"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Green Machine
Sale 341-15-60

District: Astoria

Date: June 04, 2014

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$1,013,596.71	$0.00	$1,013,596.71
		Project Work:	$0.00
		Advertised Value:	$1,013,596.71

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Timber Sale Appraisal
Green Machine
Sale 341-15-60

District: Astoria

Date: June 04, 2014

timber description

Location: Portions of Section 7, T6N, R8W, W.M., Clatsop County, Oregon

Stand Stocking: 100%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Western Hemlock / Fir	13	0	95

Volume by Grade	3S	Total
Western Hemlock / Fir	3,031	3,031
Total	3,031	3,031

comments: Pond Value Used 1st quarter Calender Year 2014

Expected Log markets Warrenton, OR; Tillamook, OR; Claskanine, OR; Mist, OR; Garibaldi, OR; Longview, WA; Aberdeen, WA.

SCALING COST ALLOWANCE: $5.00/MBF

FUEL COST ALLOWANCE: $4.00/GALLON

HAULING COST ALLOWANCE: Hauling costs equivalent to $780. per day truck cost.

OTHER COSTS (With Profit and Risk):
Branding and Painting: $1.00/MBF X 3,032 MBF = $3,032.
Slash and Landing piling in MC (including move-in and pile material) = $7,188.

TOTAL OTHER COSTS (With Profit and Risk): $10,220

OTHER COSTS (No Profit and Risk):
Machine Wash for Invasive Species: $2,000

TOTAL FOR OTHER COSTS (No Profit and Risk) = $2,000.

"STEWARDSHIP IN FORESTRY"

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Sale 341-15-60

District: Astoria **Date: June 04, 2014**

logging conditions

combination#: 1 Western Hemlock / Fir 100.00%

yarding distance: Medium (800 ft) **downhill yarding:** No

logging system: Cable: Large Tower >=70 **Process**: Manual Falling/Delimbing

tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

loads / day: 9.0 **bd. ft / load:** 4,000

cost / mbf: $102.60

machines: Log Loader (A)
Tower Yarder (Large)

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Green Machine
Sale 341-15-60

District: Astoria **Date:** June 04, 2014

logging costs

Operating Seasons:	1.00	**Profit Risk:**	9.00%
Project Costs:	$0.00	**Other Costs (P/R):**	$10,220.00
Slash Disposal:	$0.00	**Other Costs:**	$2,000.00

Miles of Road

Road Maintenance: $4.02

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

Hauling Costs

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

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Green Machine
Sale 341-15-60

District: Astoria **Date:** June 04, 2014

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Western Hemlock / Fir									
$102.60	$4.22	$1.45	$62.61	$3.37	$15.68	$0.00	$5.00	$0.66	$195.59

Specie	Amortization	Pond Value	Stumpage	Amortized
Western Hemlock / Fir	$0.00	$530.00	$334.41	$0.00

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Green Machine
Sale 341-15-60

District: **Astoria** **Date:** **June 04, 2014**

summary

Amortized

Specie	MBF	Value	Total
Western Hemlock / Fir	0	$0.00	$0.00

Unamortized

Specie	MBF	Value	Total
Western Hemlock / Fir	3,031	$334.41	$1,013,596.71

Gross Timber Sale Value

Recovery: $1,013,596.71

Prepared by: John Tillotson **Phone:** 503-325-5451

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Green Machine
Sale 341-15- **60 - 69**

District: Astoria

Date: May 20, 2014

Individual Sort Appraisal addendum:

Sort #	Species and Sort Specifications	Average Log Length	Estimated Net Volume		Logging Cost	Road Maintenance	Fire Protection	Appraised Hauling	Other P/R Costs	Scaling	Profit and Risk	Other	Minimum Bid Delivered Prices		(net to state)		Total Apprised Value	Bid Deposit
			Mbf	Tons									$/mbf	$/Ton	$/mbf	$/Ton		
341-15-60	WH/fir 6"-11"		2,086	n/a	$102.60	$4.22	$1.45	$62.61	$3.37	$5.00	$15.68	$0.66	$530.00	n/a	$334.41	n/a	$1,105,580.00	$110,558.00
341-15-61	WH/fir 12"+		641	n/a	$102.60	$4.22	$1.45	$62.61	$3.37	$5.00	$15.68	$0.66	$550.00	n/a	$354.41	n/a	$352,550.00	$35,255.00
341-15-62	WH/fir Camp Run 6"+	28	2,727	n/a	$102.60	$4.22	$1.45	$62.61	$3.37	$5.00	$15.68	$0.66	$540.00	n/a	$344.41	n/a	$1,472,580.00	$147,258.00
341-15-63	DF 6"-13"		33	n/a	$102.60	$4.22	$1.45	$62.61	$3.37	$5.00	$15.68	$0.66	$645.00	n/a	$449.41	n/a	$21,285.00	$2,128.50
341-15-64	DF 14"+		130	n/a	$102.60	$4.22	$1.45	$62.61	$3.37	$5.00	$15.68	$0.66	$685.00	n/a	$489.41	n/a	$89,050.00	$8,905.00
341-15-65	DF Camp Run 6"+	27	163	n/a	$102.60	$4.22	$1.45	$62.61	$3.37	$5.00	$15.68	$0.66	$660.00	n/a	$464.41	n/a	$107,580.00	$10,758.00
341-15-66	RA Camp Run 6"+		51	n/a	$102.60	$4.22	$1.45	$62.61	$3.37	$5.00	$15.68	$0.66	$500.00	n/a	$304.41	n/a	$25,500.00	$2,550.00
341-15-67	SS 6"-20"	40	46	n/a	$102.60	$4.22	$1.45	$62.61	$3.37	$5.00	$15.68	$0.66	$520.00	n/a	$324.41	n/a	$23,920.00	$2,392.00
341-15-68	SS 21"+	40	44	n/a	$102.60	$4.22	$1.45	$62.61	$3.37	$5.00	$15.68	$0.66	$250.00	n/a	$54.41	n/a	$11,000.00	$1,100.00
341-15-69	Pulp 2"+		330	2,968	$102.60	$4.22	$1.45	$62.61	$3.37	$1.00	$15.68	$0.66	$250.00	$27.78	n/a	$6.49	$82,444.44	$8,244.44

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale:	**Green Machine**	**MBF:**	3,031
Date:	May 21, 2014	**$$/MBF:**	$4.02
By:	John Tillotson		

Type	Equipment/Rationale	Move-in Rate	Times	Hours	Rate	Cost	
Interim	Grader 14G	$778	1	8	$100	$1,578	
	Grader 14G	$778	1	40	$100	$4,778	
Final	Dump Truck 12CY	$163	1	8	$79	$795	
Road	FE Loader C966	$778	1	4	$83	$1,110	
Maintenance	Vibratory Roller	$778	1	20	$77	$2,318	
Haul Route	Water Truck 2,500 gallon	$190	1	16	$89	$1,614	
Total							**$12,193**

*Final Road Maint: Grade only on Saddle Mtn. County Rd.
Water, Process and Compact all crushed rock from Green Mtn. Gate to Timber Sale Area.

Final Road Maintenance

Production Rates	Miles/day	Distance(miles)	Days	Hours
Grader	1.5	6.0	4.0	40.0
Vibratory Roller	1.5	2.0	1.3	13.3

Site Prep Appraisal

Sale Number: 341-15-
Sale Name: Green Machine
Date: 04/21/2014

Vegetation Type/Zone	Vegetation Type/Zone Code	Production Rate (hr/ac)	Estimated Piles/Acre
Doug-fir	A	1.0	3.0
Hemlock/Fir	B	1.5	4.5
Hemlock/Spruce	C	2.0	6.0
Hemlock	D	2.0	6.0
Conifer/Hardwood	E	1.5	4.5
Whole Tree Yarding	F	0.5	0.5

Sale Area	Harvest Type	Veg Type/Zone	Ground Based Yarding Acres	Estimated Piling Hours/Area	Cost/Hour	Total Cost/Area
1	MC	C	1.0	2	$129.00	$258.00

In-unit Piling **Sub Total =** $258.00

Sale Area	Number of Landings to be Piled	Cost/Landing Pile	Total Cost/Area	Number of In-Unit Piles	Material Cost/Pile	Total Cost/Area
1	6	$930.00	$5,580.00	6	$5.00	$60.00

*Cost includes separating firewood

Materials **Sub Total =** $60.00

Landing Piling **Sub Total =** $5,580.00

Move-In Allowance	Number of Move-In's	Total Move-In Allowance
$1,290.00	1	$1,290.00

Move-In **Sub Total =** $1,290.00

Grand Total = **$7,188.00**

TIMBER CRUISE REPORT
Green Machine
FY2014

1. **Sale Area Location:**
The Sale Area is located in portions of Section 7, T6N, R8W, Willamette Meridian., Clatsop County, Oregon.

2. **Fund Distribution:**
BOF = 100% Tax Code = 1-02 = 100%

3. **Sale Acreage and Treatments by Area:**

Area	Harvest Type	Gross Acres	Non-Stocked	GTRA	Type N Stream Buffer	Existing R/W	New R/W	Net Acres	Survey Method
1	MC	87	5	3	1	2	0	76	GIS

4. **Cruisers and Cruise Dates:**
Areas 2 was cruised by Jon Long, Andrew Arvin, and John Choate in November, 2013.

5. **Cruise Method and Computations:**

Area 1 was designed for a variable plot cruise using a 54.45 Basal Area Factor (BAF). 26 plots were sampled with grade to count ratio of 1:1 on a 7 x 4 chain grid. Trees with a DBH of 6-7 inches were tallied to estimate the number of trees per acre.

The data was downloaded to the Atterbury SUPER A.C.E. program and computations were made at the Astoria District Office. See the attached Cruise Design for more details on cruise methods.

AREA	CRUISE	CRUISE TYPE
1	GMACH	T07NR08W 08 01CC

6. **Timber Description:**

Area 1- This stand is approximately 72 years old and is dominated by hemlock with some minor components of Sitka spruce, true fir, Douglas-fir, and red alder . Some windthrow is evident along the East and West edges of the sale Area.

7. **Statistical Analysis and Stand Summary:** (See also "Statistical Summary-Type Reports", attached.) Evaluated on Net BF/Acre.

Area	Target CV %	Target SE %	Actual CV %	Actual SE %
1	45	8	42.8	8.1

The statistics for the cruise is "Take" and "Leave" stands combined based on Net BF/ACRE.

8. **Volumes by Species and Sort:** (See the Species, Sort, Grade, and the Log Stock Table attached.) Volumes do not include "in-growth". The majority of defect and breakage was culled during the cruise. The total net MBF volumes by species and grade are as follows:

Species	DBH	Net. Vol.	2 Saw	3 Saw	4 Saw	% D & B	Sale%
W. Hemlock	13	2,727	472	1,641	614	3	90
Sitka Spruce	24	90	44	46		0	3
Douglas-fir	22	163	93	62	8	0	5
Totals		**2,980**					

Species	DBH	Net Vol.	12"+	10"-11"	8"-9"	6"-7"	% D & B	% Sale
Red Alder	14	51	0	17	29	5	6	2

TOTAL NET SAWLOG VOLUME	3,031

Sort breakdown:

Sort #	Species	Sort Specifications	Net MBF	Sale %
1	WH/fir	6"-11" Sawlogs	2,086	69
2	WH/fir	12"+ Sawlogs	641	21
4	DF	6"-13" Sawlogs	33	1
5	DF	14"+ Sawlogs	130	4
7	RA	Camp Run 6"+ Sawlogs	51	2
8	SS	6"-20" Sawlogs	46	2
9	SS	21"+ Sawlogs	44	1
10	Pulp	2"+ Pulp	2,968 Tons	n/a

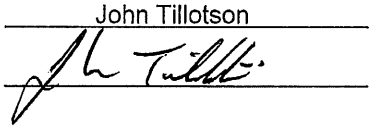
Pulp Volume:

Species	DBH	Net Tons
All (Primarily WH)	7	2,968

*Pulp volume is based on the cruised volume of submerchantable material (240 tons) and approximately 10% of the saw log volume will be generated from the submerchantable tops of the saw timber.

9. Approvals:

Prepared by: John Tillotson Date: November 21, 2013

Approved by:  Date: 12/1/2013

10. Attachments:

Species, Sort & Grade (Volume) Reports: 1 page
Statistical Report-Sawlog: 1 page
Statistical Report-Pulp: 1 page
Log Stock Table-MBF (cut): 1 page
Log Stock Table-Pulp: 1 page
Stand Table (cut) 1 page
Cruise Designs and Maps: 3 page

Revised August, 2002

CRUISE DESIGN
ASTORIA DISTRICT

Sale Name: Green Machine **Area** 1

Harvest Type: CC

Approx. Cruise Acres: 78 **Estimated CV%** (Net BF/Acre) 45 **SE% Objective** (Net BF/Acre) 8

Planned Sale Volume: 2.73 MMBF **Estimated Sale Area Value/Acre:** $10,500

A. Cruise Goals: (a) Grade minimum 80 conifer and 10 hardwood trees: (b) Sample 31 cruise 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; Determine log sort volumes for test run of log sort program.)

B. Cruise Design:

1. **Plot Cruises:** BAF 54.45 (Full point; Half point) (circle one)
   Fixed Plot Size ____ Plot Radius ____ feet
   Cruise Line Direction(s) 43 / 223 Az.
   Cruise Line Spacing 7 (chains) (feet)
   Cruise Plot Spacing 4 (chains) (feet)
   Grade/Count Ratio 1:1
2. **ITS (Sample Tree) Cruises:** Measure-grade ratios: D-fir ____ Hemlock ____
   Spruce ____ True Fir ____ Cedar ____ Hardwood ____

C. Tree Measurements:

1. **Diameter:** Minimum DBH to cruise is 6 " for conifers and 7 " 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 " 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 10'. 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**.

Logs shall be segmented and graded as follows:

All conifer shall have the following lengths: 16', 24', 32', and 40'
All hardwoods shall have log lengths of 20', 30', and 40'.

Grade all trees to 40 foot and 32 foot lengths, minimize logs less than 16 feet.

For trees less than 8" DBH tally heights to a 3" dib top on tally card by spp.

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; UT = Utility; 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 intervisible 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.
   ITS and 100% Cruises: Mark cruise "strips" with various colored flagging (not pink). Mark trees measured and graded with yellow paint.

9. **Cruising Equipment:** Relaskop Logger's Tape (with dbh on back)
   Biltmore Stick Compass Cruise Cards in Tatum OR Data Recorder
   Cruise Design Rangefinder Cruise Map Yellow Flagging Blue Flagging

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.
    B. Data Recorder Instructions
    C. Other

Cruise Design by: John Tillotson
Approved by: [signature]
Date: 11/9/13

EXHIBIT "A"

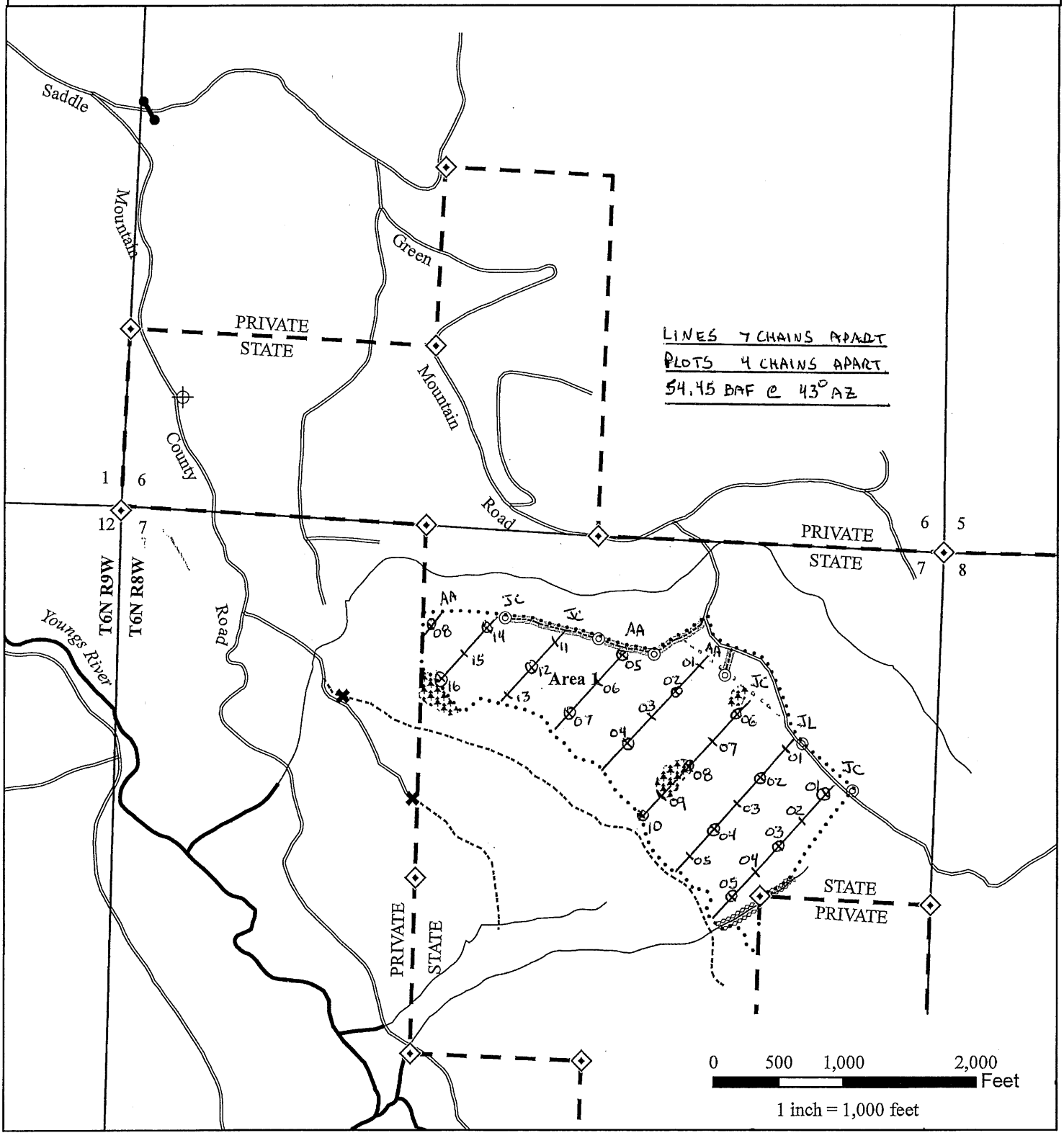
OF TIMBER SALE CONTRACT NO. 341-15-
SECTION 7
T6N, R8W, W.M., CLATSOP COUNTY, OREGON

N

Approximate Net Acreage	MC Acres
Area 1 (MC) -	76

Legend

- Timber Sale Boundary
- Ownership Boundary
- Surfaced Road
- Unsurfaced Road
- Landing to Construct
- New Road Construction
- Type F Stream
- Type N Stream
- Posted Stream Buffer
- Green Tree Retention Area
- Sections
- Gate
- Registered Water Use Site
- Survey Monument



TC TSTATS

STATISTICS

PROJECT GMACH

DATE 5/20/2014

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	08W	07	A1 SORT	01CC	76.00	29	187	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	29	187	6.4		
CRUISE	17	99	5.8	27,657	.4
DBH COUNT					
REFOREST					
COUNT	12	83	6.9		
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
WHEMLOCK	86	336.1	12.5	51		284.5	37,069	35,893	9,948	9,948
SNAG	4	8.2	20.5	63		18.8				
DOUG FIR	3	6.7	21.6	77		16.9	2,141	2,141	581	581
R ALDER	4	10.6	14.0	28		11.3	716	674	250	250
S SPRUCE	2	2.4	23.9	81		7.5	1,186	1,186	318	318
TOTAL	*99*	*363.9*	*13.1*	*51*		*338.9*	*41,111*	*39,894*	*11,097*	*11,097*

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
WHEMLOCK	88.4	9.5	139	154	168			
SNAG								
DOUG FIR	27.8	19.2	267	330	393			
R ALDER	82.8	47.3	66	125	184			
S SPRUCE	85.6	80.2	151	760	1,369			
TOTAL	*106.0*	*10.6*	*146*	*164*	*181*	*449*	*112*	*50*

CL: 68.1 %	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK	57.8	10.9	299	336	373			
SNAG	247.6	46.7	4	8	12			
DOUG FIR	243.1	45.9	4	7	10			
R ALDER	288.4	54.4	5	11	16			
S SPRUCE	278.3	52.6	1	2	4			
TOTAL	*47.6*	*9.0*	*331*	*364*	*397*	*94*	*23*	*10*

CL: 68.1 %	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK	44.3	8.4	261	284	308			
SNAG	236.1	44.6	10	19	27			
DOUG FIR	245.1	46.3	9	17	25			
R ALDER	270.3	51.0	6	11	17			
S SPRUCE	254.4	48.0	4	8	11			
TOTAL	*29.8*	*5.6*	*320*	*339*	*358*	*37*	*9*	*4*

CL: 68.1 %	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK	51.1	9.7	32,428	35,893	39,358			
SNAG								
DOUG FIR	248.1	46.8	1,138	2,141	3,144			
R ALDER	300.9	56.8	291	674	1,057			
S SPRUCE	254.5	48.1	616	1,186	1,756			
TOTAL	*42.8*	*8.1*	*36,669*	*39,894*	*43,119*	*76*	*19*	*8*

STATISTICS

PROJECT GMACH

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	07W	07	AREA 2	PLP	76.00	29	15	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	29	15	.5		
CRUISE	13	15	1.2	8,009	.2
DBH COUNT					
REFOREST COUNT					
BLANKS	16				
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
WHEMLOCK	15	105.4	7.0	21		28.2	351	351	295	295
TOTAL	*15*	*105.4*	*7.0*	*21*		*28.2*	*351*	*351*	*295*	*295*

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
WHEMLOCK	131.7	37.9	2	4	5			
TOTAL	*131.7*	*37.9*	*2*	*4*	*5*	*749*	*187*	*83*

CL: 68.1 %	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK	122.5	23.1	81	105	130			
TOTAL	*122.5*	*23.1*	*81*	*105*	*130*	*621*	*155*	*69*

CL: 68.1 %	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK	122.5	23.1	22	28	35			
TOTAL	*122.5*	*23.1*	*22*	*28*	*35*	*621*	*155*	*69*

CL: 68.1 %	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK	271.6	51.3	171	351	531			
TOTAL	*271.6*	*51.3*	*171*	*351*	*531*	*3,050*	*762*	*339*

TC TSTNDSUM

Stand Table Summary

Project GMACH

T06N R08W S07 T01CC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
06N	08W	07	A1 SORT	01CC	76.00	29	99

Date: 05/20/20
Time: 11:09:08AM

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	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
H		8	1	88	96	9.476	3.31	18.95	7.5	35.0		142	663		108	50
H		9	9	88	76	67.388	29.77	97.34	9.1	35.4		884	3,444		671	262
H		10	9	87	75	54.585	29.77	72.78	11.9	41.7		867	3,032		659	230
H		11	12	88	77	60.148	39.70	90.22	13.1	46.7		1,178	4,210		895	320
H		12	7	87	76	29.482	23.16	46.33	15.1	52.7		699	2,443		531	186
H		13	6	88	81	21.825	19.85	40.06	17.2	57.2		691	2,293		525	174
H		14	7	88	85	21.661	23.16	43.32	20.1	72.9		870	3,156		661	240
H		15	8	88	85	21.564	26.46	43.13	23.1	83.7		997	3,612		758	275
H		16	6	88	92	14.215	19.85	28.43	28.0	100.0		796	2,843		605	216
H		17	7	88	93	14.690	23.16	29.38	33.9	120.7		995	3,547		756	270
H		18	2	90	82	3.744	6.62	7.49	32.8	117.5		245	880		186	67
H		19	5	87	87	8.400	16.54	16.80	38.7	134.0		650	2,251		494	171
H		20	2	90	100	3.032	6.62	4.55	55.7	216.7		253	986		192	75
H		21	3	86	83	4.126	9.92	8.25	45.3	158.3		374	1,307		284	99
H		25	1	82	84	.970	3.31	1.94	63.5	205.0		123	398		94	30
H		28	1	88	124	.774	3.31	2.32	79.0	356.7		183	828		139	63
H		Totals	86	88	80	336.082	284.48	551.29	18.0	65.1		9,948	35,893		7,560	2,728
D		20	1	86	74	2.582	5.63	5.16	33.5	115.0		173	594		131	45
D		22	1	82	105	2.134	5.63	4.27	48.0	175.0		205	747		156	57
D		23	1	86	110	1.952	5.63	3.90	52.0	205.0		203	800		154	61
D		Totals	3	85	94	6.668	16.90	13.34	43.6	160.6		581	2,141		441	163
S		19	1	87	100	1.907	3.76	3.81	43.5	150.0		166	572		126	43
S		37	1	87	89	.503	3.76	1.01	151.5	610.0		152	614		116	47
S		Totals	2	87	98	2.410	7.51	4.82	66.0	246.0		318	1,186		242	90
A		9	1	86	17	6.375	2.82									
A		18	1	85	53	1.594	2.82	1.59	44.0	80.0		70	127		53	10
A		19	1	85	68	1.430	2.82	2.86	31.5	105.0		90	300		68	23
A		21	1	85	67	1.171	2.82	2.34	38.5	105.0		90	246		69	19
A		Totals	4	86	35	10.570	11.27	6.80	36.8	99.1		250	674		190	51
SN		15	1	86	85	3.825	4.69									
SN		17	1	88	78	2.978	4.69									
SN		32	1	85	36	.840	4.69									
SN		40	1	86	21	.538	4.69									
SN		Totals	4	87	73	8.181	18.78									
Totals			99	88	79	363.911	338.93	576.25	19.3	69.2		11097	39,894		8,434	3,032

TC TLOGSTVB

Log Stock Table - MBF

Project: GMACH

T06N R08W S07 T01CC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
06N	08W	07	A1 SORT	01CC	76.00	29	99

T06N R08W S07 T01CC

Date 5/20/2014

Time 11:09:08AM

Spp	S T	So	Gr	Log Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches: 2-3 4-5	6-11	12-21	22-27	28-39	40-41	42-43	44-45	46-47	48-49	50+
H		DO	CU	8															
H		DO	CU	27															
H		DO	2S	32	26	6.3	24	.9			24								
H		DO	2S	40	452	.9	448	16.4			448								
H		DO	3S	16	19		19	.7		19									
H		DO	3S	24	2		2	.1		2									
H		DO	3S	32	547	2.4	534	19.6		509	25								
H		DO	3S	40	1,115	2.6	1,086	39.8		942	144								
H		DO	4S	16	247	2.3	241	8.8		241									
H		DO	4S	24	296		296	10.9		296									
H		DO	4S	32	114	31.8	77	2.8		77									
H		Totals			2,817	3.2	2,728	90.0		2087	641								
SN		DO	CU	16															
SN		DO	CU	20															
SN		DO	CU	24															
SN		DO	CU	38															
SN		DO	CU	40															
SN		Totals																	
D		DO	CU	8															
D		DO	2S	32	93		93	57.1			93								
D		DO	3S	32	37		37	22.9			37								
D		DO	3S	40	25		25	15.2		25									
D		DO	4S	24	8		8	4.8		8									
D		Totals			163		163	5.4		33	130								
A		DO	CU	10															
A		DO	2S	40	18	5.0	17	33.0			17								
A		DO	3S	30	20		20	38.2			20								
A		DO	3S	40	11	11.1	10	18.9		10									
A		DO	4S	16	2		2	3.5		2									
A		DO	4S	20	4	25.0	3	6.4		3									
A		Totals			54	5.9	51	1.7		15	36								
S		DO	2S	40	44		44	48.8				44							
S		DO	3S	40	46		46	51.2		11	35								
S		Totals			90		90	3.0		11	35	44							
Total All Species					3,124	3.0	3,032	100.0		2145	843	44							

TC TLOGSTVT

Log Stock Table - TONS

Project: GMACH

T06N R07W S07 TPLP

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
06N	07W	07	AREA 2	PLP	76.00	29	15

T06N R07W S07 TPLP

Date 5/22/2014

Time 1:48:18PM

Spp	S T	So	Gr de	Log Len	Tons	% Spc	Tons by Scaling Diameter in Inches 2-3	4-5	6-11	12-21	22-27	28-39	40-41	42-43	44-45	46-47	48-49	50+
H		DO	CR	16	96	40.0		96										
H		DO	CR	17	144	60.0	144											
H		DO	CR	20														
H		DO	CR	24														
H		DO	CR	25														
H		DO	CR	26														
H		DO	CR	30														
H		Totals			240	100.0	144	96										
Total All Species					240	100.0	144	96										

T TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: GMACH

Page 1
Date 5/20/2014
Time 11:09:08AM

T06N R08W S07 T01CC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt
06N	08W	07	A1 SORT	01CC	76.00	29	99	1	W

T06N R08W S07 T01CC

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
H		DO	CU														18		0.00	9.2
H		DO	2S	17	1.2	6,285	6,211	472			91	9			5	95	39	246	1.60	25.3
H		DO	3S	60	2.5	22,149	21,597	1,641		90	10		1	0	33	66	36	87	0.68	247.7
H		DO	4S	23	6.4	8,635	8,085	614		100			39	48	13		21	29	0.40	278.3
H	**Totals**			90	3.2	37,069	35,893	2,727 ~~2,728~~		76	22	2	10	11	23	56	28	64	0.63	560.5
SN		DO	CU														33		0.00	15.0
SN	**Totals**																33		0.00	15.0
D		DO	CU														8		0.00	4.1
D		DO	2S	57		1,222	1,222	93			100				100		32	299	2.14	4.1
D		DO	3S	38		816	816	62		40	60				60	40	37	122	1.06	6.7
D		DO	4S	5		103	103	8		100				100			24	40	0.67	2.6
D	**Totals**			5		2,141	2,141	163		20	80			5	80	15	27	123	1.23	17.4
A		DO	CU														10		0.00	6.4
A		DO	2S	33	5.0	234	222	17			100					100	40	190	1.70	1.2
A		DO	3S	57	4.0	401	385	29		33	67			67		33	35	127	1.30	3.0
A		DO	4S	10	17.7	81	66	5		100			100				18	25	0.68	2.6
A	**Totals**			2	5.9	716	674	51		29	71		10	38		52	20	51	0.95	13.2
S		DO	2S	48		578	578	44				100				100	40	1150	5.87	.5
S		DO	3S	52		607	607	46		25	75					100	40	141	1.16	4.3
S	**Totals**			3		1,186	1,186	90		13	39	49				100	40	246	1.65	4.8
Type Totals					3.0	41,111	39,894	3,031 ~~3,032~~		71	26	3	9	11	25	55	28	65	0.64	610.9

Logging Plan

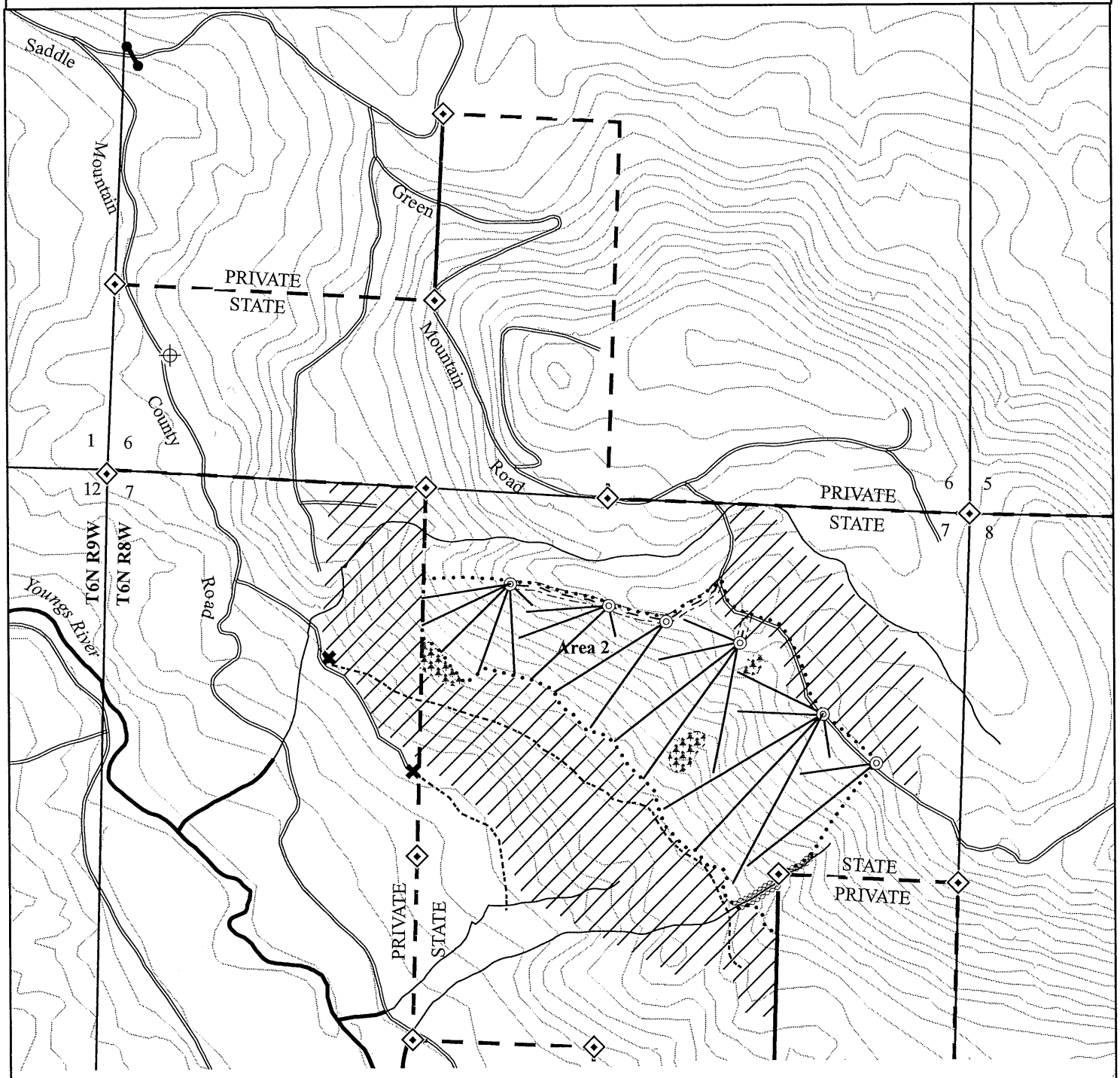
OF TIMBER SALE CONTRACT NO. 341-15-60 THROUGH 341-15-69
GREEN MACHINE SORTS
SECTION 7
T6N, R8W, W.M., CLATSOP COUNTY, OREGON

N

Approximate Net Acreage	MC Acres
Area 1 (MC) -	76
Total Sale Acreage = 76	

Legend

- Timber Sale Boundary
- Surfaced Road
- Unsurfaced Road
- Posted Stream Buffer
- Ownership Boundary
- Green Tree Retention Area
- Reforestation Area
- New Road Construction
- Landing to Construct
- Type F Stream
- Type N Stream
- Gate
- Registered Water Use Site
- Yarding Area - Cable
- Sections



Logging Breakdown	Tractor	Cable
Area 1 (MC) -	0%	100%

0 500 1,000 2,000 Feet

1 inch = 1,000 feet