Timber Sale Appraisal
Gold Rush
Sale TL-341-2020-W00751-01

District: Tillamook **Date: April 26, 2019**

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$1,387,033.92	$178,254.91	$1,565,288.83
		Project Work:	($346,230.00)
		Advertised Value:	$1,219,058.83

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District: Tillamook **Date: April 26, 2019**

Timber Description

Location: Section(s) 1, 2, 3, 11, 12 of T2S R8W W.M.,
Tillamook County, Oregon

Stand Stocking: 80%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	17	0	95
Alder (Red)	13	0	90
Maple	20	0	90

Volume by Grade	2S	3S & 4S 6"-11"	8" - 9"	10" - 11"	12"+	6" - 7"	4S	Total
Douglas - Fir	1,855	2,657	0	0	0	0	0	4,512
Alder (Red)	0	0	124	165	253	211	0	753
Maple	17	0	0	0	0	0	21	38
Total	1,872	2,657	124	165	253	211	21	5,303

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

Western Red Cedar and Other Cedars Stumpage Price = Pond Value – Logging Cost
$1,035/MBF - $390.80/MBF = $644.20/ MBF

Western Hemlock and other Conifers = Pond Value – Logging Cost
564$/MBF – $390.80/MBF = $173.20/ MBF

Pulp (Conifer and Hardwood) Price = $ 2.50/ 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

Other Costs with Profit and Risk to be added:
Snag creation: 262 x $10/ snag = $2,620

TOTAL Other Costs with profit and Risk to be added = $2,620.00

Other Costs with No Profit and Risk Added:

Non-Project road 1# construction: 5+50 stations x $350/station = $1,925

Guideline Cats (Area 3) : $1,000 x 2 machienes = $2,000
Machine Cleaning: $1,000/machine x 2 machines x 2 seasons = $4,000
Slash piling and sorting (Cable Ground): $5/ac x 132ac. = $660
Heliport Construction: $600 ($200/area)
Road blocking $50/ block x 3 roads = $150
Pull Pipe at Point E to F: 1 x 100= $100.00

Ditch Cleaning and Bank Sluff Removal:
Mobilization: three times – dump truck w/ tilt bed & small excavator: $890 x 3 = $2,670
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 = $21,105.00

ROAD MAINTENANCE:
Spot Rocking: 20cy/MMBF/mile x 5.303 MMBF x $10/cy x 7.5 miles / 5,303 MBF= $1.50/MBF
Interim Grading: $1,150/ mile x 7.5 miles x 2 times/ 5,303 MBF = $3.25/MBF
Final Maintenance Grading: $1,500 x 3.0 miles/ 5,303 MBF = $0.85/MBF
Total Road Maintenance: $5.60/MBF

Logging Conditions

Combination#: 1

Douglas - Fir	16.99%
Alder (Red)	43.53%
Maple	100.00%

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: 12
bd. ft / load: 4000
cost / mbf: $111.33
machines: Forwarder
Harvester

Combination#: 2

Douglas - Fir	33.66%
Alder (Red)	28.00%

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: 8
bd. ft / load: 4300
cost / mbf: $226.17
machines: Log Loader (A)
Forwarder
Harvester
Tower Yarder (Medium)

Combination#: 3

Douglas - Fir	49.35%
Alder (Red)	28.46%

Logging System: Cable: Large Tower >=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: 7
bd. ft / load: 4300
cost / mbf: $265.13
machines: Log Loader (A)
Forwarder
Harvester
Tower Yarder (Large)

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District: Tillamook **Date: April 26, 2019**

Logging Costs

Operating Seasons:	2.00	**Profit Risk:**	10%
Project Costs:	$346,230.00	**Other Costs (P/R):**	$2,620.00
Slash Disposal:	$0.00	**Other Costs:**	$21,105.00

Miles of Road **Road Maintenance:** $5.60

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	4.3
Alder (Red)	$0.00	2.0	3.0
Maple	$0.00	2.0	3.0

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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									
$225.89	$5.88	$1.66	$115.99	$0.49	$34.99	$0.00	$2.00	$3.98	$390.88
Alder (Red)									
$187.27	$6.16	$1.66	$174.16	$0.49	$36.97	$0.00	$2.00	$3.98	$412.69
Maple									
$111.33	$6.16	$1.66	$174.16	$0.49	$29.38	$0.00	$2.00	$3.98	$329.16

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$698.29	$307.41	$0.00
Alder (Red)	$0.00	$643.52	$230.83	$0.00
Maple	$0.00	$446.00	$116.84	$0.00

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District: Tillamook **Date: April 26, 2019**

Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	$0.00	$0.00
Alder (Red)	0	$0.00	$0.00
Maple	0	$0.00	$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	4,512	$307.41	$1,387,033.92
Alder (Red)	753	$230.83	$173,814.99
Maple	38	$116.84	$4,439.92

Gross Timber Sale Value

Recovery: $1,565,288.83

Prepared By: Nathan Atchison **Phone:** 503-815-7063

"STEWARDSHIP IN FORESTRY"

PROJECT SUMMARY SHEET

Sale: Gold Rush

CONSTRUCTION

Point	E to F	20+40	stations =	$12,894.92
Point	G to H	34+00	stations =	$94,914.30
Point	I to J	26+70	stations =	$77,282.85
Point	K to L	1+70	stations =	$8,251.85
Point	O to P	8+90	stations =	$6,117.74
			SUBTOTAL CONSTRUCTION	**$199,461.66**

IMPROVEMENT

Point	A to B	109+50	stations =	$26,414.04
Point	C to D	225+70	stations =	$32,364.32
Point	S to T	17+80	stations =	$821.60
Point	Point U	0+00	stations =	$991.20
			SUBTOTAL IMPROVEMENT	**$60,591.16**

RECONSTRUCTION

Point	M to N	4+00	stations =	$7,279.80
Point	O to P	13+70	stations =	$12,196.08
			SUBTOTAL RECONSTRUCTION	**$19,475.88**

VACATE

Point	Q to R	11+80	stations =	$7,904.08
Point	V to B	10+70	stations =	$525.00
			SUBTOTAL VACATE	**$8,429.08**

SPECIAL PROJECTS

No. 2) Quarry Clean-Up	1	At Alternate 1 Jaw-Run Source	$3,320.00
No. 3) Purchase & Install Gate	1	At Pump chance spur along A to B	$500.00
No. 7) Brush	7.0	Miles of forest road	$6,475.00
No. 8) Post Log Haul Surfacing & Process	212.8	Stations on A to B and C to D	$41,491.75
		SUBTOTAL SPECIAL PROJECTS	**$51,786.75**

MOVE IN **$6,485.47**

GRAND TOTAL **$346,230.00**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **A to B**

Construction -	0+00	stations	Improvement -	109+50	stations	Reconstruction -	0+00	stations
	0.00	miles		2.07	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

Scattering	0.250	acres @	$1,275.00	per acre =	$318.75		
				TOTAL CLEARING AND GRUBBING			**$318.75**

IMPROVEMENT: EXCAVATION -

Pullback	61	cy. @	$2.00	per c.y.=	$122.00		
Remove Berm / Old Waste	96	cy. @	$2.00	per c.y.=	$192.00		
				TOTAL EXCAVATION			**$314.00**

IMPROVEMENT: ENDHAUL -

Pullback	79+80	to	80+50	61	cy. @	$3.02	per c.y.=	$184.22
Remove Berm / Old Waste	93+50	to	94+10	9	cy. @	$3.51	per c.y.=	$31.59
Remove Berm / Old Waste	102+00	to	108+00	87	cy. @	$4.71	per c.y.=	$409.77
Spread & compact				157	cy. @	$0.50	per c.y.=	$78.50
							TOTAL ENDHAUL	**$704.08**

CULVERTS - MATERIALS & INSTALLATION

Culverts							
120	LF of 18"	$2,400.00		40	LF of 24"	$1,240.00	
40	LF of 30"	$1,640.00		40	LF of 36"	$1,940.00	
Culvert Markers							
17	markers	$136.00					
					TOTAL CULVERTS		**$7,356.00**

ROCK

62+00	to	75+50	320	cy. of	BC Crushed	@	$12.03	per c.y.=	$3,849.60
75+50	to	98+50	540	cy. of	NF Crushed	@	$8.65	per c.y.=	$4,671.00
Culvert Bedding / Backfill		All Pipes	70	cy. of	NF Crushed	@	$7.42	per c.y.=	$519.40
Fill Armor		76+60,90+00,93+80	30	cy. of	Pit-Run	@	$9.71	per c.y.=	$291.30
South Fork/Edwards Junction R		0+00	20	cy. of	BC Crushed	@	$11.96	per c.y.=	$239.20
Blocking		26+20, 98+50	10	cy. of	Riprap	@	$9.94	per c.y.=	$99.40
Energy Dissipator		All Pipes	40	cy. of	Riprap	@	$9.71	per c.y.=	$388.40
Other Junction Rock		36+90,62+00,63+40	30	cy. of	NF Crushed	@	$8.36	per c.y.=	$250.80
Camp Site Surfacing		66+10	80	cy. of	NF Crushed	@	$8.39	per c.y.=	$671.20
Shoulder Fill		102+00	40	cy. of	Pit-Run	@	$7.33	per c.y.=	$293.20
Spot Rock		75+50-109+50	200	cy. of	BC Crushed	@	$12.31	per c.y.=	$2,462.00
								TOTAL ROCK	**$13,735.50**

SPECIAL PROJECTS

Construct sediment catch basin at station 76+40 & 90+30 -	2.00	@	$50.00	each	$100.00	
Re-open waste area at 71+70 -	1.00	hour @	$180.00	per hour	$180.00	
Construct 10' outlet ditch for new culvert at 87+70 -	1.00	@	$60.00		$60.00	
Construct 25'-30' long ditchout at stations 103+00 & 105+00 -	2.00	@	$150.00	each	$300.00	
Pull ditch and endhaul -	20.00	stations @	$130.00	per station	$2,600.00	
Grade and shape road -	109.50	stations @	$22.00	per station	$2,409.00	
Roll subgrade w/ vibratory roller prior to rocking -	109.50	stations @	$17.50	per station	$1,916.25	
AFTER LOG HAUL: Grade & Shape and Roll from 62+00 to 75+50 -	13.50	stations @	$39.50	per station	$533.25	
Remove culverts from state lands	4.00	@	$598.50	total	$598.50	
Grass seed and fertilize -	0.78	acres @	$280.00	per acre	$218.40	
Mulching -	0.352	acres @	$780.00	per acre	$274.56	
				TOTAL SPECIAL PROJECTS		**$9,189.96**

GRAND TOTAL **$31,618.29**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **C to D**

Construction -	0+00	stations	Improvement -	225+70	stations	Reconstruction -	0+00	stations
	0.00	miles		4.27	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

Widening	0.079	acres @	$860.00	per acre =	$67.94		
Scattering	0.260	acres @	$1,275.00	per acre =	$331.50		
				TOTAL CLEARING AND GRUBBING			**$399.44**

IMPROVEMENT: EXCAVATION -

Widening	532	cy. @	$2.00	per c.y.=	$1,064.00		
Remove piled waste	20	cy. @	$2.00	per c.y.=	$40.00		
				TOTAL	**EXCAVATION**		**$1,104.00**

IMPROVEMENT: ENDHAUL -

Widening	67+50	to	68+70	208	cy. @	$3.09	per c.y.=	$642.72	
Widening	118+00	to	119+00	87	cy. @	$4.32	per c.y.=	$375.84	
Widening	119+00	to	120+00	39	cy. @	$4.35	per c.y.=	$169.65	
Widening	188+50	to	215+00	100	cy. @	$5.30	per c.y.=	$530.00	
Widening	216+00	to	218+00	98	cy. @	$5.65	per c.y.=	$553.70	
Remove piled waste	126+40	to	126+60	20	cy. @	$4.55	per c.y.=	$91.00	
Spread & compact				552	cy. @	$0.50	per c.y.=	$276.00	
								TOTAL ENDHAUL	**$2,638.91**

CULVERTS - MATERIALS & INSTALLATION

Culverts			
60	LF of 18"	$1,200.00	
Culvert Markers			
14	markers	$112.00	
		TOTAL CULVERTS	**$1,312.00**

ROCK

0+00 to	19+40	440	cy. of	BC Crushed	@	$12.44	per c.y.=	$5,473.60	
19+40 to	176+30	3,510	cy. of	NF Crushed	@	$10.12	per c.y.=	$35,521.20	
Culvert Bedding / Backfill	All Pipes	20	cy. of	NF Crushed	@	$8.17	per c.y.=	$163.40	
Spot Rock	19+40-176+30	500	cy. of	NF Crushed	@	$10.12	per c.y.=	$5,060.00	
Junction Rock	0+00	20	cy. of	BC Crushed	@	$12.11	per c.y.=	$242.20	
Energy Dissipator	All Pipes	10	cy. of	Riprap	@	$10.71	per c.y.=	$107.10	
								TOTAL ROCK	**$46,567.50**

SPECIAL PROJECTS

Repair existing culvert outlet flume -	2.00	hours @	$30.00	per hour	$60.00
Remove gate assembly -	0.00	hours @	$160.00	per hour	$0.00
Construct waste area at 45+50 -	2.50	hours @	$180.00	per hour	$450.00
Construct ditchouts -	0.00	@	$60.00	each	$0.00
Improve landing at 88+40 -	1.00	@	$200.00		$200.00
Pull ditch and endhaul -	45.00	stations @	$130.00	per station	$5,850.00
Improve turnaround at 224+40 -	1.00	@	$75.00		$75.00
Grade and shape road -	225.70	stations @	$22.00	per station	$4,965.40
Roll subgrade w/ vibratory roller prior to rocking -	225.70	stations @	$17.50	per station	$3,949.75
AFTER LOG HAUL: Grade & Shape and Roll from 0+00 to 19+40 -	19.40	stations @	$39.50	per station	$766.30
Grass seed and fertilize -	0.83	acres @	$280.00	per acre	$232.40
Mulching -	0.104	acres @	$780.00	per acre	$81.12
				TOTAL SPECIAL PROJECTS	**$16,629.97**

GRAND TOTAL **$68,651.82**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **E to F**

Construction -	20+40	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.39	miles		0.00	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			
0+00		6+20	30%		Outslope	$239	=	$1,481.80	
6+20		6+90	45%		Outslope	$336	=	$235.20	
6+90		7+40	75%	0.1	Outslope	$3,465	=	$1,732.50	
7+40		8+20	45%		Outslope	$336	=	$268.80	
8+20		9+80	35%		Outslope	$239	=	$382.40	
9+80		13+60	30%		Outslope	$239	=	$908.20	
13+60		15+00	35%		Outslope	$239	=	$334.60	
15+00		16+20	45%		Outslope	$336	=	$403.20	
16+20		17+20	60%	0.2	Outslope	$1,970	=	$1,970.00	
17+20		18+70	40%		Outslope	$303	=	$454.50	
18+70		20+40	30%		Outslope	$239	=	$406.30	
								TOTAL	**$8,577.50**

CULVERTS - MATERIALS & INSTALLATION

Culverts				
	40	LF of 18"	$800.00	
Culvert Markers				
	1	markers	$8.00	
			TOTAL CULVERTS	**$808.00**

ROCK

0+00	to	1+00	60	cy. of	Jaw-Run	@	$18.64	per c.y.=	$1,118.40
Culvert Surfacing		TBD	20	cy. of	Jaw-Run	@	$18.95	per c.y.=	$379.00
Junction Rock		0+00	20	cy. of	Jaw-Run	@	$18.63	per c.y.=	$372.60
Energy Dissipator		TBD	5	cy. of	Riprap	@	$17.58	per c.y.=	$87.90
								TOTAL ROCK	**$1,957.90**

SPECIAL PROJECTS

Construct turnaround before landing -	1.00	@	$80.00		$80.00
Construct landing at Point F -	1.00	@	$370.00		$370.00
Grade and shape road -	20.40	stations @	$20.00	per station	$408.00
Roll subgrade w/ vibratory roller prior to rocking -	20.40	stations @	$17.50	per station	$357.00
Grass seed and fertilize -	0.94	acres @	$280.00	per acre	$263.20
Mulching -	0.094	acres @	$780.00	per acre	$73.32
				TOTAL SPECIAL PROJECTS	**$1,551.52**

GRAND TOTAL **$12,894.92**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **G to H**

Construction -	34+00	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.64	miles		0.00	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			
0+00		1+00	45%		Ditch	$459	=	$459.00	
1+00		3+30	60%	1.2	Ditch	$3,696	=	$8,500.80	
3+30		6+00	70%	1.2	Ditch	$5,671	=	$15,311.70	
6+00		7+60	40%		Ditch	$413	=	$660.80	
7+60		9+60	45%		Ditch	$459	=	$918.00	
9+60		10+80	50%		Ditch	$813	=	$975.60	
10+80		16+80	45%		Ditch	$459	=	$2,754.00	
16+80		18+40	50%		Ditch	$813	=	$1,300.80	
18+40		19+60	40%		Ditch	$413	=	$495.60	
19+60		21+00	65%	1.5	Ditch	$5,330	=	$7,462.00	
21+00		21+70	40%		Ditch	$413	=	$289.10	
21+70		22+20	65%	1.6	Ditch	$5,330	=	$2,665.00	
22+20		24+60	45%		Ditch	$459	=	$1,101.60	
24+60		26+70	50%		Ditch	$813	=	$1,707.30	
26+70		28+00	65%	1.7	Ditch	$5,330	=	$6,929.00	
28+00		34+00	45%		Ditch	$459	=	$2,754.00	
								TOTAL	**$54,284.30**

CULVERTS - MATERIALS & INSTALLATION

Culverts	120	LF of 18"	$2,400.00	
Culvert Markers	4	markers	$32.00	
			TOTAL CULVERTS	**$2,432.00**

ROCK

0+00 to	34+00	1,860	cy. of	Jaw-Run	@	$17.14	per c.y.=	$31,880.40
Landing Rock	27+80,Point H	160	cy. of	Jaw-Run	@	$17.07	per c.y.=	$2,731.20
Junction Rock	0+00	20	cy. of	Jaw-Run	@	$17.46	per c.y.=	$349.20
Energy Dissipator	All Pipes	20	cy. of	Riprap	@	$15.87	per c.y.=	$317.40
							TOTAL ROCK	**$35,278.20**

SPECIAL PROJECTS

Construct landings at 27+80, & Point H -	2.00	@	$370.00	each	$740.00
Construct turnarounds before landings -	2.00	@	$100.00	each	$200.00
Construct extended ditchouts at 2+30 and 7+70 -	2.00	@	$100.00	each	$200.00
Grade and shape road -	34.00	stations @	$22.00	per station	$748.00
Roll subgrade w/ vibratory roller prior to rocking -	34.00	stations @	$17.50	per station	$595.00
Grass seed and fertilize -	1.56	acres @	$280.00	per acre	$436.80
				TOTAL SPECIAL PROJECTS	**$2,919.80**

GRAND TOTAL **$94,914.30**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **I to J**

Construction -	26+70	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.51	miles		0.00	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			
0+00		1+20	55%		Ditch	$1,245	=	$1,494.00	
1+20		2+50	60%	1.5	Ditch	$4,203	=	$5,463.90	
2+50		3+00	50%		Crowned Ridgetop	$573	=	$286.50	
3+00		6+00	30%		Crowned Ridgetop	$239	=	$717.00	
6+00		6+70	50%		Ditch	$813	=	$569.10	
6+70		7+40	60%	1.6	Ditch	$4,203	=	$2,942.10	
7+40		8+30	45%		Ditch	$459	=	$413.10	
8+30		9+50	65%	1.6	Ditch	$5,330	=	$6,396.00	
9+50		11+00	60%	1.7	Crowned Ridgetop	$2,847	=	$4,270.50	
11+00		12+80	50%		Crowned Ridgetop	$573	=	$1,031.40	
12+80		13+50	55%		Crowned Ridgetop	$862	=	$603.40	
13+50		14+90	60%	1.7	Ditch	$4,203	=	$5,884.20	
14+90		15+80	50%		Ditch	$813	=	$731.70	
15+80		17+70	55%		Ditch	$1,245	=	$2,365.50	
17+70		18+80	45%		Ditch	$459	=	$504.90	
18+80		19+20	40%		Ditch	$413	=	$165.20	
19+20		23+50	35%		Ditch	$320	=	$1,376.00	
23+50		26+70	25%		Crowned Ridgetop	$206	=	$659.20	
								TOTAL	**$35,873.70**

ROCK

0+00	to	26+70	1,530	cy. of	Jaw-Run	@	$17.05	per c.y.=	$26,086.50	
Landing Rock		4 Locations	320	cy. of	Jaw-Run	@	$17.14	per c.y.=	$5,484.80	
Junction Rock		0+00	20	cy. of	Jaw-Run	@	$17.94	per c.y.=	$358.80	
									TOTAL ROCK	**$31,930.10**

SPECIAL PROJECTS

Drill & Shoot where needed -	1.00	lump sum @	$6,000.00		$6,000.00	
Construct landings at 2+00, 16+80, 20+80, & Point J -	4.00	@	$370.00	each	$1,480.00	
Construct turnarounds before landings -	4.00	@	$100.00	each	$400.00	
Construct extended ditchout at 1+80 & 17+20 -	2.00	@	$100.00		$200.00	
Grade and shape road -	26.70	stations @	$22.00	per station	$587.40	
Roll subgrade w/ vibratory roller prior to rocking -	26.70	stations @	$17.50	per station	$467.25	
Grass seed and fertilize -	1.23	acres @	$280.00	per acre	$344.40	
				TOTAL SPECIAL PROJECTS		**$9,479.05**

GRAND TOTAL **$77,282.85**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **K to L**

Construction -	1+70	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.03	miles		0.00	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			
0+00		0+60	20%		Outslope	$174	=	$104.40	
0+60		1+70	30%		Outslope	$239	=	$262.90	
								TOTAL	**$367.30**

ROCK

0+00	to	1+70	150	cy. of	Jaw-Run	@	$17.28	per c.y.=	$2,592.00	
Landing Rock		Point L	80	cy. of	Jaw-Run	@	$17.42	per c.y.=	$1,393.60	
Junction Rock		0+00	20	cy. of	Jaw-Run	@	$17.14	per c.y.=	$342.80	
									TOTAL ROCK	**$4,328.40**

SPECIAL PROJECTS

Drill & Shoot where needed -	1.00	lump sum @	$3,000.00		$3,000.00
Construct turnaround before landing -	1.00	@	$100.00		$100.00
Construct landing at Point L -	1.00	@	$370.00		$370.00
Grade and shape road -	1.70	stations @	$20.00	per station	$34.00
Roll subgrade w/ vibratory roller prior to rocking -	1.70	stations @	$17.50	per station	$29.75
Grass seed and fertilize -	0.08	acres @	$280.00	per acre	$22.40
				TOTAL SPECIAL PROJECTS	**$3,556.15**

GRAND TOTAL **$8,251.85**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **M to N**

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

RECONSTRUCTION: CLEARING AND GRUBBING -

Scattering	0.260	acres	@	$1,275.00	per acre =	$331.50	
					TOTAL CLEARING AND GRUBBING		**$331.50**

RECONSTRUCTION: EXCAVATION -

Road Earthwork	4.00	sta.	@	$30.00	per sta. =	$120.00	
					TOTAL EXCAVATION		**$120.00**

ROCK

0+00 to	4+00	250	cy. of	Jaw-Run	@	$18.07	per c.y.=	$4,517.50	
Landing Rock	Point N	80	cy. of	Jaw-Run	@	$18.13	per c.y.=	$1,450.40	
Junction Rock	0+00	20	cy. of	Jaw-Run	@	$18.00	per c.y.=	$360.00	
								TOTAL ROCK	**$6,327.90**

SPECIAL PROJECTS

Construct turnaround -	1.00	@	$100.00		$100.00	
Reconstruct Landing -	1.00	@	$200.00		$200.00	
Grade and shape road -	4.00	stations @	$20.00	per station	$80.00	
Roll subgrade w/ vibratory roller prior to rocking -	4.00	stations @	$17.50	per station	$70.00	
Grass seed and fertilize -	0.18	acres @	$280.00	per acre	$50.40	
				TOTAL SPECIAL PROJECTS		**$500.40**

GRAND TOTAL **$7,279.80**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **O to P**

Construction -	8+90	stations	Improvement -	0+00	stations	Reconstruction -	13+70	stations
	0.17	miles		0.00	miles		0.26	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			
13+70		15+70	30%		Outslope	$239	=	$478.00	
15+70		17+70	45%		Outslope	$336	=	$672.00	
17+70		18+30	55%		Outslope	$862	=	$517.20	
18+30		19+30	40%		Outslope	$303	=	$303.00	
19+30		20+00	55%		Outslope	$862	=	$603.40	
20+00		20+80	45%		Outslope	$336	=	$268.80	
20+80		22+60	30%		Outslope	$239	=	$430.20	
								TOTAL	**$3,272.60**

RECONSTRUCTION: CLEARING AND GRUBBING -

Side cast	0.050	acres @	$1,275.00	per acre =	$63.75	
Widening	0.083	acres @	$1,275.00	per acre =	$105.83	
Scattering	1.130	acres @	$1,275.00	per acre =	$1,440.75	
				TOTAL CLEARING AND GRUBBING		**$1,610.33**

RECONSTRUCTION: EXCAVATION -

Pullback	312	cy. @	$2.00	per c.y.=	$624.00	
Widening	434	cy. @	$3.00	per c.y.=	$1,302.00	
				TOTAL EXCAVATION		**$1,926.00**

RECONSTRUCTION: ENDHAUL -

Pullback	4+80	to	6+00	312	cy. @	$5.22	per c.y.=	$1,628.64	
Widening	5+50	to	7+50	434	cy. @	$5.25	per c.y.=	$2,278.50	
Spread & compact				746	cy. @	$0.50	per c.y.=	$373.00	
							TOTAL ENDHAUL		**$4,280.14**

CULVERTS - MATERIALS & INSTALLATION

Culverts				
	40	LF of 24"	$1,240.00	
Culvert Markers				
1 marker	$8.00			
		TOTAL CULVERTS		**$1,248.00**

ROCK

0+00 to	3+30	190	cy. of	Jaw-Run	@	$18.37	per c.y.=	$3,490.30	
Junction Rock	0+00	20	cy. of	Jaw-Run	@	$18.33	per c.y.=	$366.60	
Energy Dissipator	2+80	5	cy. of	Riprap	@	$17.19	per c.y.=	$85.95	
							TOTAL ROCK		**$3,942.85**

SPECIAL PROJECTS

Construct turnaround before landing -	1.00	@	$100.00		$100.00
Construct landing at Point P -	1.00	@	$370.00		$370.00
Grade and shape road -	22.60	stations @	$20.00	per station	$452.00
Roll subgrade w/ vibratory roller prior to rocking -	22.60	stations @	$17.50	per station	$395.50
Remove large stumps -	1.00	lump sum @	$540.00		$540.00
Grass seed and fertilize -	0.63	acres @	$280.00	per acre	$176.40
				TOTAL SPECIAL PROJECTS	**$2,033.90**

GRAND TOTAL **$18,313.82**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **Q to R**

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

VACATE: CLEARING AND GRUBBING -						
Scattering	0.880	acres @	$1,275.00	per acre =	$1,122.00	
				TOTAL CLEARING AND GRUBBING		**$1,122.00**
VACATE: EXCAVATION -						
Pullback	1560	cy. @	$2.00	per c.y.=	$3,120.00	
Pull existing waste onto road surface from 3+70 to 4+60	380	cy. @	$2.00	per c.y.=	$760.00	
Pile and compact against cutbank	1940	cy. @	$0.70	per c.y.=	$1,358.00	
				TOTAL EXCAVATION		**$5,238.00**
SPECIAL PROJECTS						
Remove culverts from state lands -	5.00	@	$667.40	total	$667.40	
Grass seed and fertilize -	0.83	acres @	$280.00	per acre	$232.40	
Mulching -	0.826	acres @	$780.00	per acre	$644.28	
				TOTAL SPECIAL PROJECTS		**$1,544.08**
				GRAND TOTAL		**$7,904.08**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **S to T**

Construction -	0+00	stations	Improvement -	17+80	stations	Reconstruction -	0+00	stations
	0.00	miles		0.34	miles		0.00	miles

ROCK										
Blocking	2+00,8+00,14+50	20	cy. of	Riprap	@	$8.77	per c.y.=	$175.40		
Camp Site Surfacing	16+50	60	cy. of	NF Crushed	@	$8.02	per c.y.=	$481.20		
								TOTAL ROCK		**$656.60**
SPECIAL PROJECTS										
Rip surface of camp site before blocking at 8+00 -				1.00	hour @	$165.00		$165.00		
								TOTAL SPECIAL PROJECTS		**$165.00**
								GRAND TOTAL		**$821.60**

SUMMARY OF CONSTRUCTION COST

Sale: **Gold Rush** Road: **Point U**

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

ROCK

Camp Site Surfacing	120	cy. of	NF Crushed	@	$8.26	per c.y.=	$991.20	
						TOTAL ROCK		**$991.20**

GRAND TOTAL **$991.20**

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	1.5" North Fork Stockpile	Location:	SE 1/4, SE 1/4, Sec 25, T1S, R8W		
Sale:	**Gold Rush**		Road:	5080	c.y.
Swell:	1.40		Stockpile:		c.y.
Shirinkage	1.16		Total Truck Loads:	5080	c.y.
Drill Pct.:	0%		In Place Total:	3629	c.y.

Load Dump Truck:	$1.00	/cu.yd.	x	5080	cu.yds. =	$5,080.00
					Subtotal	$5,080.00
Move in Roller and Compactor	1	@	$526.50		=	$526.50
Move in Grader	1	@	$863.39		=	$863.39
Move in Loader	1	@	$894.82		=	$894.82
Move in Trucks	2	@	$191.86		=	$383.72
					Subtotal	$2,668.43
				TOTAL PRODUCTION COSTS		$7,748.43

Base Cost= $1.53 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 7550 9850 (NF Crushed)	3.92	3.20	1.53	8.65	540		$4,671.00
A to B Culvert Bedding / Backfill (NF Crushed)	3.89	2.00	1.53	7.42	70		$519.40
A to B Fill Armor (Pit-Run)	5.18	3.00	1.53	9.71	30		$291.30
A to B Blocking (Riprap)	5.41	3.00	1.53	9.94	10		$99.40
A to B Energy Dissipator (Riprap)	5.18	3.00	1.53	9.71	40		$388.40
A to B Other Junction Rock (NF Crushed)	3.63	3.20	1.53	8.36	30		$250.80
A to B Camp Site Surfacing (NF Crushed)	3.66	3.20	1.53	8.39	80		$671.20
A to B Shoulder Fill (Pit-Run)	4.10	1.70	1.53	7.33	40		$293.20
C to D 1940 17630 (NF Crushed)	5.39	3.20	1.53	10.12	3510		$35,521.20
C to D Culvert Bedding / Backfill (NF Crushed)	4.64	2.00	1.53	8.17	20		$163.40
C to D Spot Rock (NF Crushed)	5.39	3.20	1.53	10.12	500		$5,060.00
C to D Energy Dissipator (Riprap)	6.18	3.00	1.53	10.71	10		$107.10
S to T Blocking (Riprap)	4.24	3.00	1.53	8.77	20		$175.40
S to T Camp Site Surfacing (NF Crushed)	3.29	3.20	1.53	8.02	60		$481.20
Point U Camp Site Surfacing (NF Crushed)	3.53	3.20	1.53	8.26	120		$991.20
				Total C.Y.	5080	Sub Total	$49,684.20
					TOTAL ROCKING COSTS		$49,684.20

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	2" Bobcat Stockpile	Location:	SE 1/4, NE 1/4, Sec 29, T1S, R7W
Sale:	**Gold Rush**	Road:	1000 c.y.
Swell:	1.40	Stockpile:	c.y.
Shirinkage	1.16	Total Truck Loads:	1000 c.y.
Drill Pct.:	0%	In Place Total:	714 c.y.

Load Dump Truck:	$1.00	/cu.yd.	x	1000	cu.yds. =	$1,000.00
					Subtotal	$1,000.00
Move in Roller and Compactor	1	@		$526.50	=	$526.50
Move in Grader	1	@		$863.39	=	$863.39
Move in Loader	1	@		$894.82	=	$894.82
Move in Trucks	2	@		$191.86	=	$383.72
					Subtotal	$2,668.43
					TOTAL PRODUCTION COSTS	$3,668.43

Base Cost= $3.67 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 6200 7550 (BC Crushed)	5.16	3.20	3.67	12.03	320		$3,849.60
A to B South Fork/Edwards Junction Rock (BC Crushed)	5.09	3.20	3.67	11.96	20		$239.20
A to B Spot Rock (BC Crushed)	5.44	3.20	3.67	12.31	200		$2,462.00
C to D 0 1940 (BC Crushed)	5.57	3.20	3.67	12.44	440		$5,473.60
C to D Junction Rock (BC Crushed)	5.24	3.20	3.67	12.11	20		$242.20
				Total C.Y.	1000	Sub Total	$12,266.60
						TOTAL ROCKING COSTS	$12,266.60

ROCK PIT DEVELOPMENT AND CROSHING COST SUMMARY

Pit:	Jaw-Run	Location:	NW 1/4, NW 1/4, Sec 1, T2S, R8W
Sale:	**Gold Rush**	Road:	4850 c.y.
Swell:	1.40	Stockpile:	c.y.
Shirinkage	1.16	Total Truck Loads:	4850 c.y.
Drill Pct.:	80%	In Place Total:	3464 c.y.

Pit Development & Cleanup, including Clearing and grubbing of Waste Area, place overburden in Waste Area, spread and compact.							$6,649.53
Drill & Shoot:	$3.25	/cu.yd.	x	2771	cu.yds.	=	$9,005.75
Rip Rock:	$3.00	/cu.yd.	x	693	cu.yds.	=	$2,079.00
Load Crusher:	$1.00	/cu.yd.	x	4850	cu.yds.	=	$4,850.00
Crush Rock:	$3.50	/cu.yd.	x	4850	cu.yds.	=	$16,975.00
Load Dump Truck:	$1.00	/cu.yd.	x	4850	cu.yds.	=	$4,850.00
					Subtotal		$44,409.28

Move In/Set-up Crusher	1	@	$2,465.00	=	$2,465.00
Move In and set up Drill and Compressor	1	@	$898.32	=	$898.32
Move in Roller and Compactor	1	@	$526.50	=	$526.50
Move in Grader	1	@	$863.39	=	$863.39
Move in D-8	1	@	$1,063.82	=	$1,063.82
Move in Loader	1	@	$894.82	=	$894.82
Move in Excavator	1	@	$1,009.82	=	$1,009.82
Move in Trucks	3	@	$191.86	=	$575.58
				Subtotal	$8,297.25
			TOTAL PRODUCTION COSTS		$52,706.53

Base Cost= $10.87 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
E to F 0 100 (Jaw-Run)	4.57	3.20	10.87	18.64	60		$1,118.40
E to F Culvert Surfacing (Jaw-Run)	4.88	3.20	10.87	18.95	20		$379.00
E to F Junction Rock (Jaw-Run)	4.56	3.20	10.87	18.63	20		$372.60
E to F Energy Dissipator (Riprap)	4.71	2.00	10.87	17.58	5		$87.90
G to H 0 3400 (Jaw-Run)	3.07	3.20	10.87	17.14	1860		$31,880.40
G to H Landing Rock (Jaw-Run)	3.00	3.20	10.87	17.07	160		$2,731.20
G to H Junction Rock (Jaw-Run)	3.39	3.20	10.87	17.46	20		$349.20
G to H Energy Dissipator (Riprap)	3.00	2.00	10.87	15.87	20		$317.40
I to J 0 2670 (Jaw-Run)	2.98	3.20	10.87	17.05	1530		$26,086.50
I to J Landing Rock (Jaw-Run)	3.07	3.20	10.87	17.14	320		$5,484.80
I to J Junction Rock (Jaw-Run)	3.87	3.20	10.87	17.94	20		$358.80
K to L 0 170 (Jaw-Run)	3.21	3.20	10.87	17.28	150		$2,592.00
K to L Landing Rock (Jaw-Run)	3.35	3.20	10.87	17.42	80		$1,393.60
K to L Junction Rock (Jaw-Run)	3.07	3.20	10.87	17.14	20		$342.80
M to N 0 400 (Jaw-Run)	4.00	3.20	10.87	18.07	250		$4,517.50
M to N Landing Rock (Jaw-Run)	4.06	3.20	10.87	18.13	80		$1,450.40
M to N Junction Rock (Jaw-Run)	3.93	3.20	10.87	18.00	20		$360.00
O to P 0 330 (Jaw-Run)	4.30	3.20	10.87	18.37	190		$3,490.30
O to P Junction Rock (Jaw-Run)	4.26	3.20	10.87	18.33	20		$366.60
O to P Energy Dissipator (Riprap)	4.32	2.00	10.87	17.19	5		$85.95
				Total C.Y.	4850	Sub Total	$83,765.35
					TOTAL ROCKING COSTS		$83,765.35

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

Sale: **Gold Rush**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
27.0	Pavement	30
2.8	Main Lines	7
6.7	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	Brush Cutter	$725.25		$4.00	0.00	0.00	0	$0.00	$725.25
1	Graders	$863.39		$3.65	0.00	0.00	0	$0.00	$863.39
1	Rollers (smooth/grid) & Compactors	$526.50		$5.00	0.00	0.00	0	$0.00	$526.50
1	Excavators (Med.)	$927.07		$35.50	0.00	0.00	0	$0.00	$927.07
1	Excavators (Large)	$1,009.82	1	$44.80	0.00	0.00	0	$0.00	$1,009.82
1	Tractor (D8)	$1,063.82	2	$15.10	0.00	0.00	0	$0.00	$1,063.82
2	Dump Truck (10 cy +)	$388.55		$2.85	0.00	0.00	0	$0.00	$388.55
1	Dump Truck (Off Hiway)	$981.07	1	$4.75	0.00	0.00	0	$0.00	$981.07
						TOTAL MOVE-IN COSTS:			$6,485.47

OREGON DEPARTMENT OF FORESTRY
CRUISE REPORT
Gold Rush

1. Type of Sale
Regeneration harvest, Recovery

2. Legal Description
Sections 1, 2, 3, 11, 12 of T2S R8W, 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 Clear cut)	58	35
Area 2 (Modified Clear cut)	120	96
Area 3 (Modified Clear cut)	59	42

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
Area 1 was cruised on a 200’ by 250’ spacing. Area 2 was cruised on a 250’ between plots and 380’ between lines. Finally, Area 3 was cruised on a 200’ between plots and 280’ between lines.

The timber sale areas were cruised using variable plot sampling. All conifers 8” DBH and greater and all hardwoods 10” DBH and greater were recorded on all plots. On every plot species, diameter (inch), height, form factor, and sawmill grade were recorded. 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	BAF
1	40.00
2	40.00
3	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

Plot 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 2019 from the cruise date. Plots landing in riparian management areas or areas excluded from the timber sale harvest areas were removed from computation procedures. All units were grown forward to 7/2019, which shows errors with Other Conifer (snags) in the Log Stock Table but was not applied to the Volume Summary Table.

Net sale acreage was used for volume calculation.

Cruise Statistics (Board Foot Volumes)			
Area	Number of Plots	SE (%)	CV (%)
1	36	7.2	43.2
2	24	10.5	50.4
3	24	8.4	40.5
Total	84	8.6 (avg.)	44.7 (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 mainly of red alder but have large pockets of Douglas-fir. The area also has a component of other conifer. It was seeded between 1957 and 1958 and replanted in between 1961 and 1965. All of the Douglas-fir is showing moderate symptoms of SNC. Small portions of the area were sprayed in the 1970's to treat the red alder. Portions of Area 1 were pre-commercially thinned between1991 and 1994.
Area 2 is mainly comprised of Douglas-fir with a component of red alder. The stand was seeded in 1957-1958 and replanted between 1961 and 1965 and is showing moderate symptoms of SNC.
Area 3 is comprised of Douglas-fir and red alder with a minor component of other conifer. This area was seeded with Douglas-fir between 1957 and 1958 and replanted between 1973 and 1974 and is showing moderate symptoms of SNC. The majority of Area 3 was precommercially thinned in 1991 and portions of the stands were sprayed in the 1970's to treat the red alder.

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	Red alder	16.1	60	6
1	Douglas-fir	15.6	74	5
1	Big Leaf Maple	20.2	44	6
2	Red alder	15.9	54	6
2	Douglas-fir	17.7	81	5
3	Red alder	14.7	45	6
3	Douglas-fir	17.7	72	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 the district Marketing Unit in 2019.

9. Revenue Distribution

FDF 100%

Tax Code: 901 – 100%

Deed Numbers: 169

10. Attachments

Volume Summary

Stand Table

Log Stock Tables

Logging Plan

11. Stand and Log Stock Tables Species Key

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

FI TSTNDSUM

Stand Table Summary

Project **GOLDRUSH**

T02S R08W S02 T0001

T02S R08W S02 T0001

Page: 1

Date: 05/08/201

Time: 7:27:01AM

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	08W	02	AREA1GROW	0001	35.00	36	97

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		8		83	77	5.880	2.09	5.98	8.4	41.2	1.43	50	246	50	18	9
DF		10		82	84	7.527	4.18	11.47	10.0	44.7	3.27	115	513	115	40	18
DF		11		84	82	6.220	4.18	9.48	12.0	44.7	3.25	114	424	114	40	15
DF		12		80	95	18.294	14.62	34.52	13.8	53.1	13.54	475	1,834	474	166	64
DF		13		83	99	8.907	8.35	15.84	17.4	70.7	7.86	276	1,120	275	97	39
DF		14		79	93	5.760	6.26	11.71	19.3	68.7	6.43	226	805	225	79	28
DF		15		84	98	6.690	8.35	13.60	20.9	77.3	8.09	284	1,051	283	99	37
DF		16		84	110	10.290	14.62	22.41	25.3	99.0	16.17	567	2,218	566	199	78
DF		17		88	112	5.209	8.35	13.23	24.6	104.1	9.28	326	1,378	325	114	48
DF		18		88	119	4.646	8.35	11.80	28.0	116.5	9.42	330	1,375	330	116	48
DF		19		86	116	3.127	6.26	8.47	28.8	110.8	6.95	244	939	243	85	33
DF		20		88	118	5.645	12.53	13.38	35.2	149.5	13.43	471	2,001	470	165	70
DF		21		85	116	4.267	10.44	12.14	32.8	125.9	11.35	398	1,529	397	139	54
DF		22		88	109	.778	2.09	2.37	35.2	154.7	2.37	83	367	83	29	13
DF		23		83	121	1.423	4.18	4.34	39.0	159.8	4.82	169	693	169	59	24
DF		24		88	125	.653	2.09	1.99	41.3	185.6	2.35	82	370	82	29	13
DF		25		86	125	1.806	6.26	4.89	52.0	225.5	7.25	254	1,104	254	89	39
DF		26		89	99	.557	2.09	1.13	68.5	257.8	2.21	78	292	77	27	10
DF		27		86	126	.516	2.09	1.57	59.7	240.6	2.68	94	379	94	33	13
DF		31		88	110	.783	4.18	.80	146.1	742.3	3.31	116	591	116	41	21
DF		Totals		84	101	98.979	131.54	201.13	23.6	95.6	135.47	4,753	19,226	4,741	1,664	673
RA		11		94	68	3.922	2.66	7.91	10.0	46.9	2.17	79	371	76	28	13
RA		12		80	88	6.592	5.32	13.29	13.6	49.6	4.96	181	658	174	63	23
RA		13		69	75	2.808	2.66	2.83	24.6	62.6	1.91	70	177	67	24	6
RA		14		88	75	7.265	7.98	14.64	14.5	60.9	5.83	212	891	204	74	31
RA		15		83	80	8.438	10.64	10.63	22.3	75.1	6.60	237	798	231	83	28
RA		16		83	49	1.854	2.66	3.74	14.6	57.4	1.50	55	214	53	19	8
RA		17		85	87	6.569	10.64	14.89	23.3	90.4	9.51	347	1,347	333	121	47
RA		18		82	89	7.324	13.30	16.24	22.6	89.1	10.07	367	1,448	353	128	51
RA		19		80	105	2.629	5.32	5.30	34.7	127.8	5.05	184	677	177	64	24
RA		20		89	71	1.187	2.66	2.39	30.1	114.8	1.97	72	274	69	25	10
RA		21		87	76	2.152	5.32	4.34	32.8	106.9	3.90	142	464	137	50	16
RA		22		86	89	.981	2.66	2.96	28.2	125.2	2.30	84	371	80	29	13
RA		25		40	98	.759	2.66	1.53	71.8	52.2	3.02	110	80	106	38	3
RA		27		86	67	.651	2.66	1.31	44.4	182.6	1.60	58	240	56	20	8
RA		Totals		83	81	53.132	77.14	102.00	21.5	78.5	60.39	2,196	8,011	2,114	769	280
BM		14		86	53	2.799	3.07	2.82	24.6	62.6	1.82	69	177	64	24	6
BM		21		89	61	1.244	3.07	2.51	29.9	120.0	1.97	75	301	69	26	11
BM		26		83	54	.811	3.07	1.64	43.3	172.1	1.86	71	282	65	25	10
BM		33		80	54	.504	3.07	.50	186.7	714.0	2.54	94	360	89	33	13
BM		Totals		86	56	5.358	12.30	7.47	41.4	149.8	8.19	309	1,118	287	108	39
OC		9		86	66	2.452	1.12	2.45	18.4	67.5	1.13	45	165	40	16	6
OC		Totals		86	66	2.452	1.12	2.45	18.4	67.5	1.13	45	165	40	16	6
Totals				84	92	159.920	222.10	313.04	23.3	91.1	205.18	7304	28,521	7,181	2,556	998

FI TLOGSTVB

Log Stock Table - MBF

Project: GOLDRUSH

T02S R08W S02 T0001

T02S R08W S02 T0001

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	08W	02	AREA1GROW	0001	35.00	36	97

Page 1
Date 5/8/2019
Time 7:27:01AM

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	32	8		8	1.2							8					
DF		CO	2	40	239	1.1	236	35.1						92	67	57	21			
DF		CO	3	30	5		5	.7			2	2								
DF		CO	3	32	17		17	2.5				7	10							
DF		CO	3	36	6		6	.9			6									
DF		CO	3	40	327	.2	326	48.5			98	114	94	21						
DF		CO	4	12	3		3	.5		3										
DF		CO	4	13	1		1	.2		1										
DF		CO	4	14	1		1	.2		1										
DF		CO	4	15	2		2	.3		1	0									
DF		CO	4	16	1		1	.1		1										
DF		CO	4	17	7		7	1.1		7	0									
DF		CO	4	18	3		3	.4		3										
DF		CO	4	19	1		1	.1		1										
DF		CO	4	21	2		2	.2		2										
DF		CO	4	22	1		1	.1			1									
DF		CO	4	24	2		2	.3		2										
DF		CO	4	25	1		1	.1		1										
DF		CO	4	26	4		4	.6		4										
DF		CO	4	29	2		2	.3		2										
DF		CO	4	30	2		2	.3		2										
DF		CO	4	32	2		2	.2		2										
DF		CO	4	33	3		3	.5		3										
DF		CO	4	34	12		12	1.9		12										
DF		CO	4	36	8		8	1.1		8										
DF		CO	4	37	2		2	.3		2										
DF		CO	4	38	5		5	.7		5										
DF		CO	4	40	12		12	1.7		12										
DF		Totals			676		673	67.4		74	107	123	104	113	75	57	21			
RA		H	2	12	11		11	4.0								11				
RA		H	2	15	5		5	1.9						5						
RA		H	2	16	13		13	4.6							6	7				
RA		H	2	20	8	30.0	6	2.0								6				
RA		H	2	24	8		8	2.9						8						
RA		H	3	15	5		5	1.9					5							
RA		H	3	16	5		5	1.9					5							
RA		H	3	22	6		6	2.2					6							
RA		H	3	32	23	4.8	22	7.7					14			8				
RA		H	3	36	11	7.1	10	3.6					10							
RA		H	3	40	63	1.0	62	22.1					52	10						
RA		H	4	13	2		2	.9			2									
RA		H	4	14	4		4	1.5			4									
RA		H	4	15	1		1	.4			1									
RA		H	4	16	1		1	.4			1									
RA		H	4	17	1		1	.3			1									
RA		H	4	18	2		2	.6			2									
RA		H	4	20	1		1	.4			1									
RA		H	4	23	4		4	1.3			4									
RA		H	4	24	13		13	4.6			4	9								
RA		H	4	27	1		1	.3			1									

FI TLOGSTVB

Log Stock Table - MBF

Project: GOLDRUSH

T02S R08W S02 T0001

T02S R08W S02 T0001

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	08W	02	AREA1GROW	0001	35.00	36	97

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Date 5/8/2019
Time 7:27:01AM

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	28	2		2	.6			2									
RA		H	4	29	4		4	1.3			4									
RA		H	4	32	35	2.5	35	12.3			4	20	11							
RA		H	4	33	5		5	1.9			5									
RA		H	4	34	3		3	1.1			3									
RA		H	4	35	8		8	2.8			8									
RA		H	4	36	8		8	2.7			8									
RA		H	4	38	9		9	3.2			9									
RA		H	4	39	2		2	.8			2									
RA		H	4	40	22	2.5	22	7.7			20	2								
RA		Totals			287	2.2	280	28.1			85	31	104	23	6	32				
BM		*	*	32	13		13	32.2			13									
BM		H	2	16	8		8	21.0								8				
BM		H	2	20	9		9	22.9								9				
BM		H	4	26	1		1	2.3			1									
BM		H	4	32	2		2	5.8			2									
BM		H	4	38	6		6	15.8			6									
BM		Totals			39		39	3.9			22					17				
OC		*	*	32	6		6	100.0			6									
OC		Totals			6		6	.6			6									
Total All Species					1,008		998	100.0		74	220	154	208	136	80	106	21			

FI TSTNDSUM

Stand Table Summary

Project **GOLDRUSH**

T02S R08W S02 T0001

T02S R08W S02 T0001

Page: 1
Date: 04/02/201
Time: 7:45:05AM

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	08W	02	AREA2GROW	0001	96.00	24	98

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		10		84	79	4.376	2.43	8.89	8.1	36.1	2.06	72	321	198	69	31
DF		12		86	84	6.077	4.86	12.35	11.1	46.4	3.92	138	573	377	132	55
DF		14		86	87	11.162	12.14	20.42	18.0	69.9	10.49	368	1,427	1,007	353	137
DF		15		86	92	9.724	12.14	19.76	18.7	75.3	10.51	369	1,487	1,009	354	143
DF		16		86	100	17.092	24.28	38.21	22.4	87.6	24.38	855	3,349	2,340	821	321
DF		17		87	104	21.197	33.99	52.31	23.4	93.1	34.90	1,225	4,870	3,350	1,176	467
DF		18		87	117	13.505	24.28	35.68	26.5	107.1	26.90	944	3,820	2,582	906	367
DF		19		87	110	14.545	29.13	39.41	28.0	113.4	31.47	1,104	4,470	3,021	1,060	429
DF		20		88	110	6.563	14.57	17.79	30.8	125.0	15.62	548	2,223	1,500	526	213
DF		21		87	115	6.945	16.99	20.16	33.2	127.8	19.05	668	2,578	1,829	642	247
DF		22		86	109	7.232	19.42	21.13	33.9	134.5	20.44	717	2,841	1,963	689	273
DF		23		88	120	5.790	16.99	17.65	40.0	179.2	20.11	706	3,163	1,931	677	304
DF		24		86	119	1.519	4.86	4.63	42.6	183.9	5.62	197	852	540	189	82
DF		27		86	128	.600	2.43	1.83	59.0	268.1	3.08	108	490	296	104	47
DF		28		87	114	.558	2.43	1.70	58.5	261.2	2.84	100	444	272	96	43
DF		Totals		87	104	126.888	220.92	311.93	26.0	105.5	231.40	8,119	32,908	22,214	7,794	3,159
RA		11		84	81	4.946	3.35	4.98	12.4	41.7	1.70	62	208	163	59	20
RA		16		86	58	2.338	3.35	2.36	13.1	31.3	.85	31	74	81	30	7
RA		17		86	66	2.071	3.35	2.09	18.9	52.2	1.08	39	109	104	38	10
RA		18		62	71	1.847	3.35	3.72	12.9	41.7	1.32	48	155	126	46	15
RA		19		86	56	1.658	3.35	3.34	24.2	88.7	2.22	81	296	213	78	28
RA		21		86	59	1.357	3.35	2.73	30.7	109.5	2.31	84	300	222	81	29
RA		Totals		82	69	14.216	20.12	19.22	17.9	59.4	9.48	345	1,142	910	331	110
Totals				86	100	141.104	241.04	331.15	25.6	102.8	240.88	8464	34,050	23,124	8,125	3,269

FI TLOGSTVB

Log Stock Table - MBF

Project: GOLDRUSH

T02S R08W S02 T0001

T02S R08W S02 T0001

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	08W	02	AREA2GROW	0001	96.00	24	98

Page 1
Date 4/2/2019
Time 7:45:05AM

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	12	7		7	.2						7						
DF		CO	2	20	22		22	.7							22					
DF		CO	2	40	1,324	1.5	1,304	41.3						628	448	228				
DF		CO	3	12	12		12	.4						12						
DF		CO	3	24	22		22	.7				5	16							
DF		CO	3	30	14		14	.4			8	6								
DF		CO	3	32	222	2.5	217	6.9			18	159	31	8						
DF		CO	3	36	9		9	.3				9								
DF		CO	3	40	1,199	2.9	1,164	36.9			57	317	712	52	26					
DF		CO	4	12	6		6	.2		6										
DF		CO	4	13	7		7	.2		7										
DF		CO	4	14	9		9	.3		9										
DF		CO	4	15	4		4	.1		3	2									
DF		CO	4	16	15		15	.5		15										
DF		CO	4	17	13		13	.4		12	2									
DF		CO	4	18	9		9	.3		9										
DF		CO	4	19	18		18	.6		16	2									
DF		CO	4	21	16		16	.5		7			9							
DF		CO	4	22	6		6	.2		6										
DF		CO	4	23	12		12	.4		12										
DF		CO	4	24	47		47	1.5		5	18	24								
DF		CO	4	25	7		7	.2		7										
DF		CO	4	26	8		8	.2		8										
DF		CO	4	27	10		10	.3		10										
DF		CO	4	28	12		12	.4							12					
DF		CO	4	29	9		9	.3		9										
DF		CO	4	30	15		15	.5		12	3									
DF		CO	4	31	26		26	.8		26										
DF		CO	4	32	37		37	1.2		19	10	8								
DF		CO	4	33	21		21	.7		21										
DF		CO	4	35	6		6	.2		6										
DF		CO	4	36	19		19	.6		19										
DF		CO	4	37	15		15	.5		15										
DF		CO	4	38	11		11	.3		11										
DF		CO	4	40	32		32	1.0		20			12							
DF		Totals			3,220	1.9	3,159	96.6		290	119	528	780	706	508	228				
RA		H	2	18	27	12.5	23	21.4							23					
RA		H	2	32	26		26	23.7						26						
RA		H	4	14	3		3	2.5			3									
RA		H	4	16	4		4	3.4			4									
RA		H	4	24	31		31	28.4				31								
RA		H	4	26	12		12	11.0			12									
RA		H	4	33	10		10	9.5			10									
RA		Totals			113	3.0	110	3.4			29	31		26	23					
Total All Species					3,333	1.9	3,269	100.0		290	148	560	780	732	531	228				

FI TSTNDSUM

Stand Table Summary

Project **GOLDRUSH**

T02S R08W S02 T0001

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	08W	02	AREA3GROW	0001	42.00	24	72

T02S R08W S02 T0001

Date: 04/02/201

Time: 7:56:24AM

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		83	85	16.068	12.84	32.67	12.1	46.4	11.28	396	1,517	474	166	64
DF		13		83	77	3.423	3.21	6.96	11.8	46.4	2.34	82	323	98	35	14
DF		14		83	100	2.951	3.21	6.00	20.0	77.4	3.42	120	464	144	50	20
DF		15		84	85	10.284	12.84	23.53	17.3	69.9	11.57	406	1,645	486	171	69
DF		16		85	101	6.779	9.63	18.38	17.9	76.1	9.40	330	1,399	395	139	59
DF		17		82	96	6.005	9.63	12.21	25.4	92.9	8.84	310	1,134	371	130	48
DF		18		84	108	5.356	9.63	12.71	27.8	100.2	10.08	354	1,274	424	149	53
DF		19		84	101	4.807	9.63	11.40	29.4	112.0	9.54	335	1,278	401	141	54
DF		20		84	101	2.892	6.42	7.35	30.0	109.4	6.29	221	804	264	93	34
DF		21		83	105	3.935	9.63	6.67	42.1	144.5	8.00	281	963	336	118	40
DF		22		83	92	2.390	6.42	4.86	35.4	139.3	4.91	172	677	206	72	28
DF		23		84	109	3.280	9.63	6.67	52.9	190.9	10.06	353	1,273	423	148	53
DF		24		83	110	3.013	9.63	6.13	53.7	223.6	9.37	329	1,370	393	138	58
DF		25		84	100	.926	3.21	1.88	60.7	216.7	3.26	114	408	137	48	17
DF		26		94	138	.856	3.21	2.61	58.9	302.7	4.38	154	790	184	65	33
DF		27		83	99	1.587	6.42	3.23	61.6	214.1	5.66	199	691	238	83	29
DF		31		90	119	1.204	6.42	3.67	70.8	345.7	7.41	260	1,269	311	109	53
DF		Totals		84	96	75.755	131.62	166.93	26.4	103.5	125.84	4,415	17,280	5,285	1,854	726
RA		10		84	67	17.949	10.07	18.09	7.9	31.3	3.91	142	567	164	60	24
RA		12		86	67	4.155	3.36	4.19	20.1	62.7	2.31	84	262	97	35	11
RA		13		81	68	17.701	16.78	24.98	15.5	46.3	10.62	386	1,156	446	162	49
RA		14		82	83	6.105	6.71	12.31	16.0	62.7	5.41	197	771	227	83	32
RA		15		81	75	5.318	6.71	10.72	18.6	67.9	5.48	199	728	230	84	31
RA		16		84	79	9.348	13.42	18.85	19.9	73.1	10.33	376	1,378	434	158	58
RA		18		85	73	3.693	6.71	7.45	23.0	91.4	4.71	171	681	198	72	29
RA		19		83	79	1.657	3.36	3.34	25.2	94.0	2.31	84	314	97	35	13
RA		20		90	91	1.496	3.36	3.02	34.0	146.2	2.82	103	441	118	43	19
RA		21		86	80	4.070	10.07	8.20	36.0	127.1	8.12	295	1,043	341	124	44
RA		22		90	91	1.236	3.36	2.49	48.8	214.1	3.35	122	534	141	51	22
RA		24		90	81	1.039	3.36	2.09	49.2	208.9	2.84	103	437	119	43	18
RA		25		92	92	.957	3.36	2.89	45.2	243.7	3.60	131	706	151	55	30
RA		Totals		84	73	74.724	90.62	118.62	20.2	76.0	65.80	2,393	9,017	2,764	1,005	379
Totals				84	85	150.479	222.24	285.55	23.8	92.1	191.63	6808	26,297	8,049	2,859	1,104

FI TLOGSTVB

Log Stock Table - MBF

Project: GOLDRUSH

T02S R08W S02 T0001

T02S R08W S02 T0001

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	08W	02	AREA3GROW	0001	42.00	24	72

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Date 4/2/2019
Time 7:56:23AM

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	5		5	.6							5					
DF		CO	2	32	11		11	1.6						11						
DF		CO	2	40	290		290	39.9						87	123	39	41			
DF		CO	3	19	9		9	1.2							9					
DF		CO	3	24	39		39	5.4				13	16	11						
DF		CO	3	32	92		92	12.6			20	38	29	6						
DF		CO	3	36	6		6	.9						6						
DF		CO	3	38	2		2	.3			2									
DF		CO	3	40	161		161	22.2			31	29	86	15						
DF		CO	4	12	1		1	.1		1										
DF		CO	4	14	1		1	.1				1								
DF		CO	4	15	4		4	.6		4										
DF		CO	4	16	2		2	.3		2										
DF		CO	4	17	5		5	.7		5										
DF		CO	4	18	10		10	1.4		7	3									
DF		CO	4	19	3		3	.4		2		1								
DF		CO	4	23	5		5	.6		1			4							
DF		CO	4	24	17		17	2.3		5	12									
DF		CO	4	29	3		3	.4		3										
DF		CO	4	32	20		20	2.7		9	11									
DF		CO	4	33	3		3	.4		3										
DF		CO	4	36	5		5	.6		5										
DF		CO	4	37	5		5	.8		5										
DF		CO	4	38	10		10	1.4		10										
DF		CO	4	40	12		12	1.7			12									
DF		CO	4	41	5		5	.7		5										
DF		Totals			726		726	65.7		67	92	81	134	136	136	39	41			
RA		H	2	28	21		21	5.5									21			
RA		H	2	32	28		28	7.5						11		17				
RA		H	2	40	20		20	5.2							20					
RA		H	3	16	8	33.3	5	1.4					5							
RA		H	3	24	64	6.1	60	15.9					19	34	8					
RA		H	3	26	31		31	8.1							15	16				
RA		H	3	40	28	4.4	26	6.9					16	11						
RA		H	4	13	1		1	.3			1									
RA		H	4	15	3		3	.8			3									
RA		H	4	16	12		12	3.3			12									
RA		H	4	18	5		5	1.4			5									
RA		H	4	19	2		2	.5			2									
RA		H	4	22	10		10	2.7			10									
RA		H	4	23	5		5	1.2			5									
RA		H	4	24	21		21	5.6			12	10								
RA		H	4	26	7		7	1.9			7									
RA		H	4	27	4		4	.9			4									
RA		H	4	28	1		1	.4			1									
RA		H	4	32	58	2.7	56	14.8			11	20	25							
RA		H	4	34	3		3	.8			3									
RA		H	4	35	3		3	.9			3									
RA		H	4	40	52		52	13.8			22	30								

FI TLOGSTVB

Log Stock Table - MBF

Project: GOLDRUSH

T02S R08W S02 T0001

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	08W	02	AREA3GROW	0001	42.00	24	72

T02S R08W S02 T0001

Page 2
Date 4/2/2019
Time 7:56:23AM

Spp	S T	So 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		388	2.4	379	34.3			102	60	65	56	43	33	21			
Total All Species				1,114		1,104	100.0		67	194	142	198	192	179	71	62			

Gold Rush

Area 1

Harvest Acres	Green Trees Needed	TPA (Cruise) trees 11" + Conifer	TPA (Cruise) trees 11" + 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	Total trees Non-harvest hardwood	Total trees Non-harvest total	Disbursed Leave Trees and Existing Hard Snags Conifer	Disbursed Leave Trees and Existing Hard Snags Class 1 & 2 Snags	Total reserve (green) trees
35.0	**175.0**	86	58	3	16	0	1.5	20.5	1763	595	2358			**2358**

Area 2

Harvest Acres	Green Trees Needed	TPA (Cruise) trees 11" + Conifer	TPA (Cruise) trees 11" + 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	Total trees Non-harvest hardwood	Total trees Non-harvest total	Disbursed Leave Trees and Existing Hard Snags Conifer	Disbursed Leave Trees and Existing Hard Snags Class 1 & 2 Snags	Total reserve (green) trees
96.0	**480.0**	127	14	0	17	0	2	19	2413	133	2546			**2546**

Area 3

Harvest Acres	Green Trees Needed	TPA (Cruise) trees 11" + Conifer	TPA (Cruise) trees 11" + 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	Total trees Non-harvest hardwood	Total trees Non-harvest total	Disbursed Leave Trees and Existing Hard Snags Conifer	Disbursed Leave Trees and Existing Hard Snags Class 1 & 2 Snags	Total reserve (green) trees
42.0	**210.0**	76	76	0	16	0		16	1216	1216	2432			**2432**

Gold Rush Green Tree Summary

Area	**acres**	**green req**	**green have**	**extra**
1	35.0	175.0	2358	2183
2	96.0	480.0	2546	2066
3	42.0	210.0	2432	2222
Total	**173.0**	**865.0**	**7336**	**6471**

5	GT/Ac. Average Required
42	GT/Ac. Average Have

Gold Rush

A1	
Harv Type	***Acres***
Road	3
Inner Gorge/Riparian	19
MC Ground	35.00
MC Cable	0.00
No Harvest Other	1
Future Harvest	0.05

A2	
Harv Type	***Acres***
Road	5
Inner Gorge/Riparian	17
No Harvest Other	2
MC Ground	0
MC Cable	96

A3	
Harv Type	***Acres***
Road	1
Inner Gorge/Riparian	16
MC Ground	6
MC Cable	36

Total Net MC	***173***
Total Gross	***237***

"STEWARDSHIP IN FORESTRY"

Gold Rush

Volume Summary

Area 1-Harvest Type				
		35 acres		
	Cruised Net	Cruised Net	Hidden	Net Sale
SPECIES	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	19	672	1%	665
Big Leaf Maple	1	39	2%	38
Spruce		0	1%	0
Noble Fir		0	1%	0
Alder	8	280	2%	275
TOTAL	28	992		978

Areas 2-Harvest Type				
		96 acres		
	Cruised Net	Cruised Net	Hidden	Net Sale
SPECIES	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	33	3159	1%	3128
Hemlock		0	1%	0
Spruce		0	1%	0
Noble Fir		0	1%	0
Alder	1	110	2%	107
TOTAL	34	3269		3235

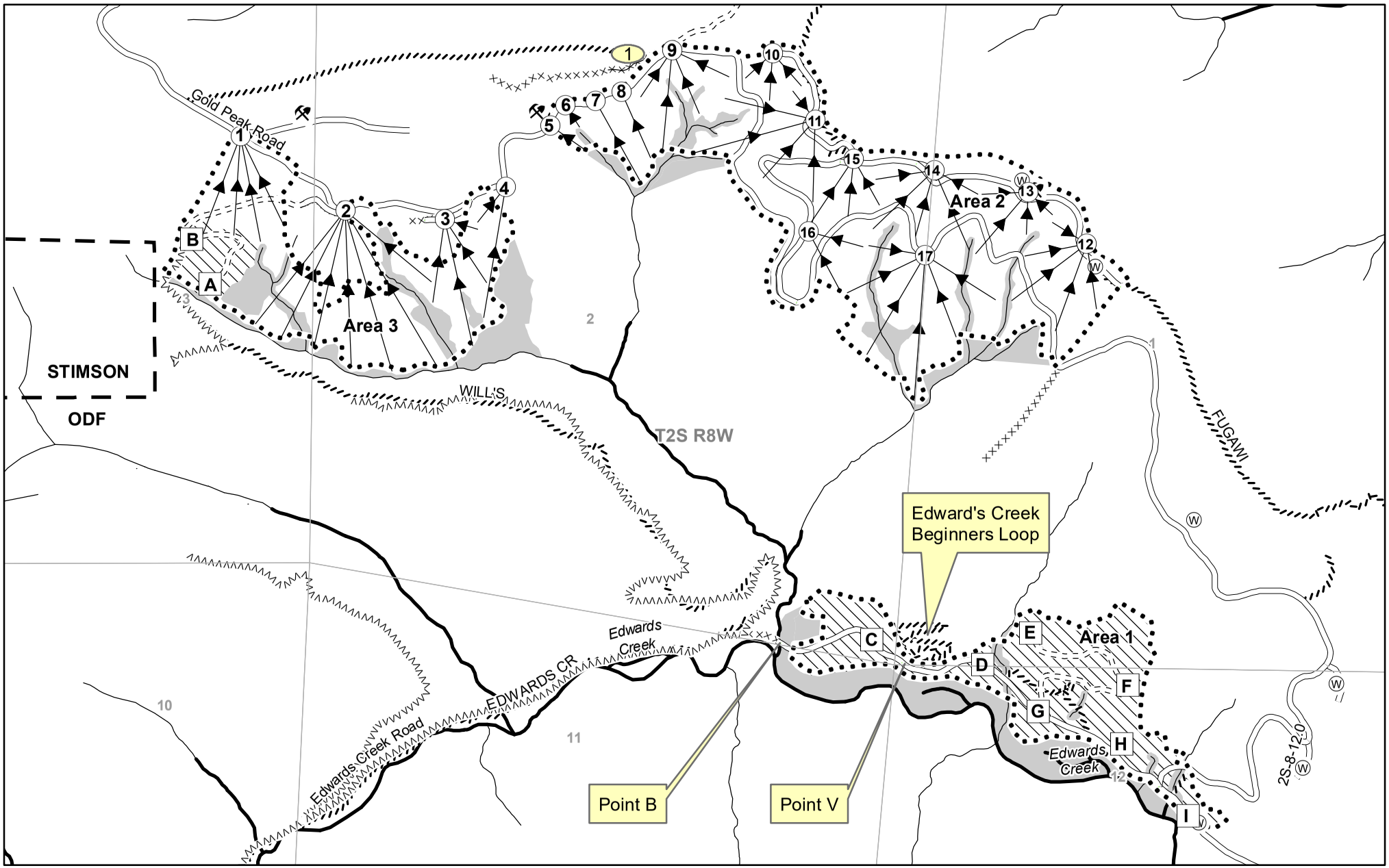
Areas 3-Harvest Type				
		42 acres		
	Cruised Net	Cruised Net	Hidden	Net Sale
SPECIES	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	17	726	1%	719
Hemlock		0	1%	0
Spruce		0	1%	0
Noble Fir		0	1%	0
Alder	9	379	2%	371
TOTAL	26	1105		1090

"STEWARDSHIP IN FORESTRY"

Gold Rush

Volume Summary

TOTAL SALE VOLUME	173	acres
SPECIES	Cruised Net (MBF)	Net Sale (MBF)
Douglas-fir	4557	4511
Big Leaf Maple	39	38
Spruce	0	0
Noble Fir	0	0
Red Alder	769	753
TOTAL	5365	5303



Rock source
Stock pile
Waste area
Bridge
Gate
Survey corner
Domestic water supply intake
Truck turn-around
Helicopter landing zone
Cultural site

Buffer
Non-required thinning
Cable yarding
Ground yarding
Helicopter yarding
Downhill yarding
Green tree retention area

Restricted area
Area boundary
Sale boundary
Ownership boundary
Fish stream
Non-fish stream
Unsurfaced road
Surfaced road
Paved road
Abandoned road

Swing road
Non-project road
Blocked road
OHV trail
Non-motorized trail
Transmission line
Railroad
Cable yarding
Ground Landing
Yarder Landing

LOGGING PLAN

Timber Sale Contract No.
TL-341-2020-W00751-01
GOLD RUSH

Sections 1, 2, 3, 11, 12 of T2S R8W, W.M.
Tillamook County, Oregon.

1,000 0 1,000 Feet

N

Area	Type of Operation	Acres Gross	Net
1	Modified Clearcut	58	35
2	Modified Clearcut	120	96
3	Modified Clearcut	59	42
Total		237	173

Tillamook District GIS
04/23/2019
This product is for informational use and may not have been prepared or suitable for legal, engineering, or surveying purposes.