCE GLEAV CELV LEAV AL 68.1 % 1.0	E LIMITS TIMES OF COLUMN COLUM	OF THE SAM UT OF 100 THE EFF R.% S.E.9 .1 7. .4 14. .4 16. .0 21. .5 45. .7 19. .5 44. .5 7. EFF R.% S.E.9	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES	E TREE AVG 837 202 759 363 493 1,391 2,214 629 /ACRE AVG	S - BF HIGH 902 230 881 441 716 1,661 3,199 677	LE ERROR #	OF TREES 5	REO. 10	INF. POP. 15 54 INF. POP.
CL: SD: DOUG R ALD WHEN SNAG CEDL S SPRU HEMI TOTA CL: SD: DOUG	FIDENCE 68.1 68.1 1.0 G FIR DER MLOCK GLEAV CUCE GLEAV CELV LEAV AL 68.1 68.1 68.1 68.1	E LIMITS TIMES OF COLUMN COLUM	OF THE SAM UT OF 100 THE EFF R.% S.E.9 1.1 7. 1.4 14. 1.4 16. 1.0 21. 1.5 45. 1.7 19. 1.5 44. 1.5 44. 1.5 7. 1.6 EFF R.% S.E.9	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 6 I	SAMPL OW 771 174 637 284 269 1,121 1,229 580 TREES	E TREE AVG 837 202 759 363 493 1,391 2,214 629 /ACRE AVG 55	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH	LE ERROR #	OF TREES 5  488 FOR PLOTS	122 3 REQ.	INF. POP. 15 54 INF. POP.
CL: SD: DOUG R ALE WHEM SNAG CEDL S SPRU HEMI TOTA CL: SD: DOUG R ALE	FIDENCE 68.1 68.1 1.0 G FIR DER MLOCK CELV LEAV AL 68.1 68.1 68.1 68.1 68.1 68.1	E LIMITS TIMES OF VAI  74 102 75 72 79 47 89 110 CO VAI 129 158	OF THE SAM UT OF 100 THE EFF R.% S.E.5 .1 7. .4 14. .4 16. .0 21. .5 45. .7 19. .5 44. .5 7. EFF R.% S.E.9	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 6 I	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  OW  46  34	E TREE AVG 837 202 759 363 493 1,391 2,214 629 /ACRE AVG 55 43	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51	LE ERROR #	OF TREES 5  488 FOR PLOTS	122 3 REQ.	INF. POP. 15 54 INF. POP.
CL: SD: DOUC R ALL SNAG CEDL S SPR DOUC S SPRU HEMI TOTA CL: SD: DOUC R ALL WHEN	FIDENCE 68.1 68.1 1.0 G FIR DER MLOCK CELV LEAV AL 68.1 68.1 68.1 MLOCK GFIR DER MLOCK	E LIMITS TIMES OF VAI  74 102 75 72 79 47 89 110 CO VAI 129 158 178	OF THE SAM UT OF 100 THE EFF R.% S.E.9 1.1 7. 1.4 14. 1.4 16. 1.0 21. 1.5 45. 1.7 19. 1.5 44. 1.5 45. 1.7 19. 1.5 44. 1.6 20. 1.6 20. 1.6 20. 1.6 20.	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 6 I  6 I  6	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  COW  46  34  18	E TREE AVG 837 202 759 363 493 1,391 2,214 629 /ACRE AVG 55 43 23	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29	LE ERROR #	OF TREES 5  488 FOR PLOTS	122 3 REQ.	INF. POP. 15 54 INF. POP.
CL: SD: DOUC R ALL WHEM SNAG CEDL S SPR DOUC SPRUC HEMI TOTA CL: SD: DOUC R ALL WHEM SNAG	FIDENCE 68.1 68.1 1.0 G FIR DER MILOCK G LEAV LEAV LEAV AL 68.1 68.1 68.1 MILOCK G FIR DER MILOCK G H H H H H H H H H H H H H H H H H H	COLUMN CO	OF THE SAN UT OF 100 TH  EFF  R.% S.E.9 .1 74 144 160 215 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 226 5 21.	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 6 I  6 1	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  COW  46  34  18  4	E TREE AVG 837 202 759 363 493 1,391 2,214 629 /ACRE AVG 55 43 23 6	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7	LE ERROR #	OF TREES 5  488 FOR PLOTS	122 3 REQ.	INF. POP. 15 54 INF. POP.
CL: SD: DOUC R ALL SNAG CEDL SPRU HEMI TOTA CL: SD: DOUC R ALL WHEN SNAG CEDL CL: SD: CL: SD: CL: SD: CL: CL: CL: CL: CL: CL: CL: CL: CL: CL	FIDENCE 68.1 68.1 68.1 1.0 G FIR DER MLOCK GLEAV LEAV AL 68.1 68.1 1.0 G FIR DER MLOCK GRAV LEAV AL 68.1 68.1 LEAV LEAV AL 68.1 LEAV LEAV AL 68.1 LEAV LEAV AL 68.1 LEAV LEAV AL 68.1 LEAV LEAV AL 68.1 LEAV LEAV AL 68.1 LEAV	E LIMITS TIMES OF COLUMN COLUM	OF THE SAM UT OF 100 TH  EFF  R.% S.E.9 .1 74 144 160 215 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 216 206 216 206 217 226 226 23. 47.	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 4 1 6 1	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  COW  46  34  18  4  2	E TREE AVG 837 202 759 363 493 1,391 2,214 629 /ACRE AVG 55 43 23 6 5	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7	LE ERROR #	OF TREES 5  488 FOR PLOTS	122 3 REQ.	INF. POP. 15 54 INF. POP.
CL: SD: DOUC R ALL WHEN SNAG CEDL S SPRU HEMI TOTA CL: SD: DOUC R ALL WHEN SNAG CEDL S SPRU CL: SD:	FIDENCE 68.1 68.1 68.1 1.0 G FIR DER MLOCK GLEAV CELV LEAV AL 68.1 68.1 68.1 MLOCK GFIR DER MLOCK GFIR DER MLOCK GLEAV LEAV AL 68.1 68.1 68.1 68.1 68.1 68.1 68.1 68.1	COI VAI 102 75 72 79 47 89 110 COI VAI 129 158 178 166 375 258	OF THE SAM UT OF 100 TH  EFF  R.% S.E.9 .1 74 144 160 215 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 206 216 206 2	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 6 I 6 1 6 8	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  OW  46  34  18  4  2  4	E TREE AVG 837 202 759 363 493 1,391 2,214 629 ACRE AVG 55 43 23 6 5 5	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7	LE ERROR #	OF TREES 5  488 FOR PLOTS	122 3 REQ.	INF. POP. 15 54 INF. POP.
CL: SD: DOUC R ALL SNAG CEDL S SPR DOUC SPRUC HEMI TOTA CL: SD: DOUC R ALL WHEN SNAG CEDL S SPR DOUC R ALL S SPR DOUC R ALL SNAG CEDL S SPR	FIDENCE 68.1 68.1 68.1 1.0 G FIR DER MLOCK GLEAV CELV LEAV AL 68.1 68.1 68.1 MLOCK GFIR DER MLOCK GRAV LEAV AL 68.1 68.1 CELV LEAV AL 68.1	COI VAI 102 75 72 79 47 89 110 COI VAI 129 158 178 166 375 258 249	OF THE SAM UT OF 100 TH  EFF  R.% S.E.5  .1 74 144 160 215 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 206 216 207 347 327 347 327 34.	IPLE HE VOLUMI  6 I  7 4 4 5 7 6 I 6 1 6 8 6	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  OW  46  34  18  4  2  4  1	E TREE AVG 837 202 759 363 493 1,391 2,214 629 ACRE AVG 55 43 23 6 5 5 2	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7 7 7	LE ERROR #	OF TREES 5  488 FOR PLOTS	122 3 REQ.	INF. POP. 15 54 INF. POP.
CL: SD: DOUC R ALL WHEN SNAG CEDL S SPRU DOUC R ALL WHEN SD: DOUC R ALL WHEN SNAG CEDL S SPRU CL: SD: DOUC R ALL S SPRU CEDL S SPRU CEDL S SPRU CEDL S SPRU CEDL S SPRU CEDL S SPRU	FIDENCE 68.1 68.1 68.1 1.0 69 FIR DER MLOCK 61 EAV EUCE GLEAV LEAV AL 68.1 68.1 68.1 68.1 68.1 68.1 68.1 68.1	E LIMITS TIMES OF COLUMN COLUM	OF THE SAN UT OF 100 TH  EFF  R.% S.E.5 .1 74 144 160 215 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 206 216 206 206 206 206 206 207 318 4 329 3 319 5 38.	IPLE HE VOLUMI  6 I  7 4 4 5 7 4 1 6 1 6 8 6 0	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  OW  46  34  18  4  2  4  1  1	E TREE AVG 837 202 759 363 493 1,391 2,214 629 ACRE AVG 55 43 23 6 5 5 2 2	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7 7 7 7 3 2	LE ERROR #	OF TREES 5  488 FOR PLOTS	122 3 REQ.	INF. POP. 15 54 INF. POP.
CL: SD: DOUC R ALL WHEM SNAG CEDL SPRU HEMI TOTA CL: SD: DOUC R ALL WHEM SNAG CEDL S SPR DOUC SPRU CL: SD: DOUC R ALL SNAG CEDL S SPR	FIDENCE 68.1 68.1 68.1 1.0 69 FIR DER MLOCK 61 EAV CELV LEAV AL 68.1 68.1 68.1 68.1 68.1 68.1 68.1 68.1	COI VAI 102 75 72 79 47 89 110 COI VAI 129 158 178 166 375 258 249	OF THE SAN UT OF 100 TH  EFF  R.% S.E.5 .1 74 144 160 211.5 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 206 216 207 317 327 327 337 347 357 357 367 367 367 37 387 387 387 387 387 387 38.	IPLE HE VOLUMI  6 I  7 4 4 5 7 4 1 6 1 6 8 6 0 7	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  OW  46  34  18  4  2  4  1	E TREE AVG 837 202 759 363 493 1,391 2,214 629 ACRE AVG 55 43 23 6 5 5 2	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7 7 7	LE ERROR #	OF TREES 5  488 FOR PLOTS	122 3 REQ.	INF. POP. 15 15 1NF. POP. 15
CL: SD: DOUC SPRU HEMI TOTA CEDL SPRU HEMI TOTA CL: SD: DOUC R ALL WHEN SNAG CEDL SPRU HEMI TOTA CL: SD: DOUC R ALL WHEN SNAG CEDL S SPR DOUC SPRU HEMI TOTA	FIDENCE 68.1 68.1 68.1 1.0 69 FIR DER MLOCK 61 EAV CELV LEAV AL 68.1 68.1 68.1 68.1 68.1 68.1 68.1 68.1	E LIMITS TIMES O  COI  VAI  74  102  75  47  89  110  COI  VAI  129  158  178  166  375  258  249  299  447  51	OF THE SAN UT OF 100 TH  EFF  R.% S.E.5 .1 74 144 160 211.5 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 206 216 207 317 327 327 337 347 357 357 367 367 367 37 387 387 387 387 387 387 38.	IPLE HE VOLUMI  6 I  7 4 4 5 7 4 1 6 1 6 8 6 0 7	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  COW  46  34  18  4  2  4  1  0  131	E TREE AVG 837 202 759 363 493 1,391 2,214 629 (ACRE AVG 55 43 23 6 5 5 2 2 0	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7 7 7 3 2 1 150	LE ERROR	488 FOF PLOTS	122 3 REQ. 10 27	INF. POP. 15
CL: SD: DOUC R ALL SNAG CEDL SPRU HEMI TOTA CL: SSPR DOUC R ALL SNAG CEDL SPRU HEMI TOTA CL: CEDL CEDL CEDL CEDL CEDL CEDL CEDL CEDL	FIDENCE 68.1 68.1 % 1.0 G FIR DER MLOCK GLEAV CELV LEAV AL 68.1 % 1.0 G FIR DER MLOCK GLEAV LEAV AL 68.1 % LEAV LEAV AL LEAV LEAV LEAV AL LEAV LEAV	E LIMITS TIMES OF COLUMN COLUM	OF THE SAN UT OF 100 TH  EFF  R.% S.E.9 .1 74 144 160 215 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 206 216 207 317 327 337 347 358 468 6.	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 6 1 6 8 6 0 7 6	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  COW  46  34  18  4  2  4  1  0  131	E TREE AVG 837 202 759 363 493 1,391 2,214 629 /ACRE AVG 55 43 23 6 5 5 2 2 0 141	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7 7 7 3 2 1 150	LE ERROR	488 FOF PLOTS 5	122 3 REQ. 10 27	INF. POP. 15  54  INF. POP. 15  INF. POP.
CL: SD: DOUC R ALL WHEM SNAG CEDL SPRU HEMI TOTA CL: SD: CEDL SPRU CL: SD: CEDL CL: CL: CEDL CL: CL: CL: CC: CC: CC: CC: CC: CC: CC	FIDENCE 68.1 68.1 1.0 G FIR DER MLOCK CELV CELV LEAV AL 68.1 68.1 MLOCK GREAV LEAV AL 68.1 68.1 MLOCK GREAV LEAV AL 68.1 MLOCK GREAV LEAV AL 68.1 MLOCK GREAV LEAV AL 68.1 MLOCK GREAV LEAV AL 68.1 MLOCK GREAV LEAV AL 68.1 MLOCK GREAV LEAV AL 68.1 MLOCK GREAV LEAV AL	E LIMITS TIMES OF COLUMN COLUM	OF THE SAM UT OF 100 TH  EFF  R.% S.E.5 .1 74 144 160 215 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 226 216 31 478 4 329 0 319 5 387 568 6. EFF  R.% S.E.*	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 6 1 6 8 6 0 7 6	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  OW  46  34  18  4  2  4  1  0  131  BASAL	E TREE AVG 837 202 759 363 493 1,391 2,214 629 ACRE AVG 55 43 23 6 5 5 2 2 0 141 AREA/A	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7 7 7 3 2 1 150	LE ERROR	488 40F PLOTS 5	122 3 REQ. 10 27 3 REQ.	INF. POP. 15 17 18 18 18 18 18 18 18 18 18 18 18 18 18
CL: SD: DOUC R ALL WHEM SNAG CEDL SPRU HEMI TOTA CL: SD: CEDL SPRU CL: SD: CEDL SPRU CL: SD: CEDL SPRU CL: SD: CEDL SPRU CL: SD: CEDL SPRU CEDL SNAG CEDL SNAG CEDL SNAG CEDL SNAG CEDL SNAG CEDL SNAG CEDL SSPRU CEDL SSPRU CEDL SSPRU CEDL SPRU CEDL	FIDENCE 68.1 68.1 68.1 1.0 G FIR DER MLOCK GLEAV CELV LEAV AL 68.1 68.1 MLOCK GLEAV LEAV LEAV AL 68.1 68.1 MLOCK GLEAV LEAV AL 68.1 MLOCK GLEAV LEAV LEAV AL 68.1 MLOCK GLEAV LEAV LEAV AL 68.1 MLOCK GLEAV AL 68.1 MLOCK GLEAV AL 68.1 MLOCK GLEAV AL	E LIMITS TIMES OF COLUMN COLUM	OF THE SAM UT OF 100 TH  EFF  R.% S.E.5 .1 74 144 160 215 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 226 216 3 478 4 329 0 319 5 387 1 568 6.  EFF  R.% S.E.9 .7 1 568 6.	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 6 1 6 8 6 0 7 6 7 7	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  OW  46  34  18  4  2  4  1  0  131  BASAL  OW	E TREE AVG 837 202 759 363 493 1,391 2,214 629 ACRE AVG 55 43 23 6 5 5 2 2 0 141 AREA/A AVG	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7 7 7 3 2 1 150 ACRE HIGH	LE ERROR	488 40F PLOTS 5	122 3 REQ. 10 27 3 REQ.	INF. POP. 15 17 18 18 18 18 18 18 18 18 18 18 18 18 18
CL: SD: DOUC R ALL WHEN SNAG CEDL SPRU HEMI TOTA CL: SD: DOUC R ALL WHEN SNAG CEDL SPRU CL: SD: DOUC R ALL SNAG CEDL S SPR DOUC R ALL SNAG CEDL S SPR DOUC R ALL S SPR DOUC R ALL S SPR DOUC R ALL S SPR DOUC R ALL S SPR DOUC R ALL	FIDENCE 68.1 68.1 68.1 1.0 G FIR DER MLOCK GLEAV CELV LEAV AL 68.1 68.1 MLOCK GLEAV LEAV LEAV AL 68.1 68.1 MLOCK GLEAV LEAV AL 68.1 MLOCK GLEAV LEAV LEAV AL 68.1 MLOCK GLEAV LEAV LEAV AL 68.1 MLOCK GLEAV AL 68.1 MLOCK GLEAV AL 68.1 MLOCK GLEAV AL	E LIMITS TIMES OF COLUMN COLUM	OF THE SAN UT OF 100 TH  EFF  R.% S.E.5 .1 74 144 160 215 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 216 207 316 207 317 327 337 347 358 4 328 6.  EFF  R.% S.E.9 .9 319 19	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 4 1 6 1 6 8 6 0 7 5	SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  OW  46  34  18  4  2  4  1  0  131  BASAL  OW  116	E TREE AVG 837 202 759 363 493 1,391 2,214 629 ACRE AVG 55 43 23 6 5 5 2 2 0 141 AREA/A AVG 134	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7 7 7 3 2 1 150 ACRE HIGH 153	LE ERROR	488 40F PLOTS 5	122 3 REQ. 10 27 3 REQ.	INF. POP. 15  54  INF. POP. 15  INF. POP.
CL: SD: DOUC R ALL WHEM SNAG CEDL SPRU HEMI TOTA CL: SD: DOUC R ALL WHEM SNAG CEDL SPRU CL: SD: DOUC R ALL SONAG CEDL SON	FIDENCE 68.1 68.1 68.1 1.0 68.1 FIRENCE FIRENCE FIRENCE GLEAV LEAV AL 68.1 68.1 68.1 LO GFIR DER MLOCK GLEAV LEAV AL 68.1 68.1 GFIR DER MLOCK GLEAV LEAV AL 68.1 MLOCK GLEAV LEAV AL 68.1 MLOCK GREAV LEAV AL 68.1 MLOCK MLOCK MLOCK MLOCK MLOCK MLOCK MLOCK MLOCK MLOCK MLOCK MLOCK MLOCK MLOCK	E LIMITS TIMES OF COLUMN COLUM	OF THE SAN UT OF 100 TH  EFF  R.% S.E.5 .1 74 144 160 215 457 195 445 7.  EFF  R.% S.E.9 .1 166 206 206 206 216 207 317 327 327 337 347 327 358 4 328 6.  EFF  R.% S.E.9 .8 6.  EFF  R.% S.E.9 .9 381 568 6.  EFF  R.% S.E.9 .8 139 198 22.	IPLE HE VOLUMI  6 I  8 1 1 7 4 4 5 7 4 1 6 1 6 8 6 0 7 6 7 7 0 1	E WILL BE  SAMPL  OW  771  174  637  284  269  1,121  1,229  580  TREES  OW  46  34  18  4  2  4  1  0  131  BASAL  LOW  116  46	E TREE AVG 837 202 759 363 493 1,391 2,214 629 ACRE AVG 55 43 23 6 5 5 2 2 0 141 AREA/A AVG 134 57	S - BF HIGH 902 230 881 441 716 1,661 3,199 677 HIGH 64 51 29 7 7 7 7 3 2 1 150 ACRE HIGH 153 68	LE ERROR	488 40F PLOTS 5	122 3 REQ. 10 27 3 REQ.	INF. POP. 15 54 INF. POP. 15

TC TST	ATS					STATIS JECT	TICS PROSP			PAGE DATE	2 2/9/2008
TWP	RGE	SECT	TRA	CT	TYP	E A	CRES	PLOTS	TREES	CuFt	BdFt
04N	08W	17	A125	5	0001		142.70	62	415	1	W
CL:	68.1%	CO]	EFF		BASA	AL AREA/	ACRE		# OF PLC	TS REQ.	INF. POP.
SD:	1.0	VAI	R.	S.E.%	LOW	AVG	HIGH		5	10	15
S SPR	UCE	252	.4	32.0	10	14	19				
DOUG	GLEAV	244	.7	31.0	7	11	14				
SPRU	CELV	255	.8	32.5	6	9	12				
HEMI	LEAV	447	.1	56.7	1	3	4				
TOTA	AL	<i>39</i> .	3	5.0	312	329	345		62	15	7
CL:	68.1 %	CO	EFF		NET	BF/ACRE		1	# OF PLOTS	REQ.	INF. POP.
SD:	1.0	VA	R.%	S.E.%	LOW	AVG	HIGH		5	10	15
DOUG	G FIR	105	.0	13.3	22,837	26,347	29,857				
R ALI	DER	149	.1	18.9	4,848	5,979	7,109				
WHE	MLOCK	177	.1	22.5	6,905	8,907	10,908				
SNAG	<del>}</del>										
CEDL	EAV	432	.0	54.8	451	998	1,546				
S SPR	UCE	256	.7	32.6	1,146	1,699	2,252				
DOUG	GLEAV	240	.7	30.5	1,716	2,471	3,226				
SPRU	CELV	260	.2	33.0	1,008	1,505	2,002				
HEMI	LEAV	447	.1	56.7	204	472	739				
TOTA	AL	51.	9	6.6	45,191	48,378	51,565		108	27	12

TC TSTATS					ST. PROJEC	ATIST	TICS PROSP			PAGE DATE 2	1 /9/2008
ΓWP RGE	SECT	TR	ACT		TYPE	AC	RES	PLOTS	TREES	CuFt	BdFt
04N 08W	17	A4	ı.		0002		99.90	48	370	11	W
	PLOTS	٠	TREES		TREES PER PLOT		ESTIMATED TOTAL TREES	S.	ERCENT AMPLE REES		
TOTAL	4		370		7.7		TREES		ICLES		
CRUISE	2		207		7.7		15,675		1.3		
DBH COUNT	_	•	207		,		15,075		1.5		
REFOREST											
COUNT	2	0	145		7.3						
BLANKS											
100 %											
				STA	ND SUMN	<b>IARY</b>					
	SAMPL	E	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREE	S	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUGLEAV		70	29.9	25.0	96	<del></del>	101.7	23,265	22,636	5,068	4,979
DOUG FIR		49	40.4	17.5	75		67.5	11,930	11,578	2,938	2,897
R ALDER		29	27.5	15.3	46		35.0	3,501	3,265	1,006	962
HEMLEAV		13	12.0	18.6	61		22.5	3,442	3,283	852	833
ALDRLEAV SNAG		8 13	29.5 3.6	11.0 29.9	26 54		19.6 17.5	1,070 298	1,053	355	352
SPRUCELV		8	3.6 6.5	29.9 19.4	34 32		17.5	1,959	1,903	472	466
WHEMLOCK		9	5.3	20.7	77		12.5	2,542	2,463	586	574
CEDLEAV		7	1.8	24.2	70		5.8	732	714	215	215
S SPRUCE		1	.4	36.0	83		2.5	428	428	109	109
TOTAL	2	07	156.9	18.7	61		297.9	49,167	47,322	11,677	11,386
CONFIDEN 68.1					E WILL BE	WITHIN	THE SAMP	LE ERROR			
CL: 68.1 % SD: 1.0	TIMES C	OUT C DEFF AR.%	OF 100 THE S.E.%	VOLUME	SAMPL!	E TREE AVG	S - BF HIGH		OF TREES	REQ. 10	INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV	TIMES C	OUT C DEFF AR.% 8.8	S.E.% 5.8	VOLUME	SAMPLE OW 934	E TREE AVG 992	S - BF HIGH 1,050				
CL: 68.1 % SD: 1.0  DOUGLEAV DOUG FIR	TIMES C	OUT C DEFF AR.% 8.8 1.3	S.E.% 5.8 11.6	VOLUME	SAMPL LOW 934 394	E TREE AVG 992 446	S - BF HIGH 1,050 498				
CL: 68.1 % SD: 1.0  DOUGLEAV DOUG FIR R ALDER	CC VA 4 8 6	DEFF AR.% 8.8 1.3 9.0	S.E.% 5.8 11.6 13.0	VOLUME	SAMPL OW 934 394 126	E TREE AVG 992 446 145	S - BF HIGH 1,050 498 164				
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV	TIMES COVA	DEFF AR.% 8.8 1.3 9.0 4.3	S.E.% 5.8 11.6 13.0 30.1	VOLUME	SAMPL LOW 934 394	E TREE AVG 992 446 145 498	S - BF HIGH 1,050 498 164 647				
CL: 68.1 % SD: 1.0  DOUGLEAV DOUG FIR R ALDER	TIMES COVA	DEFF AR.% 8.8 1.3 9.0	S.E.% 5.8 11.6 13.0	VOLUME	SAMPL OW 934 394 126 348	E TREE AVG 992 446 145	S - BF HIGH 1,050 498 164				
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV	VA 4 8 6 10 5	DEFF AR.% 8.8 1.3 9.0 4.3	S.E.% 5.8 11.6 13.0 30.1	VOLUME	SAMPL OW 934 394 126 348	E TREE AVG 992 446 145 498	S - BF HIGH 1,050 498 164 647				
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK	TIMES C  VA  4  8  6  10  5	DEFF AR.% 8.8 1.3 9.0 4.3 3.5	S.E.% 5.8 11.6 13.0 30.1 20.2 50.2 17.9	VOLUME	SAMPLE .OW 934 394 126 348 32 1,024 504	E TREE AVG 992 446 145 498 40 2,058 613	S - BF HIGH 1,050 498 164 647 48 3,091 723				
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV	TIMES C  VA  4  8  6  10  5	DEFF AR.% 8.8 1.3 9.0 4.3 3.5	S.E.% 5.8 11.6 13.0 30.1 20.2	VOLUME	SAMPL: .OW 934 394 126 348 32 1,024	E TREE AVG 992 446 145 498 40 2,058	S - BF HIGH 1,050 498 164 647 48 3,091				
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE	TIMES C VA 4 8 6 10 5 13 5 14	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8	S.E.% 5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1	VOLUME	SAMPLE .OW 934 394 126 348 32 1,024 504 325	E TREE AVG 992 446 145 498 40 2,058 613 776	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226		5	10	1:
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL	TIMES C  VA  4  8  6  10  5  13  5  14	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8	S.E.% 5.8 11.6 13.0 30.1 20.2 50.2 17.9	VOLUME	SAMPLE 934 394 126 348 32 1,024 504 325 577	E TREE AVG 992 446 145 498 40 2,058 613 776	S - BF HIGH 1,050 498 164 647 48 3,091 723	#	5 627	10 157	1 <u>:</u> 70
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE	TIMES C  VA  4  8  6  10  5  13  5  14	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8	S.E.% 5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1	L	SAMPLE .OW 934 394 126 348 32 1,024 504 325	E TREE AVG 992 446 145 498 40 2,058 613 776	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226	#	5	10 157	1: 70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL CL: 68.1 %	TIMES C  VA  4  8  6  10  5  13  5  14  125  CC  VA  7	DUT C DEFF AR % 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8 DEFF 6.7	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1	L	SAMPLE .OW 934 394 126 348 32 1,024 504 325 577 TREES/ .OW	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33	#	5 627 OF PLOTS	10 157 REQ.	1: 70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR	TIMES C  VA  4  8  6  10  5  13  5  14  12:  CC  VA  7  13	DUT C DEFF AR % 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8 5.3 DEFF AR % 6.7 9.2	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1	L	SAMPLE .OW 934 394 126 348 32 1,024 504 325 577 TREES/ .OW 27 32	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49	#	5 627 OF PLOTS	10 157 REQ.	1: 70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER	TIMES C  VA  4  8  6  10  5  13  5  14  123  CC  VA  7  13  12	DUT C DEFF AR % 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8 5.3 DEFF AR % 6.7 9.2 5.2	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1	L	SAMPLE .OW 934 394 126 348 32 1,024 504 325 577 TREES/OW 27 32 23	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33	#	5 627 OF PLOTS	10 157 REQ.	1: 70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRIEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV	TIMES C  VA  4  8  6  10  5  13  5  14  123  CC  VA  7  13  12  15	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8 5.3 DEFF AR.% 6.7 9.2 5.2 4.4	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3	L	SAMPLE .OW 934 394 126 348 32 1,024 504 325 577 TREES/OW 27 32 23 9	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15	#	5 627 OF PLOTS	10 157 REQ.	1: 70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV	TIMES C  VA  4  8  6  10  5  13  5  14  123  CC  VA  7  13  12  15  19	DUT C DEFF AR % 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8 5.3 DEFF AR % 6.7 9.2 5.2 4.4	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3	L	SAMPLE .OW 934 394 126 348 32 1,024 504 325 577 TREES/. .OW 27 32 23 9 21	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38	#	5 627 OF PLOTS	10 157 REQ.	1: 70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG	TIMES C  VA  4  8  6  10  5  13  5  14  123  CC  VA  7  13  12  15  19  22	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8 5.3 DEFF AR.% 6.7 9.2 5.2 4.4 6.2 3.2	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3 32.2	L	SAMPLE .OW 934 394 126 348 32 1,024 504 325 577 TREES/OW 27 32 23 9	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29 4	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38 5	#	5 627 OF PLOTS	10 157 REQ.	1: 70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV	TIMES C  VA  4  8  6  10  5  13  5  14  123  CC  VA  7  13  12  15  19  22  27	DUT C DEFF AR % 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8 5.3 DEFF AR % 6.7 9.2 5.2 4.4	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3	L	SAMPLE .OW 934 394 126 348 32 1,024 504 325 577 TREES/.OW 27 32 23 9 21 2	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38	#	5 627 OF PLOTS	10 157 REQ.	1: 70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV	TIMES C  VA  4  8  6  10  5  13  5  14  123  CC  VA  7  13  12  15  19  22  27  24	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8 5.3 DEFF AR.% 6.7 9.2 5.2 4.4 6.2 3.2 3.8	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3 32.2 39.5	L	SAMPLE OW 934 394 126 348 32 1,024 504 325 577 TREES/ .OW 27 32 23 9 21 2 4	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29 4 6	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38 5 9	#	5 627 OF PLOTS	10 157 REQ.	1: 70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK WHEMLOCK WHEMLOCK CEDLEAV	TIMES C  VA  4  8  6  10  5  13  5  14  123  CC  VA  7  13  12  15  19  22  27  24  67  39	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 5.3 DEFF 6.7 9.2 5.2 4.4 6.2 3.2 6.2 6.5 11.4	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3 32.2 39.5 35.5	L	SAMPLE OW 934 394 126 348 32 1,024 504 325 577 TREES/ OW 27 32 23 9 21 2 4 3	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29 4 6 5	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38 5 9 7	#	5 627 OF PLOTS 5	10 157 REQ.	1: 70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV	TIMES C  VA  4  8  6  10  5  13  5  14  123  CC  VA  7  13  12  15  19  22  27  24  67  39	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 5.3 DEFF AR.% 6.7 9.2 5.2 4.4 6.2 3.2 3.8 6.2 6.5	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3 32.2 39.5 35.5 97.6	L	SAMPLE OW 934 394 126 348 32 1,024 504 325 577 TREES/ OW 27 32 23 9 21 2 4 3 0	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29 4 6 5 2	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38 5 9 7 4	#	5 627 OF PLOTS	10 157 REQ.	70 INF. POP.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 %	TIMES C  VA  48  66 100 5  13 5 14  123  CC  VA  7  13 12 15 19 22 27 24 67 39 48 CC	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8 5.3 DEFF AR.% 6.7 9.2 5.2 4.4 6.2 3.3.2 3.8 6.2 16.5 11.4 8.7 DEFF	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3 32.2 39.5 35.5 97.6 56.4 7.0	L	SAMPLE OW 934 394 126 348 32 1,024 504 325 577 TREES/ OW 27 32 23 9 21 2 4 3 0 0 146 BASAL	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29 4 6 5 2 0 157 AREA/A	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38 5 9 7 4 1 168	#	5 627 OF PLOTS 5	157 REQ. 10	1: 70 INF. POP. 1.
CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0 DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0	TIMES C  VA  48  66 100 5  133 5 14  122  CC  VA  7  13 12 15 19 22 27 24 67 39 48 CC  VA	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 5.3 DEFF AR.% 6.7 9.2 5.2 4.4 6.2 3.2 3.8 6.2 16.5 11.4 8.7 DEFF	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3 32.2 39.5 35.5 97.6 56.4 7.0  S.E.%	L	SAMPLE OW 934 394 126 348 32 1,024 504 325 577 TREES/ .OW 27 32 23 9 21 2 4 3 0 0 146 BASAL .OW	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29 4 6 5 2 0 157 AREA/A AVG	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38 5 9 7 4 1 168 ACRE HIGH	#	5 627 OF PLOTS 5	157 REQ. 10	70 INF. POP. 1. INF. POP.
CL: 68.1 % SD: 1.0  DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRIEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0  DOUGLEAV ALDRIEAV SNAG SPRUCELV WHEMLEAV ALDRIEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0  DOUGLEAV	TIMES C  VA  4  8  6  10  5  13  5  14  123  CC  VA  7  13  12  15  19  22  27  24  67  39  46  CC  VA  66	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 5.3 DEFF AR.% 6.7 9.2 5.2 4.4 6.2 3.2 3.8 6.2 16.5 11.4 8.7 DEFF	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3 32.2 39.5 35.5 97.6 56.4 7.0 S.E.% 9.4	L	SAMPLE OW 934 394 126 348 32 1,024 504 325 577 TREES/ .OW 27 32 23 9 21 2 4 3 0 0 146 BASAL .OW 92	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29 4 6 5 2 0 157 AREA/A AVG 102	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38 5 9 7 4 1 168 ACRE HIGH	#	5 627 OF PLOTS 5	10  157  REQ. 10	70 INF. POP. 1. INF. POP.
CL: 68.1 % SD: 1.0  DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRIEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0  DOUGLEAV ALDRIEAV SNAG SPRUCELV WHEMLEAV ALDER HEMLEAV ALDER HEMLEAV ALDRIEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0  DOUGLEAV DOUG FIR	TIMES C  VA  4  8  6  10  5  13  5  14  12:  CC  VA  7  13  12  15  19  22  27  24  67  39  46  CC  VA  6  12	DUT C DEFF AR % 8.8 1.3 9.0 4.3 3.5 3.2 0.7 2.8 6.7 9.2 5.2 4.4 6.2 3.2 3.8 6.2 3.2 6.5 1.4 8.8,7 DEFF AR % 5.4 4.4,2	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3 32.2 39.5 35.5 97.6 56.4 7.0  S.E.% 9.4 17.9	L	SAMPLE OW 934 394 126 348 32 1,024 504 325 577 TREES/ .OW 27 32 23 9 21 2 4 3 0 0 146 BASAL .OW 92 55	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29 4 6 5 2 0 157 AREA/A AVG 102 68	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38 5 9 7 4 1 168 ACRE HIGH 111 80	#	5 627 OF PLOTS 5	10  157  REQ. 10	70 INF. POP. 1: INF. POP.
CL: 68.1 % SD: 1.0  DOUGLEAV DOUG FIR R ALDER HEMLEAV ALDRIEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0  DOUGLEAV ALDRIEAV SNAG SPRUCELV WHEMLEAV ALDRIEAV SNAG SPRUCELV WHEMLOCK CEDLEAV S SPRUCE TOTAL  CL: 68.1 % SD: 1.0  DOUGLEAV	TIMES C  VA  4  8  6  10  5  13  5  14  12:  CC  V/  7  13  12  15  19  22  27  24  67  39  46  CC  V/  6  12  11	DUT C DEFF AR.% 8.8 1.3 9.0 4.3 3.5 5.3 DEFF AR.% 6.7 9.2 5.2 4.4 6.2 3.2 3.8 6.2 16.5 11.4 8.7 DEFF	S.E.%  5.8 11.6 13.0 30.1 20.2 50.2 17.9 58.1 8.7  S.E.% 11.1 20.1 18.1 22.3 28.3 32.2 39.5 35.5 97.6 56.4 7.0 S.E.% 9.4	L	SAMPLE OW 934 394 126 348 32 1,024 504 325 577 TREES/ .OW 27 32 23 9 21 2 4 3 0 0 146 BASAL .OW 92	E TREE AVG 992 446 145 498 40 2,058 613 776 632 ACRE AVG 30 40 28 12 29 4 6 5 2 0 157 AREA/A AVG 102	S - BF HIGH 1,050 498 164 647 48 3,091 723 1,226 687 HIGH 33 49 33 15 38 5 9 7 4 1 168 ACRE HIGH	#	5 627 OF PLOTS 5	10  157  REQ. 10	

TC TSTA	ATS			S PROJ	TATIS ECT	TICS PROSP			PAGE DATE	2 2/9/2008
TWP	RGE	SECT TRA	CT	TYPE	<b>A</b> (	CRES	PLOTS	TREES	CuFt	BdFt
04N	08W	17 A4		0002		99.90	48	370	1	W
CL:	68.1%	COEFF		BASA	L AREA/	ACRE		# OF PLO	TS REQ.	INF. POP
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH		5	10	15
ALDR	LEAV	193.2	27.9	14	20	25	•			
SNAG		175.8	25.4	13	18	22				
SPRUC	CELV	208.3	30.0	9	13	17				
WHEN	<b>MLOCK</b>	230.2	33.2	8	13	17				
CEDLE	EAV	600.0	86.5	1	6	11				
S SPRI	UCE	391.4	56.4	1	3	4				
TOTA	L	30.3	4.4	285	298	311		37	9	4
CL:	68.1 %	COEFF		NET I	BF/ACRE			# OF PLOTS	REQ.	INF. POP.
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15
DOUG	EEAV	65.0	9.4	20,515	22,636	24,756				
DOUG	FIR	126.4	18.2	9,467	11,578	13,688				
R ALD	DER	120.8	17.4	2,696	3,265	3,834				-
HEML	EAV	144.4	20.8	2,600	3,283	3,967				
ALDR	LEAV	189.3	27.3	765	1,053	1,340				
SNAG										
SPRUG	CELV	236.8	34.1	1,253	1,903	2,553				
WHEN	<i>I</i> LOCK	238.3	34.4	1,616	2,463	3,309				
CEDLI	EAV	571.3	82.4	126	714	1,302				
S SPR	UCE	391.4	56.4	186	428	670				
TOTA	IL.	44.9	6.5	44,260	47,322	50,384		80	20	9

Stand Table Summary TC TSTNDSUM **PROSP** Project T04N R08W S17 T0002 T04N R08W S17 T0002 Page: 1 Rge Sec Tract Type Acres **Plots** Sample Trees Twp Date: 02/09/200 0002 99.90 04N 08W17 **A4LEAVE2** 48 119 Time: 3:49:22PM Αv Net Net Average Log Totals S Sample FF Ht Trees/ BA/ Net Tons/ Cu.Ft. Bd.Ft. Logs Net T DBH Trees Cu.Ft. Bd.Ft. Acre Acre **MBF** 16' Tot Acre Acre Tons Cunits Spc Acre Acre DL 10 1 83 68 2.647 1.44 2.65 14.0 50.0 37 132 37 13 DL 17 2 90 115 1.832 2.89 3.66 36.0 137.5 132 504 132 50 DL 18 1 90 118 .817 1.44 2.45 27.0 103.3 66 253 66 25 19 3 91 2.200 4.33 6.60 30.6 122.2 202 807 201 81 DL 116 133 DL 20 2 85 119 1.323 2.89 3.97 33.5 130.0 516 133 52 21 133 .600 1.44 1.80 40.3 156.7 73 282 73 28 DL1 85 22 126 2.188 5.77 6.02 45.9 195.5 276 1,176 276 117 4 89 DL 23 3 130 1.501 4.33 3.00 61.3 270.0 184 DL 89 184 811 81 DL 24 6 88 128 2.757 8.66 8.27 51.3 220.6 425 1,824 424 182 25 .424 1.44 50.0 220.0 280 63 DL 1 86 115 1.27 64 28 DL 26 6 86 138 2.349 8.66 7.05 64.5 278.3 455 1,962 454 196 140 2.905 11.55 69.3 312.5 2,269 503 227 27 8 86 7.26 503 DL 28 134 1.013 71.9 323.3 218 982 98 3 4,33 3.04 218 DL 86 131 .629 75.3 368.3 DL 29 2 90 2.89 1.89 142 696 142 69 DL 30 5 88 129 1.471 7.22 3.53 90.4 437.5 319 1,544 319 154 DL 31 3 88 140 .826 4.33 2.48 88.6 432.2 220 1,071 219 107 DL. 32 3 90 138 .775 4.33 2.33 97.2 491.1 226 1,143 226 114 33 147 1.458 102.2 502.6 472 2,321 472 232 DL 6 86 8.66 4.62 92.5 468.3 127 127 DL 34 2 88 120 .458 2.89 1.37 643 64 2 102.0 505.0 132 132 DL35 88 125 .432 2.89 1.30 655 65 36 4 86 138 .817 5.77 2.86 91.9 484.3 263 1,385 262 138 DL .58 129.0 656.7 75 75 DL37 1 85 136 .193 1.44 381 38 39 1 112 .174 1.44 .52 124.0 653.3 65 341 65 34 DL 89 143.0 71 331 71 40 148 1.44 .50 666.7 33 DL 1 88 .165 DL Totals 71 87 124 29.955 102.50 79.01 61.7 282.4 4,879 22,308 4,874 2,229 2.204 2.20 24.0 70.0 53 53 HL12 1 85 66 1.73 154 15 HL14 1 90 91 1.619 1.73 3.24 20.0 75.0 65 243 65 24 HL 15 1 89 99 1.410 1.73 2.82 25.0 100.0 71 282 70 28 1.240 25.5 90.0 63 223 63 22 HL16 1 82 85 1.73 2.48 18 3 86 56 2.938 5.19 3.92 33.5 100.0 131 392 131 39 HL22 43.3 85 328 HL88 111 .656 1.73 1.97 166.7 85 33 1 23 53 192 1 85 .600 1.73 1.20 44.5 160.0 53 19 HL64 28 1 88 111 .405 1.73 1.21 68.7 330.0 83 401 83 40 HI. 30 1 84 97 .353 1.73 .71 95.0 395.0 67 279 67 28 HL.93 108 549 107 HL32 1 90 146 .310 1.73 115.7 590.0 55 38 1 104 .220 1.73 .44 122.5 550.0 54 242 54 24 HL81 Totals 11.953 22.50 39.5 155.5 833 3,283 832 328 HL 13 86 80 21.11 1 20 3.537 1.56 3.54 6.0 20.0 21 71 21 7 SL 9 69 20 1.56 143 SL 1 88 66 .716 .72 64.0 200.0 46 46 14 21 31.0 SL 1 87 50 .650 1.56 1.30 120.0 40 156 40 16 24 86 28 .497 1.56 .50 45.0 90.0 22 45 22 4 SL 1 84 73.0 210.0 62 178 62 SL 26 1 84 .424 1.56 .85 18 48 84 129 .124 1.56 .37 230.7 1186.7 86 443 86 44 SL 1 2350.0 440.3 87 87 66 85 134 .066 1.56 .20 464 46 SL 1 72 285 72 29 SL 70 121 .058 1.56 .18 410.0 1626.7 1 70 SL Totals 8 76 38 6.072 12.50 7.64 57.1 233.5 436 1,784 436 178 139 501 139 ΑL 10 4 86 33 15.406 8.40 15.41 9.0 32.5 50 AL11 3 86 43 9.549 6.30 9.55 12.0 30.0 115 286 114 29 87 16.0 50.0 43 AL 12 1 47 2.675 2.10 2.67 43 134 13

TC TS	STNDSUN	И					Stand	l Table	Summa	ıry					
							Proje	ect	PROSP					-	
T04N Twp 04N	R08W Rge 08W		Trace	t EAV	E2		Sype 1002		cres 9.90	Plots 48	Sample T		T04N R Page: Date: Time:	08W S17 ' 2 02/09/20 3:49:22	)(
Spc T		Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Net	ge Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	T e	otals Cunits	MBF
AL	Totals	8	86	38	27.629	16.81	27.63	10.7	33.3		296	921	***************************************	296	92
CL CL CL	18 20 24	1 1 1	81 81 82	95 88 96	.472 .382 .265	.83 .83 .83	.94 .76 .53	29.0 36.5 58.0	95.0 120.0 135.0		27 28 31	90 92 72		27 28 31	9 9 7
CL CL CL	26 27 60	2 1	81 81 80	109 101	.452 .210 .042	1.67 .83 .83	.90 .42 .04	73.2 68.5 600.0	245.0 240.0 2570.0		66 29 25	221 101 109		66 29 25	22 10 11
CL	Totals	7	81		1.823	5.83	3.60	57.3	189.8		206	684		206	68
SN SN SN SN SN SN SN SN	14 16 37 38 40 45 48 60 70	1 1 1 1 2 2 1 2	78 88 85 89 82 88 79 85 70	70 26 30 32 52 26 33 37	1.299 .995 .186 .176 .318 .252 .111 .141	1.39 1.39 1.39 2.78 2.78 1.39 2.78 1.39									
SN Totals	Totals	12 119	83 86		3.530 80.963		139.00	47.8.	208.5		6651	28,981		6,644	2,895

TC PLOGSTVB		Log Stock Ta	able - MBF	·	
T04N R08W S17 Ty0002 T04N R08W S17 Ty0002 T04N R08W S17 Ty0001	4.90 99.90 142.70	Project: Acres	PROSP 247.50	Page Date Time	1 2/9/2008 3:36:56PM

s	So G	r Log	Gross	Def	Net	%			Net Vol	ume by	Scaling	Dian	eter in I	nches			
Ѕрр Т			MBF	%	MBF	Spc	2-3	4-5	6-7	8-9	10-11 1			-	20-23	24-29	30-39 40+
D	DO	CU 4	0	100.0													
D	DO	CU 6	58	100.0													
D	DO	CU 8	17	100.0													·
D	DO	CU 10	25	100.0													
D	DO	CU 12	15	100.0													
D	DO	CU 21	6	100.0													
D	DO	CU 35	25	100.0													
D	DO	CU 36	26	100.0		-											
D	DO	2S 16	19		19	.4									18	1	
D	DO	2S 18	2		2	.0						2					
D	DO	2S 20	10		10	.2						3	8				
D	DO	2S 22	19		19	.4						0			19		
D	DO	2S 24	19		19	.4						3	0	13	1	2	
D	DO	2S 25	4		4	.1						4					
D	DO	2S 32	804	1.7	790	15.4					14	219	110	216	108	122	1
D	DO	2S 40	2,708		2,697	52.7					20	382	475	745	743	332	
D	DO	3S 12	0		0	.0		•		0							
D	DO	3S 15	0		0	.0						0					
D	DO	3S 16	20		20	.4			0	8	12						
D	DO	3S 18	3		3	.1			0		0	2					
D	DO	3S 20	6		6	.1			3		3						
D	DO	3S 22	2 7		7	.1				2	5	0					
D	DO	3S 24	44		44	.9			3	23	18	•					
D	DO	3S 25	3		3	.1				3							
D	DO	3S 26	7		7	.1			0	3	0	4					
D	DO	3S 27	3		3	.1			3	0							
D	DO	3S 28	18		18	.4			7	8	3						
D	DO	3S 29	0		0	.0				0							
D	DO	3S 30	25		25	.5			5	7	14						
D	DO	3S 31	. 0		0	.0						0					
D	DO	3S 32	433	2.2	423	8.3			92	198	104	1		29			
D	DO	3S 34	<u>ا</u> 4		4	.1					4						
D	DO	3S 35	5 5		5	.1			5								
D	DO	3S 36	25		25	.5				11	0	13					
D	DO	3S 38	33		33	.6			8		25						
D	DO	38 39	5		5	.1						5					
D	DO		1		546	l			63	185	256	19	24				I

TC PLOGSTVB		Log Stock Table - MBF	
T04N R08W S17 Ty0002 T04N R08W S17 Ty0002 T04N R08W S17 Ty0001	4.90 99.90 142.70	Project: PROSP Acres 247.50	Page 2 Date 2/9/2008 Time 3:36:56PM

s			Def Net	%							<u>eter in I</u>		r .		·	
Spp T	rt de Len	MBF	% MBF	Spc	2-3 4	l-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23 2	4-29	30-39	40+
D	DO 4S 13	0	0	.0				0								
D	DO 4S 14	j	18	.4			17	1								
D	DO 4S 15	1	1	l .				1								
D	DO 4S 16	53	53	1.0			47	. 6								
D	DO 4S 17	0	0	.0				0								
D	DO 4S 18	15	15	.3			11	4								
D	DO 4S 20	17	17	.3			10	6								
D	DO 4S 22	17	17	.3			15	2								
D	DO 4S 24	23	23	.5			15	8								
D	DO 4S 26	6	6	.1			6									
D	DO 4S 28	12	12	.2			12									
D	DO 4S 30	9	9	.2			9									
D	DO 4S 32	1	1	.0			1									
D	DO 4S 36	11	11	.2			11									
D	DO SM 24	28	8.0 26	.5										26		
D	DO SM 32	133	1.6 131	2.6									99	31		
D	DO SM 40	37	37	.7									37			
D	Totals	5,330	4.0 5,116	62.5			344	476	479	658	616	1003	1025	515	1	
Н	DO CU 6	8	100.0													
Н	DO CU 8	18	100.0													
Н	DO CU 10	16	100.0										[			
H	DO CU 12	19	100.0													
Н	DO CU 16	26	100.0													
H	DO CU 20	33	100.0	1												
Н	DO CU 30	47	100.0													
Н	DO 2S 20	7	7	.5							7					
Н	DO 2S 32	93	92	6.0					1	69	1	21	1			
H	DO 2S 40	1,086	1,083	70.1						168	142	388	286	99		
H	DO 3S 17	4	4	.2						4						
Н	DO 3S 18	l .	7	.5	ŀ			3	5							
Н	DO 3S 20	1	6	1	1		2		5							
Н	DO 3S 24		2	1	1			2								
Н	DO 3S 28		30					16		14						
Н	DO 38 30		25	1.6			7	18	1							
Н	DO 3S 32		33	2.2			9	0	24							
Н	DO 3S 34		7		1				7							

TC PLC	OGSTVB					Log	Stock	Table	- MB	F								
T04N F	R08W S17 R08W S17 R08W S17	Ty000	)2 99	.90 .90 .70	,	Proj Acre		PRO	OSP 247	.50	3 * VV <b>P</b> + ++++				Page Date Time	2/9	3 )/2008 36:56P	'M
S		Log		Def	Net	%					Scaling						1	
Spp T	-	Len	MBF	%	MBF	Spc	2-3	4-5	6-7	8-9	10-11 1	2-13	14-15	16-19	20-23	24-29	30-39	40+
H	DO 3S DO 3S				13 9	.8 .6			12		9							
н	DO 3S				169	10.9			27	17	25	11		35		55		
									<u> </u>									
H	DO 4S		16		16	1.0			1	15								
H	DO 4S				5	.3			3	2								
H	DO 4S				9	.6			5	4								
H H	DO 4S DO 4S				18	1.2			15	3								
н	DO 4S DO 4S	20 21	3 2		3 2	.2 .1				3 2								
H	DO 4S		0		0	.0			0	2								
Н	DO 4S				o	.0			0									
H	DO 4S	31	4		4	.3			4									
н	DO 4S	40	1		1	.0			1									
H	Total	s	1,715	9.9	1,546	18.9			86	84	76	265	149	444	287	154		
S	DO CL			100.0	-,* . *	-0.5							117		207	134		
s	DO CL		·	100.0														
s	DO 2S	40	152		152	51.4							88	58		1	2	2
s	DO 3S	16	0		0	.0								0	<u> </u>			
s	DO 3S	22	0		0	.0								0				
s	DO 3S	26	0		0	.1									0			
s.	DO 3S	28	0		0	.0				0								
s	DO 3S	32	83		83	27.9			19	7					57			
s	DO 3S	40	44		44	14.9						7				37		
s	DO 4S	16	0		0	.1		0							***************************************			
s	DO 4S	20	1		1	.2								1				
s	DO 4S	22	0		0	.0			0									
S	DO 4S	24	15		15	4.9			14		0							
s	DO 4S	40	1		1	.3						1						
s	Total	s	304	2.8	296	3.6		0	33	7	0	8	88	59	57	38	2	2
A	DO CU	J 3	6	100.0		****												
A	DO CL	J 5	0	100.0														
A	DO CU	J 6	7	100.0														
A	DO CU		8	100.0														
A	DO CU			100.0														
Α .	DO CU	16	23	100.0														
					<u> </u>													

TC I	PLO	GSTVB						Log	Stock	Table	- MB	F								
T04	N R	.08W S1 .08W S1 .08W S1	7 T	y000	2 99	.90 .90 .70		Proj Acre		PRO	OSP 247	.50					Page Date Time	2/9	4 /2008 36:56Pl	м
Spp	S T	So Gr rt de		Log Len	Gross MBF	Def %	Net MBF	% Spc	2-3	<u>I</u> 4-5	iet Volu 6-7	ıme by 8-9	Scaling 10-11		eter in	Inches 16-19	20-23	24-29	30-39 4	40+
A		DO C	R	8	6		6	.5						6						
A		DO C	R	10	20		20				3					8			10	
Α		DO C	R	12	2		2	.2					2							
A		DO C	R	16	56	2.8	55	4.5			31	3		2	19					
A		DO C	R	20	74		74	6.0			43	3	21	8						
Α		DO C	R	24	58		58	4.7			34	2	7		15					
Α		DO C	R	26	10		10	.8		•		10								
Α		DO C	R	28	4		4	.3			1		3							
A		DO C	R	30	172		172	14.0			13	33	41	27	30	28				
Α		DO C	R	32	487		487	39.7			78	94	113	84	15	74	31			
Α		DO C	R	36	21		21	1.7			6	16								
A		DO C	R	40	318		317	25.9			52	86	111	50	18					
A		Tota	als		1,287	4.6	1,227	15.0			261	246	297	177	97	110	31		10	
Total		All Spe	cies		8,636	5.2	8,185	100.0		0	724	812	853	1107	951	1616	1400	707	13	2

TC TST	ATS				ST. PROJEC	ATIST	ICS PROSP			PAGE DATE 2	1 2/9/2008
TWP	RGE	SECT	TRACT		TYPE	AC	RES	PLOTS	TREES	CuFt	BdFt
04N	08W	17	A4LEAVE2		0002		99.90	48	216	1	W
					TREES		ESTIMATED TOTAL	S	PERCENT SAMPLE		
		PLOTS	TREES		PER PLOT		TREES	Т	REES	Tan the same	
TOTA		48			4.5						
CRUI	SE COUNT	27	119		4.4		8,088		1.5		
REFO											
COUN		21	90		4.3						_
BLAN	IKS							,	5% 0-	51 - 16	30)
100 %	Ď							J~ 6.	2/10	SOFT	
				STA	ND SUMN	iary s	OI /	/			
		SAMPLE	E TREES	AVG	BOLE	REL	BASAL /	GROSS	NET	GROSS	NET
		TREES	/ACRE	DBH	LEN	DĚŊ	AREA /	BF/AC	BF/AC	CF/AC	CF/AC
	GLEAV		71 30.0	25.0	96	130	102.5	22,925	22,308	4,968	
HEMI	LEAV RLEAV		13 12.0 8 27.6	18.6 10.6	61 26	-32	22.5	3,442	3,283	852	
SNAG			6 27.6 12 <del>3.5</del>	29.4	26 <del> 55</del>	30	16.8 16.7	921 654	921	296 161	296
SPRU			8 6.1	19.4	32	18	12.5	1,837	1,784	442	436
CEDL	EAV		7 1.8	24.2	70	7	5.8	703	684	206	206
TOTA	AL	11	9 <u>81.0</u> 77 i	20.0	60		7) 176.8/60	30,481	28,981	6,926	6,651
	68.1	TIMES O	OF THE SAMP: UT OF 100 THE	LE	WILL BE	WITHIN	7600 THE SAMPL	<b>%</b> E ERROR	Z: 	17/630	= 34%
	68.1 %	CO				E TREES	- BF	#	OF TREES	REQ.	INF. POP.
SD:	1.0		R.% S.E.%	L	OW	AVG	HIGH		5	10	15
HEMI	GLEAV	50 104			923 348	982 498	1,040 647				
	RLEAV	22			31	34	37				
SNAG	}										
	CELV	133			·=	2,058	3,091				
CEDL TOTA		125 <i>115.</i>			332 734	676 820	1,020 <i>907</i>		533	133	59
							907				
	68.1 %	CO1		т.	TREES/A		шоп	#	OF PLOTS		INF. POP.
	1.0 GLEAV	76	R.% S.E.% 5.0 11.0		OW 27	AVG 30	HIGH 33		5	10	15
HEMI		154			9	12	15				
ALDR	RLEAV	187			20	28	35				
SNAG		228			2	4	5				
SPRU- CEDL		290 676			4 0	6 2	9 4				
TOTA		58.			7 <i>4</i> /	8 <i>I</i>	88		138	34	15
	68.1 %		EFF			AREA/A			OF PLOTS		INF. POP.
SD:	1.0		R.% S.E.%	L		AVG	HIGH	#	5	10	INF. POP.
	GLEAV	64	.9 9.4		93	103	112				
HEMI		150			18	23	27				
	LEAV	189			12	17	21				
SNAG SPRU		184 220			12 9	17 13	21 16				
CEDL		600			1	6	11				
TOTA		24.			171	177	183		23	6	3
CL:	68.1 %	CO	EFF		NET BF/	ACRE		#	OF PLOTS	REO.	INF. POP.
SD:	1.0	VA	R.% S.E.%	L		AVG	HIGH		5	10	15
DOUG	GLEAV	64	.3 9.3		0,238 2	22,308	24,378				
HEMI		144				3,283	3,967				
ALDR SNAG	RLEAV	183	5.0 26.4		678	921	1,164				
SNAG	J										

TC TST	ATS					STATI JECT	STICS PROSP			PAGE DATE 2	2 2/9/2008
TWP <u>04N</u>	RGE 08W	SECT 17	TRAC	T AVE2	TYP) 0002		ACRES 99.90	PLOTS 48	TREES 216	CuFt	BdFt W
CL: SD:	68.1 % 1.0	CO. VA	EFF R.	S.E.%	<b>NET</b> LOW	BF/ACR AVG	<del>_</del>		# OF PLO 5	TS REQ.	INF. POP
SPRU CEDL TOTA		251 590 <i>33</i>	).4	36.2 85.1 4.8	1,138 102 <i>27,588</i>	1,784 684 <i>28,981</i>	1,267	-	44	11	5

