Cruise Narrative

Sale Name:	THE BIG KAHUNA	**Region:**	SOUTH PUGET SOUND
App. #:	76006	**District:**	Rainier
Lead cruiser:	KEN MCGEE	**Completion date:**	SEPT. 7, 2004
Other cruisers on sale:	PHIL KIRNER – Check cruiser		

Unit acreage specifications:

Unit #	Cruised acres	Cruised acres agree with sale acres? Yes/No	If acres do not agree explain why.
#1	72.3	NO	This cruiser believes the acres are closer to 60 because this unit was photo called.
#2	82.2	NO	This cruiser believes the acres are closer to 78 because this unit was photo called.
R/W#1	4.6	YES	
R/W#2	.6	YES	
Total	159.7		Total net acres is approximately 143 per cruisers calculation.

Unit cruise specifications:

Unit #	Sample type (VP, FP, ITS,100%)	Expansion factor (BAF, full/ half)	Sighting height (4.5 ft, 16 ft.)	Grid size (Plot spacing or % of area)	Plot ratio (cruise: count)	Total number of plots
#1	VP	54.45	4.5	400x330ft.	11:9	20
#2	VP	54.45	4.5	400x330ft.	13:13	26
R/W#1	VP	54.45	4.5	Every736ft	5:0	5
R/W#2	VP	54.45	4.5	Every250ft	1:0	1

Sale/Cruise Description:

Minor species cruise intensity:	Red Cedar and Red Alder were cruised with a 20 factor prism utilizing the same plot centers. All other minors were cruised with a 54.45 prism.					
Minimum cruise spec:	6 inch top or 40% of form point. 8 inch DBH minimum. Not less than 10 board feet.					
Avg ring count by sp:	**DF** =	8.0	**WH** =		**SS** =	
Leave/take tree description:	Leave trees are banded with blue paint or they are tagged out in small clumps with yellow tree tags.					
Other conditions	None					

Field observations:

This is another fine timber sale located in the Tahoma State Forest. Access is good via hwy#706 the #1 road and the #11 road. The timber is mature second growth Douglas Fir(71%), Western Hemlock(21%) and others. There is 5.2 acres of exterior right of way construction.

Grants: 07 - 89% 01 - 10% 03 - 01% _

Prepared by: Ken McGee

Title: Forest Cruiser

CC: Audrey Stuart

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T15N R06E S29 Ty0U-2
THRU
T15N R06E S32 Ty00RW

Project: **KAHUNA**

Acres **159.70**

Page **1**
Date **9/7/2004**
Time **2:57:42PM**

Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent of Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log Ln Ft	Bd Ft	CF/ Lf	Logs Per /Acre
DF	D	SM		9	2.2	3,652	3,572	570			7	93			100		32	428	2.68	8.4
DF	D	2S		59	1.9	21,902	21,487	3,432		2	58	39			100		32	285	1.70	75.5
DF	D	3S		27	1.3	10,197	10,068	1,608		88	12			0	100		32	94	0.66	107.0
DF	D	4S		5	7.2	1,808	1,679	268	57	43			26	22	52		17	20	0.32	85.6
DF Totals				71	2.0	37,559	36,806	5,878	3	27	38	32	1	1	98		27	133	1.00	276.4
RA	D	2S		2	31.3	104	72	11			100				100		32	110	1.28	.7
RA	D	3S		28	6.7	901	841	134		88	12				100		32	123	0.97	6.8
RA	D	4S		70	8.2	2,294	2,107	336	20	80			6	9	85		28	41	0.39	50.8
RA Totals				6	8.5	3,299	3,019	482	14	80	6		4	6	89		28	52	0.47	58.3
WH	D	2S		25	1.9	2,815	2,762	441		7	82	11			100		32	235	1.48	11.7
WH	D	3S		57	1.3	6,222	6,141	981		91	9			0	100		32	78	0.52	78.7
WH	D	4S		18	2.2	1,918	1,876	300	80	20			24	23	53		17	17	0.25	108.8
WH Totals				21	1.6	10,955	10,778	1,721	14	57	26	3	4	4	92		24	54	0.49	199.2
RC	D	3S		81	5.6	852	804	128		55	45				100		32	136	1.23	5.9
RC	D	4S		19	10.0	201	181	29	29	71			26	25	49		21	26	0.42	7.0
RC Totals				2	6.4	1,053	985	157	5	58	37		5	5	91		26	76	0.88	12.9
CW	D	1S		68		50	50	8				100			100		32	1000	5.00	.0
CW	D	2S		32	19.6	28	22	4				100			100		32	450	2.94	.0
CW Totals				0	7.1	78	72	12				100			100		32	725	3.97	.1
Totals					2.4	52,943	51,661	8,250	6	37	34	24	2	2	96		26	94	0.77	547.0

TC PSTATS

PROJECT STATISTICS

PROJECT KAHUNA

DATE 9/7/2004

TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt
15N	06E	29	BIG KAHUNA	0U-2	THRU	159.70	52	317	S	W
15N	06E	32	R/W	00RW						

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	52	317	6.1		
CRUISE	30	180	6.0	31,127	.6
DBH COUNT					
REFOREST					
COUNT	22	137	6.2		
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	87	81.3	19.5	100	39	168.9	37,559	36,806	7,520	7,523
WHEMLOCK	39	78.3	12.3	72	14	64.6	10,955	10,778	2,325	2,325
R ALDER	41	28.8	12.6	71		24.9	3,299	3,019	779	779
WR CEDAR	12	6.4	16.8	59		9.8	1,053	985	293	294
COTWOOD	1	.0	34.0	104		.3	78	72	13	13
TOTAL	*180*	*194.9*	*15.9*	*83*		*268.5*	*52,943*	*51,661*	*10,930*	*10,933*

SD: 1	COEFF VAR.	S.E.%	SAMPLE TREES - BF LOW	AVG	HIGH	# OF TREES REQ. 7	9	INF. POP. 10
DOUG FIR	136.1	10.1	281	313	344			
WHEMLOCK	279.8	20.9	36	46	56			
R ALDER	206.9	15.4	23	28	32			
WR CEDAR	452.0	33.7	8	12	16			
COTWOOD	1341.6	100.0		8	16			
TOTAL	*95.6*	*7.1*	*377*	*406*	*435*	*187*	*113*	*91*

SD: 1	COEFF VAR.	S.E.%	SAMPLE TREES - CF LOW	AVG	HIGH	# OF TREES REQ. 7	9	INF. POP. 10
DOUG FIR	130.0	9.7	56	62	68			
WHEMLOCK	270.7	20.2	8	10	12			
R ALDER	210.9	15.7	6	7	8			
WR CEDAR	443.7	33.1	2	4	5			
COTWOOD	1341.6	100.0		1	3			
TOTAL	*84.2*	*6.3*	*79*	*84*	*89*	*145*	*88*	*71*

SD: 1	COEFF VAR.	S.E.%	TREES/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
DOUG FIR	85.6	11.9	72	81	91			
WHEMLOCK	139.2	19.3	63	78	93			
R ALDER	142.8	19.8	23	29	35			
WR CEDAR	176.6	24.5	5	6	8			
COTWOOD	721.1	100.0	0	0	0			
TOTAL	*63.7*	*8.8*	*178*	*195*	*212*	*83*	*50*	*41*

SD: 1	COEFF VAR.	S.E.%	BASAL AREA/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
DOUG FIR	69.7	9.7	153	169	185			
WHEMLOCK	116.8	16.2	54	65	75			
R ALDER	137.9	19.1	20	25	30			
WR CEDAR	181.1	25.1	7	10	12			
COTWOOD	721.1	100.0		0	1			
TOTAL	*46.1*	*6.4*	*251*	*269*	*286*	*43*	*26*	*21*

SD: 1	COEFF VAR.	S.E.%	NET BF/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
DOUG FIR	68.4	9.5	33,313	36,806	40,300			
WHEMLOCK	119.8	16.6	8,989	10,778	12,568			
R ALDER	138.9	19.3	2,438	3,019	3,601			
WR CEDAR	189.2	26.2	727	985	1,244			
COTWOOD	721.1	100.0		72	144			
TOTAL	*49.6*	*6.9*	*48,107*	*51,661*	*55,216*	*50*	*30*	*25*

SD: 1	COEFF VAR.	S.E.%	NET CUFT FT/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
DOUG FIR	69.1	9.6	6,802	7,523	8,243			
WHEMLOCK	116.8	16.2	1,948	2,325	2,702			
R ALDER	139.9	19.4	628	779	931			
WR CEDAR	186.2	25.8	218	294	370			
COTWOOD	721.1	100.0	0	13	25			
TOTAL	*48.2*	*6.7*	*10,203*	*10,933*	*11,664*	*47*	*29*	*23*

TC PSTNDSUM

Stand Table Summary

Page 1
Date: 9/7/2004

T15N R06E S29 Ty0U-2
THRU
T15N R06E S32 Ty00RW

Project KAHUNA
Acres 159.70

Time: 2:57:42PM
Grown Year:

Spc	S T	DBH	Sample Trees	FF 16'	Tot Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		10	1	87	112	4.201	2.16	12.60	5.9	30.0	2.13	75	378	340	119	60
DF		11	2	86	97	6.907	4.64	20.72	6.8	30.0	3.99	140	622	637	223	99
DF		13	5	87	107	8.311	7.59	21.74	12.3	53.6	7.60	268	1,166	1,214	427	186
DF		14	1	87	117	1.933	2.16	5.80	14.6	70.0	2.41	84	406	384	135	65
DF		15	4	86	110	4.118	4.89	12.35	14.6	67.6	5.13	180	835	819	287	133
DF		16	3	86	125	4.735	6.47	15.79	17.0	75.9	7.63	268	1,198	1,219	428	191
DF		17	5	90	126	5.744	8.99	18.63	20.9	97.7	11.09	389	1,821	1,771	621	291
DF		18	3	87	134	3.880	6.63	14.21	20.5	97.4	8.28	291	1,383	1,323	464	221
DF		19	3	88	130	3.332	6.47	11.09	25.5	122.2	8.03	283	1,356	1,282	451	217
DF		20	7	86	128	7.218	15.75	23.78	28.0	126.9	18.99	666	3,018	3,033	1,064	482
DF		21	6	87	130	5.490	13.10	21.00	27.5	125.1	16.44	577	2,626	2,626	922	419
DF		22	4	88	140	3.391	8.95	12.69	33.4	166.8	12.08	424	2,116	1,929	677	338
DF		23	11	86	148	6.531	18.84	26.13	34.0	164.7	25.32	888	4,303	4,044	1,418	687
DF		24	3	85	141	1.525	4.79	6.10	36.1	178.1	6.26	220	1,086	1,000	351	173
DF		25	5	87	141	3.327	11.27	12.63	42.4	220.0	15.27	536	2,779	2,439	855	444
DF		26	6	86	145	3.597	13.26	14.39	44.7	224.4	18.30	643	3,229	2,923	1,027	516
DF		27	3	88	147	1.205	4.79	4.82	49.5	272.1	6.80	239	1,311	1,086	381	209
DF		28	5	86	145	2.167	9.27	8.16	55.2	288.7	12.84	451	2,356	2,051	720	376
DF		29	2	86	151	.574	2.63	2.30	57.8	322.6	3.79	133	741	605	212	118
DF		30	4	84	147	1.857	9.12	6.96	63.0	330.8	12.49	438	2,301	1,994	699	367
DF		31	2	89	130	.502	2.63	1.57	78.3	413.8	3.49	123	649	558	196	104
DF		32	1	79	175	.386	2.16	1.93	58.1	310.0	3.20	112	598	510	179	96
DF		35	1	86	120	.347	2.32	1.04	93.2	506.7	2.77	97	528	442	155	84
DF		Totals	87	87	127	81.279	168.87	276.41	27.2	133.2	214.33	7,523	36,806	34,229	12,014	5,878
WH		8	1	89	71	5.338	2.05	10.68	4.4	20.0	1.51	47	214	242	76	34
WH		9	4	88	64	13.976	6.37	27.95	5.3	25.4	4.73	148	711	755	236	113
WH		10	6	88	84	18.175	9.97	46.77	6.3	30.6	9.49	296	1,433	1,515	473	229
WH		11	7	89	90	12.696	8.32	32.23	8.4	37.8	8.64	270	1,217	1,379	432	194
WH		12	2	89	95	4.747	3.70	14.24	8.9	36.4	4.07	127	519	650	203	83
WH		13	3	88	75	4.512	4.11	9.24	12.6	52.4	3.73	117	484	596	186	77
WH		14	2	92	98	3.871	4.11	11.61	13.9	66.7	5.18	162	774	827	258	124
WH		15	2	88	110	3.381	3.90	10.14	16.3	76.7	5.29	165	778	845	264	124
WH		16	2	89	105	2.795	3.90	7.06	21.5	92.1	4.84	152	650	773	242	104
WH		17	1	88	117	1.303	2.05	3.91	24.3	113.3	3.04	95	443	486	152	71
WH		18	3	90	106	3.208	5.75	9.62	24.0	106.8	7.41	231	1,028	1,183	370	164
WH		19	2	88	135	1.944	3.90	6.87	28.2	135.9	6.19	194	934	989	310	149
WH		21	2	90	136	1.708	4.11	6.83	30.3	150.0	6.62	207	1,025	1,057	330	164
WH		25	2	88	131	.695	2.37	2.08	54.6	273.6	3.64	114	570	581	182	91
WH		Totals	39	89	87	78.349	64.61	199.24	11.7	54.1	74.39	2,325	10,778	11,880	3,713	1,721
RA		9	2	84	77	1.973	.88	3.95	6.1	30.0	.67	24	118	107	38	19
RA		10	4	85	78	3.756	2.09	7.51	7.8	36.6	1.62	59	275	259	94	44
RA		11	5	87	85	5.447	3.50	10.89	10.1	42.5	3.03	111	463	485	176	74
RA		12	9	84	80	6.757	5.27	12.84	12.0	44.5	4.26	155	571	680	247	91
RA		13	5	85	85	2.417	2.20	4.95	14.3	49.1	1.95	71	243	312	113	39
RA		14	5	84	87	2.940	3.17	4.64	15.8	71.7	2.03	73	332	324	117	53
RA		15	4	84	103	1.952	2.41	4.85	18.3	75.4	2.45	89	366	390	142	58
RA		16	3	85	107	1.649	2.29	4.21	20.9	73.8	2.41	88	310	385	140	50
RA		17	3	84	97	1.258	1.97	2.52	27.5	86.5	1.90	69	218	304	111	35
RA		18	1	85	101	.652	1.09	1.96	20.9	63.3	1.12	41	124	179	65	20
RA		Totals	41	85	86	28.802	24.87	58.31	13.4	51.8	21.44	779	3,019	3,423	1,245	482
RC		8	1	79	42	.299	.12	.30	5.8	30.0	.04	2	9	7	3	1
RC		11	2	81	53	1.775	1.17	1.78	13.3	47.0	.55	24	84	89	38	13
RC		15	1	79	63	.816	1.06	1.63	17.2	55.0	.66	28	90	105	45	14
RC		17	1	82	90	.670	1.06	2.01	16.5	63.3	.78	33	127	124	53	20
RC		18	2	80	82	1.217	2.11	3.07	21.0	61.3	1.50	64	188	240	103	30
RC		20	1	79	71	.484	1.06	.97	31.4	95.0	.71	30	92	114	49	15
RC		21	1	79	98	.439	1.06	1.32	29.0	110.0	.90	38	145	143	61	23
RC		22	1	84	103	.400	1.06	1.20	32.1	140.0	.91	39	168	145	62	27
RC		23	1	80	82	.040	.12	.08	43.7	140.0	.08	3	11	13	6	2
RC		26	1	78	80	.287	1.06	.57	56.0	125.0	.75	32	72	120	51	11
RC		Totals	12	80	72	6.427	9.85	12.92	22.7	76.2	6.89	294	985	1,100	469	157
CW		34	1	87	129	.050	.31	.10	126.9	725.0	.31	13	72	49	20	12
CW		Totals	1	87	129	.050	.31	.10	126.9	725.0	.31	13	72	49	20	12
Totals			180	87	103	194.907	268.51	546.98	20.0	94.4	317.35	10,933	51,661	50,681	17,461	8,250

TC PSPCTLTCM

Species Summary - Trees, Logs, Tons, CCF, MBF

T15N R06E S29 Ty0U-2	82.2
T15N R06E S32 Ty0U 1	72.3
T15N R06E S32 TyF124	.6

Project KAHUNA
Acres 159.70

Page No 1
Date: 9/7/2004
Time 2:57:41PM

Species	S T	Total Trees	Total Logs	Total Tons	Net Cubic Ft/ Tree	Net Cubic Ft/ Log	CF/ LF	Total CCF Gross	Total CCF Net	Total MBF Gross	Total MBF Net
DOUG FIR		12,980	44,142	34,229	92.55	27.22	1.03	12,010	12,014	5,998	5,878
WHEMLOCK		12,512	31,819	11,880	29.67	11.67	0.50	3,712	3,713	1,749	1,721
R ALDER		4,600	9,312	3,423	27.06	13.37	0.47	1,245	1,245	527	482
WR CEDAR		1,026	2,063	1,100	45.71	22.74	0.90	468	469	168	157
COTWOOD		8	16	49	253.87	126.94	3.97	20	20	12	12
Totals		31,127	87,353	50,681	56.10	19.99	0.78	17,456	17,461	8,455	8,250

Wood Type Species	Total Trees	Total Logs	Total Tons	Net Cubic Ft/ Tree	Net Cubic Ft/ Log	CF/ LF	Total CCF Gross	Total CCF Net	Total MBF Gross	Total MBF Net
C	26,519	78,025	47,209	61.07	20.76	0.82	16,191	16,196	7,916	7,757
H	4,608	9,328	3,473	27.45	13.56	0.48	1,265	1,265	539	494
Totals	31,127	87,353	50,681	56.10	19.99	0.78	17,456	17,461	8,455	8,250

TC TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: KAHUNA

Date 9/7/2004

Time 2:44:28PM

T15N R06E S32 T0U 1

Twp	Rge	Sec	Tract	Type	Acre	Plots	Sample Trees	CuFt	BdFt
15N	06E	32	BIG KAHUNA	0U 1	72.30	20	68	S	W

T15N R06E S32 T0U 1

Spp	ST	Sort	Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log Ln Ft	Bd Ft	CF/ Lf	Logs Per /Acre
DF	D		SM	17	2.6	6,833	6,657	481			9	91			100		32	418	2.62	15.9
DF	D		2S	51	3.4	19,601	18,932	1,369			55	45			100		32	306	1.81	61.9
DF	D		3S	26	2.5	10,043	9,788	708		87	13			1	99		32	94	0.66	104.3
DF	D		4S	6	11.2	2,283	2,028	147	49	51			23	16	61		19	22	0.34	90.6
DF	**Totals**			68	3.5	38,760	37,405	2,704	3	26	33	39	1	1	98		28	137	1.02	272.8
WH	D		2S	28	2.8	4,257	4,140	299			86	14			100		32	258	1.60	16.1
WH	D		3S	56		8,164	8,164	590		85	15				100		32	84	0.55	97.3
WH	D		4S	16	1.0	2,252	2,229	161	96	4			28	28	44		17	17	0.24	133.0
WH	**Totals**			26	1.0	14,673	14,532	1,051	15	48	33	4	4	4	91		24	59	0.52	246.3
RA	D		3S	11	9.7	332	300	22		100					100		32	116	0.98	2.6
RA	D		4S	89	3.5	2,509	2,422	175	23	77			3	12	85		28	43	0.38	56.4
RA	**Totals**			5	4.2	2,841	2,722	197	20	80			3	11	87		28	46	0.41	59.0
RC	D		3S	68	12.3	513	450	33		19	81				100		32	175	1.64	2.6
RC	D		4S	32	5.8	218	205	15		100			5		95		28	40	0.48	5.1
RC	**Totals**			1	10.4	731	655	47		45	55		1		99		29	85	0.90	7.7
Type Totals					3.0	57,005	55,315	3,999	7	34	32	27	2	2	95		26	94	0.76	585.8

TC TSTATS

STATISTICS

PROJECT KAHUNA

DATE 9/7/2004

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
15N	06E	32	BIG KAHUNA	0U 1	72.30	20	123	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	20	123	6.2		
CRUISE	11	68	6.2	15,683	.4
DBH COUNT					
REFOREST					
COUNT	9	55	6.1		
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	34	83.4	19.6	98	41	174.2	38,760	37,405	7,702	7,704
WHEMLOCK	18	98.5	12.3	71	17	81.7	14,673	14,532	3,063	3,063
R ALDER	13	29.8	11.6	69		22.0	2,841	2,722	680	679
WR CEDAR	3	5.1	15.8	54		7.0	731	655	204	204
TOTAL	*68*	*216.9*	*15.5*	*80*		*284.9*	*57,005*	*55,315*	*11,649*	*11,651*

	COEFF		**SAMPLE TREES - BF**			# OF TREES REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	129.8	15.7	287	341	395			
WHEMLOCK	240.1	29.1	49	69	90			
R ALDER	223.0	27.0	14	19	24			
WR CEDAR	540.6	65.6	3	9	15			
TOTAL	*90.1*	*10.9*	*390*	*438*	*486*	*166*	*100*	*81*

	COEFF		**SAMPLE TREES - CF**			# OF TREES REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	125.0	15.2	58	68	79			
WHEMLOCK	235.1	28.5	10	14	19			
R ALDER	227.4	27.6	3	5	6			
WR CEDAR	547.3	66.4	1	3	5			
TOTAL	*81.7*	*9.9*	*82*	*91*	*100*	*136*	*82*	*67*

	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	61.6	13.8	72	83	95			
WHEMLOCK	125.5	28.1	71	99	126			
R ALDER	142.6	31.9	20	30	39			
WR CEDAR	188.5	42.1	3	5	7			
TOTAL	*57.0*	*12.7*	*189*	*217*	*245*	*66*	*40*	*32*

	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	53.3	11.9	153	174	195			
WHEMLOCK	97.9	21.9	64	82	100			
R ALDER	131.6	29.4	16	22	28			
WR CEDAR	167.8	37.5	4	7	10			
TOTAL	*30.2*	*6.8*	*266*	*285*	*304*	*19*	*11*	*9*

	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	54.1	12.1	32,877	37,405	41,933			
WHEMLOCK	93.8	21.0	11,484	14,532	17,581			
R ALDER	133.5	29.9	1,909	2,722	3,535			
WR CEDAR	171.9	38.4	403	655	907			
TOTAL	*31.3*	*7.0*	*51,449*	*55,315*	*59,180*	*20*	*12*	*10*

	COEFF		**NET CUFT FT/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	53.4	11.9	6,784	7,704	8,624			
WHEMLOCK	93.1	20.8	2,426	3,063	3,701			
R ALDER	130.7	29.2	481	679	878			
WR CEDAR	169.6	37.9	126	204	281			
TOTAL	*30.5*	*6.8*	*10,856*	*11,651*	*12,445*	*19*	*11*	*9*

TC TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: KAHUNA

Date 9/7/2004

Time 2:49:07PM

T15N R06E S29 T0U-2

Twp	Rge	Sec	Tract	Type	Acre	Plots	Sample Trees	CuFt	BdFt
15N	06E	29	BIG KAHUNA	0U-2	82.20	26	72	S	W

T15N R06E S29 T0U-2

Spp	ST	Sort	Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log Ln Ft	Bd Ft	CF/ Lf	Logs Per /Acre
DF	D		SM	2		996	996	82				100			100		32	478	3.05	2.1
DF	D		2S	65	.7	24,205	24,029	1,975		4	62	34			100		32	270	1.62	89.1
DF	D		3S	29	.2	10,569	10,548	867		88	12				100		32	94	0.65	111.8
DF	D		4S	4	1.4	1,431	1,410	116	68	32			30	29	42		15	17	0.29	83.2
DF	**Totals**			76	.6	37,201	36,983	3,040	3	29	44	25	1	1	98		27	129	0.97	286.1
WH	D		2S	20		1,598	1,598	131		23	77				100		32	193	1.25	8.3
WH	D		3S	59	3.1	4,639	4,493	369		100					100		32	71	0.50	63.2
WH	D		4S	21	3.3	1,614	1,562	128	62	38			20	16	63		17	18	0.25	87.8
WH	**Totals**			16	2.5	7,851	7,653	629	13	71	16		4	3	93		24	48	0.46	159.2
RA	D		2S	4	31.3	203	139	11			100				100		32	110	1.28	1.3
RA	D		3S	42	6.7	1,324	1,236	102		86	14				100		32	126	0.98	9.8
RA	D		4S	54	14.5	1,881	1,608	132	18	82			9	6	85		28	40	0.40	40.2
RA	**Totals**			6	12.5	3,408	2,983	245	10	80	11		5	3	92		28	58	0.55	51.3
RC	D		3S	88	3.1	1,182	1,145	94		68	32				100		32	127	1.12	9.0
RC	D		4S	12	14.4	171	146	12	53	47			57	43			17	18	0.39	8.2
RC	**Totals**			3	4.5	1,353	1,292	106	6	65	28		7	5	89		25	75	0.89	17.2
Type Totals					1.8	49,813	48,910	4,020	5	39	37	19	2	2	96		26	95	0.78	513.9

TC TSTATS

STATISTICS

PROJECT KAHUNA

DATE 9/7/2004

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
15N	06E	29	BIG KAHUNA	0U-2	82.20	26	154	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	26	154	5.9		
CRUISE	13	72	5.5	14,309	.5
DBH COUNT					
REFOREST COUNT	13	82	6.3		
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	40	80.9	19.5	104	39	167.5	37,201	36,983	7,513	7,516
WHEMLOCK	14	60.8	12.3	74	11	50.3	7,851	7,653	1,712	1,712
R ALDER	12	25.4	13.5	72		25.4	3,408	2,983	801	801
WR CEDAR	6	7.0	18.0	65		12.3	1,353	1,292	377	378
TOTAL	*72*	*174.1*	*16.4*	*87*		*255.5*	*49,813*	*48,910*	*10,402*	*10,407*

	COEFF		**SAMPLE TREES - BF**			# OF TREES REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	118.7	14.0	288	334	381			
WHEMLOCK	256.7	30.3	22	32	41			
R ALDER	254.1	30.0	16	22	29			
WR CEDAR	376.2	44.3	9	17	24			
TOTAL	*85.5*	*10.1*	*364*	*405*	*446*	*149*	*90*	*73*

	COEFF		**SAMPLE TREES - CF**			# OF TREES REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	112.5	13.3	58	66	75			
WHEMLOCK	251.5	29.6	5	7	9			
R ALDER	258.1	30.4	4	6	8			
WR CEDAR	353.0	41.6	3	5	7			
TOTAL	*72.9*	*8.6*	*77*	*84*	*92*	*108*	*66*	*53*

	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	91.6	18.0	66	81	95			
WHEMLOCK	122.0	23.9	46	61	75			
R ALDER	143.3	28.1	18	25	33			
WR CEDAR	171.6	33.6	5	7	9			
TOTAL	*49.3*	*9.7*	*157*	*174*	*191*	*50*	*30*	*24*

	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	67.5	13.2	145	168	190			
WHEMLOCK	110.2	21.6	39	50	61			
R ALDER	145.4	28.5	18	25	33			
WR CEDAR	172.4	33.8	8	12	16			
TOTAL	*38.7*	*7.6*	*236*	*255*	*275*	*31*	*18*	*15*

	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	64.2	12.6	32,324	36,983	41,641			
WHEMLOCK	116.4	22.8	5,906	7,653	9,400			
R ALDER	148.5	29.1	2,114	2,983	3,851			
WR CEDAR	175.0	34.3	848	1,292	1,735			
TOTAL	*44.7*	*8.8*	*44,620*	*48,910*	*53,200*	*41*	*25*	*20*

	COEFF		**NET CUFT FT/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1	VAR.	S.E.%	LOW	AVG	HIGH	7	9	10
DOUG FIR	66.0	12.9	6,544	7,516	8,488			
WHEMLOCK	112.9	22.1	1,333	1,712	2,091			
R ALDER	149.5	29.3	566	801	1,036			
WR CEDAR	173.9	34.1	249	378	507			
TOTAL	*42.1*	*8.3*	*9,547*	*10,407*	*11,267*	*36*	*22*	*18*

TC TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: KAHUNA

Date 9/7/2004

Time 2:51:38PM

T15N R06E S32 T00RW

Twp	Rge	Sec	Tract	Type	Acre	Plots	Sample Trees	CuFt	BdFt
15N	06E	32	R/W	00RW	4.60	5	33	S	W

T15N R06E S32 T00RW

Spp	ST	Sort	Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log Ln Ft	Bd Ft	CF/ Lf	Logs Per /Acre
DF		D	SM	6	.0	1,591	1,591	7				100			100		32	670	3.46	2.4
DF		D	2S	70	3.8	19,092	18,371	85			30	70			100		32	359	2.05	51.1
DF		D	3S	19	1.7	5,013	4,927	23		87	13			3	97		32	102	0.75	48.2
DF		D	4S	5	10.6	1,205	1,078	5	55	45			39	43	18		20	25	0.37	43.7
DF	**Totals**			61	3.5	26,901	25,967	119	2	18	23	56	2	2	96		28	179	1.24	145.4
RA		D	3S	27		2,399	2,399	11		83	17				100		32	116	0.85	20.7
RA		D	4S	73	3.7	6,584	6,344	29	17	83			11	5	85		24	40	0.39	159.1
RA	**Totals**			20	2.7	8,983	8,742	40	12	83	5		8	3	89		25	49	0.45	179.8
WH		D	2S	46		2,268	2,268	10			32	68			100		32	355	2.10	6.4
WH		D	3S	43	8.7	2,253	2,057	9		100				8	92		31	53	0.42	38.7
WH		D	4S	11	23.6	673	514	2	100				38	62			17	14	0.22	35.5
WH	**Totals**			11	6.8	5,194	4,839	22	11	43	15	32	4	10	86		25	60	0.53	80.6
RC		D	3S	47		388	388	2		18	82				100		32	140	1.37	2.8
RC		D	4S	53	12.3	494	433	2	100					100			24	26	0.31	16.5
RC	**Totals**			2	6.9	882	821	4	53	8	39			53	47		25	43	0.50	19.2
CW		D	1S	68		1,727	1,727	8				100			100		32	1000	5.00	1.7
CW		D	2S	32	19.6	967	777	4				100			100		32	450	2.94	1.7
CW	**Totals**			6	7.1	2,694	2,504	12				100			100		32	725	3.97	3.5
Type Totals					4.0	44,654	42,874	197	6	33	18	43	3	4	93		26	100	0.79	428.4

TC PSTATS

PROJECT STATISTICS

PROJECT KAHUNA

DATE 9/7/2004

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
15N	06E	32	R/W	00RW	4.60	5	33	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	5	33	6.6		
CRUISE	5	33	6.6	847	3.9
DBH COUNT					
REFOREST					
COUNT					
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	10	48.2	20.4	91	25	108.9	26,901	25,967	5,084	5,082
R ALDER	16	77.6	12.3	70		64.0	8,983	8,742	2,062	2,058
WHEMLOCK	3	38.7	12.4	61	7	32.7	5,194	4,839	1,073	1,068
WR CEDAR	3	17.8	11.1	36		12.0	882	821	240	242
COTWOOD	1	1.7	34.0	104		10.9	2,694	2,504	438	438
TOTAL	*33*	*184.0*	*15.1*	*71*		*228.5*	*44,654*	*42,874*	*8,897*	*8,888*

SD: 1	COEFF VAR.	S.E.%	SAMPLE TREES - BF LOW	AVG	HIGH	# OF TREES REQ. 7	9	INF. POP. 10
DOUG FIR	188.5	32.8	172	256	340			
R ALDER	120.1	20.9	50	63	76			
WHEMLOCK	486.6	84.7	4	27	50			
WR CEDAR	488.6	85.1	1	10	19			
COTWOOD	574.5	100.0		44	88			
TOTAL	*120.4*	*21.0*	*316*	*400*	*484*	*296*	*179*	*145*

SD: 1	COEFF VAR.	S.E.%	SAMPLE TREES - CF LOW	AVG	HIGH	# OF TREES REQ. 7	9	INF. POP. 10
DOUG FIR	182.1	31.7	33	49	64			
R ALDER	121.3	21.1	12	15	18			
WHEMLOCK	473.1	82.3	1	6	10			
WR CEDAR	487.8	84.9	0	3	6			
COTWOOD	574.5	100.0		8	15			
TOTAL	*106.4*	*18.5*	*65*	*80*	*95*	*231*	*140*	*113*

SD: 1	COEFF VAR.	S.E.%	TREES/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
DOUG FIR	89.9	40.2	29	48	68			
R ALDER	86.8	38.8	48	78	108			
WHEMLOCK	136.9	61.2	15	39	62			
WR CEDAR	148.2	66.3	6	18	30			
COTWOOD	223.6	100.0	0	2	3			
TOTAL	*45.5*	*20.3*	*147*	*184*	*221*	*42*	*26*	*21*

SD: 1	COEFF VAR.	S.E.%	BASAL AREA/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
DOUG FIR	93.5	41.8	63	109	154			
R ALDER	80.9	36.2	41	64	87			
WHEMLOCK	149.1	66.7	11	33	54			
WR CEDAR	149.1	66.7	4	12	20			
COTWOOD	223.6	100.0		11	22			
TOTAL	*15.1*	*6.7*	*213*	*228*	*244*	*5*	*3*	*2*

SD: 1	COEFF VAR.	S.E.%	NET BF/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
DOUG FIR	109.8	49.1	13,220	25,967	38,713			
R ALDER	82.1	36.7	5,532	8,742	11,952			
WHEMLOCK	172.7	77.2	1,101	4,839	8,577			
WR CEDAR	185.1	82.8	141	821	1,501			
COTWOOD	223.6	100.0		2,504	5,009			
TOTAL	*38.5*	*17.2*	*35,497*	*42,874*	*50,250*	*30*	*18*	*15*

SD: 1	COEFF VAR.	S.E.%	NET CUFT FT/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
DOUG FIR	105.1	47.0	2,693	5,082	7,471			
R ALDER	82.4	36.8	1,300	2,058	2,816			
WHEMLOCK	170.3	76.1	255	1,068	1,880			
WR CEDAR	162.9	72.9	66	242	419			
COTWOOD	223.6	100.0	0	438	877			
TOTAL	*30.2*	*13.5*	*7,687*	*8,888*	*10,089*	*19*	*11*	*9*

TC TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: KAHUNA

Date 9/7/2004

Time 3:03:54PM

T15N R06E S32 TF124

Twp	Rge	Sec	Tract	Type	Acre	Plots	Sample Trees	CuFt	BdFt
15N	06E	32	BIG KAHUNA	F124	.60	1	7	S	W

T15N R06E S32 TF124

Spp	ST	Sort	Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log Ln Ft	Bd Ft	CF/Lf	Logs Per /Acre
WH		D	3S	60		19,368	19,368	12		100					100		32	70	0.49	276.7
WH		D	4S	40		12,777	12,777	8	48	52			10	19	71		17	20	0.24	645.3
WH	**Totals**			58		32,144	32,144	19	19	81			4	7	88		21	35	0.35	922.0
DF		D	2S	21		5,134	5,134	3		100					100		32	140	1.03	36.7
DF		D	3S	75		17,541	17,541	11		100					100		32	79	0.56	221.5
DF		D	4S	4		924	924	1	100				100				7	7	0.17	129.1
DF	**Totals**			42	.0	23,599	23,599	14	4	96			4		96		24	61	0.58	387.2
Type Totals						55,743	55,743	33	13	87			4	4	92		22	43	0.42	1,309.2

TC TSTATS

STATISTICS

PROJECT KAHUNA

DATE 9/7/2004

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
15N	06E	32	R/W	00RW	4.60	5	33	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	5	33	6.6		
CRUISE	5	33	6.6	847	3.9
DBH COUNT					
REFOREST					
COUNT					
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR	10	48.2	20.4	91	25	108.9	26,901	25,967	5,084	5,082
R ALDER	16	77.6	12.3	70		64.0	8,983	8,742	2,062	2,058
WHEMLOCK	3	38.7	12.4	61	7	32.7	5,194	4,839	1,073	1,068
WR CEDAR	3	17.8	11.1	36		12.0	882	821	240	242
COTWOOD	1	1.7	34.0	104		10.9	2,694	2,504	438	438
TOTAL	*33*	*184.0*	*15.1*	*71*		*228.5*	*44,654*	*42,874*	*8,897*	*8,888*

SD: 1	COEFF VAR.	S.E.%	LOW	AVG	HIGH	# OF TREES REQ. 7	9	INF. POP. 10
			SAMPLE TREES - BF					
DOUG FIR	188.5	32.8	172	256	340			
R ALDER	120.1	20.9	50	63	76			
WHEMLOCK	486.6	84.7	4	27	50			
WR CEDAR	488.6	85.1	1	10	19			
COTWOOD	574.5	100.0		44	88			
TOTAL	*120.4*	*21.0*	*316*	*400*	*484*	*296*	*179*	*145*

SD: 1	COEFF VAR.	S.E.%	LOW	AVG	HIGH	# OF TREES REQ. 7	9	INF. POP. 10
			SAMPLE TREES - CF					
DOUG FIR	182.1	31.7	33	49	64			
R ALDER	121.3	21.1	12	15	18			
WHEMLOCK	473.1	82.3	1	6	10			
WR CEDAR	487.8	84.9	0	3	6			
COTWOOD	574.5	100.0		8	15			
TOTAL	*106.4*	*18.5*	*65*	*80*	*95*	*231*	*140*	*113*

SD: 1	COEFF VAR.	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
			TREES/ACRE					
DOUG FIR	89.9	40.2	29	48	68			
R ALDER	86.8	38.8	48	78	108			
WHEMLOCK	136.9	61.2	15	39	62			
WR CEDAR	148.2	66.3	6	18	30			
COTWOOD	223.6	100.0	0	2	3			
TOTAL	*45.5*	*20.3*	*147*	*184*	*221*	*42*	*26*	*21*

SD: 1	COEFF VAR.	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
			BASAL AREA/ACRE					
DOUG FIR	93.5	41.8	63	109	154			
R ALDER	80.9	36.2	41	64	87			
WHEMLOCK	149.1	66.7	11	33	54			
WR CEDAR	149.1	66.7	4	12	20			
COTWOOD	223.6	100.0	0	11	22			
TOTAL	*15.1*	*6.7*	*213*	*228*	*244*	*5*	*3*	*2*

SD: 1	COEFF VAR.	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
			NET BF/ACRE					
DOUG FIR	109.8	49.1	13,220	25,967	38,713			
R ALDER	82.1	36.7	5,532	8,742	11,952			
WHEMLOCK	172.7	77.2	1,101	4,839	8,577			
WR CEDAR	185.1	82.8	141	821	1,501			
COTWOOD	223.6	100.0		2,504	5,009			
TOTAL	*38.5*	*17.2*	*35,497*	*42,874*	*50,250*	*30*	*18*	*15*

SD: 1	COEFF VAR.	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 7	9	INF. POP. 10
			NET CUFT FT/ACRE					
DOUG FIR	105.1	47.0	2,693	5,082	7,471			
R ALDER	82.4	36.8	1,300	2,058	2,816			
WHEMLOCK	170.3	76.1	255	1,068	1,880			
WR CEDAR	162.9	72.9	66	242	419			
COTWOOD	223.6	100.0		438	877			
TOTAL	*30.2*	*13.5*	*7,687*	*8,888*	*10,089*	*19*	*11*	*9*