



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Park
Sale SW-341-2019-GF7819-01

District: S Cascade

Date: March 14, 2019

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$381,322.50	\$0.00	\$381,322.50
		Project Work:	\$0.00
		Advertised Value:	\$381,322.50



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Timber Description

Location: Sections 21 & 22, T16S, R4E, W.M.

Stand Stocking: 60%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	17	0	95

Volume by Grade	Camprun	Total
Douglas - Fir	1,950	1,950
Total	1,950	1,950

Comments: Western Hemlock and Other Conifers Stumpage Price = Pond Value minus Logging Cost:
\$65.55/MBF = \$535/MBF - \$469.45/MBF

Western redcedar and Other Cedars Stumpage Price = Pond Value minus Logging Cost:
\$496.55/MBF = \$966/MBF - \$469.45/MBF

Alder and Other Hardwoods Stumpage Price = Pond Value minus Logging Cost:
\$3.55/MBF = \$473/MBF - \$469.45/MBF

BRANDING AND PAINTING COST ALLOWANCE=\$2.00/MBF

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

Equipment Move-in: (((\$120/hr + (\$22/hr x 2 pilot)) x 4 hr/ move cycle x 5 machines = \$3,280

Equipment Weed Wash = (((\$120/hr + (\$22/hr x 2 pilots)) x 2.5 hr wash = \$410 x 5 machines = \$2,050

Temporary road construction = \$500

Temporary road entrance blocked, pulling back of displaced material, installation of water bars, bucket ripping to depth of 20 inches, seeded, and weed-free strawed = \$1,000

Landing pull back of displaced material, installation of water bars, bucket ripping to depth of 20 inches, seeded, and weed-free strawed = \$400 x 7 landings = \$2,800

Prior to wet weather season or heavy rain events, landings and temporary roads water barred = \$2,000

Seeding of all disturbed sites (culvert installations, disposal sites, etc.) = \$500

Dust Abatement = (\$100/hour x 45 day in summer) + \$500 move-in = \$5,000

Pile Landing Slash: 7 Landings (7hrs @ \$150/hr) = \$1,050

Covering Piles: (\$15/pile x 7 piles) + (\$22/hr x 2 covering personnel x 8 hours) = \$457

Fire Trail Construction: \$1/foot x 6,150 feet = \$6,150

TOTAL Other Cost (with Profit & Risk to be added) = \$24,787

PULP = \$1/Ton

ROAD MAINTENANCE

See Attached Road Maintenance Cost Estimate Sheet

TOTAL = \$17,271.47/1,950 MBF = \$8.86/MBF



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Logging Conditions

Combination#: 1 Douglas - Fir 100.00%

Logging System: Cable: Large Tower >=70 **Process:** Stroke Delimber

yarding distance: Long (1,500 ft) **downhill yarding:** No

tree size: Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF

loads / day: 6 **bd. ft / load:** 4000

cost / mbf: \$258.33

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



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Logging Costs

Operating Seasons: 2.00	Profit Risk: 15%
Project Costs: \$0.00	Other Costs (P/R): \$24,787.00
Slash Disposal: \$0.00	Other Costs: \$0.00

Miles of Road

Road Maintenance: \$8.86

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

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	4.1



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Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
\$258.33	\$9.30	\$4.50	\$121.64	\$12.71	\$60.97	\$0.00	\$2.00	\$0.00	\$469.45

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$665.00	\$195.55	\$0.00



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Date: March 14, 2019

Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	1,950	\$195.55	\$381,322.50

Gross Timber Sale Value

Recovery: \$381,322.50

Prepared By: Kyle Sullivan

Phone: 541-285-8685

Safety

The McKenzie River Ranger District office can be contacted in an emergency, or Eugene Dispatch. Repeaters to use are Frissel or Indian. Use Project MCK for local communication. A tailgate safety meeting will be held weekly focusing on general safety considerations and any particular safety issues for this timber sale.

GNA Park Timber Sale Summary

A proposal has been made to harvest an estimated 2.0 MMBF of timber in the GNA Park Timber sale area. The sale area is part of the Park CE and is located on the McKenzie River Ranger District, Willamette National Forest. The volume estimates for the GNA Park Timber sale units were determined during the planning process using silviculture stand exams. The project area is located in the McKenzie River drainage and is accessed by the 1500-102 and 1500-104 roads. The legal description for this sale is T. 16S R. 04E. Sections 21, 22 Willamette Meridian; Lane County, Oregon.

This sale will be sold as a 100% weight scaled sale and cruised using cubic unit of measure. It is a commercial thin with designate by description used in lieu of marking. The expected sale volume will be comprised of 90% second growth Douglas-fir and 10% second growth grand fir, noble fir, pacific silver fir, incense cedar, western red cedar and western hemlock. Contract species will be Douglas-fir and other coniferous species except Pacific yew, western white pine, and sugar pine. The stands are approximately 70 years old with minimal defect. Stand structure is even aged with an estimated average cut tree 20.0" DBH. Logging systems are ground base and skyline. Non-saw timber does not represent a significant value and will not be included in the sale.

Section 1: Silvicultural Guidelines

Use the Silvicultural prescription outlined for each unit to determine the appropriate sampling method. This prescription assists the cruise planner by identifying a stand treatment, which can include information about the species to be removed, and the residual trees per acre (TPA).

Unit Summaries

Unit 1. A 22 foot DxD prescription thinning *Douglas-fir, noble fir, grand fir, pacific silver fir, western red cedar and western hemlock only* is proposed.

Units 11, 12, 13. **1-3 acre gap cuts with 1 tree per acre retained using orange tree marking paint, all unmarked conifers except sugar pine and western white pine are subject for removal.**

GNA Park “Draft Copy” of the C2.35# (Option 1) provision

1	22'	Live Douglas-fir, noble fir, grand fir, pacific silver fir, incense cedar, western red cedar and hemlock within 22 feet of a live Douglas-fir, noble fir, grand fir, pacific silver fir, incense cedar, western red cedar or hemlock with a larger DxD stump diameter are designated for cutting. All live trees with a larger stump diameter will remain standing after logging is complete.
11	LTM	A gap cut remove all conifers except sugar pine and western white pine not marked with orange tree marking paint.
12	LTM	A gap cut remove all conifers except sugar pine and western white pine not marked with orange tree marking paint.
13	LTM	A gap cut removes all conifers except sugar pine and western white pine not marked with orange tree marking paint.

***DxD stump height is 4” above the ground on the uphill side of the tree.*

Section 2: Cruise Specifications

The National Cruise System (NCS V2) will be used to calculate and process all volumes and sampling statistics.

Refer to R-6 Tatum Aids (June 2015 version), *Timber Cruisers Field Guide to Disease and Insect Damages and Defects of Pacific Northwest Conifers* (P.F. Hessburg), and the *Timber Cruising in the Pacific Northwest* (R6-NR-TM-TP-21-97) for cruising methods and defect rules.

Cruisers:

Only certified cruisers will cruise independently, all other field people will cruise only with a certified cruiser. Cruisers will fill out cruise cards completely in the field. For this variable plot (**PNT**) cruise use a 40 BAF for strata A

BOUNDARY MARKING

Unit boundaries are marked as follows:

All boundary marks will be made with orange tracer paint. Two softball sized dots will indicate the direction of boundary on each tree. A 2' x 2" stripe will be painted in the middle of the tree facing into the unit. All markings and tags will be from 5-7 feet above the ground on the tree except the stump mark. All painted boundary trees require a stump mark in the crevice of the stump reaching onto the ground on the downhill side of the tree.

Three boundary tags will be used for a major direction change. Three tags on the corner tree and an additional tag on the closest tree each side of the corner tag with the tags facing into the unit, totaling three tags. Two boundary tags will be used when a unit boundary crosses a system road. One tag will be placed facing into the unit on each tree closest to the road at the crossing. (Unless there is a major direction change at the road cross use 3). All boundary tags must have the vertical 2 inch by 2 foot slash of tracer paint overlapping the tag onto the tree. Corners will require no additional designation other than the three tags and paint. When boundary crosses the road but does not have a major direction change, a boundary tag on each side of road is proper.

(2018 Willamette Forest Products Accountability Action Plan).

Plot Location:

Plot location shall be a predetermined spacing and located within unit boundaries using the grid feature within ArcGIS. This ensures non-bias. UTM's using WGS 84 projection will be used. Cruise plots will be located in the field with the use of a Garmin GPS. The cruiser navigate to within one chain (< 66 feet) using a Garmin. The cruiser will pause long enough for the Garmin device to center itself on location, then switch to compass mode to use the distance and azimuth provided. At this point the cruiser will utilize one of four methods to establish plot center. 1) Use an actual compass and loggers tape to locate plot center (not the compass on the Garmin). 2) Use an actual compass and pace the distance placing the stake in front of where the last step ends up. 3) Use an actual compass and digital laser to determine the distance to plot center then stake as close as possible to that location. 4) The cruiser will navigate to within 20 feet using a Garmin a preset beep will tell the cruiser that plot center has been arrived at. A map datum of WGS 84 will be utilized as well as a position format of Decimal Degree.

Plot Monumentation:

All cruise plots will have the following:

1. Wooden stake in the ground with an intersection of lines in an "X" on top will be considered true plot center. The following information will be written on the stake: plot #, cruisers initials and date.
2. Three pink flags to form a triangle around plot center. One stating cruisers initials, plot #, and date, one directly north of plot and one more to aid in locating the plot center. Flagging brush or small trees <7" in diameter is preferable.
3. Cut trees will have numbers painted towards plot center with green fluorescent paint starting with the first tree from north and going in a clockwise direction. Leave trees will be marked with bright flagging.
4. All borderline trees will be measured using Limiting Distance formulas and equations from the approved R6 Tatum Aid. Limiting distance trees will be noted on the cruise card, distance and azimuth.

Cruising Near Gaps:

Use the following methods to determine cut and leave trees.

Plots Partially in Gap:

1. Any leave trees within the radius of the gap become cut trees and are numbered and cruised accordingly.
2. Measure from face of gap tree to face of leave tree on plot at DBH using slope distance. The face of the tree is defined as the portion of the bole that is closest to the bole of the tree being measured.
3. Spin plot according to cruise plan.
4. Determine leave trees according to silviculture prescription.

Plots Entirely in Gap:

1. Spin plot, all trees are numbered and cruised.

Mirage Plots:

The Mirage Method will be used when part of the plot falls outside the unit (refer to *Timber Cruising in the Pacific Northwest*). Follow the procedures below.

1. Establish a line between two boundary trees or two trees closest to the system road that are perpendicular to plot center.
2. Measure from plot center, perpendicular to that line using **Horizontal Distance**. (*Laser gun must be used if tape can't be held horizontally due to slope*) Place a pin flag in the ground and write the distance and azimuth on stake.
3. From that stake, pull the same **Horizontal** distance and azimuth to establish the mirage plot center for mirage measurements. Place a pin flag in the ground at that location and record cruisers initials, date, plot #, and mirage plot.

Section 3: Measurement Specifications

1. Record DBH to nearest 1/10th using a diameter tape. Always round down to nearest 1/10th DBH is measured at 4.5' above the natural forest floor on the high or uphill side of the tree at a right angle to the lean of the tree.
2. Record heights in feet from a 1.0 foot stump to the top of the tree (the top bud). Measured to the nearest foot. If top is broken off, find the top and record total height if it can be measured. If no top can be found, record the height in feet to the specified top DIB. No top DIB less than 6" shall be measured/recorded.
3. Forked trees to be cruised will be considered one tree if the fork is above DBH, two if below DBH. If the fork is above DBH, height measurements are to be taken from the tallest fork.
4. Cruise trees will be graded for saw-log value deductions will be made for sweep and crook in 16 foot logs using a percentage table.
5. Include helpful notes on the cruise card in the green area to help explain the rationale for deducting defect (type of defect, location of defect, etc.). Hidden defect and breakage will be applied during the cruise input. This factor will be based on field observations on this sale, past experience, and cruises and cutouts of nearby sales.

Merchantability Specs:

- Minimum DBH – 7.0”
- Minimum Top DIB – 6.0”
- Minimum Log Length/Height – 8.0’
- Saw Log maximum defect – 60%
- Unit of Measure – Cubic

Grading and Defecting:

- Grade 1: Saw Log
- Grade 9: Cull
- Logs not meeting a minimum of 40% net volume will be recorded as Grade 9
- Cull Rules for DF in the older stands 35 & 35a: (these stands will be treated as though > 150 years of age for *fomes pini* deductions)
 - 4 feet above/below the conk (punk knots), 2 feet above/below swollen knots.
All other deductions for pathogens/conks for all units will be made referencing the Hessburg field guide.

Species Code, Volume Equation and Weight Equation:

Species	Species Code	Volume Equation	Weight Equation
Douglas-fir	205	F05FW2W202	60
Western hemlock	263	F03FW2W263	64
Noble fir	022	100FW2W108	64
Pacific silver fir	025	100FW2W017	68
Incense cedar	081	616BEH000	40
Western red Cedar	242	616BEH000	40

- Pacific Silver sample group will include white and grand fir.
- The maximum sampling error is 30% at the 95% confidence level. The maximum error for any one strata is 50%.

Hidden Defect and Breakage:

- Hidden Defect Percentage will be determined by dividing the net BDFT by the gross BDFT found on the UC3 form. This will give you the visible defect percentage. Use this number to assist in estimating the hidden defect percentage for each strata.

Area Determination:

Unit acreage was determined by traversing with a Trimble GEO7X and GEO6000X GPS using II trails software. Traverses were performed using acceptable equipment as described in WO 2409.12, chapter 50. Traverse data will

be stored on file at the district office as well as the O and T drive. All individual unit data will be lumped together in the Ridge STWD error report and project summary.

Section 4: Pre Cruise

For the Pre-Cruise, plot radii for each unit is determined by the correlation between desired post-harvest TPA and the estimated existing TPA from the Silviculture stand exam data to reach an average of 4-8 measure trees per plot. Preliminary recon revealed that 20 BAF point plots would yield the desired results for most units.

- Preliminary recon was done during the layout phase, reading Silviculture notes and reviewing past sales in combination with previous experience on the McKenzie River Ranger District.
- All Units will be sampled in their own separate strata for the Pre-Cruise to accurately determine Volume/Acre/Unit. This will ensure sufficient, reliable and current data that is otherwise unavailable which will assist in determining stratification for the Final Cruise. Stratification for the Final Cruise will be based on a variety of factors such as, but not limited to, volumes, presence of gaps, desired spacing, the coefficient of variation for each stand and cutting prescription.
- Plot spacing will be developed utilizing *X-Tools Fishnet* in ArcGIS 10.3.1.
- All data collected will be entered on cruise cards. This information will be processed through NCSV2 to determine volume summaries by Unit, Strata, and Species. Using this information, and guidance from the Cruise Design program, units will be stratified accordingly for the Final Cruise.

Strata	Unit(s)	Number of Recon Plots	Recommended BAF
A	1, 11, 12, 13	12	40

Section 6: Miscellaneous

Definitions:

- D x D: Designation by description.
- D x D Stump Height: Measure at 4" above the ground on the uphill side of the tree. Minimum stump height left for inspection purposes will be 4 inches.
- D x D Diameter: Measured at 4" stump height outside the bark of the tree with a diameter tape that is perpendicular to the bole of the tree. Stumps missing all or part of their bark will be measured as presented. Measure to the nearest tenth of an inch.
- D x D Spacing: Is measured slope distance at 4" above the ground from the closest point between trees. This does not need to be measured on the uphill side of the tree.

- Final Cruise Statistics.

Strata	Unit(s)	Error
A	1, 11, 12, 13	24.3%
Total Sale Error		

Final Cruise Strata Table

Strata	Unit(s)	Number of Recon Plots	Number of Final Plots	BAF
A	1, 11, 12, 13	12	0	40
Total Plots	12			

Addendums:**Supplemental Plots:**

The sale area error was met with the final plots and cruise design was utilized to determine the additional samples below.

Strata A will require 0 additional plots.

Strata	Unit(s)	Number of Recon Plots	Number of Final Plots	Supplemental Samples	BAF
A	1, 11, 12, 13	12	0	0	40
Total Plots	12				

Prepared By

Print

Sign

Date

Approved By

Print

Sign

Date

CRUISE REPORT HEADER & CERTIFICATION
CRUISE#: 52775 SALE#: 52775
SALENAME: GNA_PARK
RUN DATE & TIME: 7/26/2018 4:58:30 PM

Year: 0 Region: 06 Forest: 18 District: 01
Remarks:
FILENAME: C:\Users\dwadell\52775 GNA_PARK\GNA_PARK.cruise
REPORTS: A01 A02 A03 A04 A05 A07 A08 R602 R604 R605 ST1 ST3 TIM UC25 UC26 UC3 UC4 VSM1 VSM2 VSM3
WT1 WT4

***** CRUISE CERTIFICATION *****

I certify that the timber for the GNA_PARK timber sale has been designated and cruised by the procedures and standards in FSH 2409.12, Timber Cruising Handbook. Records of checks are on file at the District Ranger Office,

McKenzie River	McKenzie Bridge
RANGER DISTRICT	(name of headquarters town)
/s/Darren M Cross	10/09/18
DISTRICT RANGER	DATE

Developed and Maintained By:
USDA FOREST SERVICE
WASHINGTON OFFICE TIMBER MANAGEMENT
FORT COLLINS, COLORADO (970)295-5776

VERSION: 12.07.2017
VOLUME LIBRARY VERSION: 07.12.2017
NATIONAL CRUISE PROCESSING PROGRAM

VOLUME EQUATION TABLE
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VERSION: 12.07.2017
 VOLUME LIBRARY VERSION: 07.12.2017

DF	SPECIES	PROD	VOLUME	EQUATION	STUMP	HEIGHT	TOTAL	PRIMARY			SECONDARY					
								MIN	TOP	DIB	BDFT	CUFT	CORDS	MIN	TOP	DIB
01			F05FW2W202		1.0		YES	6.0	YES	YES	NO	6.0	YES	YES	NO	YES

DF	SPECIES	PROD	COMPONENT	EQU	% MOIST	% REMV	L/D	FIA CODE	WEIGHT PRIM	WEIGHT SECD	METDATA
01	Total	Tree		82.9	95.0	L	202	0.0	0.0	Heath et al 2009	
	Live	Branches		82.9	95.0	L	202	0.0	0.0	Heath et al 2009	
	Dead	Branches		82.9	95.0	L	202	0.0	0.0		
	Foliage			82.9	95.0	L	202	0.0	0.0	Heath et al 2009	
	Mainstem	Primary		82.9	95.0	L	202	60.0	0.0	USE REGIONAL DEFAULT WEIGHT FACTOR (PRIM	
	Mainstem	Secondary		82.9	95.0	L	202	0.0	60.0	USE REGIONAL DEFAULT WEIGHT FACTOR (PRIM	
	Stem	Tip		82.9	95.0	L	202	0.0	0.0		

A01: STRATA, UNIT, PAYMENT UNIT AND SAMPLE GROUP REPORT (A1)
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VOLUME LIBRARY VERSION: 07.12.2017
 VERSION: 12.07.2017

CRUISE NO.	STRATA NO.	CRUISE METHOD	STRATA ACRES	BAF	PLOT SIZE	NO. OF PLOTS	STRATA DESCRIPTION	DATE
								MMYYYY
52775	1	PNT	64.00	40.00	0	12		6 0

A01: STRATA, UNIT, PAYMENT UNIT AND SAMPLE GROUP REPORT (A1)
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

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 VERSION: 12.07.2017
 VOLUME LIBRARY VERSION: 07.12.2017

CRUISE NO.	CUTTING UNIT NO.	CUTTING UNIT ACRES	CUTTING UNIT DESCRIPTION	LOG METHOD	PAYMENT UNIT NO.
52775	1	58.00	unit 1	430	
52775	11	3.00	gap 11	430	
52775	12	2.00	gap 12	430	
52775	13	1.00	gap 13	430	
TOTAL SALE ACRES:				64.00	

A01: STRATA, UNIT, PAYMENT UNIT AND SAMPLE GROUP REPORT (A1)
CRUISE#: 52775 SALE#: 52775
SALENAME: GNA_PARK
RUN DATE & TIME: 7/26/2018 4:58:30 PM

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VERSION: 12.07.2017
VOLUME LIBRARY VERSION: 07.12.2017

CRUISE NO.	CUTTING UNIT	STRATUM	PAYMENT UNIT
52775	1	1	1
52775	11	1	1
52775	12	1	1
52775	13	1	1

A01: STRATA, UNIT, PAYMENT UNIT AND SAMPLE GROUP REPORT (A1)
CRUISE#: 52775 SALE#: 52775
SALENAME: GNA_PARK
RUN DATE & TIME: 7/26/2018 4:58:30 PM

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VERSION: 12.07.2017
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STRATUM	SAMPLE GROUP	FREQ	KZ	BIG BAF	SMALL FPS	DESCRIPTION
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1		0	0	0	0	
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A02: PLOT INFORMATION REPORT (A1)
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

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 VERSION: 12.07.2017
 VOLUME LIBRARY VERSION: 07.12.2017

CRUISE NO.	PLOT NO.	CUTTING UNIT NO.	STRATA NO.	SLOPE %	ASPECT	PLOT KPI	NULL PLOT?
52775	2	1	1	0	0	0	0
52775	3	1	1	0	0	0	0
52775	4	1	1	0	0	0	0
52775	5	1	1	0	0	0	0
52775	6	1	1	0	0	0	0
52775	7	1	1	0	0	0	0
52775	8	1	1	0	0	0	0
52775	9	1	1	0	0	0	0
52775	10	1	1	0	0	0	0
52775	11	1	1	0	0	0	0
52775	12	1	1	0	0	0	0
52775	1	11	1	0	0	0	0

A05: CUBIC FOOT
PRIMARY AND SECONDARY PRODUCT
VOLUME INFORMATION (A5)
CRUISE#: 52775 SALE#: 52775
SALENAME: GNA_PARK
RUN DATE & TIME: 7/26/2018 4:58:30 PM

VERSION: 12.07.2017
VOLUME LIBRARY VERSION: 07.12.2017

S	T	U	P	L	R	I	E	S	M	D	H	T	***** PER TREE *****			***** PER STRATA *****			EXP	FAC	CHAR	FAC	TREE	FAC	GROSS	NET	CUFT	GROSS	NET	CUFT	GROSS	NET	CUFT
													GROSS	NET	CUFT	GROSS	NET	CUFT															
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	61.8	53.9	0.0	0.0	28.649	0.000	2.387	0.0	147.5	128.7	0.0	0.0	147.5	128.7	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	83.4	72.9	0.0	0.0	22.387	0.000	1.866	0.0	155.6	136.0	0.0	0.0	155.6	136.0	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	93.3	84.0	0.0	0.0	19.895	0.000	1.658	0.0	154.7	139.3	0.0	0.0	154.7	139.3	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	123.3	111.0	0.0	0.0	13.744	0.000	1.145	0.0	141.2	127.1	0.0	0.0	141.2	127.1	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	74.8	64.8	0.0	0.0	19.895	0.000	1.658	0.0	124.0	107.4	0.0	0.0	124.0	107.4	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	40.7	35.2	0.0	0.0	35.865	0.000	2.989	0.0	121.7	105.2	0.0	0.0	121.7	105.2	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	7.2	6.0	0.0	0.0	103.941	0.000	8.662	0.0	62.4	52.0	0.0	0.0	62.4	52.0	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	60.9	54.8	0.0	0.0	25.377	0.000	2.115	0.0	128.8	115.9	0.0	0.0	128.8	115.9	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	48.3	43.4	0.0	0.0	34.883	0.000	2.907	0.0	140.4	126.2	0.0	0.0	140.4	126.2	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	93.3	75.2	0.0	0.0	9.558	0.000	0.797	0.0	74.4	59.9	0.0	0.0	74.4	59.9	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	126.0	56.1	0.0	0.0	7.583	0.000	0.632	0.0	79.6	35.5	0.0	0.0	79.6	35.5	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	173.1	155.8	0.0	0.0	10.766	0.000	0.897	0.0	155.3	139.8	0.0	0.0	155.3	139.8	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	224.2	201.7	0.0	0.0	8.485	0.000	0.707	0.0	158.5	142.6	0.0	0.0	158.5	142.6	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	164.1	147.7	0.0	0.0	10.444	0.000	0.870	0.0	142.8	128.5	0.0	0.0	142.8	128.5	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	117.3	105.6	0.0	0.0	14.359	0.000	1.197	0.0	140.4	126.4	0.0	0.0	140.4	126.4	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	130.4	117.3	0.0	0.0	14.233	0.000	1.186	0.0	154.7	139.1	0.0	0.0	154.7	139.1	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	159.3	143.5	0.0	0.0	11.735	0.000	0.978	0.0	155.8	140.3	0.0	0.0	155.8	140.3	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	139.0	125.1	0.0	0.0	13.394	0.000	1.116	0.0	155.1	139.6	0.0	0.0	155.1	139.6	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	80.8	72.8	0.0	0.0	22.141	0.000	1.845	0.0	149.1	134.3	0.0	0.0	149.1	134.3	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	94.4	83.5	0.0	0.0	18.898	0.000	1.575	0.0	148.7	131.5	0.0	0.0	148.7	131.5	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	130.9	117.8	0.0	0.0	12.119	0.000	1.010	0.0	132.2	119.0	0.0	0.0	132.2	119.0	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	20.5	18.5	0.0	0.0	60.612	0.000	5.051	0.0	103.5	93.4	0.0	0.0	103.5	93.4	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	41.8	37.5	0.0	0.0	33.035	0.000	2.753	0.0	115.1	103.2	0.0	0.0	115.1	103.2	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	32.8	28.8	0.0	0.0	40.845	0.000	3.404	0.0	111.7	98.0	0.0	0.0	111.7	98.0	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	149.0	134.0	0.0	0.0	12.523	0.000	1.044	0.0	155.6	139.9	0.0	0.0	155.6	139.9	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	87.0	78.3	0.0	0.0	19.091	0.000	1.591	0.0	138.4	124.6	0.0	0.0	138.4	124.6	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	153.2	133.6	0.0	0.0	10.288	0.000	0.857	0.0	131.3	114.5	0.0	0.0	131.3	114.5	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	161.6	145.3	0.0	0.0	9.288	0.000	0.774	0.0	125.1	112.5	0.0	0.0	125.1	112.5	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	119.4	107.5	0.0	0.0	15.292	0.000	1.274	0.0	152.1	137.0	0.0	0.0	152.1	137.0	0.0	0.0			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	153.2	138.1	0.0	0.0	10.684	0.000	0.890	0.0	136.3	122.9	0.0	0.0	136.3	122.9	0.0	0.0			

A07: BOARD FOOT
PRIMARY AND SECONDARY PRODUCT
VOLUME INFORMATION (A7)
CRUISE#: 52775 SALE#: 52775
SALENAME: GNA_PARK
RUN DATE & TIME: 7/26/2018 4:58:30 PM

VERSION: 12.07.2017
VOLUME LIBRARY VERSION: 07.12.2017

S	T	U	P	L	R	I	E	S	M	D	H	T	***** PER TREE *****				***** PER ACRE/PER STRATA *****							
													GROSS	NET	BDFT	EXP	CHAR	FAC	GROSS	NET	BDFT	GROSS	NET	BDFT
1	1	1	1	1	1	1	1	1	1	16.0	126	0	345.0	0	300.0	0.0	0.0	28.649	0.000	2.387	823.5	716.1	0.0	0.0
1	1	1	1	1	1	1	1	1	1	18.1	130	0	490.0	0	427.0	0.0	0.0	22.387	0.000	1.866	914.3	796.8	0.0	0.0
1	1	1	1	1	1	1	1	1	1	19.2	128	0	562.0	0	505.0	0.0	0.0	19.895	0.000	1.658	931.8	837.3	0.0	0.0
1	1	1	1	1	1	1	1	1	1	23.1	125	0	758.0	0	682.0	0.0	0.0	13.744	0.000	1.145	867.9	780.9	0.0	0.0
1	1	1	1	1	1	1	1	1	1	19.2	110	0	429.0	0	370.0	0.0	0.0	19.895	0.000	1.658	711.3	613.5	0.0	0.0
1	1	1	1	1	1	1	1	1	1	14.3	99	0	215.0	0	185.0	0.0	0.0	35.865	0.000	2.989	642.6	553.0	0.0	0.0
1	1	1	1	1	1	1	1	1	1	8.4	70	0	38.0	0	32.0	0.0	0.0	103.941	0.000	8.662	329.2	277.2	0.0	0.0
1	1	1	1	1	1	1	1	1	1	17.0	112	0	337.0	0	303.0	0.0	0.0	25.377	0.000	2.115	712.8	640.8	0.0	0.0
1	1	1	1	1	1	1	1	1	1	14.5	115	0	263.0	0	236.0	0.0	0.0	34.883	0.000	2.907	764.5	686.1	0.0	0.0
1	1	1	1	1	1	1	1	1	1	27.7	82	0	511.0	0	411.0	0.0	0.0	9.558	0.000	0.797	407.3	327.6	0.0	0.0
1	1	1	1	1	1	1	1	1	1	31.1	90	0	714.0	0	632.0	0.0	0.0	7.583	0.000	0.632	451.2	172.5	0.0	0.0
1	1	1	1	1	1	1	1	1	1	26.1	140	0	1108.0	0	998.0	0.0	0.0	10.766	0.000	0.897	993.9	895.2	0.0	0.0
1	1	1	1	1	1	1	1	1	1	29.4	144	0	1487.0	0	1339.0	0.0	0.0	8.485	0.000	0.707	1051.3	946.7	0.0	0.0
1	1	1	1	1	1	1	1	1	1	26.5	131	0	1056.0	0	951.0	0.0	0.0	10.444	0.000	0.870	918.7	827.4	0.0	0.0
1	1	1	1	1	1	1	1	1	1	22.6	125	0	713.0	0	642.0	0.0	0.0	14.359	0.000	1.197	853.5	768.5	0.0	0.0
1	1	1	1	1	1	1	1	1	1	22.7	130	0	802.0	0	722.0	0.0	0.0	14.233	0.000	1.186	951.2	856.3	0.0	0.0
1	1	1	1	1	1	1	1	1	1	25.0	139	0	1020.0	0	918.0	0.0	0.0	11.735	0.000	0.978	997.6	897.8	0.0	0.0
1	1	1	1	1	1	1	1	1	1	23.4	138	0	860.0	0	774.0	0.0	0.0	13.394	0.000	1.116	959.8	863.8	0.0	0.0
1	1	1	1	1	1	1	1	1	1	18.2	122	0	464.0	0	418.0	0.0	0.0	22.141	0.000	1.845	856.1	771.2	0.0	0.0
1	1	1	1	1	1	1	1	1	1	19.7	124	0	553.0	0	488.0	0.0	0.0	18.898	0.000	1.575	871.0	768.6	0.0	0.0
1	1	1	1	1	1	1	1	1	1	24.6	120	0	823.0	0	740.0	0.0	0.0	12.119	0.000	1.010	831.2	747.4	0.0	0.0
1	1	1	1	1	1	1	1	1	1	11.0	89	0	102.0	0	91.0	0.0	0.0	60.612	0.000	5.051	515.2	459.6	0.0	0.0
1	1	1	1	1	1	1	1	1	1	14.9	99	0	215.0	0	193.0	0.0	0.0	33.035	0.000	2.753	591.9	531.3	0.0	0.0
1	1	1	1	1	1	1	1	1	1	13.4	97	0	174.0	0	152.0	0.0	0.0	40.845	0.000	3.404	592.3	517.4	0.0	0.0
1	1	1	1	1	1	1	1	1	1	24.2	135	0	950.0	0	856.0	0.0	0.0	12.523	0.000	1.044	991.8	893.7	0.0	0.0
1	1	1	1	1	1	1	1	1	1	19.6	120	0	508.0	0	457.0	0.0	0.0	19.091	0.000	1.591	808.2	727.1	0.0	0.0
1	1	1	1	1	1	1	1	1	1	26.7	125	0	965.0	0	838.0	0.0	0.0	10.288	0.000	0.857	827.0	718.2	0.0	0.0
1	1	1	1	1	1	1	1	1	1	28.1	120	0	1014.0	0	913.0	0.0	0.0	9.288	0.000	0.774	784.8	706.7	0.0	0.0
1	1	1	1	1	1	1	1	1	1	21.9	130	0	736.0	0	662.0	0.0	0.0	15.292	0.000	1.274	937.7	843.4	0.0	0.0
1	1	1	1	1	1	1	1	1	1	26.2	125	0	965.0	0	869.0	0.0	0.0	10.684	0.000	0.890	858.8	773.4	0.0	0.0

R602: VOLUME BY SPECIES & PRODUCT WITHIN
 PAYMENT AND CUTTING UNIT ACROSS STRATA
 FOR CUT TREES ONLY
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VERSION: 12.07.2017
 VOLUME LIBRARY VERSION: 07.12.2017

PAY UNIT	CUTTING UNIT	ACRES	LOGGING METHOD	SPECIES	PRODUCT	U OF		% DEFECT	** NET VOLUME **	
						M			CCF	
1	58.0	430	DF	01	03			10	2935.91	
11	3.0	430	DF	01	03			10	151.86	
12	2.0	430	DF	01	03			10	101.24	
13	1.0	430	DF	01	03			10	50.62	

PAYMENT UNIT			TOTALS						3239.63	
	64.0		DF	01	03			10		
	64.0		DF	08	03			0	0.00	

PRODUCT TOTALS										
					01				3239.63	
					08				0.00	
									GRAND TOTAL	3239.63

VOLUME BY SPECIES AND PRODUCT IS BASED ON GRADING ALL LOGS (100%).
 THE DEFAULT TREE GRADE WILL BE THE TREE GRADE DEFINED IN THE SUBPOPULATION TABLE.
 LOG GRADE AT THE LOG RECORD LEVEL WILL OVERRIDE THE DEFAULT TREE GRADE.
 PRODUCT 01 (SAW LOG) ARE GRADES 1-6
 PRODUCT 08 & 20 (NON-SAW) ARE GRADE 8
 GRADES 9 WILL CULL (100% DEFECT) WHEN USED AT THE LOG RECORD LEVEL.
 PRODUCT 08 & 20=FS, PRODUCT 02=BLM

R604: PRODUCT VOLUME SUMMARY - CCF
 LOG STOCK TABLE FOR CUT TREES ONLY
 ***** CCF *****
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VERSION: 12.07.2017
 VOLUME LIBRARY VERSION: 07.12.2017

TABLE 1

REPORT FOR SPECIES: DF
 AVERAGE DBH: 16.7"

LOG DIB SMALL END 1" DIA. CLASS	SAW TIMBER		NON-SAW TIMBER		CULL LOG (GRADE 9) VOLUME	TOTAL		TOTAL				
	GROSS	NET	GROSS	NET		SAW+NONSAW GROSS VOLUME	SAW+NONSAW NET VOLUME	SAW+NONSAW GROSS VOLUME	SAW+NONSAW NET VOLUME			
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
6	152.74	138.03	0.00	0.00	0.00	152.74	138.03	0.00	138.03			
7	109.38	95.54	0.00	0.00	0.00	109.38	95.54	0.00	95.54			
8	130.12	117.40	0.00	0.00	0.00	130.12	117.40	0.00	117.40			
9	143.46	128.84	0.00	0.00	0.00	143.46	128.84	0.00	128.84			
10	166.70	148.72	0.00	0.00	0.00	166.70	148.72	0.00	148.72			
11	248.31	221.34	0.00	0.00	0.00	248.31	221.34	0.00	221.34			
12	260.24	231.43	0.00	0.00	0.00	260.24	231.43	0.00	231.43			
13	205.54	181.79	0.00	0.00	0.00	205.54	181.79	0.00	181.79			
14	216.29	194.76	0.00	0.00	0.00	216.29	194.76	0.00	194.76			
15	308.17	275.11	0.00	0.00	0.00	308.17	275.11	0.00	275.11			
16	231.53	202.95	0.00	0.00	0.00	231.53	202.95	0.00	202.95			
17	220.89	198.92	0.00	0.00	0.00	220.89	198.92	0.00	198.92			
18	294.38	263.26	0.00	0.00	0.00	294.38	263.26	0.00	263.26			
19	194.56	175.13	0.00	0.00	0.00	194.56	175.13	0.00	175.13			
20	286.69	255.61	0.00	0.00	0.00	286.69	255.61	0.00	255.61			
21	154.39	136.62	0.00	0.00	0.00	154.39	136.62	0.00	136.62			
22	162.14	146.00	0.00	0.00	0.00	162.14	146.00	0.00	146.00			
23	45.79	37.43	0.00	0.00	23.18	68.97	37.43	0.00	37.43			
24	75.59	68.03	0.00	0.00	0.00	75.59	68.03	0.00	68.03			
25	25.19	22.69	0.00	0.00	0.00	25.19	22.69	0.00	22.69			
SPECIES TOTALS:					3632.10	3239.63	10.8%	0.00	0.0%	23.18	3655.27	3239.63

VOLUME BY SPECIES AND PRODUCT IS BASED ON GRADING ALL LOGS.
 THE DEFAULT TREE GRADE WILL BE THE TREE GRADE DEFINED IN THE SUBPOPULATION TABLE.
 LOG GRADE AT THE LOG RECORD LEVEL WILL OVERRIDE THE DEFAULT TREE GRADE.
 GRADES WILL BE ASSIGNED BASED ON THE PRIMARY AND SECONDARY TOP
 LISTED IN THE VOLUME EQUATIONS. LOGS WITH TOP DIB LESS THAN THE PRIMARY TOP DIB
 WILL AUTOMATICALLY BE ASSIGNED A NON-SAW TIMBER GRADE 8.

R605: PRODUCT VOLUME SUMMARY - MEF
 LOG STOCK TABLE FOR CUT TREES ONLY
 ***** MEF *****
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VERSION: 12.07.2017
 VOLUME LIBRARY VERSION: 07.12.2017

TABLE 1

REPORT FOR SPECIES: DF
 AVERAGE DBH: 16.7"

LOG DIB SMALL END 1" DIA. CLASS	SAW TIMBER		NON-SAW TIMBER		CULL LOG (GRADE 9) VOLUME	TOTAL		TOTAL				
	GROSS	NET	GROSS	NET		SAW+NONSAW GROSS VOLUME	SAW+NONSAW NET VOLUME	SAW+NONSAW GROSS VOLUME	SAW+NONSAW NET VOLUME			
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
6	63.88	58.17	8.9	0.00	0.00	63.88	58.17	0.00	58.17			
7	50.18	43.28	13.7	0.00	0.00	50.18	43.28	0.00	43.28			
8	51.02	45.92	10.0	0.00	0.00	51.02	45.92	0.00	45.92			
9	63.79	57.25	10.3	0.00	0.00	63.79	57.25	0.00	57.25			
10	88.58	79.00	10.8	0.00	0.00	88.58	79.00	0.00	79.00			
11	134.13	119.24	11.1	0.00	0.00	134.13	119.24	0.00	119.24			
12	138.82	123.05	11.4	0.00	0.00	138.82	123.05	0.00	123.05			
13	117.78	103.90	11.8	0.00	0.00	117.78	103.90	0.00	103.90			
14	126.09	113.92	9.6	0.00	0.00	126.09	113.92	0.00	113.92			
15	196.19	175.18	10.7	0.00	0.00	196.19	175.18	0.00	175.18			
16	148.79	130.39	12.4	0.00	0.00	148.79	130.39	0.00	130.39			
17	144.21	130.10	9.8	0.00	0.00	144.21	130.10	0.00	130.10			
18	196.44	176.18	10.3	0.00	0.00	196.44	176.18	0.00	176.18			
19	134.95	121.46	10.0	0.00	0.00	134.95	121.46	0.00	121.46			
20	204.75	182.85	10.7	0.00	0.00	204.75	182.85	0.00	182.85			
21	108.14	95.76	11.4	0.00	0.00	108.14	95.76	0.00	95.76			
22	114.62	103.29	9.9	0.00	0.00	114.62	103.29	0.00	103.29			
23	33.38	27.33	18.1	0.00	15.21	48.59	27.33	0.00	27.33			
24	52.82	47.58	9.9	0.00	0.00	52.82	47.58	0.00	47.58			
25	18.80	16.92	10.0	0.00	0.00	18.80	16.92	0.00	16.92			
SPECIES TOTALS:					2187.35	1950.77	10.8%	0.00	0.0%	15.21	2202.56	1950.77

VOLUME BY SPECIES AND PRODUCT IS BASED ON GRADING ALL LOGS.
 THE DEFAULT TREE GRADE WILL BE THE TREE GRADE DEFINED IN THE SUBPOPULATION TABLE.
 LOG GRADE AT THE LOG RECORD LEVEL WILL OVERRIDE THE DEFAULT TREE GRADE.
 GRADES WILL BE ASSIGNED BASED ON THE PRIMARY AND SECONDARY TOP
 LISTED IN THE VOLUME EQUATIONS. LOGS WITH TOP DIB LESS THAN THE PRIMARY TOP DIB
 WILL AUTOMATICALLY BE ASSIGNED A NON-SAW TIMBER GRADE 8.

ST3: ERROR TERM, VOLUME AND CONFIDENCE INTERVAL (DS1)
 PRIMARY PRODUCT VOLUME
 FOR CUT TREES ONLY
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VERSION: 12.07.2017
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P R U		***** PRIMARY PRODUCT GROSS VOLUME *****		***** PRIMARY PRODUCT NET VOLUME *****				
T O O		***** 95% CONFIDENCE *****		***** 95% CONFIDENCE *****				
A U F		INTERVAL		INTERVAL				
A T M	VOLUME*	ERROR	FROM	TO	VOLUME*	ERROR	FROM	TO
1 01 03	365527.3	23.20	280740	450314	323962.6	24.29	245265	402660
			-----	AGGREGATED BY PRODUCT	-----			
01 03	365527.3	23.20	280740	450314	323962.6	24.29	245265	402660
			-----	AGGREGATED BY UNIT OF MEASURE	-----			
03	365527.3	23.20	280740	450314	323962.6	24.29	245265	402660
			-----	AGGREGATED BY STRATA	-----			
1 03	365527.3	23.20	280740	450314	323962.6	24.29	245265	402660

* UOM DETERMINES VALUES USED IN CALCULATION UNDER VOLUME

ST3: ERROR TERM, VOLUME AND CONFIDENCE INTERVAL (DS1)
 TOTAL VOLUME
 FOR CUT TREES ONLY
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

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P R U		***** TOTAL GROSS VOLUME *****		***** TOTAL NET VOLUME *****						
S	T	O	R	O						
R	D	O								
A	U	F	***** 95% CONFIDENCE *****	***** 95% CONFIDENCE *****						
T	C		INTERVAL	INTERVAL						
A	T	M	FROM	TO	FROM					
			VOLUME*	ERROR	VOLUME*					
					ERROR					
					TO					
01	03		365527.3	23.20	280740	450314	323962.6	24.29	245265	402660
					AGGREGATED BY PRODUCT					
					280740	450314	323962.6	24.29	245265	402660
					AGGREGATED BY UNIT OF MEASURE					
					280740	450314	323962.6	24.29	245265	402660
					AGGREGATED BY STRATA					
					280740	450314	323962.6	24.29	245265	402660

* UOM DETERMINES VALUES USED IN CALCULATION UNDER VOLUME

UC25: VOLUME BY CONTRACT SPECIES & PRODUCT
 WITHIN PAYMENT UNITS ACROSS STRATA
 FOR CUT TREES ONLY
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VOLUME LIBRARY VERSION: 07.12.2017
 VERSION: 12.07.2017

PAYMENT UNIT	ACRES	CONTRACT SPECIES	SAWTIMBER CCF	NON-SAWTIMBER CCF
TOTAL	64	ALL	3240	0
CONTRACT SPECIES SUMMARY				
		NS	3240	0
GRAND TOTALS				
ALL	64	ALL	3240	0

UC26: VOLUME SUMMARY BY CONTRACT SPECIES & PRODUCT
 BY CUTTING UNIT FOR THE SALE
 FOR CUT TREES ONLY
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VOLUME LIBRARY VERSION: 07.12.2017
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CUTTING UNIT	ACRES	CONTRACT SPECIES	SAWTIMBER CCF	NON-SAWTIMBER CCF
1	58		2935.91	0.00
11	3		151.86	0.00
12	2		101.24	0.00
13	1		50.62	0.00
CONTRACT SPECIES SUMMARY				
		NS	3239.63	0.00

GRAND TOTALS	ALL	64 ALL	3239.63	0.00

UC3: VOLUME BY SPECIES WITHIN CUTTING UNIT FOR EACH STRATUM-SAWTIMBER/PULPWOOD
 FOR CUT TREES ONLY
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VERSION: 12.07.2017
 VOLUME LIBRARY VERSION: 07.12.2017

S		***** SAWTIMBER ***** (PROD = 01 UM = 01, 03)										***** NON-SAWTIMBER ***** (PROD NOT = 01 UM = 01, 02, 03)									
EST.		** GROSS VOLUME **					** NET VOLUME **					*** GROSS ***					*** NET ***				
TREES	# OF TREES	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	CORDS	
1	1	DF	4792	4792	1996070	331259	1767884	293591	0	0	0	0	0	0	0	0	0	0	0	0	0.00
UNIT 1 TOTAL			4792	4792	1996070	331259	1767884	293591	0	0	0	0	0	0	0	0	0	0	0	0	0.00
1	11	DF	248	248	103245	17134	91442	15186	0	0	0	0	0	0	0	0	0	0	0	0	0.00
UNIT 11 TOTAL			248	248	103245	17134	91442	15186	0	0	0	0	0	0	0	0	0	0	0	0	0.00
1	12	DF	165	165	68830	11423	60962	10124	0	0	0	0	0	0	0	0	0	0	0	0	0.00
UNIT 12 TOTAL			165	165	68830	11423	60962	10124	0	0	0	0	0	0	0	0	0	0	0	0	0.00
1	13	DF	83	83	34415	5711	30481	5062	0	0	0	0	0	0	0	0	0	0	0	0	0.00
UNIT 13 TOTAL			83	83	34415	5711	30481	5062	0	0	0	0	0	0	0	0	0	0	0	0	0.00
STRATA 1 TOTAL			5288	5288	2202560	365527	1950769	323963	0	0	0	0	0	0	0	0	0	0	0	0	0.00

OVERALL TOTALS--		5288	5288	2202560	365527	1950769	323963	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
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* FOR TREE-BASED SAMPLES, THE CUTTING UNIT VOLUME IS BASED ON THE # OF TREES TALLIED OR THE SUM OF KPIS THAT FALL WITHIN THE CUTTING UNIT. FOR AREA-BASED SAMPLES, THE CUTTING UNIT VOLUME IS BASED ON AN AVERAGE VOLUME PER ACRE AT THE STRATA LEVEL TIMES THE NUMBER OF ACRES IN THE CUTTING UNIT.
 *R = RECOVERED VOLUME ADDED TO NET SECONDARY VOLUME.
 *FOR CRUISE METHOD 3P ONLY, THE COLUMN Est. # of Trees for sawtimber WILL SHOW ZERO INSTEAD OF ACTUAL TALLY.

UC4: VOLUME BY SAMPLE GROUP WITHIN CUTTING UNIT FOR EACH STRATUM-SAWTIMBER/PULPWOOD
 FOR CUT TREES ONLY
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

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S	M	P	U	A	N	G	R	A	T	P	TOTAL	EST.	EST.	# OF TREES	# OF TREES	** GROSS VOLUME **	** NET VOLUME **	** GROSS **	** NET **	BDFT	CUFT	BDFT	CUFT	CORDS
1	1										4792	4792	4792	4792	4792	1996070	331259	1767884	293591	0	0	0	0	0.00
UNIT 1 TOTAL											4792	4792	1996070	331259	1767884	293591	0	0	0	0	0.00			
1	11										248	248	248	248	103245	17134	91442	15186	0	0	0	0	0.00	
UNIT 11 TOTAL											248	248	103245	17134	91442	15186	0	0	0	0	0.00			
1	12										165	165	165	165	68830	11423	60962	10124	0	0	0	0	0.00	
UNIT 12 TOTAL											165	165	68830	11423	60962	10124	0	0	0	0	0.00			
1	13										83	83	83	83	34415	5711	30481	5062	0	0	0	0	0.00	
UNIT 13 TOTAL											83	83	34415	5711	30481	5062	0	0	0	0	0.00			
STRATA 1 TOTAL											5288	5288	2202560	365527	1950769	323963	0	0	0	0	0.00			
OVERALL TOTALS--											5288	5288	2202560	365527	1950769	323963	0	0	0	0	0.00			

* FOR TREE-BASED SAMPLES, THE CUTTING UNIT VOLUME IS BASED ON THE # OF TREES TALLIED OR THE SUM OF KPIS THAT FALL WITHIN THE CUTTING UNIT. FOR AREA-BASED SAMPLES, THE CUTTING UNIT VOLUME IS BASED ON AN AVERAGE VOLUME PER ACRE AT THE STRATA LEVEL TIMES THE NUMBER OF ACRES IN THE CUTTING UNIT.
 *R = RECOVERED VOLUME ADDED TO NET SECONDARY VOLUME.
 *FOR CRUISE METHOD 3P ONLY, THE COLUMN Est. # of Trees for sawtimber WILL SHOW ZERO INSTEAD OF ACTUAL TALLY.

1	DF	01	P	03	L	C	CL	N	I	44	18.0	16.7	98.8	0.8	11	11	6.026	6.022	5288	2202560	365527	1950769	323963	0.0
		PRODUCT		SOURCE		EST. NO		OF TREES		*** GROSS VOLUME ***		*** NET VOLUME ***		CORDS										
		PRODUCT		SOURCE		EST. NO		OF TREES		*** GROSS VOLUME ***		*** NET VOLUME ***		CORDS										
		01	P					5288		2202560	365527	1950769	323963	0.0										
				5288				2202560		365527	1950769	323963	0.0											

TOTALS --- PRODUCT SOURCE EST. NO OF TREES *** GROSS VOLUME *** *** NET VOLUME *** CORDS

01 P 03 L C CL N I 44 18.0 16.7 98.8 0.8 11 11 6.026 6.022 5288 2202560 365527 1950769 323963 0.0

PRODUCT SOURCE KEY:
 P = PRIMARY PRODUCT
 S = SECONDARY PRODUCT
 R = RECOVERABLE PRODUCT

The following items are not reported and/or calculated for secondary or recovered products but are shown here as blank so the associated volumes can be reported:
 Number of measured trees, Quad mean DBH, Mean DBH, Mean height(s), Average defect, any Ratio, Estimated number of trees.

VSM3: VOLUME SUMMARY FOR STRATA (CS1)
 FOR CUT TREES ONLY
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VERSION: 12.07.2017
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PRODUCT	SOURCE	DBH	MEAN DBH	MEAN TOT HGT	MEAN MRHT	PRPD	MEAN	0.8	98.8	18.0	16.7	98.8	0.8	11	11	6.026	6.022	5288	2202560	365527	1950769	323963	0.0
TOTALS -----																							
PRODUCT	SOURCE	DBH	MEAN DBH	MEAN TOT HGT	MEAN MRHT	PRPD	MEAN	0.8	98.8	18.0	16.7	98.8	0.8	11	11	6.026	6.022	5288	2202560	365527	1950769	323963	0.0
01	P	18.0	16.7	98.8	0.8	0.8	0.8	0.8	98.8	18.0	16.7	98.8	0.8	11	11	6.026	6.022	5288	2202560	365527	1950769	323963	0.0
PRODUCT SOURCE KEY:																							
P = PRIMARY PRODUCT																							
S = SECONDARY PRODUCT																							
R = RECOVERABLE PRODUCT																							

The following items are not reported and/or calculated for secondary or recovered products but are shown here as blank so the associated volumes can be reported:
 Number of measured trees, Quad mean DBH, Mean DBH, Mean height(s), Average defect, any Ratio, Estimated number of trees.

WT1: WEIGHT BY SPECIES ACROSS STRATA
 FOR CUT TREES ONLY
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VOLUME LIBRARY VERSION: 07.12.2017
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DF	CRUISE SPECIES	CONTRACT SPECIES	PRODUCT	GROSS CUFT	(1) WEIGHT FACTOR	(2) POUNDS STANDING	(3) PERCENT REMOVED	(4) POUNDS REMOVED	(5) TONS REMOVED
			01 P	365527	60.00	21931620	95.00	20835039	10417.52

SUMMARY
 CONTRACT SPECIES PRODUCT TONS REMOVED

01 P 10417.52

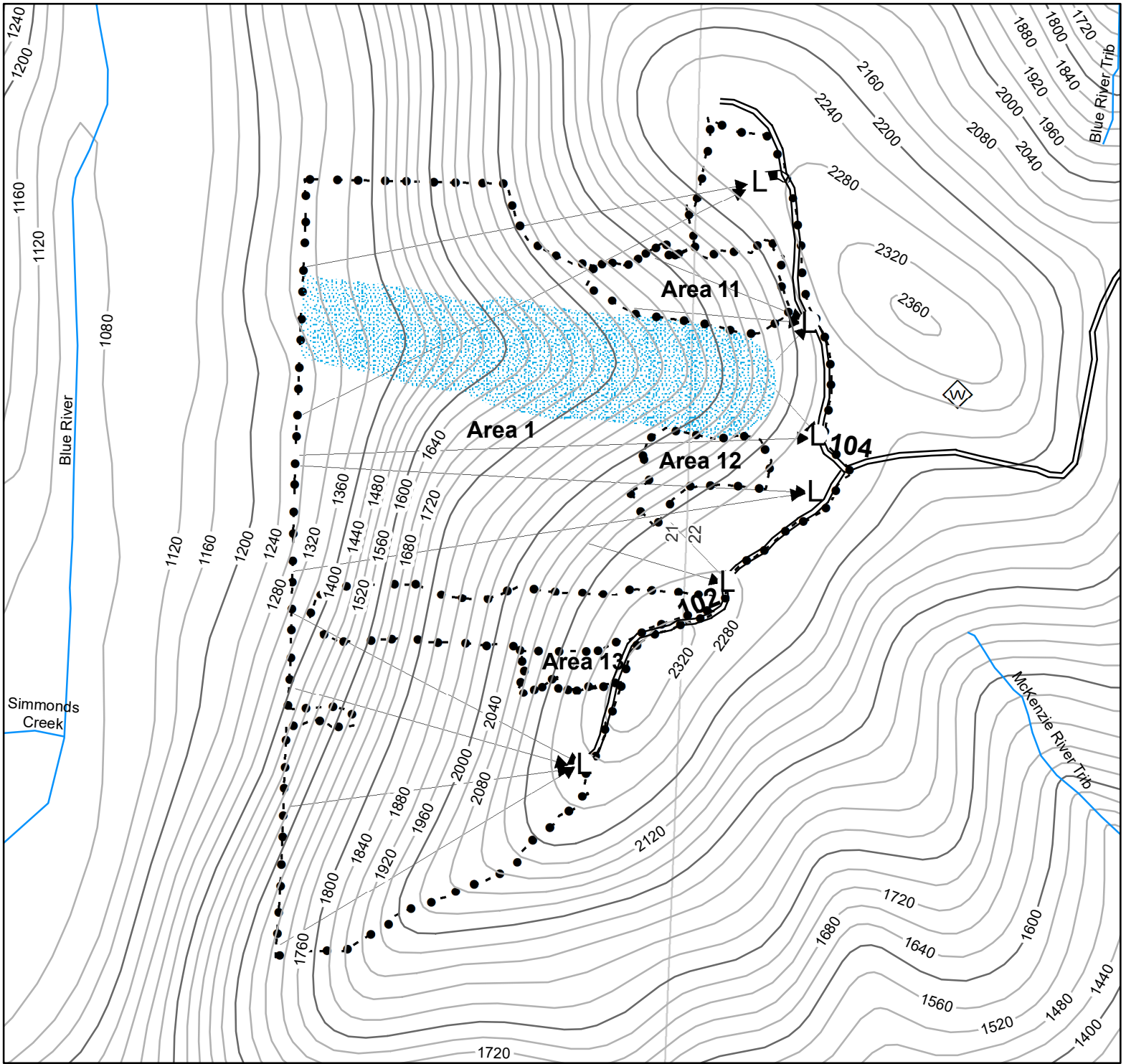
TOTAL TONS REMOVED 10417.52

- (1) WEIGHT FACTOR = POUNDS PER GROSS CUFT
- (2) POUNDS STANDING = GROSS CUFT x WEIGHT FACTOR
- (3) PERCENT REMOVED = % MATERIAL HAULED OUT ON TRUCKS
- (4) POUNDS REMOVED = POUNDS STANDING x (PERCENT REMOVED/100)
- (5) TONS REMOVED = POUNDS REMOVED / 2,000

WT4: WEIGHT BY SPECIES AND PRODUCT BY UNIT
 BY CUTTING UNIT FOR THE SALE
 FOR CUT TREES ONLY
 CRUISE#: 52775 SALE#: 52775
 SALENAME: GNA_PARK
 RUN DATE & TIME: 7/26/2018 4:58:30 PM

VOLUME LIBRARY VERSION: 07.12.2017
 VERSION: 12.07.2017

CUTTING UNIT	ACRES	SPECIES	SAWTIMBER PRIM PROD = 01 GREEN TONS	NON-SAWTIMBER OTHER PRIM PROD GREEN TONS	NON-SAWTIMBER SECOND PROD ONLY GREEN TONS
1	58	DF	9440.88	0.00	0.00
SUBTOTAL			9440.88	0.00	0.00
11	3	DF	488.32	0.00	0.00
SUBTOTAL			488.32	0.00	0.00
12	2	DF	325.55	0.00	0.00
SUBTOTAL			325.55	0.00	0.00
13	1	DF	162.77	0.00	0.00
SUBTOTAL			162.77	0.00	0.00
GRAND TOTAL			10417.53	0.00	0.00



Legend

- Timber Sale Boundary
- Landing
- Road
- Temp Spur
- GNAParkRiparianReserve
- Stream
- Cable Yarding Corridor
- Disposal Site

LOGGING PLAN

Sale No. SW-341-2019-GF7819-01

Approximate Net Acres

Park Timber Sale
 Section 21 & 22, T16S, R4E, W.M.
 Lane County, Oregon
 Regulated Use Area EL-1
 Willamette National Forest

Area 1	56
Area 11	3
Area 12	2
Area 13	1.5

Total 62.5

