"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Jethro Toll
Sale TL-341-2020-W00750-01

District: Tillamook

Date: August 06, 2019

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$1,668,133.70	$511,392.00	$2,179,525.70
		Project Work:	($244,910.00)
		Advertised Value:	$1,934,615.70

Timber Sale Appraisal
Jethro Toll

Sale TL-341-2020-W00750-01

District: Tillamook **Date: August 06, 2019**

Timber Description

Location: Sections 5, 6 of T2S R7W and Sections 29, 30, 31, 32 of T1S R7W, W.M., Tillamook County, Oregon.

Stand Stocking: 100%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	17	0	95
Western Hemlock / Fir	16	0	95
Sitka Spruce	16	0	95
Alder (Red)	15	0	90

Volume by Grade	2S	3S & 4S 6"-11"	8" - 9"	10" - 11"	12"+	6" - 7"	Total
Douglas - Fir	2,430	3,528	0	0	0	0	5,958
Western Hemlock / Fir	0	58	0	0	0	0	58
Sitka Spruce	0	40	0	0	0	0	40
Alder (Red)	0	0	577	633	897	937	3,044
Total	2,430	3,626	577	633	897	937	9,100

Comments: Pond Values Used: August 2019
Region: Astoria, Forest Grove, and Tillamook

Western Red Cedar and Other Cedars Stumpage Price = Pond Value – Logging Cost
$1,049.00/MBF - $396.98/MBF = $652.02/ MBF

Other hardwoods stumpage price= $0.00/MBF.

Pulp (Conifer and Hardwood) Price = $ 2.5/ Ton

BRAND AND PAINT ALLOWANCE = $2.00/ MBF
FUEL COST ALLOWANCE = $3.00/ Gallon
HAULING COST ALLOWANCE
Hauling cost equivalent to $950 daily truck cost
($95.00/hr x 10 hr. = $950)

Other Costs with Profit and Risk to be added:
Area 1 Snag Creation: 111 acres x 2 = 222 snags
222 x $10 = $2,220
Area 3 Snag Creation: 112 acres x 2 = 224 snags
224 x $10 = $2,240
Directional Falling: Specific OHV trails within Areas 1 and 4: Approximately 5,000 feet = $3,000

TOTAL Other Costs with profit and Risk to be added = $7,460

Other Costs with No Profit and Risk Added:

Non-Project Rd. 1: 1+80 sta. $350/sta. = $630
Non-Project Rd. 2: 1+65 sta. $350/sta. = $578
Non-Project Rd. 3: 8+95 sta. $400/sta. = $3,580
Non-Project Rd. 4: 10+30 sta. $100/sta. = $1,030
Non-Project Rd. 5: 4+00 sta. $300/sta. = $1,200
Non-Project Rd. 6: 4+05 sta. $100/sta. = $405
Non-Project Rd. 7: 5+20 sta. $350/sta. = $1,820
Non-Project Rd. 8: 9+80 sta. $350/sta. = $3,430
Non-Project Rd. 9: 3+75 sta. $300/sta. = $1,125
Non-Project Equipment Access Rd. (Area 3): 19+65 sta. $150/sta.= $2,948

Move-in Guyline Cats (Area 2) : $1,000 x 3 machines = $3,000
Move-in Tailhold Cats (Area 2 & 4): $1,000 x 1 machine = $1,000
Move-in Machine Cleaning: $1,000/machine x 2 machines x 2 seasons = $4,000
Unit to Unit Machine Track Cleaning: $1,000/machine x 2 machines x 1 units = $2,000
Slash piling and sorting (Cable Settings): $5/ac x 387ac. = $1,935
Heliport Construction: $2,000 ($500/area x 4 areas)
Road blocking $50/block x 10 roads = $500

Ditch Cleaning and Bank Sluff Removal:
Mobilization: three times – dump truck w/ tilt bed & small excavator: $900 x 3 = $2,700
Small excavator (Cat 312 or equivalent): 40 hours @ $135/ hour = $5,400
Dump truck: 40 hours @ $90/ hour = $3,600

TOTAL Other Costs no Profit and Risk added = $42,881.00

ROAD MAINTENANCE:
Spot Rocking: 20cy/MMBF/mile x 9.1 MMBF x $8/cy x 6.0 miles / 9,100 MBF= $0.96/MBF
Interim Grading: $1,200/ mile x 6.0 miles x 3 times/ 9,100 MBF = $2.37/MBF
Final Maintenance:
Full Processing: $2,250 x 2.0 miles/ 9,100 MBF = $0.49/MBF
Grade & Shape: $1,350 x 4.0 miles/ 9,100 MBF = $0.59/MBF

Total Road Maintenance: $4.41/MBF
$4.41 x 9,100 MBF = $40,131

Logging Conditions

Combination#: 1

Douglas - Fir	29.76%
Western Hemlock / Fir	29.00%
Sitka Spruce	30.05%
Alder (Red)	28.96%

Logging System: Shovel **Process:** Harvester Head Delimbing
yarding distance: Medium (800 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 14.5 **bd. ft / load:** 4000
cost / mbf: $92.14
machines: Forwarder
Harvester

Combination#: 2

Douglas - Fir	4.79%
Sitka Spruce	0.88%
Alder (Red)	4.63%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Harvester Head Delimbing
yarding distance: Medium (800 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 11 **bd. ft / load:** 4200
cost / mbf: $168.41
machines: Log Loader (A)
Forwarder
Harvester
Tower Yarder (Medium)

Combination#: 3

Douglas - Fir	61.19%
Western Hemlock / Fir	71.00%
Sitka Spruce	67.32%
Alder (Red)	59.51%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Harvester Head Delimbing
yarding distance: Medium (800 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 6 **bd. ft / load:** 4200
cost / mbf: $308.75
machines: Log Loader (A)
Forwarder
Harvester
Tower Yarder (Medium)

Combination#: 4

Douglas - Fir	4.26%
Sitka Spruce	1.75%
Alder (Red)	6.90%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Harvester Head Delimbing
yarding distance: Long (1,500 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF

loads / day:	5.5	**bd. ft / load:**	4000
cost / mbf:	$353.65		
machines:	Log Loader (A) Forwarder Harvester Tower Yarder (Medium)		

Timber Sale Appraisal
Jethro Toll

Sale TL-341-2020-W00750-01

District: Tillamook **Date: August 06, 2019**

Logging Costs

Operating Seasons:	2.00	**Profit Risk:**	13%
Project Costs:	$244,910.00	**Other Costs (P/R):**	$7,460.00
Slash Disposal:	$0.00	**Other Costs:**	$42,881.00

Miles of Road

Road Maintenance: $4.41

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

Hauling Costs

Species	$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	$95.00	2.0	3.7
Western Hemlock / Fir	$95.00	2.0	4.2
Sitka Spruce	$95.00	1.0	4.2
Alder (Red)	$95.00	2.0	4.2

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Jethro Toll
Sale TL-341-2020-W00750-01

District: Tillamook **Date: August 06, 2019**

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
$239.48	$4.63	$0.96	$99.75	$0.82	$44.93	$0.00	$2.00	$4.71	$397.28
Western Hemlock / Fir									
$245.93	$4.63	$0.96	$99.75	$0.82	$45.77	$0.00	$2.00	$4.71	$404.57
Sitka Spruce									
$243.22	$4.63	$0.96	$99.75	$0.82	$45.42	$0.00	$2.00	$4.71	$401.51
Alder (Red)									
$242.61	$4.85	$0.96	$104.50	$0.82	$45.99	$0.00	$2.00	$4.71	$406.44

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$675.30	$278.02	$0.00
Western Hemlock / Fir	$0.00	$532.00	$127.43	$0.00
Sitka Spruce	$0.00	$509.00	$107.49	$0.00
Alder (Red)	$0.00	$574.44	$168.00	$0.00

Timber Sale Appraisal
Jethro Toll
Sale TL-341-2020-W00750-01

District: Tillamook **Date: August 06, 2019**

Summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	5,958	$278.02	$1,656,443.16
Western Hemlock / Fir	58	$127.43	$7,390.94
Sitka Spruce	40	$107.49	$4,299.60
Alder (Red)	3,044	$168.00	$511,392.00

Gross Timber Sale Value

Recovery: $2,179,525.70

Prepared By: Harold Stevens **Phone:** 503-815-7044

"STEWARDSHIP IN FORESTRY"

PROJECT SUMMARY SHEET

Sale: Jethro Toll

CONSTRUCTION

Point	A to B	30+35	stations =	$29,120.77
Point	I to J	21+90	stations =	$31,614.22
			SUBTOTAL CONSTRUCTION	**$60,734.99**

IMPROVEMENT

Point	A to B	146+10	stations =	$94,392.26
Point	C to D	12+00	stations =	$18,211.15
Point	E to F	4+05	stations =	$1,656.18
Point	G to H	11+30	stations =	$3,013.15
Point	I to J	2+45	stations =	$2,924.66
Point	K to L	17+30	stations =	$8,620.80
			SUBTOTAL IMPROVEMENT	**$128,818.20**

SPECIAL PROJECTS

Project 2 3,000 CY Stockpile Construction	38,760.00
Project 3 Stockpile Site A Pad Widening	7,752.40
Project 5 Rock Quarry Test Drilling	$2,800.00
SUBTOTAL SPECIAL PROJECTS	**$49,312.40**

MOVE IN **$6,044.41**

GRAND TOTAL **$244,910.00**

SUMMARY OF CONSTRUCTION COST

Sale: **Jethro Toll** Road: **A to B**

Construction -	30+35	stations	Improvement -	146+10	stations	Reconstruction -	0+00	stations
	0.57	miles		2.77	miles		0.00	miles

CONSTRUCTION: CLEARING, GRUBBING, SCATTERING, EXCAVATION, COMPACTION, LOADING, END-HAULING AND SPREADING/COMPACTING AT WASTE AREA -

Station	to	Station	Avg. Sideslope	Avg. Dist. To W.A. (mi.)	Outslope/Ditch	Cost per Station			
146+10		164+30	45%		Outslope	$336	=	$6,115.20	
164+30		164+90	Land. Const.		Outslope	$650	=	$390.00	
164+90		175+85	30%		Outslope	$239	=	$2,617.05	
175+85		176+45	Land. Const.		Outslope	$650	=	$390.00	
								TOTAL	**$9,512.25**

CULVERTS - MATERIALS & INSTALLATION

Culverts				
	60	LF of 18"	$1,200.00	
Culvert Stakes & Markers				
	2	markers	$16.00	
			TOTAL CULVERTS	**$1,216.00**

ROCK

0+00 to	112+40	2,520	cy. of	Crushed	@	$17.33	per c.y.=	$43,671.60
112+40 to	125+70	470	cy. of	Jaw-Run	@	$17.26	per c.y.=	$8,112.20
125+70 to	176+45	2,660	cy. of	Jaw-Run	@	$17.84	per c.y.=	$47,454.40
Culvert Backfill	66+10 & 70+60	40	cy. of	Crushed	@	$15.84	per c.y.=	$633.60
Landing Rock	164+60 & Pt. B	200	cy. of	Jaw-Run	@	$18.31	per c.y.=	$3,662.00
Energy Dissipator	66+10 & 70+60	15	cy. of	Riprap	@	$10.32	per c.y.=	$154.80
							TOTAL ROCK	**$103,688.60**

SPECIAL PROJECTS

Construct ditchout 86+85 -	1.00	@	$60.00	each	$60.00
Grade and shape road (includes grader ditching) -	176.45	stations @	$30.00	per station	$5,293.50
Roll subgrade w/ vibratory roller prior to rocking -	176.45	stations @	$17.50	per station	$3,087.88
Grass seed and fertilize -	2.06	acres @	$280.00	per acre	$576.80
Mulching -	0.100	acres @	$780.00	per acre	$78.00
				TOTAL SPECIAL PROJECTS	**$9,096.18**

GRAND TOTAL **$123,513.03**

SUMMARY OF CONSTRUCTION COST

Sale: **Jethro Toll** Road: **C to D**

Construction -	0+00	stations	Improvement -	12+00	stations	Reconstruction -	0+00	stations
	0.00	miles		0.23	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

Scattering	1.540	acres @	$1,275.00	per acre =	$1,963.50	
				TOTAL CLEARING AND GRUBBING		**$1,963.50**

IMPROVEMENT: EXCAVATION -

Road Earthwork	12.00	sta. @	$200.00	per sta. =	$2,400.00	
				TOTAL EXCAVATION		**$2,400.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts						
30	LF of 18"	$600.00		0	LF of 24"	$0.00
Culvert Stakes & Markers						
1	markers	$8.00				
		$8.00			**TOTAL CULVERTS**	**$608.00**

ROCK

0+00 to	12+00	640	cy. of	Jaw-Run	@	$16.18	per c.y.=	$10,355.20
Culvert Backfill	0+00	20	cy. of	Crushed	@	$15.57	per c.y.=	$311.40
Landing Rock	Point D	100	cy. of	Jaw-Run	@	$16.25	per c.y.=	$1,625.00
Junction Rock	0+00	20	cy. of	Crushed	@	$17.27	per c.y.=	$345.40
Energy Dissipator	0+00	5	cy. of	Riprap	@	$10.05	per c.y.=	$50.25
							TOTAL ROCK	**$12,687.25**

SPECIAL PROJECTS

Grade and shape road -	12.00	stations @	$22.00	per station	$264.00	
Roll subgrade w/ vibratory roller prior to rocking -	12.00	stations @	$17.50	per station	$210.00	
Grass seed and fertilize -	0.28	acres @	$280.00	per acre	$78.40	
				TOTAL SPECIAL PROJECTS		**$552.40**

GRAND TOTAL **$18,211.15**

SUMMARY OF CONSTRUCTION COST

Sale: **Jethro Toll** Road: **E to F**

Construction -	0+00	stations	Improvement -	4+05	stations	Reconstruction -	0+00	stations
	0.00	miles		0.08	miles		0.00	miles

IMPROVEMENT: EXCAVATION -

Road Ditching					4.05	sta. @	$100.00	per sta. =	$405.00	
								TOTAL	**EXCAVATION**	**$405.00**

ROCK

Spot Rock	0+00 to 4+05	40	cy. of	Crushed		@	$17.92	per c.y.=	$716.80	
Junction Rock	0+00	20	cy. of	Crushed		@	$17.88	per c.y.=	$357.60	
									TOTAL ROCK	**$1,074.40**

SPECIAL PROJECTS

Grade and shape road -	4.05	stations @	$22.00	per station	$89.10	
Roll subgrade w/ vibratory roller prior to rocking -	4.05	stations @	$17.50	per station	$70.88	
Grass seed and fertilize -	0.06	acres @	$280.00	per acre	$16.80	
				TOTAL SPECIAL PROJECTS		**$176.78**

GRAND TOTAL **$1,656.18**

SUMMARY OF CONSTRUCTION COST

Sale: **Jethro Toll** Road: **G to H**

Construction -	0+00	stations	Improvement -	11+30	stations	Reconstruction -	0+00	stations
	0.00	miles		0.21	miles		0.00	miles

IMPROVEMENT: -

ROCK

Spot Sock	0+00 to 11+30	120	cy. of	Crushed	@	$18.35	per c.y.=	$2,202.00	
Junction Rock	0+00	20	cy. of	Crushed	@	$18.24	per c.y.=	$364.80	
								TOTAL ROCK	**$2,566.80**

SPECIAL PROJECTS

Grade and shape road -	11.30	stations @	$22.00	per station	$248.60		
Roll subgrade w/ vibratory roller prior to rocking -	11.30	stations @	$17.50	per station	$197.75		
					TOTAL SPECIAL PROJECTS		**$446.35**

GRAND TOTAL **$3,013.15**

SUMMARY OF CONSTRUCTION COST

Sale: **Jethro Toll** Road: **I to J**

Construction -	21+90	stations	Improvement -	2+45	stations	Reconstruction -	0+00	stations
	0.41	miles		0.05	miles		0.00	miles

CONSTRUCTION: CLEARING, GRUBBING, SCATTERING, EXCAVATION, COMPACTION, LOADING, END-HAULING AND SPREADING/COMPACTING AT WASTE AREA -

Station	to	Station	Avg. Sideslope	Avg. Dist. To W.A. (mi.)	Outslope/Ditch	Cost per Station			
2+45		5+05	30%		Outslope	$239	=		$621.40	
5+05		13+70	45%		Outslope	$336	=		$2,906.40	
13+70		17+65	30%		Outslope	$239	=		$944.05	
17+65		18+25	Land. Const.		Outslope	$650	=		$390.00	
18+25		23+75	30%		Outslope	$239	=		$1,314.50	
23+75		24+35	Land. Const.		Outslope	$650	=		$390.00	
									TOTAL	**$6,566.35**

IMPROVEMENT: EXCAVATION -

Road Earthwork	2.45	sta. @	$50.00	per sta. =	$122.50			
				TOTAL	**EXCAVATION**			**$122.50**

ROCK

0+00 to	24+35	1,300	cy. of	Jaw-Run	@	$17.51	per c.y.=	$22,763.00	
Landing Rock	17+95 & Pt. J	200	cy. of	Jaw-Run	@	$17.61	per c.y.=	$3,522.00	
Junction Rock	0+00	20	cy. of	Jaw-Run	@	$17.28	per c.y.=	$345.60	
								TOTAL ROCK	**$26,630.60**

SPECIAL PROJECTS

Grade and shape road -	24.35	stations @	$22.00	per station	$535.70	
Roll subgrade w/ vibratory roller prior to rocking -	24.35	stations @	$17.50	per station	$426.13	
Grass seed and fertilize -	0.92	acres @	$280.00	per acre	$257.60	
				TOTAL SPECIAL PROJECTS		**$1,219.43**

GRAND TOTAL **$34,538.88**

SUMMARY OF CONSTRUCTION COST

Sale: **Jethro Toll** Road: **K to L**

Construction -	0+00	stations	Improvement -	17+30	stations	Reconstruction -	0+00	stations
	0.00	miles		0.33	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -									
Scattering				0.790	acres @	$1,275.00	per acre =	$1,007.25	
							TOTAL CLEARING AND GRUBBING		**$1,007.25**
IMPROVEMENT: EXCAVATION -									
Road Earthwork				17.30	sta. @	$100.00	per sta. =	$1,730.00	
Const. Landing @ Point L				1	@	$370.00	each =	$370.00	
							TOTAL EXCAVATION		**$2,100.00**
ROCK									
Spot Sock	0+00	180	cy. of	Crushed	@	$16.95	per c.y.=	$3,051.00	
Landing Rock	Pt. L	100	cy. of	Jaw-Run	@	$15.58	per c.y.=	$1,558.00	
							TOTAL ROCK		**$4,609.00**
SPECIAL PROJECTS									
Grade and shape road -				17.30	stations @	$22.00	per station	$380.60	
Roll subgrade w/ vibratory roller prior to rocking -				17.30	stations @	$17.50	per station	$302.75	
Grass seed and fertilize -				0.79	acres @	$280.00	per acre	$221.20	
							TOTAL SPECIAL PROJECTS		**$904.55**
							GRAND TOTAL		**$8,620.80**

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Crushing Pit	Location:	SW 1/4 NE 1/4 Sec. 9, T2S, R7W, W.M.
Sale:	**Jethro Toll**		Road & Stockpile 12110 c.y.
Swell:	1.40		
Shirinkage	1.16		Total Truck Loads: 12110 c.y.
Drill Pct.:	50%		In Place Total: 8650 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact.							$4,000.00
Drill & Shoot:	$3.25	/cu.yd.	x	4325	cu.yds.	=	$14,056.25
Rip Rock:	$3.00	/cu.yd.	x	4325	cu.yds.	=	$12,975.00
Push Rock:	$1.00	/cu.yd.	x	12110	cu.yds.	=	$12,110.00
Load Crusher:	$1.00	/cu.yd.	x	12110	cu.yds.	=	$12,110.00
Crush 2" Rock:	$4.25	/cu.yd.	x	5980	cu.yds.	=	$25,415.00
Crush 4" Jaw-Run:	$3.50	/cu.yd.	x	6130	cu.yds.	=	$21,455.00
Load Dump Truck:	$1.00	/cu.yd.	x	12110	cu.yds.	=	$12,110.00
					Subtotal		$114,231.25

Move In/Set-up Crusher					$2,100.00
Move In and set up Drill and Compressor	1	@	$808.57	=	$808.57
Move in Roller and Compactor	1	@	$592.50	=	$592.50
Move in Grader	1	@	$776.79	=	$776.79
Move in Loader	1	@	$811.07	=	$811.07
Move in Excavator	1	@	$926.07	=	$926.07
Move in Trucks	4	@	$218.57	=	$874.28
Move in Water Truck	1	@	$218.57	=	$218.57
			Subtotal		$7,107.85
			TOTAL PRODUCTION COSTS		$121,339.10

Base Cost= $10.02 Per Cu.Yd.

Road Segment	Haul Cost $/cu.yd.	Proc Cost $/cu.yd.	Base Cost. $/cu.yd.	Cost $/cu.yd.	Number Cu. Yds		ROCK COST
A to B 0 11240 (Crushed)	4.11	3.20	10.02	17.33	2520		$43,671.60
A to B 11240 12570 (Jaw-Run)	5.24	2.00	10.02	17.26	470		$8,112.20
A to B 12570 17645 (Jaw-Run)	5.82	2.00	10.02	17.84	2660		$47,454.40
A to B Culvert Backfill (Crushed)	4.32	1.50	10.02	15.84	40		$633.60
A to B Landing Rock (Jaw-Run)	6.29	2.00	10.02	18.31	200		$3,662.00
A to B Energy Dissipator (Riprap)	4.32	2.00	4.00	10.32	15		$154.80
C to D 0 1200 (Jaw-Run)	4.16	2.00	10.02	16.18	640		$10,355.20
Project 4 3,000 CY Stockpile Construction	4.05	1.50	10.02	15.57	20		$311.40
Project 3 Stockpile Site A Pad Widening	4.23	2.00	10.02	16.25	100		$1,625.00
C to D Junction Rock (Crushed)	4.05	3.20	10.02	17.27	20		$345.40
C to D Energy Dissipator (Riprap)	4.05	2.00	4.00	10.05	5		$50.25
E to F Spot Rock (Crushed)	4.70	3.20	10.02	17.92	40		$716.80
E to F Junction Rock (Crushed)	4.66	3.20	10.02	17.88	20		$357.60
G to H Spot Sock (Crushed)	5.13	3.20	10.02	18.35	120		$2,202.00
G to H Junction Rock (Crushed)	5.02	3.20	10.02	18.24	20		$364.80
I to J 0 2435 (Jaw-Run)	5.49	2.00	10.02	17.51	1300		$22,763.00
I to J Landing Rock (Jaw-Run)	5.59	2.00	10.02	17.61	200		$3,522.00
I to J Junction Rock (Jaw-Run)	5.26	2.00	10.02	17.28	20		$345.60
K to L Spot Sock (Crushed)	3.73	3.20	10.02	16.95	180		$3,051.00
K to L Landing Rock (Jaw-Run)	3.56	2.00	10.02	15.58	100		$1,558.00
Stockpile Site A Pad (Jaw-Run)	1.20	2.00	10.02	13.22	420		$5,552.40
3,000 CY Stockpile (Crushed)	1.20	1.70	10.02	12.92	3000		$38,760.00
				Total C.Y.	12110	Sub Total	$195,569.05
					TOTAL ROCKING COSTS		$195,569.05

Move-In Calculations for Project Work not Involving Rocking/Pit Work

Sale: **Jethro Toll**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
30.0	Pavement	30
8.0	Main Lines	7
3.0	Steep Grades	2

No.	EQUIPMENT DESCRIPTION	Move in Cost	Pilot Cars	Within Area Move ($/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
1	Excavators (Small)	$592.50		$22.00	0.00	8.00	8	$176.00	$768.50
1	Excavators (Large)	$926.07	1	$44.80	0.00	8.00	8	$358.40	$1,284.47
1	Tractors (D6)	$920.89	2	$7.10	0.00	8.00	8	$56.80	$977.69
1	Tractor (D8)	$986.07	2	$15.10	0.00	8.00	8	$120.80	$1,106.87
3	Dump Truck (10 cy +)	$661.79		$2.85	0.00	8.00	8	$68.40	$730.19
1	Dump Truck (Off Hiway)	$897.32	1	$4.75	0.00	8.00	8	$38.00	$935.32
1	Water Truck (1500 Gal)	$218.57		$2.85	0.00	8.00	8	$22.80	$241.37
					TOTAL MOVE-IN COSTS:				$6,044.41

OREGON DEPARTMENT OF FORESTRY
CRUISE REPORT

Jethro Toll

1. Type of Sale

Regeneration harvest, Recovery

2. Legal Description

Sections 5, 6 of T2S R7W and Sections 29, 30, 31, 32 of T1S R7W, W.M., Tillamook County, Oregon.

3. Sale Acreage

Sale acreage was determined by GPS and orthophotographs along with GIS.

	ACRES	
	Gross	Net
Area 1 (Modified Clearcut)	130	111
Area 2 (Modified Clearcut)	97	75
Area 3 (Modified Clearcut)	124	112
Area 4 (Modified Clearcut)	116	89
Total Acres	467	387

Gross Acres
Area within the Timber Sale Boundary signs

Net acres
Used for calculating the advertised volume.
Gross acres, less green tree retention, roads, Non-required thinning areas, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

4. Cruising Procedures

A. Cruise Method

All units were cruised using a 350’ x 350’ grid. The timber sale areas were cruised with a variable plot sampling method. All conifers 8” DBH and greater and all hardwoods 10” DBH and greater were recorded on all plots. Every plot recorded species, diameter, height, form factor and grade. Merchantable heights were recorded to 6” and 7” outside bark for conifers and hardwoods, respectively.

B. Plot size

Point of observation was 4.0’. Form factor was measured at 16.0’.

Area	Type	BAF
1	100	27.78
1	200	40.00
1	300	33.61

2	27.78
3	40.00
4	40.00

C. Grading System

All trees were graded according to Columbia River Log Scaling and Grading Rules. Log lengths favored 40' lengths.

5. Computation Procedure

Cruise data was entered into SuperAce for computation of basal area, advertised volume, volume summary, log stock table, and stand table for each species and type. Cruise volumes were grown forward to the approximate auction date for Jethro Toll. Plots landing in riparian management areas or areas excluded from the timber sale harvest areas were removed from computation procedures.

Net sale acreage was used for volume calculation.

Cruise Statistics (Board Foot Volumes)			
Area	Number of Plots	SE (%)	CV (%)
1	29	6.1	32.2
2	20	9.8	42.9
3	32	9.0	51.0
4	23	11.8	55.6
Total	104	9.1 (avg.)	45.2 (avg.)

6. Hidden Defect and Breakage

A 1% reduction was applied to conifers and a 2% reduction to hardwood volumes for hidden defect and breakage.

7. Timber Description

Area 1 is comprised mostly of Douglas-fir with a fair amount of red alder. The area has burned three times: first in the 1933 Wolf Creek Fire, again in the 1939 Saddle Mountain Fire, and the southern portion in 1951's North Fork Fire. The area was seeded between 1952 and 1964 and shows low to moderate Swiss Needle Cast presence. The northwest portion was sprayed to eliminate alder in 1977 and produced some multiple top alder. Previous management was completed with the Off Toll Thinning Sale of 1995.

Area 2 is balanced stand of both Douglas-fir and red alder with minor elements of Big Leaf Maple and Sitka Spruce. Status 1 and 2 snags are abundant and will be utilized towards snag creation goals. Both the Wolf Creek Fire and Saddle Mountain Fire

burned Area 2. The area was seeded between 1952 and 1957 and has not received any forest management treatment since.
Area 3 is Douglas-fir dominant with an element of red alder and miniscule amounts of western hemlock and Sitka Spruce. The entire area was burned by the Wolf Creek and Saddle Mountain Fires. The entire area was seeded between 1952 and 1957 and approximately 15 acres received spray for red alder. Blue Monday Area 1 timber sale thinned 7 acres of the eastern boundary. No other management was completed on the timber sale area.

Area 4 is a balanced combination of Douglas-fir and red alder with elements of Big leaf Maple and Western red cedar. Class 1 and 2 snags are abundant and will be used towards snag creation goals. The area burned in the Wolf Creek and Saddle Mountain Fires and was reseeded from 1952-1953. The southern portion was treated for red alder in the 1970's. No other management activities have been completed on the area.

The stand is comprised of multiple merchantable species, please see the table below:

Sale Area	Species	DBH	Merchantable Bole Height (feet)	Merchantable top (inches inside bark)
1	Douglas-fir	15.0	68	5
1	Red alder	14.1	63	6
2	Red alder	13.9	59	6
2	Douglas-fir	17.5	66	5
2	Big leaf maple	14.0	25	6
2	Sitka Spruce	24.0	46	5
3	Douglas-fir	17.0	78	5
3	Red alder	19.1	63	6
3	Western hemlock	16.0	61	5
3	Sitka Spruce	14.0	63	5
4	Douglas-fir	18.4	82	5
4	Red alder	14.2	63	6
4	Big leaf maple	16.7	34	6
4	Western red cedar	12.6	29	5

Above date derived from Statistics (type) report using SuperAce 2008, developed by Atterbury consultants, Inc.

8. Cruiser /Dates

The timber sale area was cruised by contracts in 2019.

9. Revenue Distribution

FDF 100%

Tax Code: 901 – 28.5%
902 – 71.5%

Deed Numbers: 161, 169, 209, 230, 231

10. Attachments

Volume Summary
Stand Table
Log Stock Tables
Logging Plan

11. Stand and Log Stock Tables Species Key

BM – Big leaf maple take
DF – Douglas-fir take
OC – Other conifer
RA – Red alder take
SS – Sitka Spruce
WH – Western hemlock take
RC – Western red cedar take

FI TSTNDSUM

Stand Table Summary

Project **JETHTOLL**

T02S R07W S06 TGROW **T02S R07W S06 TGRO**

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	07W	06	AREA1	GRO	111.00	29	84

Page: 1
Date: 05/14/201
Time: 4:12:33PM

Spc	ST	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		9		84	63	4.274	1.94	4.33	4.0	20.7	.49	17	90	54	19	10
DF		10		86	70	11.112	6.21	14.77	9.2	39.0	3.88	136	575	430	151	64
DF		11		83	81	5.722	3.87	11.60	9.4	38.8	3.10	109	450	344	121	50
DF		12		85	87	14.929	12.02	30.26	12.3	49.1	10.60	372	1,485	1,176	413	165
DF		13		84	83	6.145	5.81	12.45	13.6	55.2	4.83	169	688	536	188	76
DF		14		85	91	5.670	6.21	11.49	17.6	71.2	5.78	203	818	641	225	91
DF		15		86	94	11.093	13.95	24.04	19.9	81.7	13.65	479	1,963	1,515	532	218
DF		16		86	101	8.114	11.61	16.44	25.6	104.4	11.98	420	1,717	1,330	467	191
DF		17		87	104	11.284	18.23	26.51	25.1	98.7	19.00	667	2,617	2,109	740	291
DF		18		87	86	2.137	3.87	4.33	28.3	106.1	3.50	123	460	388	136	51
DF		19		89	109	5.197	10.49	12.88	32.2	132.3	11.82	415	1,705	1,312	461	189
DF		20		88	110	2.596	5.81	7.02	32.3	132.0	6.46	227	926	717	252	103
DF		21		88	110	2.685	6.62	7.37	34.7	146.3	7.29	256	1,077	809	284	120
DF		22		89	117	2.296	6.21	6.98	37.3	148.9	7.43	261	1,039	824	289	115
DF		25		89	112	.554	1.94	1.12	68.9	300.3	2.20	77	337	245	86	37
DF		26		89	110	.512	1.94	1.04	75.6	336.5	2.23	78	349	248	87	39
DF		30		83	121	.385	1.94	.78	98.5	414.2	2.19	77	323	243	85	36
DF		Totals		86	91	94.706	118.64	193.41	21.1	85.9	116.44	4,085	16,621	12,924	4,535	1,845
RA		10		91	68	3.485	2.03	7.02	8.5	37.9	1.65	60	266	183	66	30
RA		11		78	97	7.141	5.04	9.58	17.4	59.6	4.58	167	571	509	185	63
RA		12		89	79	6.840	5.74	11.76	15.5	69.5	5.01	182	817	556	202	91
RA		13		93	91	2.062	2.03	4.15	17.5	54.2	2.00	73	225	222	81	25
RA		14		83	84	6.803	7.77	11.91	17.9	78.2	5.85	213	932	649	236	103
RA		16		84	99	5.389	7.07	12.14	21.5	75.3	7.18	261	915	796	290	102
RA		17		86	88	2.486	3.71	5.01	24.5	94.5	3.38	123	473	375	136	53
RA		18		88	102	2.202	3.71	5.65	22.3	110.6	3.46	126	625	384	140	69
RA		19		93	95	2.151	4.06	4.33	33.3	127.3	3.97	144	551	441	160	61
RA		21		80	93	.871	2.03	2.63	22.9	97.5	1.66	60	256	184	67	28
RA		22		78	82	.790	2.03	1.59	28.6	108.3	1.25	46	172	139	51	19
RA		24		92	67	.659	2.03	1.33	39.9	173.3	1.45	53	230	161	59	26
RA		Totals		85	88	40.881	47.25	77.09	19.5	78.3	41.44	1,507	6,033	4,599	1,673	670
Totals				86	90	135.587	165.88	270.50	20.7	83.7	157.87	5592	22,654	17,524	6,207	2,515

FI TLOGSTVB

Log Stock Table - MBF

Project: JETHTOLL

T02S R07W S06 TGRO

T02S R07W S06 TGRO

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	07W	06	AREA1	GRO	111.00	29	84

Page 1
Date 5/14/2019
Time 4:12:34PM

Spp	ST	Sort	Grade	Log Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF		CO	2	40	462	1.0	457	24.8						193	176	88				
DF		CO	3	24	18		18	1.0				8	10							
DF		CO	3	30	7		7	.4			7									
DF		CO	3	32	51	6.0	48	2.6				25	22							
DF		CO	3	40	900	1.8	884	47.9			157	196	473	34	24					
DF		CO	4	12	2		2	.1		2										
DF		CO	4	13	3		3	.1		3										
DF		CO	4	15	5		5	.3		5										
DF		CO	4	16	24		24	1.3		24										
DF		CO	4	17	10		10	.5		10										
DF		CO	4	18	23		23	1.3		23										
DF		CO	4	19	4		4	.2		4										
DF		CO	4	20	15		15	.8		2		13								
DF		CO	4	21	4		4	.2		4										
DF		CO	4	22	4		4	.2		4										
DF		CO	4	23	12		12	.7		12										
DF		CO	4	24	40		40	2.2		16	7	17								
DF		CO	4	26	15		15	.8		15										
DF		CO	4	27	5		5	.3		5										
DF		CO	4	28	14		14	.8		14										
DF		CO	4	29	6		6	.3		6										
DF		CO	4	30	5		5	.3		5										
DF		CO	4	32	64		64	3.4		15	49									
DF		CO	4	33	11		11	.6		11										
DF		CO	4	34	6		6	.3		6										
DF		CO	4	36	6		6	.3		6										
DF		CO	4	37	7		7	.4		7										
DF		CO	4	38	26		26	1.4		26										
DF		CO	4	40	123	2.9	119	6.5		28	55	36								
DF		Totals			1,872	1.5	1,845	73.4		254	274	297	505	226	201	88				
RA		H	2	18	22		22	3.2								22				
RA		H	2	20	14		14	2.2						14						
RA		H	3	15	19		19	2.8							19					
RA		H	3	22	17		17	2.5							17					
RA		H	3	32	26	35.7	17	2.5					17							
RA		H	3	40	75	10.4	67	10.0					44	23						
RA		H	4	16	3		3	.5			3									
RA		H	4	18	20		20	2.9			4				15					
RA		H	4	20	8		8	1.3					8							
RA		H	4	21	8		8	1.2			8									
RA		H	4	22	9		9	1.3			9									
RA		H	4	24	97		97	14.5			13	23	22	18	22					
RA		H	4	25	4		4	.6			4									
RA		H	4	26	7		7	1.1			7									
RA		H	4	28	10		10	1.5			10									
RA		H	4	30	15	18.8	12	1.9			12									
RA		H	4	32	67		67	10.0			15	26	26							
RA		H	4	34	26		26	3.8			26									
RA		H	4	35	8		8	1.2			8									
RA		H	4	36	18	9.6	17	2.5			17									

FI TLOGSTVB

Log Stock Table - MBF

Project: **JETHTOLL**

T02S R07W S06 TGRO

T02S R07W S06 TGRO

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	07W	06	AREA1	GRO	111.00	29	84

Date **5/14/2019**

Time **4:12:34PM**

Spp	ST	Sort	Grade	Log Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
RA	H	4	37		17		17	2.5			17									
RA	H	4	38		17		17	2.6			17									
RA	H	4	40		194	10.3	174	26.0			52	98	25							
RA	H	4	41		10		10	1.4			10									
RA		Totals			711	5.9	670	26.6			231	147	141	55	73	22				
Total All Species					2,584	2.7	2,515	100.0		254	506	444	646	282	274	110				

FI TSTNDSUM

Stand Table Summary

Project JETHTOLL

T01S R07W S32 TGROW **T01S R07W S32 TGRO**

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	32	AREA2	GRO	75.00	20	121

Page: 1
Date: 05/13/201
Time: 2:23:25PM

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.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
RA		11		87	86	11.766	7.08	14.42	12.6	54.7	4.99	181	789	374	136	59
RA		12		88	87	11.669	8.50	13.91	16.2	65.3	6.20	225	909	465	169	68
RA		13		90	93	11.439	9.92	20.03	15.1	62.5	8.30	302	1,253	622	226	94
RA		14		88	92	12.532	12.75	24.18	16.9	73.1	11.26	410	1,768	845	307	133
RA		15		88	92	9.605	11.33	17.17	22.8	95.5	10.78	392	1,640	809	294	123
RA		16		89	94	4.183	5.67	8.55	24.6	111.4	5.78	210	952	433	158	71
RA		17		91	89	9.192	14.17	18.78	25.9	111.4	13.35	486	2,092	1,002	364	157
RA		18		88	92	3.257	5.67	6.66	29.1	117.3	5.33	194	780	400	145	59
RA		19		91	85	7.263	14.17	14.10	34.4	135.8	13.33	485	1,914	1,000	364	144
RA		20		89	88	.652	1.42	1.33	37.8	129.0	1.38	50	172	104	38	13
RA		21		91	85	1.765	4.25	3.61	40.4	156.3	4.01	146	564	301	109	42
RA		23		90	55	.486	1.42	.50	65.2	164.2	.89	32	82	67	24	6
RA		25		93	92	.409	1.42	.83	67.0	299.0	1.54	56	250	115	42	19
RA		Totals		89	90	84.217	97.76	144.08	22.0	91.4	87.14	3,169	13,164	6,535	2,376	987
DF		11		76	72	8.180	5.84	10.68	11.7	45.2	3.56	125	482	267	94	36
DF		12		88	68	3.437	2.92	3.59	18.6	67.7	1.90	67	243	143	50	18
DF		15		90	90	3.787	4.38	7.91	18.5	80.9	4.16	146	640	312	109	48
DF		16		90	112	1.100	1.46	2.30	24.9	107.2	1.63	57	246	122	43	18
DF		17		88	98	.967	1.46	2.02	25.2	101.6	1.45	51	205	109	38	15
DF		18		88	112	.856	1.46	1.79	31.6	135.5	1.61	57	242	121	42	18
DF		19		85	100	1.527	2.92	3.19	33.1	124.2	3.01	106	396	226	79	30
DF		20		87	100	.685	1.46	1.43	36.9	129.8	1.51	53	186	113	40	14
DF		21		87	101	3.093	7.30	7.11	37.7	138.6	7.64	268	984	573	201	74
DF		22		81	101	1.122	2.92	2.34	45.9	152.4	3.06	107	357	230	81	27
DF		23		87	103	1.022	2.92	2.67	42.0	164.8	3.19	112	440	240	84	33
DF		24		93	124	.935	2.92	2.93	46.3	220.1	3.87	136	645	290	102	48
DF		25		84	104	3.437	11.68	8.07	50.5	198.8	11.63	408	1,605	872	306	120
DF		26		88	126	.396	1.46	1.24	53.0	252.1	1.87	66	313	140	49	23
DF		27		87	69	.366	1.46	.38	89.9	417.7	.98	34	160	73	26	12
DF		28		80	99	.339	1.46	.71	77.8	259.7	1.57	55	184	118	41	14
DF		29		86	113	.631	2.92	1.65	58.9	264.2	2.77	97	435	207	73	33
DF		31		87	102	.275	1.46	.57	96.3	389.5	1.58	55	224	118	41	17
DF		Totals		84	91	32.156	58.39	60.58	33.0	131.9	56.98	1,999	7,988	4,273	1,499	599
BM		11		70	17	2.353	1.42	2.40	6.2	23.5	.39	15	56	29	11	4
BM		15		84	28	3.602	4.25	3.68	14.5	50.8	1.41	53	187	106	40	14
BM		16		90	43	2.092	2.83	2.14	23.1	58.6	1.31	49	125	98	37	9
BM		17		75	51	.919	1.42	1.88	13.6	46.9	.68	26	88	51	19	7
BM		21		70	40	.588	1.42	.60	48.6	46.9	.77	29	28	58	22	2
BM		Totals		80	32	9.554	11.33	10.70	16.1	45.3	4.56	172	485	342	129	36
SS		26		90	58	.406	1.46	.42	81.1	216.0	.89	34	92	67	26	7
SS		Totals		90	58	.406	1.46	.42	81.1	216.0	0.89	34	92	67	26	7
OC		9		88	80	3.384	1.59									
OC		Totals		88	80	3.384	1.59									
Totals				87	85	129.717	170.53	215.78	24.9	100.7	149.57	5374	21,729	11,218	4,031	1,630

FI TLOGSTVB

Log Stock Table - MBF

Project: JETHTOLL

T01S R07W S32 TGRO

T01S R07W S32 TGRO

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	32	AREA2	GRO	75.00	20	121

Page 1
Date 5/13/2019
Time 2:23:26PM

Spp	ST	Sort	Grade	Log Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches: 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
RA		H	1	40	17	2.2	17	1.7								17				
RA		H	2	20	10	21.4	8	.8							8					
RA		H	2	24	11	5.9	10	1.1							10					
RA		H	2	40	163	4.2	156	15.8						156						
RA		H	3	12	6		6	.6						6						
RA		H	3	32	9		9	.9					9							
RA		H	3	40	290	4.2	278	28.2					278							
RA		H	4	12	3		3	.3			3									
RA		H	4	14	2		2	.2			2									
RA		H	4	16	10		10	1.0			10									
RA		H	4	17	1		1	.1			1									
RA		H	4	20	10		10	1.0			3	6								
RA		H	4	21	8		8	.8			8									
RA		H	4	22	16		16	1.6			16									
RA		H	4	24	35		35	3.6			28	8								
RA		H	4	26	7		7	.7			7									
RA		H	4	27	8		8	.8			8									
RA		H	4	28	7		7	.7			7									
RA		H	4	29	8	25.0	6	.6			6									
RA		H	4	30	28		28	2.8			28									
RA		H	4	32	48	7.8	44	4.5			26	19								
RA		H	4	33	16	10.9	14	1.5			14									
RA		H	4	34	18		18	1.8			18									
RA		H	4	36	6		6	.6			6									
RA		H	4	40	295	5.1	280	28.4			115	166								
RA		Totals			1,032	4.4	987	60.6			306	198	287	161	18	17				
DF		CO	2	28	11		11	1.8								11				
DF		CO	2	32	19	10.1	17	2.9						5		12				
DF		CO	2	40	317	3.2	307	51.3						96	76	135				
DF		CO	3	20	3		3	.5				3								
DF		CO	3	29	1		1	.2			1									
DF		CO	3	32	9		9	1.6				4	5							
DF		CO	3	36	2		2	.3			2									
DF		CO	3	37	2		2	.4			2									
DF		CO	3	40	195	.6	193	32.3			60	54	80							
DF		CO	4	12	0		0	.1			0									
DF		CO	4	15	1		1	.2		1										
DF		CO	4	16	3		3	.4		1	2									
DF		CO	4	17	1		1	.2		1										
DF		CO	4	18	7		7	1.2		7										
DF		CO	4	20	2		2	.3			2									
DF		CO	4	22	2		2	.4		2										
DF		CO	4	24	8	5.2	8	1.3		8										
DF		CO	4	26	2		2	.3		2										
DF		CO	4	30	2		2	.3			2									
DF		CO	4	32	4		4	.7		4										
DF		CO	4	34	2		2	.3		2										
DF		CO	4	37	7		7	1.1		7										
DF		CO	4	38	2		2	.4		2										
DF		CO	4	40	11		11	1.9		11										

FI TLOGSTVB

Log Stock Table - MBF

Project: **JETHTOLL**

T01S R07W S32 TGRO

T01S R07W S32 TGRO

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	32	AREA2	GRO	75.00	20	121

Page 2
Date 5/13/2019
Time 2:23:26PM

Spp	ST	Sort	Grade	Log Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches: 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF		Totals			613	2.2	599	36.8		48	70	61	85	101	76	158				
BM		H	3	14	4		4	11.4					4							
BM		H	3	16	6	33.3	4	11.9					4							
BM		H	3	20	8		8	20.8					8							
BM		H	4	15	4		4	11.6			4									
BM		H	4	16	3	33.3	2	5.9				2								
BM		H	4	20	5	20.0	4	10.3				4								
BM		H	4	21	2		2	6.8			2									
BM		H	4	31	2		2	5.8			2									
BM		H	4	40	7	14.3	6	15.5			6									
BM		Totals			41	12.3	36	2.2			14	6	16							
SS		CO	3	40	7		7	100.0					7							
SS		Totals			7		7	.4					7							
Total All Species					1,694	3.8	1,630	100.0		48	391	265	394	263	95	174				

FI TSTNDSUM

Stand Table Summary

Project JETHTOLL

T01S R07W S32 TGROW **T01S R07W S32 TGRO**

Page: 1

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	32	AREA3	GRO	112.00	32	85

Date: 05/13/201

Time: 2:47:05PM

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.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		9		89	86	10.967	4.93	22.29	7.9	43.8	4.99	175	977	559	196	109
DF		10		79	78	4.441	2.46	4.51	15.0	61.9	1.94	68	279	217	76	31
DF		11		82	81	3.671	2.46	7.46	9.2	41.2	1.95	68	308	218	77	34
DF		12		77	95	6.169	4.93	12.54	14.1	49.0	5.05	177	614	566	198	69
DF		13		82	94	10.512	9.86	21.36	16.0	61.9	9.74	342	1,322	1,091	383	148
DF		14		86	98	6.798	7.39	13.82	18.3	72.2	7.20	253	997	807	283	112
DF		15		81	98	3.948	4.93	8.02	22.4	79.9	5.11	179	641	572	201	72
DF		16		84	101	6.940	9.86	14.10	25.7	99.2	10.34	363	1,400	1,159	407	157
DF		17		83	104	3.074	4.93	6.25	27.9	97.9	4.97	174	612	557	195	69
DF		18		85	110	6.854	12.32	15.32	30.2	113.4	13.17	462	1,738	1,475	518	195
DF		19		84	114	6.152	12.32	16.25	29.8	115.8	13.78	484	1,882	1,544	542	211
DF		20		82	112	2.221	4.93	5.64	32.0	113.4	5.15	181	640	576	202	72
DF		21		85	118	4.029	9.86	12.28	33.2	132.3	11.61	408	1,625	1,301	456	182
DF		22		87	107	1.835	4.93	4.66	38.5	152.6	5.12	180	711	574	201	80
DF		23		90	136	.840	2.46	2.56	45.0	209.6	3.28	115	537	367	129	60
DF		24		80	120	1.542	4.93	3.92	48.8	173.2	5.44	191	679	610	214	76
DF		25		89	127	.711	2.46	2.17	52.2	230.3	3.22	113	499	361	127	56
DF		26		85	130	2.628	9.86	8.01	54.6	241.4	12.47	438	1,934	1,397	490	217
DF		28		84	134	1.133	4.93	2.88	75.6	321.7	6.20	218	926	695	244	104
DF		29		87	137	1.056	4.93	3.22	69.4	336.8	6.36	223	1,084	713	250	121
DF		30		83	126	1.480	7.39	4.01	75.6	323.5	8.65	303	1,298	968	340	145
DF		31		86	139	.462	2.46	1.41	84.2	409.0	3.38	119	576	379	133	65
DF		32		86	121	.434	2.46	1.32	75.8	336.8	2.86	100	445	320	112	50
DF		34		83	124	.768	4.93	1.95	99.0	451.6	5.51	193	882	617	217	99
DF		Totals		84	102	88.664	142.92	195.96	28.2	115.3	157.50	5,526	22,603	17,640	6,189	2,532
RA		12		79	76	4.987	4.02	5.03	16.0	57.4	2.22	81	288	248	90	32
RA		15		84	85	1.596	2.01	1.61	30.6	73.0	1.35	49	117	151	55	13
RA		16		94	101	2.805	4.02	5.65	31.0	138.2	4.82	175	781	540	196	88
RA		17		80	84	1.242	2.01	1.25	27.5	62.6	.95	34	78	106	39	9
RA		18		78	106	1.108	2.01	2.23	34.1	109.5	2.10	76	245	235	85	27
RA		19		94	99	.995	2.01	2.00	36.1	146.1	1.99	72	293	223	81	33
RA		21		77	66	.814	2.01	.82	61.2	93.9	1.38	50	77	155	56	9
RA		23		88	104	2.715	8.05	6.16	50.5	202.8	8.56	311	1,249	958	348	140
RA		25		94	108	.574	2.01	1.16	71.0	286.9	2.26	82	332	253	92	37
RA		26		70	100	.531	2.01	1.07	72.5	177.3	2.13	78	190	239	87	21
RA		28		94	110	1.374	6.04	3.69	69.7	344.3	7.08	257	1,271	793	288	142
RA		29		87	118	.854	4.02	2.15	75.0	327.6	4.44	161	705	497	181	79
RA		Totals		85	93	19.596	40.25	32.83	43.5	171.4	39.27	1,428	5,627	4,398	1,599	630
WH		16		83	91	3.491	5.05	7.09	21.9	74.0	4.96	155	525	555	174	59
WH		Totals		83	91	3.491	5.05	7.09	21.9	74.0	4.96	155	525	555	174	59
SS		14		89	83	2.280	2.53	2.31	31.3	126.9	1.88	72	294	211	81	33
SS		Totals		89	83	2.280	2.53	2.31	31.3	126.9	1.88	72	294	211	81	33
OC		8			54	.840	.26									
OC		Totals			54	.840	.26									
Totals				84	99	114.870	191.01	238.19	30.2	122.0	203.61	7182	29,048	22,804	8,043	3,253

FI TLOGSTVB

Log Stock Table - MBF

Project: JETHTOLL

T01S R07W S32 TGRO

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	32	AREA3	GRO	112.00	32	85

T01S R07W S32 TGRO

Date 5/13/2019

Time 2:47:05PM

Spp	ST	Sort	Grade	Log Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches: 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF		CO	2	28	30		30	1.2									30			
DF		CO	2	36	39		39	1.5									39			
DF		CO	2	40	1,111	.4	1,106	43.7						328	177	341	260			
DF		CO	3	28	4		4	.1				4								
DF		CO	3	31	3		3	.1				3								
DF		CO	3	32	56		56	2.2			26	30								
DF		CO	3	36	27		27	1.1				27								
DF		CO	3	37	4		4	.2			4									
DF		CO	3	38	5		5	.2			5									
DF		CO	3	40	1,003	.4	998	39.4			237	291	364	60	46					
DF		CO	4	12	3		3	.1		3	1									
DF		CO	4	13	3		3	.1		1	1	1								
DF		CO	4	14	4		4	.1		3		1								
DF		CO	4	15	19		19	.7		19										
DF		CO	4	16	14		14	.6		14										
DF		CO	4	18	2		2	.1		2										
DF		CO	4	20	2		2	.1		2										
DF		CO	4	23	7		7	.3		7										
DF		CO	4	24	7		7	.3		7										
DF		CO	4	26	3		3	.1			3									
DF		CO	4	27	14		14	.5		14										
DF		CO	4	28	3		3	.1		3										
DF		CO	4	29	35		35	1.4		35										
DF		CO	4	31	16		16	.6		16										
DF		CO	4	32	12		12	.5		8	4									
DF		CO	4	33	23		23	.9		23										
DF		CO	4	34	38		38	1.5		38										
DF		CO	4	36	9		9	.4		9										
DF		CO	4	38	24		24	1.0		24										
DF		CO	4	39	8		8	.3		8										
DF		CO	4	40	14		14	.5		14										
DF		Totals			2,540		2,532	77.8		249	280	357	364	388	223	341	329			
RA		H	1	20	19	28.9	14	2.2									14			
RA		H	1	40	277	2.4	271	42.9								150	120			
RA		H	2	32	25	4.3	24	3.8							24					
RA		H	2	40	164		164	26.1						94	70					
RA		H	3	28	8		8	1.3					8							
RA		H	3	40	23	11.1	21	3.3					21							
RA		H	4	12	1		1	.1			1									
RA		H	4	15	2		2	.3				2								
RA		H	4	19	2		2	.3			2									
RA		H	4	20	6		6	.9			6									
RA		H	4	30	5		5	.7			5									
RA		H	4	31	3		3	.5			3									
RA		H	4	33	9		9	1.5			9									
RA		H	4	35	7		7	1.1			7									
RA		H	4	36	12		12	1.9			12									
RA		H	4	37	4		4	.6				4								
RA		H	4	38	5		5	.8			5									
RA		H	4	40	74		74	11.8			39	35								

FI TLOGSTVB

Log Stock Table - MBF

Project: **JETHTOLL**

T01S R07W S32 TGRO

T01S R07W S32 TGRO

Page 2

Date 5/13/2019

Time 2:47:05PM

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	32	AREA3	GRO	112.00	32	85

Spp	ST	Sort	Grade	Log Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
RA		Totals			646	2.4	630	19.4			88	41	29	94	94	150	134			
WH		CO	3	40	50		50	85.7				50								
WH		CO	4	19	8		8	14.3		8										
WH		Totals			59		59	1.8		8		50								
SS		CO	3	40	33		33	100.0				33								
SS		Totals			33		33	1.0				33								
Total All Species					3,278		3,253	100.0		257	369	481	393	482	317	492	463			

FI TSTNDSUM

Stand Table Summary

Project **JETHTOLL**

T01S R07W S29 TGROW **T01S R07W S29 TGRO**

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	29	AREA4	GRO	89.00	23	60

Page: 1
Date: 05/13/201
Time: 3:49:37PM

Spc	ST	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		12		80	87	7.496	5.98	15.20	13.1	49.2	5.68	199	747	506	178	67
DF		13		86	84	3.194	2.99	6.47	12.4	46.6	2.29	80	302	204	72	27
DF		15		86	106	4.798	5.98	12.16	18.9	78.7	6.53	229	957	582	204	85
DF		16		86	104	6.325	8.97	12.82	27.0	112.2	9.88	347	1,438	879	309	128
DF		17		83	109	1.868	2.99	3.79	31.3	124.2	3.38	119	470	301	106	42
DF		19		81	106	5.981	11.96	13.64	29.0	110.4	11.28	396	1,506	1,004	352	134
DF		20		81	123	2.699	5.98	8.21	27.6	98.4	6.45	226	807	574	201	72
DF		21		83	116	1.224	2.99	2.48	45.1	155.3	3.19	112	385	284	100	34
DF		22		88	121	2.230	5.98	5.65	42.7	180.2	6.87	241	1,018	612	215	91
DF		23		83	131	2.041	5.98	6.21	41.6	146.7	7.35	258	910	654	230	81
DF		24		81	101	.937	2.99	1.90	53.1	170.8	2.87	101	325	256	90	29
DF		25		82	88	1.727	5.98	3.50	50.7	160.5	5.06	178	562	450	158	50
DF		26		83	137	.798	2.99	2.43	54.0	231.2	3.74	131	561	333	117	50
DF		27		83	122	.740	2.99	2.25	53.5	217.4	3.43	120	490	305	107	44
DF		30		83	124	.600	2.99	1.82	73.0	338.2	3.79	133	617	338	118	55
DF		31		86	117	.562	2.99	1.71	78.6	358.9	3.82	134	613	340	119	55
DF		Totals		83	105	43.219	80.73	100.24	30.0	116.8	85.63	3,004	11,709	7,621	2,674	1,042
RA		9		81	70	6.965	3.26	14.02	8.5	43.3	3.28	119	608	292	106	54
RA		11		79	66	9.325	6.52	14.08	12.2	46.9	4.74	172	661	422	153	59
RA		12		86	92	3.918	3.26	7.89	15.6	65.0	3.38	123	513	301	109	46
RA		13		72	74	13.353	13.05	20.16	22.0	63.2	12.21	444	1,274	1,087	395	113
RA		14		77	95	11.514	13.05	23.18	21.2	73.1	13.54	492	1,695	1,205	438	151
RA		15		73	86	2.507	3.26	5.05	24.2	59.6	3.36	122	301	299	109	27
RA		16		94	108	2.204	3.26	4.44	32.4	146.2	3.95	144	649	352	128	58
RA		18		74	91	3.904	6.52	7.86	32.4	102.9	7.01	255	809	624	227	72
RA		19		72	99	6.965	13.05	14.02	36.2	108.3	13.97	508	1,519	1,243	452	135
RA		20		80	94	3.126	6.52	6.29	38.2	127.3	6.61	241	801	589	214	71
RA		28		78	98	.774	3.26	1.56	46.1	173.3	1.97	72	270	176	64	24
RA		Totals		77	84	64.554	75.01	118.55	22.7	76.7	74.04	2,692	9,098	6,589	2,396	810
BM		11		73	35	4.988	3.49	5.02	7.7	21.7	1.02	39	109	91	34	10
BM		21		83	93	1.509	3.49	3.04	38.8	135.4	3.12	118	411	278	105	37
BM		22		75	63	1.369	3.49	1.38	59.9	65.0	2.19	83	90	195	73	8
BM		28		73	94	.828	3.49	1.67	28.5	108.3	1.26	47	181	112	42	16
BM		Totals		75	55	8.693	13.96	11.10	25.8	71.2	7.59	286	790	675	255	70
RC		12		61	46	3.608	2.93	3.66	13.7	21.1	1.17	50	77	105	44	7
RC		13		77	59	6.149	5.85	6.23	17.7	37.0	2.59	110	230	231	98	21
RC		Totals		71	54	9.757	8.78	9.88	16.2	31.1	3.77	160	308	335	143	27
OC		8		88	117	5.804	2.12									
OC		Totals		88	117	5.804	2.12									
Totals				79	88	132.028	180.60	239.77	25.6	91.4	171.02	6143	21,905	15,221	5,468	1,950

FI TLOGSTVB

Log Stock Table - MBF

Project: JETHTOLL

T01S R07W S29 TGRO

T01S R07W S29 TGRO

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	29	AREA4	GRO	89.00	23	60

Page 1
Date 5/13/2019
Time 3:49:38PM

Spp	ST	Sort	Grade	Log Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF		CO	2	24	21		21	2.0						21						
DF		CO	2	32	4		4	.4			4									
DF		CO	2	40	484	4.2	464	44.5						171		77	137	79		
DF		CO	3	23	8		8	.7				8								
DF		CO	3	24	25		25	2.4		4				21						
DF		CO	3	40	439		439	42.1			147	51	228	13						
DF		CO	4	12	4		4	.3		4										
DF		CO	4	13	1		1	.1			1									
DF		CO	4	16	7		7	.7		7										
DF		CO	4	17	11		11	1.0		11										
DF		CO	4	19	4		4	.4		2		2								
DF		CO	4	22	5		5	.4			5									
DF		CO	4	23	4		4	.4		2	2									
DF		CO	4	27	4		4	.4		4										
DF		CO	4	30	7		7	.6		7										
DF		CO	4	32	11		11	1.0		11										
DF		CO	4	33	8		8	.8		8										
DF		CO	4	34	4		4	.3		4										
DF		CO	4	40	14		14	1.3			14									
DF		Totals			1,063	1.9	1,042	53.5		62	173	61	228	227		77	137	79		
RA		H	2	40	30		30	3.7						30						
RA		H	3	40	255	2.0	250	30.9					186	43		22				
RA		H	4	12	5		5	.6			5									
RA		H	4	17	14		14	1.7			14									
RA		H	4	18	6		6	.8			6									
RA		H	4	23	18		18	2.2			18									
RA		H	4	25	11		11	1.4			11									
RA		H	4	26	17		17	2.1			17									
RA		H	4	27	12		12	1.5			12									
RA		H	4	28	16		16	2.0			16									
RA		H	4	30	6		6	.7			6									
RA		H	4	32	40		40	4.9			40									
RA		H	4	33	8		8	1.0			8									
RA		H	4	39	10		10	1.3			10									
RA		H	4	40	368	.7	366	45.1			165	200								
RA		Totals			817		810	41.5			329	200	186	73		22				
BM		H	2	32	28		28	39.6						28						
BM		H	3	16	13		13	18.3								13				
BM		H	4	17	10		10	13.8			10									
BM		H	4	26	3		3	4.6			3									
BM		H	4	36	9		9	12.5			9									
BM		H	4	40	8		8	11.3			8									
BM		Totals			70		70	3.6			30			28		13				
RC		CO	4	22	7		7	25.1		7										
RC		CO	4	24	9		9	32.1		9										
RC		CO	4	39	12		12	42.8		12										
RC		Totals			27		27	1.4		27										

FI TLOGSTVB

Log Stock Table - MBF

Project: **JETHTOLL**

T01S R07W S29 TGRO

T01S R07W S29 TGRO

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	29	AREA4	GRO	89.00	23	60

Date **5/13/2019**

Time **3:49:38PM**

Spp	S T	So Gr rt de	Log Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
Total All Species				1,977	1.4	1,950	100.0		89	531	261	413	328	99	150	79			

TC TSTNDSUM

Stand Table Summary

Project **JETHTOLL**

T01S R07W S32 TSALE

T01S R07W S32 TSALE

Page: 1
Date: 05/30/201
Time: 9:21:20AM

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	32	AREA2	SALE	75.00	20	121

Spc	ST	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
RA		10	5	87	85	12.733	6.95	15.28	11.4	46.7	4.78	174	713	358	130	53
RA		11	6	88	85	12.628	8.33	14.73	14.7	55.7	5.94	216	821	445	162	62
RA		12	7	90	91	12.380	9.72	21.22	13.6	53.3	7.95	289	1,132	596	217	85
RA		13	9	88	90	13.562	12.50	25.62	15.3	62.4	10.79	393	1,597	810	294	120
RA		14	8	88	90	10.395	11.11	18.19	20.7	81.4	10.33	376	1,481	775	282	111
RA		15	4	89	92	4.527	5.56	9.05	22.2	95.0	5.54	201	860	415	151	65
RA		16	10	90	87	9.948	13.89	19.90	23.4	95.0	12.80	465	1,890	960	349	142
RA		17	4	88	90	3.525	5.56	7.05	26.3	100.0	5.10	186	705	383	139	53
RA		18	10	91	83	7.860	13.89	14.93	31.1	115.8	12.77	464	1,729	958	348	130
RA		19	1	89	86	.705	1.39	1.41	34.2	110.0	1.33	48	155	99	36	12
RA		20	3	90	83	1.910	4.17	3.82	36.5	133.3	3.84	140	509	288	105	38
RA		22	1	90	54	.526	1.39	.53	59.0	140.0	.85	31	74	64	23	6
RA		24	1	92	90	.442	1.39	.88	60.6	255.0	1.47	54	225	110	40	17
RA		Totals	69	89	88	91.142	95.84	152.62	19.9	77.9	83.50	3,036	11,893	6,262	2,277	892
DF		11	4	76	69	8.419	5.56	10.52	10.8	40.0	3.23	113	421	242	85	32
DF		12	2	88	65	3.537	2.78	3.54	17.1	60.0	1.73	61	212	129	45	16
DF		14	3	89	86	3.898	4.17	7.80	17.0	71.7	3.78	133	559	283	99	42
DF		15	1	90	107	1.132	1.39	2.26	23.0	95.0	1.48	52	215	111	39	16
DF		16	1	88	94	.995	1.39	1.99	23.2	90.0	1.31	46	179	99	35	13
DF		17	1	88	107	.881	1.39	1.76	29.1	120.0	1.46	51	211	110	38	16
DF		18	2	85	96	1.572	2.78	3.14	30.5	110.0	2.73	96	346	205	72	26
DF		19	1	86	96	.705	1.39	1.41	34.1	115.0	1.37	48	162	103	36	12
DF		20	5	87	97	3.183	6.95	7.00	34.8	122.7	6.94	243	860	520	183	64
DF		21	2	81	97	1.155	2.78	2.31	42.3	135.0	2.78	98	312	209	73	23
DF		22	2	87	99	1.052	2.78	2.63	38.7	146.0	2.90	102	384	218	76	29
DF		23	2	93	119	.963	2.78	2.89	42.7	195.0	3.51	123	563	263	92	42
DF		24	8	84	100	3.537	11.11	7.96	46.6	176.1	10.56	371	1,402	792	278	105
DF		25	1	88	121	.407	1.39	1.22	48.8	223.3	1.70	60	273	128	45	20
DF		26	1	86	66	.377	1.39	.38	82.8	370.0	.89	31	139	67	23	10
DF		27	1	80	95	.349	1.39	.70	71.7	230.0	1.43	50	161	107	38	12
DF		28	2	85	109	.650	2.78	1.62	54.3	234.0	2.51	88	380	188	66	29
DF		30	1	86	98	.283	1.39	.57	88.7	345.0	1.43	50	195	107	38	15
DF		Totals	40	84	87	33.096	55.56	59.71	30.4	116.8	51.76	1,816	6,974	3,882	1,362	523
BM		10	1	69	17	2.547	1.39	2.55	5.6	20.0	.38	14	51	28	11	4
BM		14	3	84	27	3.898	4.17	3.90	13.1	43.3	1.35	51	169	101	38	13
BM		15	2	90	43	2.264	2.78	2.26	20.9	50.0	1.25	47	113	94	36	8
BM		16	1	74	50	.995	1.39	1.99	12.3	40.0	.65	25	80	49	18	6
BM		20	1	69	39	.637	1.39	.64	44.0	40.0	.74	28	25	56	21	2
BM		Totals	8	80	31	10.340	11.11	11.33	14.6	38.6	4.37	165	438	328	124	33
SS		24	1	90	56	.442	1.39	.44	70.9	180.0	.82	31	80	61	24	6
SS		Totals	1	90	56	.442	1.39	.44	70.9	180.0	0.82	31	80	61	24	6
OC		13	1	88	86	1.507	1.39									
OC		14	1	87	66	1.299	1.39									
OC		21	1	87	72	.577	1.39									
OC		Totals	3	87	76	3.384	4.17									
Totals			121	87	83	138.404	168.07	224.10	22.5	86.5	140.44	5049	19,384	10,533	3,786	1,454

TC TSTNDSUM

Stand Table Summary

Project **JETHTOLL**

T01S R07W S29 TSALE

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01S	07W	29	781	SALE	102.00	23	60

T01S R07W S29 TSALE

Page: 1
Date: 05/30/201
Time: 9:23:08AM

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.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		12	2	80	86	7.545	5.93	15.09	12.9	47.5	5.57	195	717	568	199	73
DF		13	1	86	83	3.214	2.96	6.43	12.2	45.0	2.24	79	289	229	80	30
DF		15	2	85	105	4.829	5.93	12.07	18.6	76.0	6.40	225	917	653	229	94
DF		16	3	86	103	6.366	8.89	12.73	26.7	108.3	9.68	340	1,379	987	346	141
DF		17	1	83	108	1.880	2.96	3.76	30.9	120.0	3.31	116	451	338	119	46
DF		19	4	81	105	6.019	11.85	13.54	28.6	106.7	11.05	388	1,445	1,127	395	147
DF		20	2	81	122	2.716	5.93	8.15	27.2	95.0	6.32	222	774	644	226	79
DF		21	1	82	114	1.232	2.96	2.46	44.5	150.0	3.12	110	370	318	112	38
DF		22	2	88	119	2.245	5.93	5.61	42.1	174.0	6.73	236	977	687	241	100
DF		23	2	82	129	2.054	5.93	6.16	41.0	141.7	7.20	253	873	735	258	89
DF		24	1	81	100	.943	2.96	1.89	52.4	165.0	2.81	99	311	287	101	32
DF		25	2	82	87	1.738	5.93	3.48	50.0	155.0	4.96	174	539	505	177	55
DF		26	1	83	135	.804	2.96	2.41	53.3	223.3	3.66	128	538	373	131	55
DF		27	1	82	120	.745	2.96	2.24	52.8	210.0	3.36	118	469	343	120	48
DF		30	1	83	122	.604	2.96	1.81	72.0	326.7	3.71	130	592	379	133	60
DF		31	1	86	115	.565	2.96	1.70	77.5	346.7	3.75	131	588	382	134	60
DF		Totals	27	83	103	43.500	80.00	99.53	29.6	112.8	83.88	2,943	11,229	8,556	3,002	1,145
RA		9	1	80	70	7.360	3.25	14.72	8.1	40.0	3.26	118	589	332	121	60
RA		11	2	79	66	9.853	6.50	14.78	11.6	43.3	4.71	171	640	480	175	65
RA		12	1	86	91	4.140	3.25	8.28	14.8	60.0	3.36	122	497	343	125	51
RA		13	4	71	74	14.110	13.01	21.16	20.9	58.3	12.14	441	1,235	1,238	450	126
RA		14	4	77	94	12.166	13.01	24.33	20.1	67.5	13.45	489	1,642	1,372	499	168
RA		15	1	72	85	2.649	3.25	5.30	22.9	55.0	3.34	122	291	341	124	30
RA		16	1	93	107	2.329	3.25	4.66	30.7	135.0	3.93	143	629	400	146	64
RA		17	2	74	90	4.126	6.50	8.25	30.7	95.0	6.97	253	784	711	258	80
RA		18	4	72	99	7.360	13.01	14.72	34.3	100.0	13.88	505	1,472	1,416	515	150
RA		19	2	80	94	3.303	6.50	6.61	36.2	117.5	6.57	239	776	670	244	79
RA		27	1	77	97	.818	3.25	1.64	43.6	160.0	1.96	71	262	200	73	27
RA		Totals	23	77	83	68.213	74.78	124.44	21.5	70.9	73.56	2,675	8,817	7,503	2,728	899
BM		11	1	72	35	5.270	3.48	5.27	7.3	20.0	1.02	38	105	104	39	11
BM		20	1	82	92	1.594	3.48	3.19	36.7	125.0	3.10	117	399	316	119	41
BM		21	1	75	63	1.446	3.48	1.45	56.7	60.0	2.17	82	87	222	84	9
BM		27	1	72	93	.875	3.48	1.75	27.0	100.0	1.25	47	175	127	48	18
BM		Totals	4	74	55	9.186	13.91	11.65	24.4	65.7	7.54	285	766	769	290	78
RC		12	1	61	45	3.691	2.90	3.69	13.3	20.0	1.15	49	74	117	50	8
RC		13	2	77	59	6.289	5.80	6.29	17.2	35.0	2.54	108	220	259	110	22
RC		Totals	3	71	54	9.980	8.70	9.98	15.7	29.5	3.69	157	294	376	160	30
OC		9	1	63	134	3.937	1.74									
OC		18	1	83	95	.984	1.74									
OC		19	1	83	58	.883	1.74									
OC		Totals	3	69	116	5.804	5.22									
Totals			60	78	87	136.682	182.61	245.61	24.7	85.9	168.67	6059	21,106	17,204	6,181	2,153

Jethro Toll

Area 1

Harvest Acres	Green Trees Needed	TPA (Cruise) trees 11" + Conifer	Hardwood	Acres in buffer beyond 100' from Type F	Acres in stream buffers	Acres in GTRA	Non-harvest Acres Other	Total Acres Non-harvest	Total trees Non-harvest conifer	hardwood	total	Disbursed Leave Trees and Existing Hard Snags Conifer	Class 1 & 2 Snags	Total reserve (green) trees
111.0	**555.0**	79.4	37.4	0	15.9	0	0	15.9	1262	297	1560			**1560**

Area 2

Harvest Acres	Green Trees Needed	TPA (Cruise) trees 11" + Conifer	Hardwood	Acres in buffer beyond 100' from Type F	Acres in stream buffers	Acres in GTRA	Non-harvest Acres Other	Total Acres Non-harvest	Total trees Non-harvest conifer	hardwood	total	Disbursed Leave Trees and Existing Hard Snags Conifer	Class 1 & 2 Snags	Total reserve (green) trees
75.0	**375.0**	32.5	93.7	0	17.3	0	0	17.3	562	811	1373			**1373**

Area 3

Harvest Acres	Green Trees Needed	TPA (Cruise) trees 11" + Conifer	Hardwood	Acres in buffer beyond 100' from Type F	Acres in stream buffers	Acres in GTRA	Non-harvest Acres Other	Total Acres Non-harvest	Total trees Non-harvest conifer	hardwood	total	Disbursed Leave Trees and Existing Hard Snags Conifer	Class 1 & 2 Snags	Total reserve (green) trees
112.0	**560.0**	78.9	19.5	0	10.8	0		10.8	852.12	105	957			**957**

Area 4

Harvest Acres	Green Trees Needed	TPA (Cruise) trees 11"+ Conifer	Hardwood	Acres in buffer beyond 100' from Type F	Acres in stream buffers	Acres in GTRA	Non-harvest Acres Other	Total Acres Non-harvest	Total trees Non-harvest conifer	hardwood	total	Disbursed Leave Trees and Existing Hard Snags Conifer	Class 1 & 2 Snags	Total reserve (green) trees
89.0	**445.0**	52.9	66.2	0	19.27	0		19.27	1019.383	637.837	1657.22		0	**1657**

Jethro Toll Green Tree Summary

Area	**acres**	**green req**	**green have**	**extra**
1	111.0	555.0	1560	1005
2	75.0	375.0	1373	998
3	112.0	560.0	957	397
4	89.0	445.0	1657	1212
Total	**387.0**	**1935.0**	**5547**	**3612**

6	GT/Ac. Average Required
14	GT/Ac. Average Have

"STEWARDSHIP IN FORESTRY"

Jethro Toll

Volume Summary

Area 1-Modified Clearcut				
		111 acres		
SPECIES	Cruised Net MBF/ Acre	Cruised Net MBF	Hidden D&B	Net Sale MBF
Douglas-fir	16.6	1845	1%	1827
Red alder	6.0	670	2%	657
TOTAL	22.7	2515		2483

Area 2-Modified Clearcut				
		75 acres		
SPECIES	Cruised Net MBF/ Acre	Cruised Net MBF	Hidden D&B	Net Sale MBF
Douglas-fir	8.0	599	1%	593
Red Alder	13.2	987	1%	978
Big Leaf Maple		0	1%	0
Sitka Spruce	0.1	7	2%	7
TOTAL	21.3	1594		1578

Area 3-Modified Clearcut				
		112 acres		
SPECIES	Cruised Net MBF/ Acre	Cruised Net MBF	Hidden D&B	Net Sale MBF
Douglas-fir	22.6	2532	1%	2506
Red Alder	5.6	630	2%	617
Western hemlock	0.5	59	1%	58
Sitka Spruce	0.3	33	1%	33
TOTAL	29.0	3253		3215

Areas 4-Harvest Type				
		89 acres		
SPECIES	Cruised Net MBF/ Acre	Cruised Net MBF	Hidden D&B	Net Sale MBF
Douglas-fir	11.7	1042	1%	1032
Red Alder	9.1	810	2%	794
Big Leaf Maple	0.0	0	2%	0
	0.0		1%	0
TOTAL	20.8	1852		1825

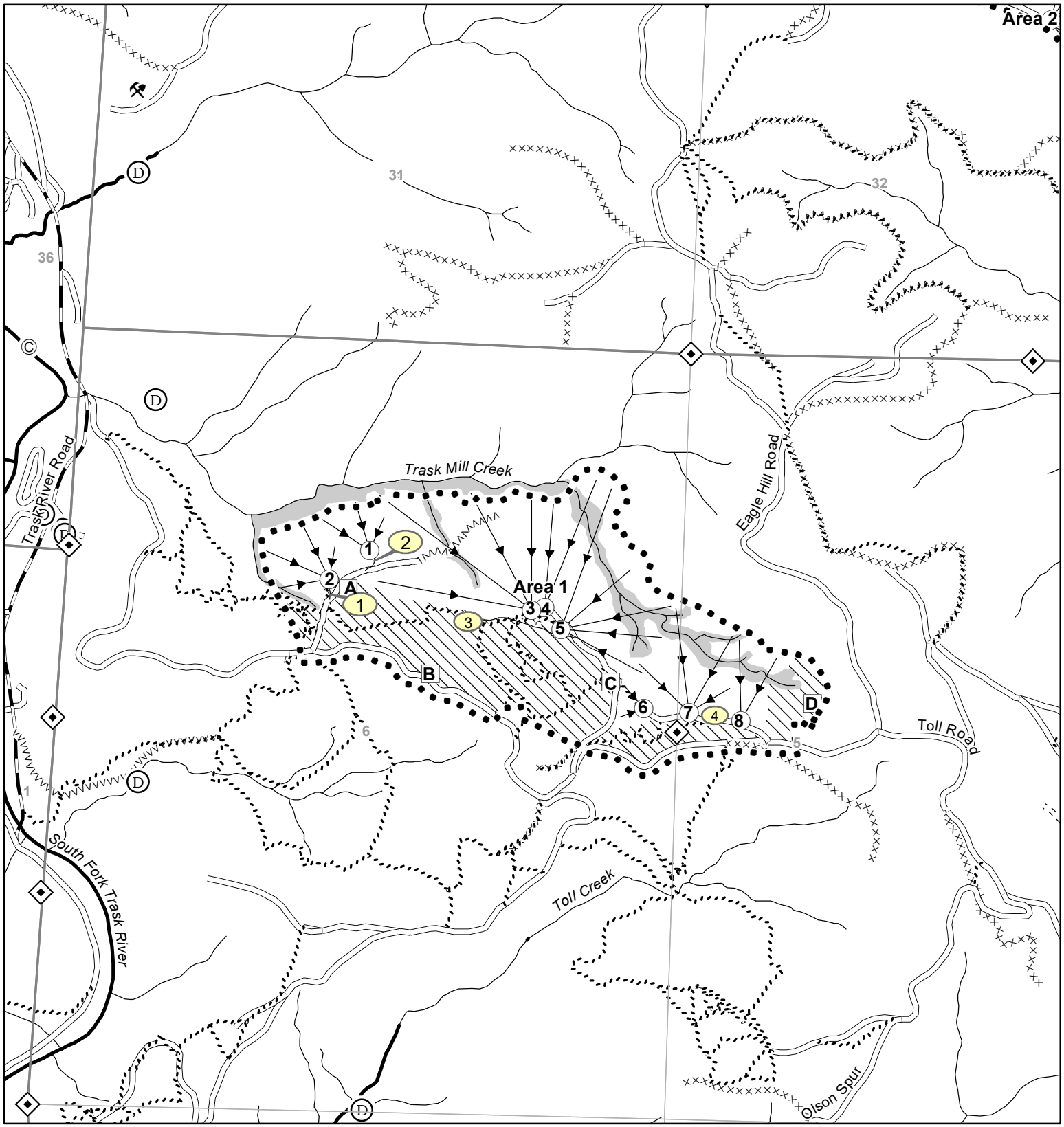
TOTAL SALE VOLUME	**387**	**acres**

"STEWARDSHIP IN FORESTRY"

Jethro Toll

Volume Summary

SPECIES	Cruised Net (MBF)	Net Sale (MBF)
Douglas-fir	6018	5958
Red Alder	3097	3045
Big Leaf Maple	0	0
Western hemlock	59	58
Sitka Spruce	40	40
Western red cedar	0	0
TOTAL	9214	9101



Restricted area
Area boundary
Sale boundary
Ownership boundary
Fish stream
Non-fish stream
Unsurfaced road
Surfaced road
Paved road
Abandoned road
Cable yarding
Ground Landing
Yarder Landing

Buffer
Ground yarding
Cable Yarding with Haulback
Green tree retention area
Swing road
Non-project road
Blocked road
OHV trail
Non-motorized trail

Unposted Buffer
Cable yarding
Rock source
Waste area
Stock pile
Bridge
Gate
Survey corner
Domestic water supply intake
Helicopter landing zone

LOGGING PLAN

Timber Sale Contract
No. TL-341-2020-W00750-01
JETHRO TOLL

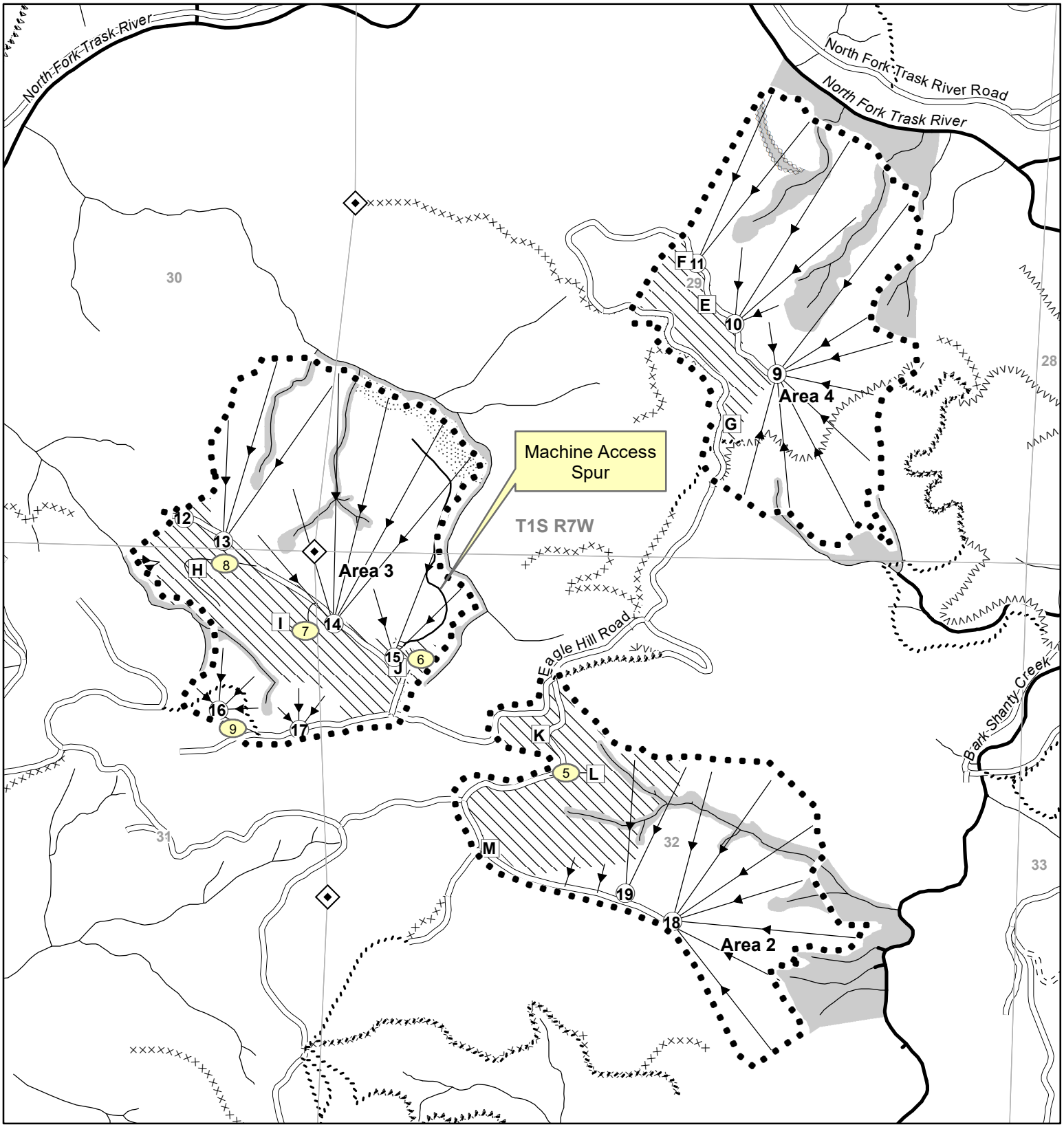
Section(s) 5, 6 of T2S R7W,
Section(s) 29, 30, 31, 32 of
T1S R7W W.M.
Tillamook County, Oregon

Area	Type of Operation	Acres Gross	Net
1	Modified Clearcut	130	111
2	Modified Clearcut	97	75
3	Modified Clearcut	124	112
4	Modified Clearcut	116	89
	Total	467	387

Tillamook District GIS
05/29/2019
This product is for informational use and may not have been prepared or suitable for legal, engineering, or surveying purposes.

1,000 0 1,000 Feet

N



Restricted area
Area boundary
Sale boundary
Ownership boundary
Fish stream
Non-fish stream
Unsurfaced road
Surfaced road
Paved road
Abandoned road
Cable yarding
Ground Landing
Yarder Landing

Buffer
Ground yarding
Cable Yarding with Haulback
Green tree retention area
Swing road
Non-project road
Blocked road
OHV trail
Non-motorized trail

Unposted Buffer
Cable yarding
Rock source
Waste area
Stock pile
Bridge
Gate
Survey corner
Domestic water supply intake
Helicopter landing zone

LOGGING PLAN
Timber Sale Contract
No. TL-341-2020-W00750-01
JETHRO TOLL
Section(s) 5, 6 of T2S R7W,
Section(s) 29, 30, 31, 32 of
T1S R7W W.M.
Tillamook County, Oregon

Area	Type of Operation	Acres Gross	Net
1	Modified Clearcut	130	111
2	Modified Clearcut	97	75
3	Modified Clearcut	124	112
4	Modified Clearcut	116	89
	Total	467	387

Tillamook District GIS
05/29/2019
This product is for informational use and may not have been prepared or suitable for legal, engineering, or surveying purposes.

1,000 0 1,000 Feet

N