

**Oz
FY 2015
TIMBER CRUISE REPORT**

1. **Sale Area Location:** Areas 1 and 2 are located in portions of Sections 2, 3, and 11 T4N, R7W; W.M., Clatsop County, Oregon.

All timber sale areas are posted with ODF "Timber Sale Boundary", signs and pink ribbon.

2. **Fund Distribution:** **Fund:** BOF (100%)
 Tax Code: 8-01 (100%)

3. **Sale Acreage by Area:**

Area	Harvest Type	Gross Acres	New R/W Acres	Stream Buffer Acres	Existing R/W Acres	Utility Line	Net Acreage
1	MC	23	0	2	1	0	20
2	MC	68	<1	5	3	1	59
TOTALS		91	<1	7	4	1	79

4. **Cruisers and Cruise Dates:** Area 1 was cruised by Andrew Arvin, John Choate and Bryce Rogers. Area 2 was cruised by Andrew Arvin, Ed Holloran, John Choate, Bryce Rogers, and Jon Long. All areas were cruised in January, 2015.

5. **Cruise Method and Computation:** Cruises used Corvallis MicroTechnology (CMT) data collectors, and were downloaded to the Atterbury Super A.C.E. program in District for computing. See the attached Cruise Design for more details on the cruise method. The cruise calculations were processed in the Astoria District office.

Area 1 (Modified Clear Cut), was variable plot cruised with a 40 BAF. 27 plots were sampled on a 2 by 3.5 chain spacing, with a count/cruise ratio of 1:1.

Area 2 (Modified Clear Cut), was variable plot cruised with a 54.4 BAF. 44 plots were sampled on a 3 by 5 chain spacing, with a count/cruise ratio of 2:1.

<u>AREAS</u>	<u>PROJECT</u>	<u>TRACT</u>	<u>CRUISE TYPE</u>
1	OZ	AREA1	00CC, TAKE
2	OZ	AREA2	00CC, TAKE

6. **Timber Description:**

Area 1 (Modified Clearcut) – This stand is approximately 60 years old, consisting red alder and scattered conifer. This stand averages 18 inches in DBH, with an average height of 54 feet to a merchantable top (6" D.I.B. or 40% of the diameter at 16 feet). The average (net) volume to be harvested is approximately 24 MBF/acre.

Area 2 (Modified Clearcut) – This stand is approximately 62 years old, consisting of mixed conifer stands with patches of red alder. This stand averages 21 inches in DBH, with an average height of 64 feet to a merchantable top (6" D.I.B. or 40% of the diameter at 16 feet). The average (net) volume to be harvested is approximately 44 MBF/acre.

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

Area	Target CV	Target SE%	Actual CV	Actual SE%
1	50	10	44	8.6
2	50	8	45	6.7

8. **Take Volumes by Species and Log Grades for All Sale Areas by MBF:** (See “Species, Sort Grade-Board Feet Volumes (Project)” and the “Stand Table Summary” 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	Camp Run	% D & B	% Sale
Douglas-fir	23	2,185	1,905	196	84	-	3	71
Hemlock	23	199	123	75	1	-	10	6
Spruce	22	18	5	8	5	-	8	1
Maple	27	5				5	66	<1
TOTAL		2,407						78

Species	DBH	Net Vol.	12”+	10”-11”	8”-9”	6”-7”	% D & B	% Sale
Red Alder	18	688	318	96	144	130	5	22

TOTAL NET SAWLOG VOLUME	3,095
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Sort breakdown:

Sort #	Species	Sort Specifications	Net MBF	Sale %
1	DF	6”-11” Sawlogs	261	8
2	DF	12”-20” Sawlogs 2S, 3S	1,070	32
3	DF	12”-20” Sawlogs (high quality 2S)	349	11
4	DF	21”+	505	19
5	WH/fir	6”-11” Sawlogs	69	2
6	WH/fir	12”+ Sawlogs	130	4
7	RA	6”+ Sawlogs	688	22
8	SS	6”-20” Sawlogs	18	1
9	Pulp	2”+ Pulp (includes 5 MBF BM)	693 Tons	n/a
10	Poles	poles as developed	TBD	up to 10%

*Sort #3 (12”-20” high quality 2S DF) was estimated at 25% of the total 2S DF volume. Surface characteristics for a high quality log sort will have well scattered sound tight knots not to exceed 2” in diameter and may include logs with two larger knots, not to exceed 2½” in diameter. Knots of ¾ and less in diameter will not be a determining factor. Logs will have a ring count of 4 or more per inch in the outer third top end of the log.

Pulp Volume:

Species	Net Tons
All (Primarily RA)	693

*Pulp volume is based on approximately 10% of the alder saw log volume.

9. Prepared by: Jon Long

Date: February 11, 2015

10. Approved by: 

Date: 3/24/2015

11. Attachments:
- Cruise Plans & Maps (4 pages)
 - Species, Sort, Grade Reports (3 pages)
 - Statistics Reports (4 pages)
 - Stand Table Summary Reports (2 pages)
 - Take - Log Stock Table Reports (3 pages)

X:\Sunset Unit\2015 FY Sales\OZ\Sale Prep\Cruise Report Oz.doc

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: Oz Area(s) 1

Harvest Type: (MC) Modified Clearcut

Approx. Cruise Acres: 20 Estimated CV% 50 Net BF/Acre SE% Objective 10 Net BF/Acre

Planned Sale Volume : 700 MBF Estimated Sale Area Value/Acre: \$10,000/Ac
(Area 1) (30 MBF/Ac.)

A. **Cruise Goals:** (a) Grade minimum 15 conifer and 70 hardwood trees
(b) Sample 29 cruise plots (1 grade/1 count); (c) Other goals (Determine "automark" thinning standards; X Determine log grades for sale value; X Determine snag and leave tree species and sizes.

B. Cruise Design:

1. **Plot Cruises:** BAF 40 (Full point; Half point) (circle one)
Cruise Line Directions 0° / 180°
Cruise Line Spacing 3 ½ (chains)
Cruise Plot Spacing 2 (chains)
Grade/Count Ratio 1/1

Take plots as marked on cruise map. All cedar will be reserved. Grade all alder (not camprun). Record all snags as SN.

C. Tree Measurements:

1. **Diameter:** Minimum DBH to cruise is 8" for conifers and 8" 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.
2. **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.
3. **Top Cruise Diameter (TCD):** Minimum top outside bark is 7" for conifers and 7" for hardwoods or 40 % of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for 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:

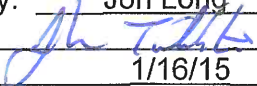
- A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); SF (Silver fir); A (Red alder); M (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DL, HL, CL, etc.)
- B. Sort: Use code "1" (Domestic).
- C. Grade: 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
- D. Alder Grades: 12" + = 1 Sawmill; 10"-12" = 2 Sawmill; 10"-8" = 3 Sawmill; and 8"-6" 4 Sawmill, or R = Camp Run; 0 = Cull.

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 inter-visible 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. Cruise Map (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: Jon Long
Approved by: 
Date: 1/16/15

Legend

- Stream
- ▭ Buffer
- ⋯ Timber Sale Boundary
- ▭ Ownership
- - - right_of_way
- - - New Road Construction
- ⊙ New Landing Construction
- Utility
- ⊙ Domestic Water

Roads

- ▬ Paved
- ▬ Surfaced

Cruise Map

OZ

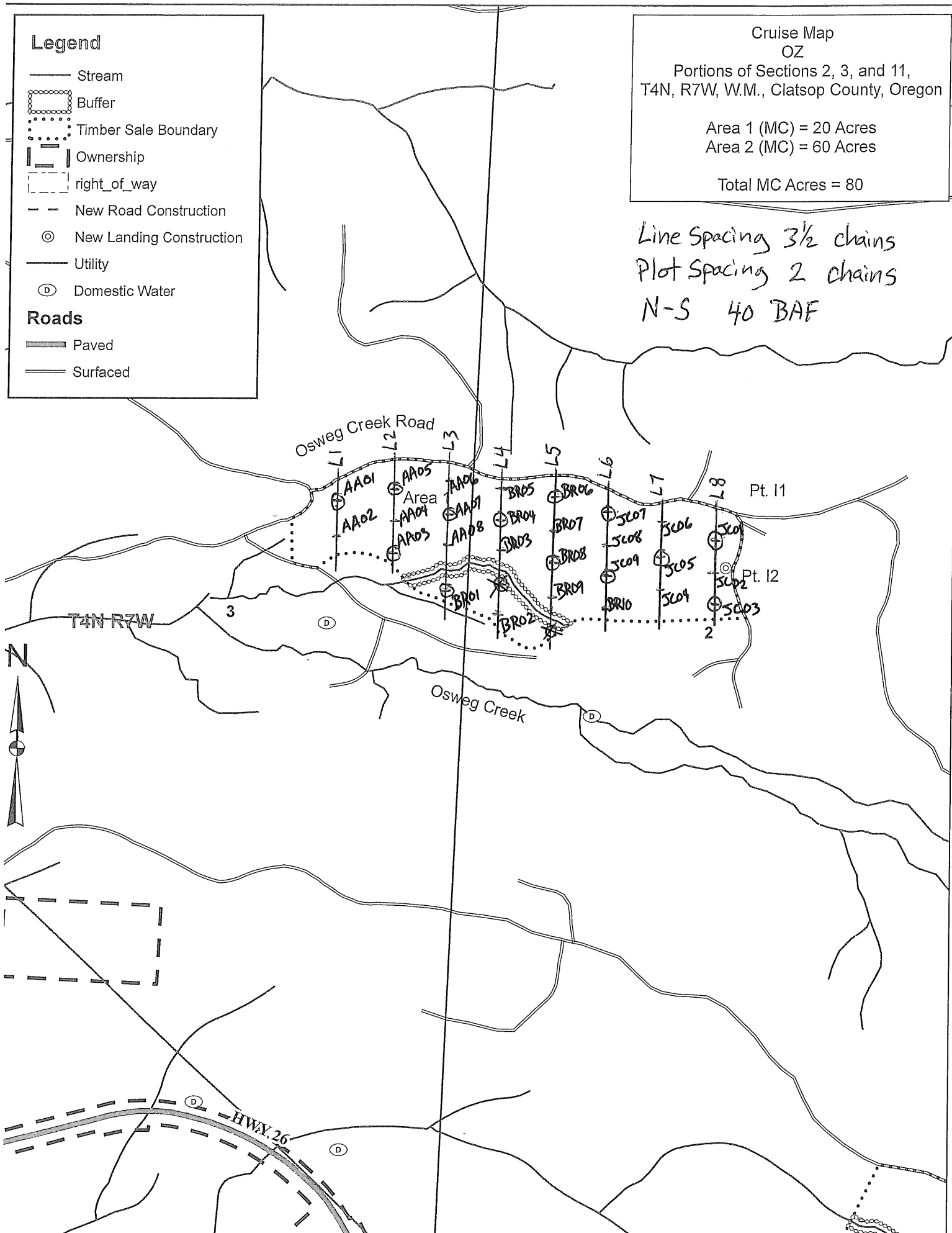
Portions of Sections 2, 3, and 11,
T4N, R7W, W.M., Clatsop County, Oregon

Area 1 (MC) = 20 Acres

Area 2 (MC) = 60 Acres

Total MC Acres = 80

Line Spacing 3½ chains
Plot Spacing 2 chains
N-S 40 BAF



250 500 1,000 Feet 1 inch = 500 feet

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: Oz **Area(s)** 2

Harvest Type: (MC) Modified Clearcut

Approx. Cruise Acres: 60 **Estimated CV%** 50 Net BF/Acre **SE% Objective** 8 Net BF/Acre

Planned Sale Volume : 2,400 MBF **Estimated Sale Area Value/Acre:** \$16,000/Ac
(Area 2) (40 MBF/Ac.)

A. Cruise Goals: (a) Grade minimum 90 conifer and 10 hardwood trees
(b) Sample 46 cruise plots (1 grade/2 count); (c) Other goals (Determine "automark" thinning standards; X Determine log grades for sale value; X Determine snag and leave tree species and sizes.

B. Cruise Design:

- 1. Plot Cruises:** BAF 54.4 (Full point; Half point) (circle one)
Cruise Line Directions 0° / 180°
Cruise Line Spacing 5 (chains)
Cruise Plot Spacing 3 (chains)
Grade/Count Ratio 1/2

Take plots as marked on cruise map. Drop plot if it lands in buffers, power line R/W, or outside TSB. All cedar will be reserved. Grade all alder (not camprun). Record all snags as SN.

C. Tree Measurements:

- 1. Diameter:** Minimum DBH to cruise is 8" for conifers and 8" for hardwoods.
Record dbh to nearest 1/2" 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.
- 2. 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.
- 3. Top Cruise Diameter (TCD):** Minimum top outside bark is 7" for conifers and 7" for hardwoods or 40 % of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for 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:

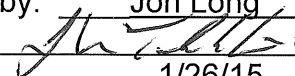
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- B. Sort: Use code "1" (Domestic).
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9. Cruising Equipment: Relaskop, Rangefinder, Logger's Tape (with dbh on back) Biltmore Stick, Compass, Cruise Cards in Tatum OR Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint.

10. Attachments: A. Cruise Map (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: Jon Long
Approved by: 
Date: 1/26/15

Cruise Map
OZ

Portions of Sections 2, 3, and 11,
T4N, R7W, W.M., Clatsop County, Oregon

Area 1 (MC) = 20 Acres
Area 2 (MC) = 61 Acres

Total MC Acres = 81

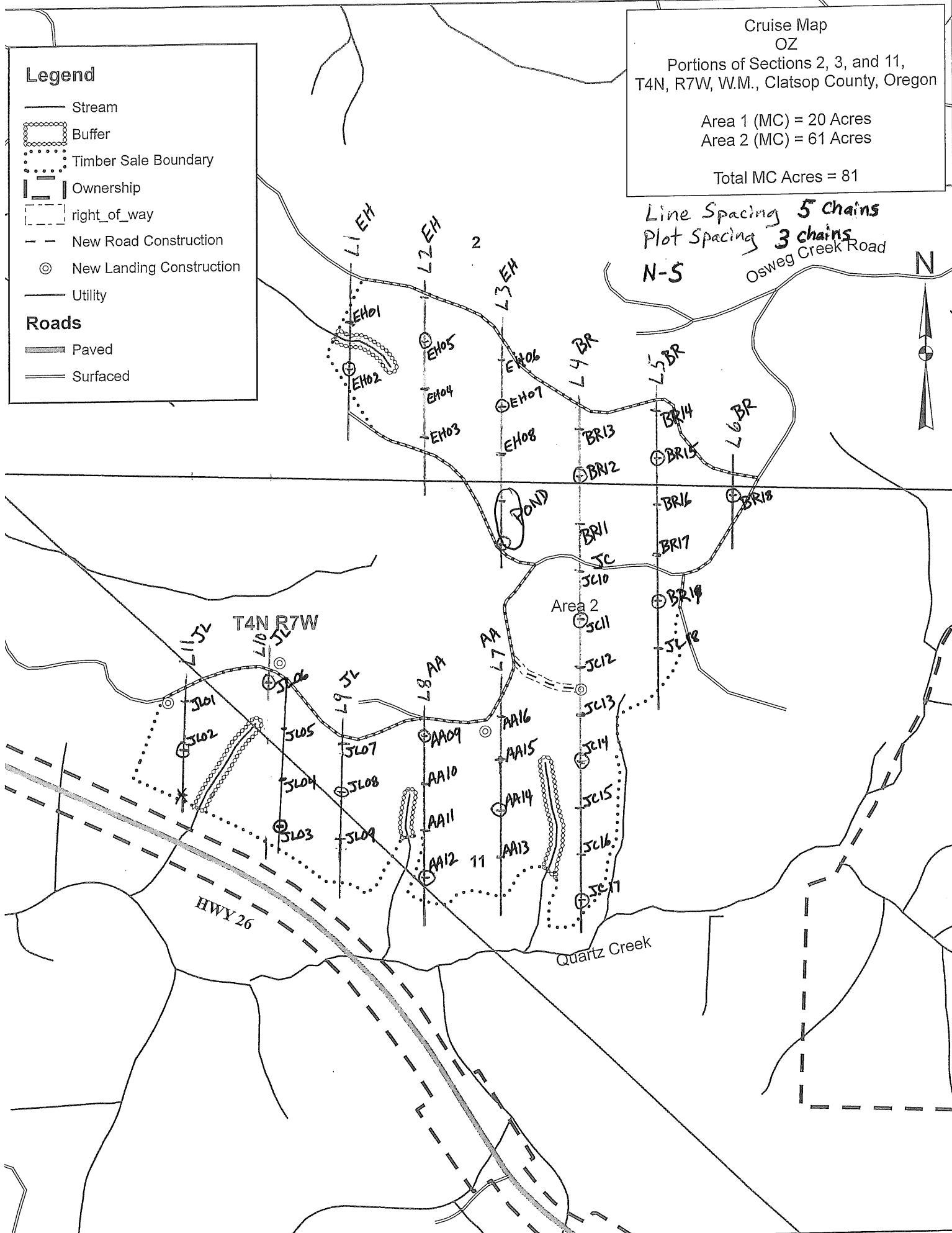
Line Spacing **5 Chains**
Plot Spacing **3 chains**
N-S
Osweg Creek Road

Legend

- Stream
- ▭ Buffer
- ⋯ Timber Sale Boundary
- ▭ Ownership
- - - right_of_way
- - - New Road Construction
- ⊙ New Landing Construction
- Utility

Roads

- ▬ Paved
- ▬ Surfaced



0 250 500 1,000 Feet 1 inch = 500 feet

Species, Sort Grade - Board Foot Volumes (Project)

T04N R07W S02 TyTAKE	20.00
T04N R07W S11 TyTAKE	59.00

Project: **OZ**
 Acres **79.00**

Page **1**
 Date **3/6/2015**
 Time **2:57:03PM**

Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log			Logs Per /Acre	
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf		
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
A		DOCU			100.0	194										8		0.00	3.3		
A		DO1S		46	3.7	4,177	4,023	318		2	87	12		2	16	27	55	34	236	1.81	17.1
A		DO2S		14		1,220	1,220	96		77	23			5	44	51	36	148	1.23	8.3	
A		DO3S		21	5.5	1,935	1,829	144		97	3		4	3	40	54	34	86	0.89	21.1	
A		DO4S		19	.4	1,649	1,641	130	1	99			33	13	36	18	25	40	0.58	41.3	
A	Totals			22	5.0	9,175	8,713	688	0	51	44	5	8	11	34	47	29	96	1.00	91.1	
D		CU																	0.00	.8	
D		DOCU			100.0	375											9		0.00	2.2	
D		DO2S		87	1.8	24,565	24,111	1,905		1	33	66			1	9	90	38	449	2.60	53.7
D		DO3S		9	.3	2,487	2,480	196		84	13	3	9	10	31	51	32	96	0.98	25.9	
D		DO4S		4	1.5	1,077	1,061	84		100			38	62			21	34	0.52	30.8	
D	Totals			71	3.0	28,504	27,652	2,185 2,184		12	30	58	2	4	11	83	31	244	1.82	113.3	
S		DO2S		28	12.5	75	66	5			100				100		32	140	1.50	.5	
S		DO3S		43	9.0	111	101	8		11		89	11			89	30	305	3.17	.3	
S		DO4S		29		67	67	5		100			21	36		43	27	43	0.82	1.6	
S	Totals			1	7.6	253	234	18		34	28	38	11	10	28	50	29	99	1.32	2.4	
H		DOCU			100.0	258											6		0.00	.9	
H		DO2S		61	1.0	1,569	1,553	123			41	59				100	40	453	2.49	3.4	
H		DO3S		38	.4	948	944	75		90	10				9	91	39	114	0.94	8.2	
H		DO4S		1		13	13	1	100						100		24	30	0.50	.4	
H	Totals			6	10.0	2,787	2,510	199 198		1	34	29	37		1	3	96	37	193	1.37	13.0
M		DOCU			100.0	103											9		0.00	.5	
M		DO3S		100	19.4	75	61	5		100					63	37	35	66	1.85	.9	
M	Totals			0	66.0	178	61	5		100					63	37	26	41	1.61	1.5	
Totals					4.2	40,898	39,169	3,095 3,094		0	22	33	45	3	5	16	76	31	177	1.46	221.2

T04N R07W S02 TTAKE T04N R07W S02 TTAKE
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 04N 07W 02 AREA1 TAKE 20.00 27 72 1 W

Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf	
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
A		DO	CU		00.0	424										17		0.00	1.6	
A		DO	1S	56	2.4	9,751	9,515	190	3	78	19	3	7	34	55	34	249	1.89	38.2	
A		DO	2S	17		2,987	2,987	60	91	9		8	43	48	35	138	1.16	21.6		
A		DO	3S	7	4.8	1,281	1,220	24	83	17		7	18	33	42	30	80	0.91	15.3	
A		DO	4S	20	.9	3,288	3,259	65	1	99		25	19	21	36	27	41	0.61	80.1	
A	Totals			69	4.2	17,733	16,982	340	0	42	46	11	7	10	33	49	30	108	1.08	156.8
D		DO	CU		00.0	152										14		0.00	.8	
D		DO	2S	89	1.9	5,156	5,058	101	13	22	65			20	80	37	387	2.25	13.1	
D		DO	3S	11		615	615	12	45	8	47	32		21	47	21	77	0.93	8.0	
D	Totals			23	4.2	5,922	5,673	113	16	21	63	3		20	77	30	260	1.87	21.8	
H		DO	2S	66		1,205	1,205	24		61	39			100		40	326	1.94	3.7	
H		DO	3S	31	2.9	578	562	11		35	65			62	38	35	105	0.96	5.4	
H		DO	4S	3		50	50	1	100				100			24	30	0.50	1.7	
H	Totals			7	.9	1,834	1,817	36	3	11	61	26		3	19	78	35	169	1.30	10.7
S		DO	4S	100		209	209	4		100				46	54	32	49	0.86	4.3	
S	Totals			1		209	209	4		100				46	54	32	49	0.86	4.3	
Type Totals					4.0	25,699	24,681	494	0	35	41	24	6	8	29	58	30	127	1.18	193.6

T TSPCSTGR		Species, Sort Grade - Board Foot Volumes (Type)								Page 1												
		Project: OZ								Date	3/6/2015											
										Time	2:57:03PM											
T04N R07W S11 TTAKE										T04N R07W S11 TTAKE												
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt													
04N	07W	11	AREA2	TAKE	59.00	44	76	1	W													
S Sp	So T	Gr rt	%	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log			Logs Per /Acre			
				Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf				
D		CU																				
D		DO CU		00.0	451											8		0.00				2.7
D		DO 2S	87	1.8	31,144	30,570	1,804			34	66		1	9	91	38	453	2.62				67.4
D		DO 3S	8	.3	3,122	3,112	184		87	13			7	10	32	51	33	97	0.98			31.9
D		DO 4S	5	1.5	1,443	1,421	84		100				38	62			21	34	0.52			41.2
D	Totals		80	2.9	36,159	35,102	2,071		12	31	57		2	4	10	83	31	243	1.82			144.3
A		DO CU		00.0	116												7		0.00			3.9
A		DO 1S	36	5.5	2,288	2,161	127			100				29	16	55	35	218	1.71			9.9
A		DO 2S	11		621	621	37		55	45					45	55	37	166	1.37			3.7
A		DO 3S	34	5.7	2,157	2,035	120		100				3		41	56	35	88	0.88			23.1
A		DO 4S	19		1,093	1,093	64		100				42	7	51		23	39	0.54			28.1
A	Totals		13	5.8	6,275	5,910	349		59	41			9	12	34	45	29	86	0.94			68.8
H		DO CU		00.0	345												6		0.00			1.2
H		DO 2S	60	1.3	1,692	1,671	99			36	64					100	40	501	2.69			3.3
H		DO 3S	40		1,073	1,073	63		100							100	40	116	0.94			9.2
H	Totals		6	11.8	3,111	2,744	162		39	22	39				100		37	199	1.39			13.8
M		DO CU		00.0	138												9		0.00			.7
M		DO 3S	100	19.4	101	81	5		100						63	37	35	66	1.85			1.2
M	Totals		0	66.0	239	81	5		100						63	37	26	41	1.61			2.0
S		DO 2S	36	12.5	101	88	5			100					100		32	140	1.50			.6
S		DO 3S	56	9.0	148	135	8		11		89		11			89	30	305	3.17			.4
S		DO 4S	8		19	19	1		100				100				16	30	0.62			.6
S	Totals		1	9.7	268	242	14		14	36	49		14		36	49	26	142	1.81			1.7
Type Totals				4.3	46,051	44,080	2,601		20	32	48		3	5	13	79	31	191	1.54			230.5

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	OZ		DATE	3/6/2015		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
04N	07W	02	AREA1	TAKE	20.00	27	138	1	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
					TREES	TREES				
TOTAL	27	138	5.1							
CRUISE	13	72	5.5		2,247		3.2			
DBH COUNT										
REFOREST										
COUNT	14	66	4.7							
BLANKS										
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
R ALDER	59	94.7	17.5	52		158.5	17,733	16,982	5,129	5,055
DOUG FIR	7	8.0	25.4	86		28.1	5,922	5,673	1,271	1,242
WHEMLOCK	4	5.4	20.1	72		11.9	1,834	1,817	485	485
S SPRUCE	2	4.3	15.9	34		5.9	209	209	118	118
TOTAL	72	112.3	18.3	54		204.4	25,699	24,681	7,003	6,901
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
R ALDER	69.8	9.1	213	234	255					
DOUG FIR	74.1	30.1	738	1,056	1,374					
WHEMLOCK	124.9	71.4	187	655	1,123					
S SPRUCE	28.3	26.5	37	50	63					
TOTAL	124.0	14.6	284	332	381	614	153	68		
CL: 68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
R ALDER	59.1	11.6	84	95	106					
DOUG FIR	212.6	41.7	5	8	11					
WHEMLOCK	280.0	54.9	2	5	8					
S SPRUCE	245.5	48.1	2	4	6					
TOTAL	53.6	10.5	101	112	124	119	30	13		
CL: 68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
R ALDER	52.6	10.3	142	159	175					
DOUG FIR	192.3	37.7	18	28	39					
WHEMLOCK	244.4	47.9	6	12	18					
S SPRUCE	244.4	47.9	3	6	9					
TOTAL	50.1	9.8	184	204	225	104	26	12		
CL: 68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
R ALDER	65.0	12.7	14,817	16,982	19,146					
DOUG FIR	188.4	36.9	3,577	5,673	7,768					
WHEMLOCK	235.7	46.2	978	1,817	2,657					
S SPRUCE	244.8	48.0	109	209	310					
TOTAL	63.0	12.3	21,633	24,681	27,729	165	41	18		

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT OZ				DATE	3/6/2015	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
04N	07W	11	AREA2	TAKE	59.00	44	223	1	W	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
					TREES	TREES				
TOTAL	44	223	5.1							
CRUISE	18	76	4.2		6,833		1.1			
DBH COUNT										
REFOREST										
COUNT	26	145	5.6							
BLANKS										
100 %										
STAND SUMMARY										
	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 FIR	51	65.0	23.1	72		189.3	36,159	35,102	8,312	8,232
R ALDER	17	42.5	16.2	49		60.6	6,275	5,910	1,873	1,846
WHEMLOCK	4	6.3	23.3	84		18.6	3,111	2,744	768	707
BL MAPLE	2	1.2	27.2	42		4.9	239	81	102	80
S SPRUCE	2	.8	23.1	53		2.5	268	242	79	79
TOTAL	76	115.8	20.9	64		275.9	46,051	44,080	11,133	10,943
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF					# OF TREES REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	63.0	8.8	804	881	959					
R ALDER	61.7	15.4	145	171	198					
WHEMLOCK	66.2	37.8	425	683	940					
BL MAPLE	10.9	10.2	58	65	72					
S SPRUCE	79.8	74.7	99	390	681					
TOTAL	82.9	9.5	613	678	742	275	69	31		
CL: 68.1 %	COEFF	TREES/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	81.3	12.2	57	65	73					
R ALDER	143.6	21.6	33	42	52					
WHEMLOCK	248.7	37.5	4	6	9					
BL MAPLE	322.7	48.6	1	1	2					
S SPRUCE	663.3	99.9	0	1	2					
TOTAL	50.9	7.7	107	116	125	103	26	11		
CL: 68.1 %	COEFF	BASAL AREA/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	66.4	10.0	170	189	208					
R ALDER	138.6	20.9	48	61	73					
WHEMLOCK	236.2	35.6	12	19	25					
BL MAPLE	319.9	48.2	3	5	7					
S SPRUCE	663.3	99.9	0	2	5					
TOTAL	37.2	5.6	260	276	291	55	14	6		
CL: 68.1 %	COEFF	NET BF/ACRE					# OF PLOTS REQ.		INF. POP.	
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	66.3	10.0	31,597	35,102	38,608					
R ALDER	139.0	20.9	4,673	5,910	7,147					
WHEMLOCK	236.3	35.6	1,767	2,744	3,721					
BL MAPLE	325.5	49.0	41	81	121					
S SPRUCE	663.3	99.9	0	242	484					
TOTAL	45.5	6.9	41,059	44,080	47,101	83	21	9		

PROJECT STATISTICS										PAGE	1									
PROJECT OZ										DATE	3/6/2015									
TC PSTATS	TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt										
	04N	07	02	AREA1	TAKE	79.00	71	361	1	W										
	04N	07W	11	AREA2	TAKE															
											ESTIMATED	PERCENT								
											TOTAL	SAMPLE								
											TREES	TREES								
											PER PLOT	TREES								
											TREES	TREES								
TOTAL				71	361	5.1														
CRUISE				31	148	4.8	9,080		1.6											
DBH COUNT																				
REFOREST																				
COUNT				40	211	5.3														
BLANKS																				
100 %																				
STAND SUMMARY																				
											SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
											TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
R ALDER				76	55.7	16.8	50		85.4	9,175	8,713	2,697	2,658							
DOUG FIR				58	50.5	23.2	73		148.5	28,504	27,652	6,530	6,462							
WHEMLOCK				8	6.1	22.6	81		16.9	2,787	2,510	696	650							
S SPRUCE				4	1.7	18.9	41		3.3	253	234	89	89							
BL MAPLE				2	.9	27.2	42		3.7	178	61	76	60							
TOTAL				148	114.9	20.3	62		257.8	40,898	39,169	10,088	9,920							
CONFIDENCE LIMITS OF THE SAMPLE																				
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR																				
CL	68.1	COEFF		SAMPLE TREES - BF			# OF TREES REQ.		INF. POP.											
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15											
R ALDER		70.0	8.0	202	220	238														
DOUG FIR		64.4	8.5	826	902	978														
WHEMLOCK		91.5	34.5	438	669	900														
S SPRUCE		121.0	69.1	68	220	372														
BL MAPLE		10.9	10.2	58	65	72														
TOTAL		102.5	8.4	467	509	552	420	105	47											
CL	68.1	COEFF		TREES/ACRE			# OF PLOTS REQ.		INF. POP.											
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15											
R ALDER		111.7	13.2	48	56	63														
DOUG FIR		122.1	14.5	43	51	58														
WHEMLOCK		265.8	31.5	4	6	8														
S SPRUCE		400.1	47.4	1	2	3														
BL MAPLE		415.7	49.3	0	1	1														
TOTAL		59.6	7.1	107	115	123	142	35	16											
CL	68.1	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.											
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15											
R ALDER		102.7	12.2	75	85	96														
DOUG FIR		106.6	12.6	130	149	167														
WHEMLOCK		258.7	30.7	12	17	22														
S SPRUCE		495.4	58.7	1	3	5														
BL MAPLE		412.2	48.9	2	4	6														
TOTAL		55.3	6.6	241	258	275	122	31	14											
CL	68.1	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.											
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15											
R ALDER		105.5	12.5	7,623	8,713	9,803														
DOUG FIR		105.9	12.6	24,181	27,652	31,123														
WHEMLOCK		257.0	30.5	1,745	2,510	3,275														
S SPRUCE		655.5	77.7	52	234	415														
BL MAPLE		419.2	49.7	30	61	91														
TOTAL		68.5	8.1	35,986	39,169	42,351	188	47	21											

Log Stock Table - MBF

T04N R07W S02 TyTAKE 20.00
 T04N R07W S11 TyTAKE 59.00

Project: OZ
 Acres 79.00

Page 1
 Date 3/6/2015
 Time 2:57:03PM

Spp	S T	So Gr rt de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches												
								2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-20	21-23	24-29	30-39	40+	
A		DO CU	7	7	100.0															
A		DO CU	18	5	100.0															
A		DO CU	24	4	100.0															
A		DO 1S	16	2	3.4	2	.3					1	1							
A		DO 1S	20	4		4	.7					4								
A		DO 1S	24	9		9	1.3					5		4						
A		DO 1S	30	48	12.1	42	6.1					17	20	5						
A		DO 1S	32	86		85	12.4					45	17	23						
A		DO 1S	36	6		6	.9						6							
A		DO 1S	40	175	3.2	169	24.6					5	43	103	17					
A		DO 2S	30	5		5	.7					5								
A		DO 2S	32	42		42	6.2				5	21	17							
A		DO 2S	40	49		49	7.1					43	5							
A		DO 3S	16	1		1	.2			1	1									
A		DO 3S	20	4		4	.6			1	4									
A		DO 3S	24	1		1	.1				1									
A		DO 3S	30	4		4	.5				4									
A		DO 3S	32	64	10.5	57	8.3			9	28	21								
A		DO 3S	40	79	2.2	78	11.3				52	21	4							
A		DO 4S	16	34		34	5.0			30		5								
A		DO 4S	20	9		9	1.2			9										
A		DO 4S	21	0		0	.1			0										
A		DO 4S	24	11		11	1.6			11										
A		DO 4S	26	1		1	.1			1										
A		DO 4S	30	4		4	.6				1									
A		DO 4S	32	47	1.2	46	6.7				43	4								
A		DO 4S	40	24		24	3.4				20	4								
A		Totals		725	5.0	688	22.2			1	126	101	122	143	148	48				
D		DO CU	6	6	100.0															
D		DO CU	10	23	100.0															
D		DO CU	21	1	100.0															
D		DO 2S	24	10		10	.5					10								
D		DO 2S	32	180	1.7	177	8.1					4	86	33	54					
D		DO 2S	40	1,750	1.9	1,717	78.6					9	105	179	927	76	409		14	

Log Stock Table - MBF

T04N R07W S02 TyTAKE	20.00
T04N R07W S11 TyTAKE	59.00

Project: OZ
Acres 79.00

Spp	S T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-20	21-23	24-29	30-39	40+
M		Totals			14	66.0	5	.2			2	3								
Total		All Species			3,231	4.2	3,094	100.0		2	244	158	287	394	397	1037	145	418	14	

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

T04N R07W S02 TTAKE

T04N R07W S02 TTAK

Twp Rge Sec Tract Type Acres Plots Sample Trees Page
04N 07W 02 AREA1 TAKE 20.00 27 72 Date 3/6/2015
Time 2:57:02PM

Spp	T	S	So	Gr	Log	Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches												
											2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-20	21-23	24-29	30-39	40+	
A		DO	CU																				
A		DO	CU	18			5	100.0															
A		DO	CU	24			4	100.0															
A		DO	1S	16			2	3.4	2	.6				1	1								
A		DO	1S	20			4		4	1.3				4									
A		DO	1S	24			9		9	2.6				5		4							
A		DO	1S	30			6	17.8	5	1.5						5							
A		DO	1S	32			66	1.2	65	19.1				25	17	23							
A		DO	1S	36			6		6	1.9					6								
A		DO	1S	40			101	2.7	99	29.0				5	21	56	17						
A		DO	2S	30			5		5	1.5				5									
A		DO	2S	32			26		26	7.6				21									
A		DO	2S	40			29		29	8.5				23	5								
A		DO	3S	16			1		1	.4													
A		DO	3S	20			1		1	.2				1									
A		DO	3S	24			1		1	.2													
A		DO	3S	30			4		4	1.0													
A		DO	3S	32			9	11.1	8	2.4													
A		DO	3S	40			11	2.1	10	3.0					4								
A		DO	4S	16			11		11	3.2													
A		DO	4S	20			5		5	1.5													
A		DO	4S	21			0		0	.1													
A		DO	4S	24			7		7	1.9													
A		DO	4S	26			1		1	.2													
A		DO	4S	30			4		4	1.3													
A		DO	4S	32			14	4.2	13	3.9													
A		DO	4S	40			24		24	6.9													
A		Totals						355	4.2	340	68.8			1	58	31	55	66	80	48			
D		DO	CU	6			2	100.0															
D		DO	CU	21			1	100.0															
D		DO	2S	32			20		20	17.6				4	7								
D		DO	2S	40			83	2.3	81	71.5				9		11	22	13	13	14			
D		DO	3S	12			1		1	.5													
D		DO	3S	16			3		3	2.9				1	1								
D		DO	3S	32			3		3	2.2				3									
D		DO	3S	40			6		6	5.1								6					
D		Totals						118	4.2	113	23.0				4	1	14	8	11	31	18	13	14
H		DO	2S	40			24		24	66.3					15						9		
H		DO	3S	32			7	4.6	7	19.0					5								
H		DO	3S	40			4		4	11.9						2							
H		DO	4S	24			1		1	2.8													
H		Totals						37		36	7.4				1	4		20	2			9	
S		DO	4S	26			2		2	46.1													
S		DO	4S	40			2		2	53.9													
S		Totals						4		4	.8												
Total All Species								514	4.0	494	100.0			2	70	32	69	94	93	80	18	22	14

TC TLOGSTVB

Log Stock Table - MBF

Project: OZ

T04N R07W S11 TTAKE

T04N R07W S11 TTAK

Twp Rge Sec Tract Type Acres Plots Sample Trees
04N 07W 11 AREA2 TAKE 59.00 44 76

Page 1
Date 3/6/2015
Time 2:57:02PM

Spp	S	So	Gr	Log	Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches										
										2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-20	21-23	24-29	30-39
D				CU																
D		DO	CU	6		4	100.0													
D		DO	CU	10		23	100.0													
D		DO	2S	24		10		10	.5					10						
D		DO	2S	32		160	1.9	157	7.6					79	33	45				
D		DO	2S	40		1,667	1.9	1,636	79.0					105	168	905	63	396		
D		DO	3S	16		3		3	.1					3						
D		DO	3S	20		10		10	.5				5	3	3					
D		DO	3S	22		4		4	.2				4							
D		DO	3S	24		15		15	.7					11	4					
D		DO	3S	32		58		58	2.8			16	4	38						
D		DO	3S	36		9		9	.4			5	5							
D		DO	3S	40		85	.7	84	4.1			12	11	44	17					
D		DO	4S	12		5		5	.2			1	3							
D		DO	4S	14		3		3	.1				3							
D		DO	4S	16		14		14	.7			9	6							
D		DO	4S	18		6		6	.3				4	3						
D		DO	4S	20		4		4	.2				4							
D		DO	4S	22		6		6	.3			4	2							
D		DO	4S	24		34	3.8	33	1.6			25	3	5						
D		DO	4S	30		13		13	.6			13								
D		Totals				2,133	2.9	2,071	79.6			83	54	106	218	201	950	63	396	
A		DO	CU	7		7	100.0													
A		DO	1S	30		41	11.3	37	10.6					17	20					
A		DO	1S	32		20		20	5.8					20						
A		DO	1S	40		73	3.8	70	20.2					23	48					
A		DO	2S	32		17		17	4.8					17						
A		DO	2S	40		20		20	5.7					20						
A		DO	3S	20		4		4	1.0				4							
A		DO	3S	32		55	10.4	49	14.1			9	20	21						
A		DO	3S	40		69	2.2	67	19.3				46	21						
A		DO	4S	16		23		23	6.7			19		5						
A		DO	4S	20		4		4	1.0			4								
A		DO	4S	24		5		5	1.4			5								
A		DO	4S	32		33		33	9.4			33								
A		Totals				370	5.8	349	13.4			68	70	66	76	68				
H		DO	CU	6		20	100.0													
H		DO	2S	40		100	1.3	99	60.9						35		63			
H		DO	3S	40		63		63	39.1			19		44						
H		Totals				184	11.8	162	6.2			19		44		35		63		
M		DO	CU	9		8	100.0													
M		DO	3S	32		4	22.2	3	62.7				3							
M		DO	3S	40		2	14.3	2	37.3			2								
M		Totals				14	66.0	5	.2			2	3							

TC TLOGSTVB

Log Stock Table - MBF

Project: **OZ**

T04N R07W S11 TTAKE

T04N R07W S11 TTAK

Twp Rge Sec Tract
04N 07W 11 AREA2

Type Acres Plots Sample Trees
TAKE 59.00 44 76

Page 2
 Date **3/6/2015**
 Time **2:57:02PM**

Spp	T	S	So	Gr	Log	Gross	%	Net	%	Net Volume by Scaling Diameter in Inches									
										MBF	Def	MBF	Spc	2-3	4-5	6-7	8-9	10-11	12-13
S		DO	2S	32		6	12.5	5	36.4					5					
S		DO	3S	20		1		1	6.4				1						
S		DO	3S	40		8	10.0	7	49.4						7				
S		DO	4S	16		1		1	7.8			1							
S		Totals				16	9.7	14	.5			1	1	5		7			
Total All Species						2,717	4.3	2,601	100.0			174	127	218	300	304	957	127	396

Stand Table Summary

T04N R07W S02 TyTAKE 20.00
T04N R07W S11 TyTAKE 59.00

Project **OZ**
Acres **79.00**

Time: **2:57:04PM**
Grown Year:

S Spc T	Sample DBH	Trees	Tot		Trees/ Acres	BA/ Acres	Logs Acres	Average Log		Tons/ Acres	Net Cu.Ft. Acres	Net Bd.Ft. Acres	Totals		
			FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
D	9	1	86	50	6.275	2.77	6.27	8.0	30.0		50	188		40	15
D	11	2	87	43	8.401	5.54	8.40	12.0	35.0		101	294		80	23
D	17	1	88	97	.646	1.02	1.29	31.0	115.0		40	149		32	12
D	18	1	86	84	1.569	2.77	3.14	29.5	105.0		93	329		73	26
D	19	2	87	94	2.816	5.54	5.63	37.5	135.0		211	760		167	60
D	21	1	88	134	1.153	2.77	3.46	41.7	183.3		144	634		114	50
D	22	1	92	106	.386	1.02	1.16	37.7	166.7		44	193		34	15
D	23	3	88	96	2.882	8.32	6.73	47.3	180.0		318	1,211		251	96
D	24	7	86	115	6.177	19.40	16.77	50.8	195.3		852	3,274		673	259
D	25	3	87	111	1.925	6.56	4.96	53.2	218.6		264	1,085		209	86
D	26	6	86	118	4.511	16.63	12.03	62.6	255.6		753	3,075		595	243
D	27	4	86	118	2.348	9.33	7.04	60.5	255.4		426	1,799		336	142
D	28	2	86	132	1.297	5.54	3.89	62.3	275.0		242	1,070		192	85
D	29	1	86	124	.604	2.77	1.81	73.3	326.7		133	592		105	47
D	30	5	85	126	2.824	13.86	8.47	77.9	342.0		660	2,897		521	229
D	31	3	81	121	1.587	8.32	4.23	78.0	317.5		330	1,343		261	106
D	32	2	91	131	.679	3.79	2.04	97.1	495.6		198	1,009		156	80
D	33	2	87	129	.933	5.54	2.80	96.3	441.7		270	1,237		213	98
D	34	1	92	116	.161	1.02	.48	96.0	486.7		47	236		37	19
D	35	1	91	136	.415	2.77	1.24	118.3	603.3		147	751		116	59
D	36	2	84	135	.784	5.54	2.35	116.2	528.3		273	1,243		216	98
D	37	4	92	136	1.485	11.09	4.46	130.8	677.5		583	3,018		460	238
D	41	1	78	137	.302	2.77	.91	144.0	613.3		131	556		103	44
D	42	1	86	103	.288	2.77	.58	186.0	805.0		107	464		85	37
D	44	1	85	140	.096	1.02	.19	242.0	1270.0		47	245		37	19
D	Totals	58	87	95	50.543	148.50	110.33	58.6	250.6		6,462	27,652		5,105	2,184
A	12	4	87	51	5.989	4.70	5.99	17.7	55.7		106	333		84	26
A	13	3	86	54	4.365	4.02	4.37	17.9	51.7		78	226		62	18
A	14	10	86	66	8.218	8.79	14.53	18.4	54.4		267	791		211	62
A	15	9	87	57	13.069	16.04	16.35	26.3	76.0		430	1,242		340	98
A	16	2	86	75	2.395	3.34	4.79	24.6	83.0		118	397		93	31
A	17	3	86	73	2.553	4.02	5.11	26.4	88.3		135	451		107	36
A	18	6	86	77	4.554	8.05	9.11	31.4	102.5		286	934		226	74
A	19	7	87	75	3.425	6.74	6.51	35.3	115.8		229	753		181	59
A	20	7	87	77	2.182	4.76	3.74	43.6	148.3		163	555		129	44
A	21	6	86	70	3.346	8.05	6.41	40.2	126.5		258	811		204	64
A	22	7	86	84	2.555	6.74	5.11	48.8	179.6		249	918		197	73
A	23	3	86	81	1.395	4.02	2.79	53.9	197.4		150	551		119	43
A	24	4	87	89	.866	2.72	1.52	60.0	238.6		91	362		72	29
A	25	1	86	62	.200	.68	.40	50.5	175.0		20	70		16	6
A	27	2	87	70	.342	1.36	.68	63.0	227.5		43	156		34	12
A	28	1	86	127	.159	.68	.32	94.0	490.0		30	156		24	12
A	37	1	87	41	.091	.68	.09	47.0	100.0		4	9		3	1
A	Totals	76	87	66	55.704	85.41	87.80	30.3	99.2		2,658	8,713		2,100	688
H	17	2	83	106	2.674	4.22	5.35	34.1	120.9		182	647		144	51
H	18	1	89	67	.424	.75	.85	27.0	90.0		23	76		18	6
H	19	1	88	102	.381	.75	.76	44.5	155.0		34	118		27	9
H	20	1	92	100	1.588	3.47	3.18	48.0	175.0		152	556		120	44
H	37	1	77	107	.464	3.47	.93	120.5	510.0		112	473		88	37
H	38	1	77	107	.440	3.47	.88	129.5	560.0		114	493		90	39
H	42	1	85	103	.078	.75	.16	212.0	940.0		33	147		26	12

Stand Table Summary

T04N R07W S02 TyTAKE 20.00
T04N R07W S11 TyTAKE 59.00

Project **OZ**
Acres **79.00**

Time: **2:57:04PM**
Grown Year:

S Spc T	Sample DBH	Trees	Tot		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals	
			FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits
H	Totals	8	85	101	6.050	16.86	12.10	53.8	207.4		650	2,510	514	198
S	15	1	82	34	.611	.75	.61	21.0	40.0		13	24	10	2
S	17	1	82	51	.476	.75	.48	36.0	60.0		17	29	14	2
S	19	1	82	61	.469	.92	.94	29.0	85.0		27	80	22	6
S	32	1	82	74	.165	.92	.33	95.0	305.0		31	101	25	8
S	Totals	4	82	50	1.722	3.35	2.36	37.6	99.2		89	234	70	18
M	25	1	87	50	.542	1.85	.54	50.0	70.0		27	38	21	3
M	30	1	86	44	.376	1.85	.38	87.0	60.0		33	23	26	2
M	Totals	2	87	48	.919	3.70	.92	65.2	65.9		60	61	47	5
Totals		148	86	80	114.938	257.82	213.50	46.5	183.5		9,920	39,169	7,836	3,094

Stand Table Summary

Project **OZ**

T04N R07W S02 TTAKE

T04N R07W S02 TTAK

Twp Rge Sec Tract
04N 07W 02 AREA1

Type Acres Plots Sample Trees
TAKE 20.00 27 72

Page: 1
Date: 03/06/20
Time: 2:57:04PM

Spc	T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.			Tons	Cunits	MBF
A		12	3	87	51	10.263	8.06	10.26	18.7	50.0	192	513	38	10	
A		13	2	87	53	5.830	5.37	5.83	21.5	55.0	125	321	25	6	
A		14	9	86	65	22.620	24.18	37.70	19.3	59.3	729	2,237	146	45	
A		15	4	87	61	8.757	10.75	13.14	23.0	73.3	302	963	60	19	
A		16	1	87	61	1.924	2.69	3.85	21.0	75.0	81	289	16	6	
A		17	2	86	68	3.409	5.37	6.82	25.2	85.0	172	580	34	12	
A		18	4	86	78	6.082	10.75	12.16	32.2	107.5	392	1,308	78	26	
A		19	6	87	72	8.187	16.12	15.01	35.5	112.7	532	1,692	106	34	
A		20	7	87	77	8.621	18.81	14.78	43.6	148.3	644	2,192	129	44	
A		21	4	87	66	4.468	10.75	7.82	41.9	118.6	327	927	65	19	
A		22	6	86	88	6.107	16.12	12.21	50.0	189.2	611	2,310	122	46	
A		23	2	87	83	1.862	5.37	3.72	54.8	182.5	204	680	41	14	
A		24	4	87	89	3.421	10.75	5.99	60.0	238.6	359	1,428	72	29	
A		25	1	86	62	.788	2.69	1.58	50.5	175.0	80	276	16	6	
A		27	2	87	70	1.351	5.37	2.70	63.0	227.5	170	615	34	12	
A		28	1	86	127	.628	2.69	1.26	94.0	490.0	118	616	24	12	
A		37	1	87	41	.360	2.69	.36	47.0	100.0	17	36	3	1	
A		Totals		59	87	68	94.678	158.52	155.19	32.6	109.4	5,055	16,982	1,011	340
D		17	1	88	97	2.551	4.02	5.10	31.0	115.0	158	587	32	12	
D		22	1	92	106	1.523	4.02	4.57	37.7	166.7	172	762	34	15	
D		25	1	89	116	1.180	4.02	3.54	51.3	203.3	182	720	36	14	
D		27	1	91	106	1.011	4.02	3.03	58.0	263.3	176	799	35	16	
D		32	1	91	116	.720	4.02	2.16	86.3	420.0	186	907	37	18	
D		34	1	92	116	.638	4.02	1.91	96.0	486.7	184	931	37	19	
D		44	1	85	140	.381	4.02	.76	242.0	1270.0	184	967	37	19	
D		Totals		7	90	108	8.004	28.15	21.08	58.9	269.1	1,242	5,673	248	113
H		17	1	88	94	1.880	2.96	3.76	34.5	125.0	130	470	26	9	
H		18	1	89	67	1.677	2.96	3.35	27.0	90.0	91	302	18	6	
H		19	1	88	102	1.505	2.96	3.01	44.5	155.0	134	467	27	9	
H		42	1	85	103	.308	2.96	.62	212.0	940.0	131	579	26	12	
H		Totals		4	88	88	5.369	11.85	10.74	45.1	169.2	485	1,817	97	36
S		15	1	82	34	2.414	2.96	2.41	21.0	40.0	51	97	10	2	
S		17	1	82	51	1.880	2.96	1.88	36.0	60.0	68	113	14	2	
S		Totals		2	82	41	4.294	5.93	4.29	27.6	48.8	118	209	24	4
Totals			72	87	71	112.346	204.44	191.30	36.1	129.0	6901	24,681	1,380	494	

Stand Table Summary																
TC TSTNDSUM																
Project OZ																
T04N R07W S11 TTAKE											T04N R07W S11 TTAKE					
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees		Page:	1						
04N	07W	11	AREA2	TAKE	59.00	44	76		Date:	03/06/20						
									Time:	2:57:04PM						
S Spc	T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
D		9	1	86	50	8.402	3.71	8.40	8.0	30.0		67	252		40	15
D		11	2	87	43	11.249	7.42	11.25	12.0	35.0		135	394		80	23
D		18	1	86	84	2.100	3.71	4.20	29.5	105.0		124	441		73	26
D		19	2	87	94	3.770	7.42	7.54	37.5	135.0		283	1,018		167	60
D		21	1	88	134	1.543	3.71	4.63	41.7	183.3		193	849		114	50
D		23	3	88	96	3.859	11.14	9.01	47.3	180.0		426	1,621		251	96
D		24	7	86	115	8.271	25.98	22.45	50.8	195.3		1,141	4,383		673	259
D		25	2	87	110	2.178	7.42	5.44	53.6	222.0		292	1,209		172	71
D		26	6	86	118	6.040	22.27	16.11	62.6	255.6		1,008	4,118		595	243
D		27	3	85	120	2.801	11.14	8.40	60.8	254.4		511	2,138		301	126
D		28	2	86	132	1.736	7.42	5.21	62.3	275.0		325	1,432		192	85
D		29	1	86	124	.809	3.71	2.43	73.3	326.7		178	793		105	47
D		30	5	85	126	3.781	18.56	11.34	77.9	342.0		883	3,879		521	229
D		31	3	81	121	2.125	11.14	5.67	78.0	317.5		442	1,799		261	106
D		32	1	91	136	.665	3.71	1.99	101.0	523.3		201	1,043		119	62
D		33	2	87	129	1.250	7.42	3.75	96.3	441.7		361	1,656		213	98
D		35	1	91	136	.556	3.71	1.67	118.3	603.3		197	1,006		116	59
D		36	2	84	135	1.050	7.42	3.15	116.2	528.3		366	1,665		216	98
D		37	4	92	136	1.988	14.85	5.97	130.8	677.5		780	4,042		460	238
D		41	1	78	137	.405	3.71	1.21	144.0	613.3		175	745		103	44
D		42	1	86	103	.386	3.71	.77	186.0	805.0		144	621		85	37
D		Totals	51	86	95	64.963	189.30	140.59	58.6	249.7		8,232	35,102		4,857	2,071
A		12	1	87	50	4.541	3.57	4.54	17.0	60.0		77	272		46	16
A		13	1	86	55	3.869	3.57	3.87	16.0	50.0		62	193		37	11
A		14	1	86	68	3.336	3.57	6.67	16.5	45.0		110	300		65	18
A		15	5	87	57	14.530	17.83	17.44	27.2	76.7		474	1,337		279	79
A		16	1	86	78	2.554	3.57	5.11	25.5	85.0		130	434		77	26
A		17	1	86	76	2.262	3.57	4.52	27.0	90.0		122	407		72	24
A		18	2	86	76	4.036	7.13	8.07	31.0	100.0		250	807		148	48
A		19	1	86	80	1.811	3.57	3.62	35.0	120.0		127	435		75	26
A		21	2	86	72	2.965	7.13	5.93	39.5	130.0		234	771		138	45
A		22	1	86	79	1.351	3.57	2.70	47.0	165.0		127	446		75	26
A		23	1	86	80	1.236	3.57	2.47	53.5	205.0		132	507		78	30
A		Totals	17	86	64	42.492	60.63	64.95	28.4	91.0		1,846	5,910		1,089	349
H		17	1	82	108	2.944	4.64	5.89	34.0	120.0		200	706		118	42
H		20	1	92	100	2.127	4.64	4.25	48.0	175.0		204	744		120	44
H		37	1	77	107	.621	4.64	1.24	120.5	510.0		150	634		88	37
H		38	1	77	107	.589	4.64	1.18	129.5	560.0		153	660		90	39
H		Totals	4	84	105	6.281	18.56	12.56	56.3	218.5		707	2,744		417	162
S		19	1	82	61	.628	1.24	1.26	29.0	85.0		36	107		22	6
S		32	1	82	74	.222	1.24	.44	95.0	305.0		42	135		25	8
S		Totals	2	82	64	.850	2.47	1.70	46.2	142.3		79	242		46	14
M		25	1	87	50	.726	2.47	.73	50.0	70.0		36	51		21	3
M		30	1	86	44	.504	2.47	.50	87.0	60.0		44	30		26	2
M		Totals	2	87	48	1.230	4.95	1.23	65.2	65.9		80	81		47	5
Totals			76	86	83	115.816	275.91	221.03	49.5	199.4		10943	44,080		6,456	2,601