Timber Sale Appraisal
Kilchis Company

Sale TL-341-2025-W00958-01

District: Tillamook

Date: February 20, 2025

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$1,563,970.96	$37,661.22	$1,601,632.18
		Project Work:	($659,340.00)
		Advertised Value:	$942,292.18

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Date: February 20, 2025

Timber Description

Location: Section(s) 35, 36 of T2N R9W, Section(s) 2 of T1N R9W W.M

Stand Stocking: 60%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	16	0	100
Western Hemlock / Fir	21	0	100
Sitka Spruce	22	0	100
Alder (Red)	18	0	100

Volume by Grade	2S	3S & 4S 6"-11"	Camprun	Total
Douglas - Fir	816	2,884	0	3,700
Western Hemlock / Fir	115	26	0	141
Sitka Spruce	65	73	0	138
Alder (Red)	0	0	582	582
Total	996	2,983	582	4,561

Comments: Additional Costs – KILCHIS COMPANY
Pond Values Used: February 2025
Region: Astoria, Forest Grove, and Tillamook
Western red cedar and other cedars stumpage price = $1,278.00/MBF - $300.24/MBF =$977.76/MBF
Conifer Utility SC and PC = $411.01/MBF x .5 = $205.50/MBF
Pulp (Conifer and Hardwood) Price = $2.50/Ton

FUEL COST ALLOWANCE = $5.00/Gallon
HAULING COST ALLOWANCE ($120.00/hr x 10 hr.= $ 1,200.00) = $1,200/DAY
BRAND AND PAINT ALLOWANCE = $2.00/ MBF

Other costs with profit and risk added:

TOTAL Other Costs with profit and risk to be added = $00.00

Other Costs without Profit and Risk Added:
Slash piling and sorting (Cable Settings): $10/ac x 257 ac. = $2,570
Heliport Construction: $200/unit x 3 unit = $600
Tailhold OR guybacks dozer move-in: $1,000/machine x 4 machines = $4,000
TOTAL Other Costs without Profit and Risk added = $7,170

ODF Road Maintenance
Spot Rocking: 20cy/MMBF/mile x 4.561MMBF x $9/cy x 13.55 miles /4,561 MBF = $2.44/MBF
Interim Grading: $1,150/mile x 13.55 miles x 1 times/ 4,561 MBF = $3.42/MBF
Final Maintenance Grading: $1,500/mile x 13.55 miles/ 4,561 MBF = $4.46/MBF
Final Maintenance Compaction: $900/mile x 6 miles/4,561 MBF = $1.18/MBF
Total Road Maintenance: = $11.50/MBF

Logging Conditions

Combination#: 1

Douglas - Fir	61.35%
Western Hemlock / Fir	72.28%
Sitka Spruce	69.52%
Alder (Red)	54.02%

Logging System: Cable: Large Tower >=70
Process: Harvester Head Delimbing
yarding distance: Long (1,500 ft)
downhill yarding: No
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 10
bd. ft / load: 4000
cost / mbf: $214.47
machines:
Log Loader (A)
Forwarder
Harvester
Tower Yarder (Large)

Combination#: 2

Douglas - Fir	38.65%
Western Hemlock / Fir	27.72%
Sitka Spruce	30.48%
Alder (Red)	45.98%

Logging System: Cable: Large Tower >=70
Process: Harvester Head Delimbing
yarding distance: Medium (800 ft)
downhill yarding: No
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 15
bd. ft / load: 4000
cost / mbf: $142.98
machines:
Log Loader (A)
Forwarder
Harvester
Tower Yarder (Large)

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Logging Costs

Operating Seasons:	2.00	**Profit Risk:**	10%
Project Costs:	$659,340.00	**Other Costs (P/R):**	$0.00
Slash Disposal:	$0.00	**Other Costs:**	$7,170.00

Miles of Road **Road Maintenance:** $11.50

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	4.0	4.5
Western Hemlock / Fir	$0.00	4.0	4.5
Sitka Spruce	$0.00	2.0	3.6
Alder (Red)	$0.00	2.0	3.4

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
$186.84	$11.50	$1.92	$69.44	$0.00	$26.97	$0.00	$2.00	$1.57	$300.24
Western Hemlock / Fir									
$194.66	$11.50	$1.92	$69.44	$0.00	$27.75	$0.00	$2.00	$1.57	$308.84
Sitka Spruce									
$192.68	$11.50	$1.92	$173.61	$0.00	$37.97	$0.00	$2.00	$1.57	$421.25
Alder (Red)									
$181.60	$11.50	$1.92	$183.82	$0.00	$37.88	$0.00	$2.00	$1.57	$420.29

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$711.25	$411.01	$0.00
Western Hemlock / Fir	$0.00	$525.48	$216.64	$0.00
Sitka Spruce	$0.00	$513.19	$91.94	$0.00
Alder (Red)	$0.00	$485.00	$64.71	$0.00

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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	3,700	$411.01	$1,520,737.00
Western Hemlock / Fir	141	$216.64	$30,546.24
Sitka Spruce	138	$91.94	$12,687.72
Alder (Red)	582	$64.71	$37,661.22

Gross Timber Sale Value

Recovery: $1,601,632.18

Prepared By: Nathan Atchison **Phone:** 971-977-9825

PROJECT SUMMARY SHEET

Sale: Kilchis Company

CONSTRUCTION

Point	U to V	4+70	stations =	$11,478.74
Point	W to X	34+05	stations =	$190,820.24
Point	Y to Z	2+90	stations =	$17,970.97
Point	AA to BB	4+10	stations =	$9,104.03
Point	CC to DD	3+10	stations =	$6,325.23
			SUBTOTAL CONSTRUCTION	**$235,699.21**

IMPROVEMENT

Point	A to B	110+70	stations =	$45,606.53
Point	C to D	25+95	stations =	$1,926.56
Point	E to F	9+30	stations =	$2,002.34
Point	G to H	27+00	stations =	$3,725.25
Point	I to J	94+05	stations =	$35,640.74
Point	K to L	5+30	stations =	$946.32
Point	O to P	7+40	stations =	$180.56
Point	Q to R	8+00	stations =	$14,625.48
Point	S to T	11+20	stations =	$1,236.86
Point	EE to FF	602+10	stations =	$175,083.52
Point	GG to HH	1+40	stations =	$894.00
			SUBTOTAL IMPROVEMENT	**$281,868.16**

RECONSTRUCTION

Point	M to N	5+20	stations =	$1,971.68
Point	Q to R	32+00	stations =	$75,615.58
Point	U to V	3+90	stations =	$8,683.46
			SUBTOTAL RECONSTRUCTION	**$86,270.72**

SPECIAL PROJECTS

Brush	6.7	miles of road	$5,963.00
Stockpile	2000.0	Yards of 1 1/2"-0" Crushed rock(A to B)	$29,580.00
Sawtooth Pit		Pit Development, stripping, enhauling	$15,950.00
		SUBTOTAL SPECIAL PROJECTS	**$51,493.00**

MOVE IN **$4,008.91**

GRAND TOTAL **$659,340.00**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **A to B**

Construction -	0+00	stations	Improvement -	110+70	stations	Reconstruction -	0+00	stations
	0.00	miles		2.10	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

Widening	0.255	acres @	$955.00	per acre =	$243.53	
				TOTAL CLEARING AND GRUBBING		$243.53

IMPROVEMENT: EXCAVATION -

Pullback	516	cy. @	$2.20	per c.y.=	$1,135.20	
Widening	1167	cy. @	$2.20	per c.y.=	$2,567.40	
				TOTAL EXCAVATION		$3,702.60

IMPROVEMENT: ENDHAUL -

Pullback	22+15	to	22+95	94	cy. @	$2.08	per c.y.=	$195.52	
Pullback	24+00	to	24+20	8	cy. @	$2.13	per c.y.=	$17.04	
Pullback	26+25	to	27+10	99	cy. @	$1.52	per c.y.=	$150.48	
Pullback	27+10	to	27+85	87	cy. @	$1.45	per c.y.=	$126.15	
Pullback	52+75	to	52+95	20	cy. @	$1.63	per c.y.=	$32.60	
Pullback	59+25	to	59+80	160	cy. @	$1.88	per c.y.=	$300.80	
Pullback	72+50	to	73+15	48	cy. @	$2.35	per c.y.=	$112.80	
Widening	22+15	to	23+30	485	cy. @	$2.08	per c.y.=	$1,008.80	
Widening	26+15	to	28+60	590	cy. @	$1.52	per c.y.=	$896.80	
Widening	72+30	to	73+25	92	cy. @	$2.35	per c.y.=	$216.20	
Spread & compact				1683	cy. @	$0.55	per c.y.=	$925.65	
							TOTAL ENDHAUL		$3,982.84

CULVERTS - MATERIALS & INSTALLATION

Culverts				
90	LF of 18"	$2,272.50		
		$2,272.50		
Culvert Stakes & Markers				
3 markers		$27.00		
			TOTAL CULVERTS	$2,299.50

ROCK

6+70 to	30+10	410	cy. of	Crushed	@	$17.50	per c.y.=	$7,175.00	
Spot / Leveling Rock	As directed	300	cy. of	Crushed	@	$18.50	per c.y.=	$5,550.00	
Spot Rock	9+40	20	cy. of	Jawrun	@	$17.52	per c.y.=	$350.40	
Widening	22+15	20	cy. of	Jawrun	@	$17.79	per c.y.=	$355.80	
Widening	22+15	5	cy. of	Crushed	@	$17.79	per c.y.=	$88.95	
Widening	26+15	10	cy. of	Jawrun	@	$17.88	per c.y.=	$178.80	
Widening	26+15	5	cy. of	Crushed	@	$17.88	per c.y.=	$89.40	
Energy Dissipator	0+00	0	cy. of	Rip rap	@	$0.00	per c.y.=	$0.00	
Energy Dissipator	46+70	20	cy. of	Rip rap	@	$15.96	per c.y.=	$319.20	
Energy Dissipator	48+50	5	cy. of	Rip rap	@	$16.00	per c.y.=	$80.00	
Energy Dissipator	52+30	5	cy. of	Rip rap	@	$16.08	per c.y.=	$80.40	
Culvert Backfill/bedding	55+60	20	cy. of	Crushed	@	$16.65	per c.y.=	$333.00	
Energy Dissipator	55+60	5	cy. of	Rip rap	@	$16.15	per c.y.=	$80.75	
Culvert Backfill/bedding	58+30	20	cy. of	Crushed	@	$18.56	per c.y.=	$371.20	
Energy Dissipator	58+30	5	cy. of	Rip rap	@	$16.21	per c.y.=	$81.05	
Energy Dissipator	63+30	5	cy. of	Rip rap	@	$16.31	per c.y.=	$81.55	
Culvert Backfill/bedding	71+25	20	cy. of	Crushed	@	$16.98	per c.y.=	$339.60	
Energy Dissipator	71+25	5	cy. of	Rip rap	@	$16.48	per c.y.=	$82.40	
Widening	72+30	10	cy. of	Jawrun	@	$18.86	per c.y.=	$188.60	
Widening	72+30	5	cy. of	Crushed	@	$18.86	per c.y.=	$94.30	
Landing Rock	79+10	70	cy. of	Jawrun	@	$19.00	per c.y.=	$1,330.00	
Landing Rock	83+50	70	cy. of	Jawrun	@	$19.09	per c.y.=	$1,336.30	
Landing Rock	87+70	30	cy. of	Jawrun	@	$19.18	per c.y.=	$575.40	
								TOTAL ROCK	$19,162.10

SPECIAL PROJECTS

Construct Jump Up Landing @ station 79+10 -	1.00	@	$3,715.00	each	$3,715.00	
Construct Landings @ stations 83+50 and 87+70	4.00	hours @	$385.00	per hour	$1,540.00	
Construct waste areas -	4.00	hours @	$220.00	per hour	$880.00	
Construct ditchouts -	2.00	@	$60.00	each	$120.00	
Ditch - No Endhaul	7.50	stations @	$90.00	per station	$675.00	
Ditch - Endhaul	24.80	stations @	$145.00	per station	$3,596.00	
Endhaul stumps from landing -	1.00	hours @	$385.00	per hour	$385.00	
Spot Grade and shape road -	49.15	stations @	$24.40	per station	$1,199.26	
Endhaul stumps and slash from 83+50 and 87+70	1.50	hours @	$550.00	per station	$825.00	
Construct 3 waterbars 107+55 to 110+70 -	3.00	@	$33.00	each	$99.00	
Remove culverts from state lands	1.00	@	$236.70	total	$236.70	
Sluff Removal	2.00	hours @	$385.00	per hour	$770.00	
Spot Roll subgrade w/ vibratory roller -	40.00	stations @	$19.40	per station	$776.00	
Clean culverts	2.00	@	$25.00	each	$50.00	
Remove large stumps -	2.00	@	$110.00	each	$220.00	
Slash removal -	2.00	hours @	$385.00	per hour	$770.00	
Grass seed -	0.60	acres @	$310.00	per acre	$186.00	
Mulching -	0.200	acres @	$865.00	per acre	$173.00	
				TOTAL SPECIAL PROJECTS		$16,215.96

GRAND TOTAL **$45,606.53**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **C to D**

Construction -	0+00	stations	Improvement -	25+95	stations	Reconstruction -	0+00	stations
	0.00	miles		0.49	miles		0.00	miles

CULVERTS - MATERIALS & INSTALLATION

Culverts

30	LF of 18"	$757.50
		$757.50

Culvert Stakes & Markers

1	markers	$9.00

TOTAL CULVERTS **$766.50**

ROCK

Culvert Backfill/bedding	1+00	20	cy. of	Crushed	@	$14.62	per c.y.=	$292.40
Energy Dissipator	1+00	5	cy. of	Rip rap	@	$14.12	per c.y.=	$70.60
Spot Rock	As Directed	30	cy. of	Crushed	@	$14.66	per c.y.=	$439.80

TOTAL ROCK **$802.80**

SPECIAL PROJECTS

Ditch - Endhaul	1.00	stations @	$145.00	per station	$145.00
Clean culvert	1.00	@	$25.00	each	$25.00
Grade and shape road -	6.65	stations @	$24.40	per station	$162.26
Clean culverts	1.00	@	$25.00	each	$25.00

TOTAL SPECIAL PROJECTS **$357.26**

GRAND TOTAL **$1,926.56**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **E to F**

Construction -	0+00	stations	Improvement -	9+30	stations	Reconstruction -	0+00	stations
	0.00	miles		0.18	miles		0.00	miles

ROCK

Spot Rock	As Directed	10	cy. of	Crushed	@	$14.76	per c.y.=	$147.60	
Landing Rock	2+30	60	cy. of	Jawrun	@	$16.79	per c.y.=	$1,007.40	
								TOTAL ROCK	**$1,155.00**

SPECIAL PROJECTS

Construct Landing 2+30	2.00	hours @	$220.00	per hour	$440.00	
Grade and shape road -	9.30	stations @	$24.40	per station	$226.92	
Roll subgrade	9.30	stations @	$19.40	per station	$180.42	
					TOTAL SPECIAL PROJECTS	**$847.34**

GRAND TOTAL **$2,002.34**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **G to H**

Construction -	0+00	stations	Improvement -	27+00	stations	Reconstruction -	0+00	stations
	0.00	miles		0.51	miles		0.00	miles

ROCK

Spot Rock	As Directed	50	cy. of	Crushed	@	$13.24	per c.y.=	$662.00
							TOTAL ROCK	**$662.00**

SPECIAL PROJECTS

Remove Ravel @ 9+25	0.25	hours @	$485.00	per hour	$121.25	
Reestablish road prism @ 15+40	6.00	hours @	$220.00	per hour	$1,320.00	
Construct waste areas -	4.00	hours @	$220.00	per hour	$880.00	
Grade and shape road -	5.00	stations @	$24.40	per station	$122.00	
Grass seed -	2.00	acres @	$310.00	per acre	$620.00	
					TOTAL SPECIAL PROJECTS	**$3,063.25**

GRAND TOTAL **$3,725.25**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **I to J**

Construction -	0+00	stations	Improvement -	94+05	stations	Reconstruction -	0+00	stations
	0.00	miles		1.78	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

Side cast	0.083	acres @	$955.00	per acre =	$79.27
Widening	0.098	acres @	$955.00	per acre =	$93.59
				TOTAL CLEARING AND GRUBBING	**$172.86**

IMPROVEMENT: EXCAVATION -

Pullback	451	cy. @	$2.20	per c.y.=	$992.20	
Widening	515	cy. @	$2.20	per c.y.=	$1,133.00	
					TOTAL EXCAVATION	**$2,125.20**

IMPROVEMENT: ENDHAUL -

Pullback	7+00	to	7+50	78	cy. @	$1.62	per c.y.=	$126.36	
Pullback	7+50	to	8+15	64	cy. @	$1.64	per c.y.=	$104.96	
Pullback	8+15	to	8+80	101	cy. @	$1.67	per c.y.=	$168.67	
Pullback	8+80	to	9+85	122	cy. @	$1.70	per c.y.=	$207.40	
Pullback	60+95	to	61+35	47	cy. @	$1.97	per c.y.=	$92.59	
Pullback	72+25	to	72+35	23	cy. @	$2.34	per c.y.=	$53.82	
Pullback	80+10	to	80+30	16	cy. @	$2.63	per c.y.=	$42.08	
Widening	7+75	to	10+60	515	cy. @	$1.63	per c.y.=	$839.45	
Spread & compact				966	cy. @	$0.55	per c.y.=	$531.30	
								TOTAL ENDHAUL	**$2,166.63**

CULVERTS - MATERIALS & INSTALLATION

Culverts						
330	LF of 18"	$8,332.50	30	LF of 24"	$1,147.50	
		$8,332.50			$1,147.50	
Culvert Stakes & Markers						
13	markers	$117.00				
					TOTAL CULVERTS	**$9,597.00**

ROCK

Spot / Leveling Rock	As Directed	300	cy. of	Crushed	@	$13.20	per c.y.=	$3,960.00	
Culvert Backfill/bedding	20yds each	240	cy. of	Crushed	@	$13.16	per c.y.=	$3,158.40	
Energy Dissipator	5yds each	60	cy. of	Rip rap	@	$12.66	per c.y.=	$759.60	
Widening	7+75	40	cy. of	Jawrun	@	$14.51	per c.y.=	$580.40	
Widening	7+75	10	cy. of	Crushed	@	$14.51	per c.y.=	$145.10	
Rock over ditch	60+95	5	cy. of	Jawrun	@	$13.34	per c.y.=	$66.70	
Energy Dissipator	62+00	5	cy. of	Rip rap	@	$12.86	per c.y.=	$64.30	
Energy Dissipator/wall	63+00	30	cy. of	Rip rap	@	$12.87	per c.y.=	$386.10	
Energy Dissipator/wall	66+40	10	cy. of	Rip rap	@	$12.92	per c.y.=	$129.20	
Leveling Rock	71+25	20	cy. of	Crushed	@	$13.28	per c.y.=	$265.60	
								TOTAL ROCK	**$9,515.40**

SPECIAL PROJECTS

Construct waste areas -	2.00	hours @	$220.00	per hour	$440.00	
Construct ditchouts -	3.00	@	$60.00	each	$180.00	
Ditch - No Endhaul	24.25	stations @	$108.00	per station	$2,619.00	
Ditch - Endhaul	25.40	stations @	$174.00	per station	$4,419.60	
Repair culvert -	0.25	hours @	$220.00	per hour	$55.00	
Grade and shape road -	62.00	stations @	$24.40	per station	$1,512.80	
Roll subgrade	62.00	stations @	$19.40	per station	$1,202.80	
Sluff Removal	2.00	hours @	$385.00	per hour	$770.00	
Clean culvert	1.00	@	$33.00	each	$33.00	
Remove culverts from state lands	1.00	@	$236.70	total	$236.70	
Grass seed -	1.50	acres @	$310.00	per acre	$465.00	
Mulching -	0.150	acres @	$865.00	per acre	$129.75	
					TOTAL SPECIAL PROJECTS	**$12,063.65**

GRAND TOTAL **$35,640.74**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **K to L**

Construction -	0+00	stations	Improvement -	5+30	stations	Reconstruction -	0+00	stations
	0.00	miles		0.10	miles		0.00	miles

ROCK

Spot Rock	As Directed	10	cy. of	Jawrun	@	$12.90	per c.y.=	$129.00	
								TOTAL ROCK	**$129.00**

SPECIAL PROJECTS

Construct waste areas -	2.00	hours @	$220.00	per hour	$440.00	
Grade and shape road -	5.30	stations @	$24.40	per station	$129.32	
Grass seed -	0.80	acres @	$310.00	per acre	$248.00	
					TOTAL SPECIAL PROJECTS	**$817.32**

GRAND TOTAL **$946.32**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **M to N**

Construction -	0+00	stations	Improvement -		stations	Reconstruction -	5+20	stations
	0.00	miles		0.00	miles		0.10	miles

ROCK

0+00 to	1+00	50	cy. of	Jawrun	@	$12.91	per c.y.=	$645.50	
Intersection Widening	0+00	30	cy. of	Jawrun	@	$12.91	per c.y.=	$387.30	
							TOTAL ROCK		**$1,032.80**

SPECIAL PROJECTS

Construct waste areas -	2.00	hours @	$220.00	per hour	$440.00	
Grade and shape road -	5.20	stations @	$24.40	per station	$126.88	
Grass seed -	1.20	acres @	$310.00	per acre	$372.00	
				TOTAL SPECIAL PROJECTS		**$938.88**

GRAND TOTAL **$1,971.68**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **O to P**

Construction -	0+00	stations	Improvement -	7+40	stations	Reconstruction -	0+00	stations
	0.00	miles		0.14	miles		0.00	miles

SPECIAL PROJECTS

Grade and shape road -	7.40	stations @	$24.40	per station	$180.56	
				TOTAL SPECIAL PROJECTS		**$180.56**
				GRAND TOTAL		**$180.56**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **Q to R**

Construction -	0+00	stations	Improvement -	8+00	stations	Reconstruction -	32+00	stations
	0.00	miles		0.15	miles		0.61	miles

RECONSTRUCTION: CLEARING AND GRUBBING -

Side cast	0.114	acres @	$955.00	per acre =	$108.87
Widening	0.265	acres @	$955.00	per acre =	$253.08
				TOTAL CLEARING AND GRUBBING	**$361.95**

RECONSTRUCTION: EXCAVATION -

Pullback	383	cy. @	$2.20	per c.y.=	$842.60
Widening	2089	cy. @	$2.20	per c.y.=	$4,595.80
				TOTAL EXCAVATION	**$5,438.40**

RECONSTRUCTION: ENDHAUL -

Pullback	8+95	to	10+30	156	cy. @	$3.55	per c.y.=	$553.80
Pullback	12+25	to	12+40	18	cy. @	$3.64	per c.y.=	$65.52
Pullback	25+20	to	26+45	73	cy. @	$4.13	per c.y.=	$301.49
Pullback	33+30	to	33+75	26	cy. @	$4.41	per c.y.=	$114.66
Pullback	36+25	to	36+85	35	cy. @	$4.52	per c.y.=	$158.20
Pullback	37+30	to	39+50	75	cy. @	$4.58	per c.y.=	$343.50
Widening	8+95	to	10+80	446	cy. @	$3.56	per c.y.=	$1,587.76
Widening	14+55	to	15+45	217	cy. @	$3.74	per c.y.=	$811.58
Widening	25+00	to	25+45	407	cy. @	$4.11	per c.y.=	$1,672.77
Widening	25+45	to	26+05	361	cy. @	$4.13	per c.y.=	$1,490.93
Widening	26+05	to	26+65	217	cy. @	$4.15	per c.y.=	$900.55
Widening	27+50	to	28+10	116	cy. @	$4.20	per c.y.=	$487.20
Widening	35+80	to	36+70	325	cy. @	$4.51	per c.y.=	$1,465.75
Spread & compact				2472	cy. @	$0.55	per c.y.=	$1,359.60
							TOTAL ENDHAUL	**$11,313.31**

CULVERTS - MATERIALS & INSTALLATION

Culverts

90	LF of 18"	$2,272.50	120	LF of 24"	$4,590.00

Culvert Stakes & Markers

7 markers $63.00

TOTAL CULVERTS **$6,925.50**

ROCK

7+25	to	8+00	60	cy. of	Jawrun	@	$17.20	per c.y.=	$1,032.00
8+00	to	40+00	1,780	cy. of	Jawrun	@	$17.71	per c.y.=	$31,523.80
Culvert Backfill		11+40	20	cy. of	Crushed	@	$15.43	per c.y.=	$308.60
Energy Dissipator		11+40	30	cy. of	Rip Rap	@	$14.93	per c.y.=	$447.90
Culvert Backfill		13+00	20	cy. of	Crushed	@	$15.46	per c.y.=	$309.20
Energy Dissipator		13+00	5	cy. of	Rip Rap	@	$14.96	per c.y.=	$74.80
Culvert Backfill		15+45	20	cy. of	Crushed	@	$15.51	per c.y.=	$310.20
Energy Dissipator		15+45	20	cy. of	Rip Rap	@	$15.01	per c.y.=	$300.20
Culvert Backfill		17+05	20	cy. of	Crushed	@	$15.55	per c.y.=	$311.00
Energy Dissipator		17+05	5	cy. of	Rip Rap	@	$15.05	per c.y.=	$75.25
Culvert Backfill		18+00	20	cy. of	Crushed	@	$15.57	per c.y.=	$311.40
Energy Dissipator		18+00	5	cy. of	Rip Rap	@	$15.07	per c.y.=	$75.35
Stump Removal		18+75	20	cy. of	Jawrun	@	$15.58	per c.y.=	$311.60
Rock Buttress		21+35	10	cy. of	Rip Rap	@	$15.14	per c.y.=	$151.40
Rock Buttress		21+35	40	cy. of	Jawrun	@	$15.64	per c.y.=	$625.60
Culvert Backfill		21+60	20	cy. of	Crushed	@	$15.64	per c.y.=	$312.80
Energy Dissipator		21+60	5	cy. of	Rip Rap	@	$15.14	per c.y.=	$75.70
Rock Buttress		22+20	10	cy. of	Rip Rap	@	$15.15	per c.y.=	$151.50
Rock Buttress		22+20	30	cy. of	Jawrun	@	$15.65	per c.y.=	$469.50
Rock Buttress		24+40	10	cy. of	Rip Rap	@	$15.20	per c.y.=	$152.00
Rock Buttress		24+40	30	cy. of	Jawrun	@	$15.70	per c.y.=	$471.00
Rock Buttress		26+05	10	cy. of	Rip Rap	@	$15.24	per c.y.=	$152.40
Rock Buttress		26+05	30	cy. of	Jawrun	@	$15.74	per c.y.=	$472.20
Turnaround		30+00	50	cy. of	Jawrun	@	$15.82	per c.y.=	$791.00
Culvert Backfill		30+80	20	cy. of	Crushed	@	$15.14	per c.y.=	$302.80
Energy Dissipator		30+80	5	cy. of	Rip Rap	@	$15.34	per c.y.=	$76.70
Landing Rock		36+25	50	cy. of	Jawrun	@	$15.95	per c.y.=	$797.50
								TOTAL ROCK	**$40,393.40**

SPECIAL PROJECTS

Construct Landings	4.00	hours @	$220.00	per hour	$880.00
Remove ravel and woody debris, and endhaul	30.00	hours @	$550.00	per hour	$16,500.00
Rock Hammering	12.00	hours @	$275.00	per hour	$3,300.00
Ditch - Endhaul	9.10	stations @	$145.00	per station	$1,319.50
Endhaul stumps from landing -	2.00	hours @	$385.00	per hour	$770.00
Grade and shape road -	40.00	stations @	$24.40	per station	$976.00
Roll subgrade w/ vibratory roller prior to rocking -	40.00	stations @	$19.40	per station	$776.00
Road Lowering 15+25 to 16+60	2.00	hours @	$385.00	per hour	$770.00
Remove large stumps -	2.00	lump sum @	$110.00	each	$220.00
Grass seed -	0.40	acres @	$310.00	per acre	$124.00
Mulching -	0.200	acres @	$865.00	per acre	$173.00
				TOTAL SPECIAL PROJECTS	**$25,808.50**

GRAND TOTAL **$90,241.06**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **S to T**

Construction -	0+00	stations	Improvement -	11+20	stations	Reconstruction -	0+00	stations
	0.00	miles		0.21	miles		0.00	miles

ROCK

Spot Rock	As Directed	10	cy. of	Crushed	@	$15.13	per c.y.=	$151.30	
								TOTAL ROCK	**$151.30**

SPECIAL PROJECTS

Construct waste areas -	2.00	hours @	$220.00	per hour	$440.00	
Grade and shape road -	11.20	stations @	$24.40	per station	$273.28	
Roll subgrade w/ vibratory roller prior to rocking -	11.20	stations @	$19.40	per station	$217.28	
Grass seed -	0.50	acres @	$310.00	per acre	$155.00	
					TOTAL SPECIAL PROJECTS	**$1,085.56**

GRAND TOTAL **$1,236.86**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **U to V**

Construction -	4+70	stations	Improvement -	0+00	stations	Reconstruction -	3+90	stations
	0.09	miles		0.00	miles		0.07	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		Drill & Shoot	Endhaul	
3+90		8+60	10%			$881	=		$4,140	$4,140.00
									TOTAL	**$4,140.00**

RECONSTRUCTION: CLEARING AND GRUBBING -

Widening	0.030	acres @	$955.00	per acre =	$28.65	
				TOTAL CLEARING AND GRUBBING		**$28.65**

RECONSTRUCTION: EXCAVATION -

Widening	502	cy. @	$2.20	per c.y.=	$1,104.40	
				TOTAL EXCAVATION		**$1,104.40**

RECONSTRUCTION: ENDHAUL -

Widening	1+70	to	2+35	502	cy. @	$2.36	per c.y.=	$1,184.72	
Spread & compact				502	cy. @	$0.55	per c.y.=	$276.10	
							TOTAL ENDHAUL		**$1,460.82**

ROCK

0+00 to	8+60	490	cy. of	Jawrun	@	$17.71	per c.y.=	$8,677.90	
Intersection Widening	0+00	30	cy. of	Jawrun	@	$17.62	per c.y.=	$528.60	
Turnaround	3+75	60	cy. of	Jawrun	@	$17.70	per c.y.=	$1,062.00	
Landing Rock	8+60	70	cy. of	Jawrun	@	$17.80	per c.y.=	$1,246.00	
							TOTAL ROCK		**$11,514.50**

SPECIAL PROJECTS

Construct waste areas -	2.00	hours @	$220.00	per hour	$440.00	
Endhaul stumps from landing -	0.25	hours @	$385.00	per hour	$96.25	
Grade and shape road -	8.60	stations @	$24.40	per station	$209.84	
Roll subgrade w/ vibratory roller prior to rocking -	8.60	stations @	$19.40	per station	$166.84	
Remove large stumps -	8.00	lump sum @	$110.00	each	$880.00	
Grass seed -	0.39	acres @	$310.00	per acre	$120.90	
				TOTAL SPECIAL PROJECTS		**$1,913.83**

GRAND TOTAL **$20,162.20**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **W to X**

Construction -	34+05	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		Drill & Shoot	Endhaul	
0+00		0+80	31%			$1,613	=		$820	$1,290.00
0+80		2+20	119%			$15,086	=		$16,300	$21,120.00
2+20		3+65	68%			$8,921	=		$8,235	$12,935.00
3+65		5+00	98%			$22,981	=	$10,335	$11,610	$31,025.00
5+00		5+80	72%			$8,425	=		$4,305	$6,740.00
5+80		7+60	47%			$3,586	=		$5,770	$6,455.00
7+60		10+90	11%			$1,145	=		$3,365	$3,780.00
10+90		15+95	35%			$3,569	=		$11,840	$18,025.00
15+95		27+30	15%			$1,552	=		$10,835	$17,610.00
27+30		30+35	65%			$5,593	=		$10,230	$17,060.00
30+35		34+05	31%			$257	=			$950.00
									TOTAL	**$136,990.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts			
30	LF of 18"	$757.50	
Culvert Stakes & Markers			
1	markers	$9.00	
		TOTAL CULVERTS	**$766.50**

ROCK

0+00 to	34+05	1,880	cy. of	Jawrun	@	$17.39	per c.y.=	$32,693.20	
Junction Rock	0+00	30	cy. of	Jawrun	@	$17.03	per c.y.=	$510.90	
Traction Rock	0+65	20	cy. of	Crushed	@	$17.05	per c.y.=	$341.00	
Traction Rock	3+50	25	cy. of	Crushed	@	$17.12	per c.y.=	$428.00	
Landing Rock	10+05	50	cy. of	Jawrun	@	$17.25	per c.y.=	$862.50	
Traction Rock	12+15	10	cy. of	Crushed	@	$17.29	per c.y.=	$172.90	
Landing Rock	14+35	70	cy. of	Jawrun	@	$17.34	per c.y.=	$1,213.80	
Traction Rock	15+10	20	cy. of	Crushed	@	$17.35	per c.y.=	$347.00	
Landing Rock	19+40	60	cy. of	Jawrun	@	$17.44	per c.y.=	$1,046.40	
Traction Rock	21+95	10	cy. of	Crushed	@	$17.50	per c.y.=	$175.00	
Landing Rock	26+15	70	cy. of	Jawrun	@	$17.59	per c.y.=	$1,231.30	
Landing Rock	34+05	70	cy. of	Jawrun	@	$17.75	per c.y.=	$1,242.50	
Energy Dissipator	0+75	5	cy. of	Rip Rap	@	$17.05	per c.y.=	$85.25	
								TOTAL ROCK	**$40,349.75**

SPECIAL PROJECTS

Construct waste areas -	4.00	hours @	$220.00	per hour	$880.00	
Construct fill 10+05 to 11+15	1.00	@	$220.00	each	$220.00	
Endhaul stumps from landing -	3.00	hours @	$385.00	per hour	$1,155.00	
Grade and shape road -	34.05	stations @	$24.40	per station	$830.82	
Roll subgrade w/ vibratory roller prior to rocking -	34.05	stations @	$19.40	per station	$660.57	
Remove large stumps -	76.00	lump sum @	$110.00		$8,360.00	
Grass seed -	1.96	acres @	$310.00	per acre	$607.60	
					TOTAL SPECIAL PROJECTS	**$12,713.99**

GRAND TOTAL **$190,820.24**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **Y to Z**

Construction -	2+90	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.05	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		Drill & Shoot	Endhaul	
0+00		0+55	38%			$3,100	=		$1,125	$1,705.00
0+55		1+30	48%			$3,200	=		$1,630	$2,400.00
1+30		2+90	17%			$4,528	=		$4,780	$7,245.00
									TOTAL	**$11,350.00**

ROCK

0+00	to	2+90	180	cy. of	Jawrun	@	$17.20	per c.y.=	$3,096.00	
0+75	to	1+30	10	cy. of	Crushed	@	$17.19	per c.y.=	$171.90	
Intersection Widening		0+00	30	cy. of	Jawrun	@	$17.17	per c.y.=	$515.10	
Landing Rock		2+90	60	cy. of	Jawrun	@	$17.24	per c.y.=	$1,034.40	
									TOTAL ROCK	**$4,817.40**

SPECIAL PROJECTS

Endhaul stumps from landing -	0.25	hours @	$385.00	per hour	$96.25	
Grade and shape road -	2.90	stations @	$24.40	per station	$70.76	
Roll subgrade w/ vibratory roller prior to rocking -	2.90	stations @	$19.40	per station	$56.26	
Remove large stumps -	14.00	lump sum @	$110.00		$1,540.00	
Grass seed -	0.13	acres @	$310.00	per acre	$40.30	
				TOTAL SPECIAL PROJECTS		**$1,803.57**

GRAND TOTAL **$17,970.97**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **AA to BB**

Construction -	4+10	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.08	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		Drill & Shoot	Endhaul	
0+00		1+80	29%			$229	=			$412.20
1+80		4+10	9%			$103	=			$236.90
									TOTAL	**$649.10**

ROCK

0+00	to	4+10	220	cy. of	Jawrun	@	$17.73	per c.y.=	$3,900.60	
0+60	to	3+55	40	cy. of	Crushed	@	$17.73	per c.y.=	$709.20	
Intersection Widening		0+00	50	cy. of	Jawrun	@	$17.69	per c.y.=	$884.50	
Landing Rock		4+10	70	cy. of	Jawrun	@	$17.77	per c.y.=	$1,243.90	
									TOTAL ROCK	**$6,738.20**

SPECIAL PROJECTS

Construct Landings	2.00	hours @	$220.00	per hour	$440.00	
Construct Waste area -	1.00	hours @	$220.00	per hour	$220.00	
Endhaul stumps from landing -	0.25	hours @	$385.00	per hour	$96.25	
Grade and shape road -	4.10	stations @	$24.40	per station	$100.04	
Roll subgrade w/ vibratory roller prior to rocking -	4.10	stations @	$19.40	per station	$79.54	
Remove large stumps -	6.00	lump sum @	$110.00		$660.00	
Grass seed -	0.39	acres @	$310.00	per acre	$120.90	
				TOTAL SPECIAL PROJECTS		**$1,716.73**

GRAND TOTAL **$9,104.03**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **CC to DD**

Construction -	3+10	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.06	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		Drill & Shoot	Endhaul	
0+00		0+80	22%			$193	=			$154.40
0+80		1+90	34%			$265	=			$291.50
1+90		3+10	21%			$193	=			$231.60
									TOTAL	**$677.50**

ROCK

0+00	to	3+10	170	cy. of	Jawrun	@	$17.76	per c.y.=	$3,019.20	
0+80	to	1+90	20	cy. of	Crushed	@	$17.76	per c.y.=	$355.20	
Intersection Widening		0+00	30	cy. of	Jawrun	@	$17.73	per c.y.=	$531.90	
Landing Rock		3+10	70	cy. of	Jawrun	@	$17.80	per c.y.=	$1,246.00	
									TOTAL ROCK	**$5,152.30**

SPECIAL PROJECTS

Construct Landings	1.00	hours @	$220.00	per hour	$220.00	
Endhaul stumps from landing -	0.25	hours @	$385.00	per hour	$96.25	
Grade and shape road -	3.10	stations @	$24.40	per station	$75.64	
Roll subgrade w/ vibratory roller prior to rocking -	3.10	stations @	$19.40	per station	$60.14	
Grass seed -	0.14	acres @	$310.00	per acre	$43.40	
					TOTAL SPECIAL PROJECTS	**$495.43**

GRAND TOTAL **$6,325.23**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **EE to FF**

Construction -	0+00	stations	Improvement -	602+10	stations	Reconstruction -	0+00	stations
	0.00	miles		11.40	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

Side cast	0.109	acres @	$955.00	per acre =	$104.10	
Widening	0.182	acres @	$955.00	per acre =	$173.81	
				TOTAL CLEARING AND GRUBBING		**$277.91**

IMPROVEMENT: EXCAVATION -

Pullback	606	cy. @	$2.20	per c.y.=	$1,333.20	
Widening	658	cy. @	$2.20	per c.y.=	$1,447.60	
				TOTAL EXCAVATION		**$2,780.80**

IMPROVEMENT: ENDHAUL -

Pullback	162+30	to	162+70	35	cy. @	$1.67	per c.y.=	$58.45	
Pullback	172+15	to	172+50	21	cy. @	$1.86	per c.y.=	$39.06	
Pullback	193+35	to	194+05	101	cy. @	$1.44	per c.y.=	$145.44	
Pullback	207+40	to	207+75	14	cy. @	$3.25	per c.y.=	$45.50	
Pullback	307+50	to	307+95	49	cy. @	$1.88	per c.y.=	$92.12	
Pullback	308+75	to	309+05	44	cy. @	$1.84	per c.y.=	$80.96	
Pullback	314+20	to	314+50	26	cy. @	$1.64	per c.y.=	$42.64	
Rock Buttress	339+90	to	340+25	14	cy. @	$2.62	per c.y.=	$36.68	
Rock Buttress	356+80	to	357+15	203	cy. @	$2.60	per c.y.=	$527.80	
Rock Buttress	401+40	to	402+25	99	cy. @	$3.22	per c.y.=	$318.78	
Pullback	439+75	to	440+05	26	cy. @	$1.68	per c.y.=	$43.68	
Pullback	494+40	to	494+75	10	cy. @	$1.21	per c.y.=	$12.10	
Rock Buttress	508+70	to	509+00	26	cy. @	$1.49	per c.y.=	$38.74	
Pullback	574+90	to	575+40	16	cy. @	$2.13	per c.y.=	$34.08	
Widening	161+70	to	163+55	94	cy. @	$1.67	per c.y.=	$156.98	
Widening	192+75	to	194+65	69	cy. @	$1.44	per c.y.=	$99.36	
Widening	206+75	to	208+00	64	cy. @	$3.25	per c.y.=	$208.00	
Widening	308+55	to	310+25	82	cy. @	$1.82	per c.y.=	$149.24	
Widening	314+00	to	315+55	150	cy. @	$1.63	per c.y.=	$244.50	
Widening	574+60	to	575+70	199	cy. @	$2.98	per c.y.=	$593.02	
Spread & compact				1342	cy. @	$0.55	per c.y.=	$738.10	
							TOTAL ENDHAUL		**$3,705.23**

CULVERTS - MATERIALS & INSTALLATION

Culverts

710	LF of 18"	$17,170.00	100	LF of 24"	$3,825.00	
			40	LF of 36"	$2,121.62	
			40	LF of 48"	$3,955.20	

Culvert Stakes & Markers

35 markers $315.00

TOTAL CULVERTS **$27,386.82**

ROCK

354+35 to	472+90	1,410	cy. of	Crushed	@	$18.22	per c.y.=	$25,690.20
472+90 to	602+10	1,530	cy. of	Crushed	@	$15.60	per c.y.=	$23,868.00
Culvert Backfill/bedding	21+30	30	cy. of	Crushed	@	$24.68	per c.y.=	$740.40
Energy Dissipator	21+30	5	cy. of	Rip Rap	@	$24.18	per c.y.=	$120.90
Energy Dissipator	43+00	5	cy. of	Rip Rap	@	$23.72	per c.y.=	$118.60
Energy Dissipator	45+25	5	cy. of	Rip Rap	@	$23.67	per c.y.=	$118.35
Culvert Backfill/bedding	66+60	10	cy. of	Crushed	@	$23.72	per c.y.=	$237.20
Culvert Backfill/bedding(30	60+10 to 354+55	450	cy. of	Crushed	@	$20.74	per c.y.=	$9,333.00
Energy Dissipator(5yd each	60+10 to 354+55	75	cy. of	Rip Rap	@	$20.24	per c.y.=	$1,518.00
Culvert Removal	162+05	35	cy. of	Crushed	@	$21.69	per c.y.=	$759.15
Road Widening	161+70	10	cy. of	Jawrun	@	$23.54	per c.y.=	$235.40
Road Widening	161+70	5	cy. of	Crushed	@	$23.42	per c.y.=	$117.10
Energy Dissipator	168+20	5	cy. of	Rip Rap	@	$20.98	per c.y.=	$104.90
Fill Armor	172+50	20	cy. of	Rip Rap	@	$20.53	per c.y.=	$410.60
Road Widening	192+75	15	cy. of	Jawrun	@	$22.88	per c.y.=	$343.20
Road Widening	192+75	10	cy. of	Crushed	@	$22.59	per c.y.=	$225.90
Road Widening	206+75	15	cy. of	Jawrun	@	$22.59	per c.y.=	$338.85
Road Widening	206+75	10	cy. of	Crushed	@	$21.87	per c.y.=	$218.70
Buttress & Energy Dissipatc	241+45	70	cy. of	Rip Rap	@	$19.33	per c.y.=	$1,353.10
Energy Dissipator	250+35	5	cy. of	Rip Rap	@	$18.86	per c.y.=	$94.30
Energy Dissipator	272+55	5	cy. of	Rip Rap	@	$18.09	per c.y.=	$90.45
Road Widening	308+55	15	cy. of	Jawrun	@	$20.44	per c.y.=	$306.60
Road Widening	308+55	10	cy. of	Crushed	@	$20.33	per c.y.=	$203.30
Road Widening	314+00	15	cy. of	Jawrun	@	$20.33	per c.y.=	$304.95
Road Widening	314+00	10	cy. of	Crushed	@	$20.21	per c.y.=	$202.10
Culvert Removal	314+20	25	cy. of	Crushed	@	$18.36	per c.y.=	$459.00
Energy Dissipator	319+75	20	cy. of	Rip Rap	@	$17.86	per c.y.=	$357.20
Backfill	319+75	60	cy. of	Jawrun	@	$17.57	per c.y.=	$1,054.20
Bedding/Backfill	319+75	60	cy. of	Crushed	@	$17.57	per c.y.=	$1,054.20
Rock Buttress	339+90	20	cy. of	Rip Rap	@	$16.71	per c.y.=	$334.20
Rock Buttress	339+90	20	cy. of	Crushed	@	$18.48	per c.y.=	$369.60
Rock Buttress	356+80	190	cy. of	Rip Rap	@	$16.13	per c.y.=	$3,064.70
Rock Buttress	356+80	30	cy. of	Crushed	@	$18.30	per c.y.=	$549.00
Energy Dissipator	374+05	10	cy. of	Rip Rap	@	$15.32	per c.y.=	$153.20

Rock Buttress	401+40	115	cy. of	Rip Rap	@	$15.32	per c.y.=	$1,761.80	
Rock Buttress	401+40	20	cy. of	Crushed	@	$16.81	per c.y.=	$336.20	
Energy Dissipator	409+80	5	cy. of	Rip Rap	@	$14.22	per c.y.=	$71.10	
Energy Dissipator	480+30	10	cy. of	Rip Rap	@	$14.16	per c.y.=	$141.60	
Energy Dissipator	491+70	5	cy. of	Rip Rap	@	$14.16	per c.y.=	$70.80	
Rock Buttress	508+70	40	cy. of	Rip Rap	@	$13.86	per c.y.=	$554.40	
Rock Buttress	508+70	20	cy. of	Crushed	@	$16.21	per c.y.=	$324.20	
Backfill	510+55	260	cy. of	Jawrun	@	$18.36	per c.y.=	$4,773.60	
Bedding/Backfill	510+55	60	cy. of	Crushed	@	$18.36	per c.y.=	$1,101.60	
Energy Dissipator	554+25	10	cy. of	Rip Rap	@	$13.75	per c.y.=	$137.50	
Energy Dissipator	558+60	10	cy. of	Rip Rap	@	$13.75	per c.y.=	$137.50	
Buttress/Energy Dissipator	571+60	40	cy. of	Rip Rap	@	$12.98	per c.y.=	$519.20	
Road Widening	574+60	10	cy. of	Jawrun	@	$15.24	per c.y.=	$152.40	
Road Widening	574+60	5	cy. of	Crushed	@	$15.15	per c.y.=	$75.75	
Energy Dissipator	596+05	5	cy. of	Rip Rap	@	$12.53	per c.y.=	$62.65	
Culvert Backfill/bedding(20	354+55 to 602+10	240	cy. of	Crushed	@	$12.96	per c.y.=	$3,110.40	
Energy Dissipator(5yd each	354+55 to 602+10	60	cy. of	Rip Rap	@	$12.45	per c.y.=	$747.00	
Turnout Hardening	As directed	120	cy. of	Jawrun	@	$12.96	per c.y.=	$1,555.20	
Waste Area Approaches	527+50	60	cy. of	Jawrun	@	$14.80	per c.y.=	$888.00	
Spot Rock	As directed	100	cy. of	Crushed	@	$13.89	per c.y.=	$1,389.00	
								TOTAL ROCK	**$92,612.65**

SPECIAL PROJECTS

Construct Catchbasins -	22.00	@	$60.00	each	$1,320.00	
Construct waste areas -	4.00	hours @	$220.00	per hour	$880.00	
Construct ditchouts -	9.00	@	$60.00	each	$540.00	
Clear stockpile site @ 598+40	1.00	hours @	$220.00	per hour	$220.00	
Ditch - No Endhaul	76.65	stations @	$90.00	per station	$6,898.50	
Ditch - Endhaul	80.90	stations @	$145.00	per station	$11,730.50	
Clean Culverts -	10.00	@	$30.00	each	$300.00	
Grade and shape road -	602.10	stations @	$24.40	per station	$14,691.24	
Sluff & Culvert waste endhaull	8.00	hours @	$385.00	per hour	$3,080.00	
Rock Hammering	8.00	@	$275.00	each	$2,200.00	
Roll subgrade w/ vibratory roller prior to rocking(354+35 to 472+90) -	118.55	stations @	$19.40	per station	$2,299.87	
Remove flume 357+00	1.00	@	$130.00	each	$130.00	
Remove culverts from state lands	8.00	@	$750.00	total	$750.00	
Grass seed -	5.00	acres @	$310.00	per acre	$1,550.00	
Mulching -	2.000	acres @	$865.00	per acre	$1,730.00	
					TOTAL SPECIAL PROJECTS	**$48,320.11**
				GRAND TOTAL		**$175,083.52**

SUMMARY OF CONSTRUCTION COST

Sale: **Kilchis Company** Road: **GG to HH**

Construction -	0+00	stations	Improvement -	1+40	stations	Reconstruction -	0+00	stations
	0.00	miles		0.03	miles		0.00	miles

SPECIAL PROJECTS

Fill in and rebuild tank trap	0.50	hours @	$220.00	per hour	$110.00	
Clean road	1.00	hours @	$220.00	per hour	$220.00	
Construct waste areas -	2.00	hours @	$220.00	per hour	$440.00	
Grass seed -	0.40	acres @	$310.00	per acre	$124.00	
				TOTAL SPECIAL PROJECTS		**$894.00**
				GRAND TOTAL		**$894.00**

SAWTOOTH PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Sawtooth Pit	Location:	Sec. 26 , T2N, R9W, W.M.
Sale:	**Kilchis Company**	Road:	15750 c.y.
Swell:	1.40	Stockpile:	c.y.
Shirinkage	1.16	Total Truck Loads:	15750 c.y.
Drill Pct.:	100%	In Place Total:	11250 c.y.

Drill & Shoot:	$3.60	/cu.yd.	x	11250	cu.yds.	=	$40,500.00
Sort Rip Rap	$1.20	/cu.yd.	x	1035	cu.yds.	=	$1,242.00
Load Crusher:	$1.20	/cu.yd.	x	14615	cu.yds.	=	$17,538.00
Crush Rock(1.5"-0"):	$5.20	/cu.yd.	x	7760	cu.yds.	=	$40,352.00
Crush Rock(4"-0"):	$4.00	/cu.yd.	x	6855	cu.yds.	=	$27,420.00
Load Dump Truck:	$1.20	/cu.yd.	x	15750	cu.yds.	=	$18,900.00
						Subtotal	$145,952.00

Move In/Set-up Crusher	1	@	$6,157.41	=	$6,157.41
Move In and set up Drill and Compressor	1	@	$517.04	=	$517.04
Move in Roller and Compactor	1	@	$454.60	=	$454.60
Move in D-8	1	@	$615.74	=	$615.74
Move in Loader	1	@	$480.14	=	$480.14
Move in Excavator	1	@	$595.14	=	$595.14
Move in Trucks	4	@	$181.90	=	$727.60
				Subtotal	$9,547.67

TOTAL PRODUCTION COSTS $155,499.67

Base Cost= $9.87 Per Cu.Yd.

Road Segment	Haul Cost $/cu.yd.	Proc Cost $/cu.yd.	Base/load Cost. $/cu.yd.	Cost $/cu.yd.	Number Cu. Yds	ROCK COST
A to B 670 3010 (Crushed)	4.43	3.20	9.87	17.50	410	$7,175.00
A to B Spot / Leveling Rock (Crushed)	5.08	3.55	9.87	18.50	300	$5,550.00
A to B Spot Rock (Jawrun)	4.10	3.55	9.87	17.52	20	$350.40
A to B Widening (Jawrun)	4.37	3.55	9.87	17.79	20	$355.80
A to B Widening (Crushed)	4.37	3.55	9.87	17.79	5	$88.95
A to B Widening (Jawrun)	4.46	3.55	9.87	17.88	10	$178.80
A to B Widening (Crushed)	4.46	3.55	9.87	17.88	5	$89.40
A to B Energy Dissipator (Rip rap)	4.89	1.20	9.87	15.96	20	$319.20
A to B Energy Dissipator (Rip rap)	4.93	1.20	9.87	16.00	5	$80.00
A to B Energy Dissipator (Rip rap)	5.01	1.20	9.87	16.08	5	$80.40
A to B Culvert Backfill/bedding (Crushed)	5.08	1.70	9.87	16.65	20	$333.00
A to B Energy Dissipator (Rip rap)	5.08	1.20	9.87	16.15	5	$80.75
A to B Culvert Backfill/bedding (Crushed)	5.14	3.55	9.87	18.56	20	$371.20
A to B Energy Dissipator (Rip rap)	5.14	1.20	9.87	16.21	5	$81.05
A to B Energy Dissipator (Rip rap)	5.24	1.20	9.87	16.31	5	$81.55
A to B Culvert Backfill/bedding (Crushed)	5.41	1.70	9.87	16.98	20	$339.60
A to B Energy Dissipator (Rip rap)	5.41	1.20	9.87	16.48	5	$82.40
A to B Widening (Jawrun)	5.44	3.55	9.87	18.86	10	$188.60
A to B Widening (Crushed)	5.44	3.55	9.87	18.86	5	$94.30
A to B Landing Rock (Jawrun)	5.58	3.55	9.87	19.00	70	$1,330.00
A to B Landing Rock (Jawrun)	5.67	3.55	9.87	19.09	70	$1,336.30
A to B Landing Rock (Jawrun)	5.76	3.55	9.87	19.18	30	$575.40
C to D Culvert Backfill/bedding (Crushed	3.05	1.70	9.87	14.62	20	$292.40
C to D Energy Dissipator (Rip rap)	3.05	1.20	9.87	14.12	5	$70.60
C to D Spot Rock (Crushed)	3.29	1.50	9.87	14.66	30	$439.80
E to F Spot Rock (Crushed)	3.39	1.50	9.87	14.76	10	$147.60
E to F Landing Rock (Jawrun)	3.37	3.55	9.87	16.79	60	$1,007.40
G to H Spot Rock (Crushed)	1.87	1.50	9.87	13.24	50	$662.00
I to J Spot / Leveling Rock (Crushed)	1.83	1.50	9.87	13.20	300	$3,960.00
I to J Culvert Backfill/bedding (Crushed)	1.59	1.70	9.87	13.16	240	$3,158.40
I to J Energy Dissipator (Rip rap)	1.59	1.20	9.87	12.66	60	$759.60
I to J Widening (Jawrun)	1.09	3.55	9.87	14.51	40	$580.40
I to J Widening (Crushed)	1.09	3.55	9.87	14.51	10	$145.10
I to J Rock over ditch (Jawrun)	1.77	1.70	9.87	13.34	5	$66.70
I to J Energy Dissipator (Rip rap)	1.79	1.20	9.87	12.86	5	$64.30
I to J Energy Dissipator/wall (Rip rap)	1.80	1.20	9.87	12.87	30	$386.10
I to J Energy Dissipator/wall (Rip rap)	1.85	1.20	9.87	12.92	10	$129.20
I to J Leveling Rock (Crushed)	1.91	1.50	9.87	13.28	20	$265.60

K to L Spot Rock (Jawrun)	1.53	1.50	9.87	12.90	10	$129.00
M to N 0 100 (Jawrun)	1.54	1.50	9.87	12.91	50	$645.50
M to N Intersection Widening (Jawrun)	1.54	1.50	9.87	12.91	30	$387.30
Q to R 725 800 (Jawrun)	3.78	3.55	9.87	17.20	60	$1,032.00
Q to R 800 4000 (Jawrun)	4.29	3.55	9.87	17.71	1780	$31,523.80
Q to R Culvert Backfill (Crushed)	3.86	1.70	9.87	15.43	20	$308.60
Q to R Energy Dissipator (Rip Rap)	3.86	1.20	9.87	14.93	30	$447.90
Q to R Culvert Backfill (Crushed)	3.89	1.70	9.87	15.46	20	$309.20
Q to R Energy Dissipator (Rip Rap)	3.89	1.20	9.87	14.96	5	$74.80
Q to R Culvert Backfill (Crushed)	3.94	1.70	9.87	15.51	20	$310.20
Q to R Energy Dissipator (Rip Rap)	3.94	1.20	9.87	15.01	20	$300.20
Q to R Culvert Backfill (Crushed)	3.98	1.70	9.87	15.55	20	$311.00
Q to R Energy Dissipator (Rip Rap)	3.98	1.20	9.87	15.05	5	$75.25
Q to R Culvert Backfill (Crushed)	4.00	1.70	9.87	15.57	20	$311.40
Q to R Energy Dissipator (Rip Rap)	4.00	1.20	9.87	15.07	5	$75.35
Q to R Stump Removal (Jawrun)	4.01	1.70	9.87	15.58	20	$311.60
Q to R Rock Buttress (Rip Rap)	4.07	1.20	9.87	15.14	10	$151.40
Q to R Rock Buttress (Jawrun)	4.07	1.70	9.87	15.64	40	$625.60
Q to R Culvert Backfill (Crushed)	4.07	1.70	9.87	15.64	20	$312.80
Q to R Energy Dissipator (Rip Rap)	4.07	1.20	9.87	15.14	5	$75.70
Q to R Rock Buttress (Rip Rap)	4.08	1.20	9.87	15.15	10	$151.50
Q to R Rock Buttress (Jawrun)	4.08	1.70	9.87	15.65	30	$469.50
Q to R Rock Buttress (Rip Rap)	4.13	1.20	9.87	15.20	10	$152.00
Q to R Rock Buttress (Jawrun)	4.13	1.70	9.87	15.70	30	$471.00
Q to R Rock Buttress (Rip Rap)	4.17	1.20	9.87	15.24	10	$152.40
Q to R Rock Buttress (Jawrun)	4.17	1.70	9.87	15.74	30	$472.20
Q to R Turnaround (Jawrun)	4.25	1.70	9.87	15.82	50	$791.00
Q to R Culvert Backfill (Crushed)	4.27	1.00	9.87	15.14	20	$302.80
Q to R Energy Dissipator (Rip Rap)	4.27	1.20	9.87	15.34	5	$76.70
Q to R Landing Rock (Jawrun)	4.38	1.70	9.87	15.95	50	$797.50
S to T Spot Rock (Crushed)	3.76	1.50	9.87	15.13	10	$151.30
U to V 0 860 (Jawrun)	4.29	3.55	9.87	17.71	490	$8,677.90
U to V Intersection Widening (Jawrun)	4.20	3.55	9.87	17.62	30	$528.60
U to V Turnaround (Jawrun)	4.28	3.55	9.87	17.70	60	$1,062.00
U to V Landing Rock (Jawrun)	4.38	3.55	9.87	17.80	70	$1,246.00
W to X 0 3405 (Jawrun)	3.97	3.55	9.87	17.39	1880	$32,693.20
W to X Junction Rock (Jawrun)	3.61	3.55	9.87	17.03	30	$510.90
W to X Traction Rock (Crushed)	3.63	3.55	9.87	17.05	20	$341.00
W to X Traction Rock (Crushed)	3.70	3.55	9.87	17.12	25	$428.00
W to X Landing Rock (Jawrun)	3.83	3.55	9.87	17.25	50	$862.50
W to X Traction Rock (Crushed)	3.87	3.55	9.87	17.29	10	$172.90
W to X Landing Rock (Jawrun)	3.92	3.55	9.87	17.34	70	$1,213.80
W to X Traction Rock (Crushed)	3.93	3.55	9.87	17.35	20	$347.00
W to X Landing Rock (Jawrun)	4.02	3.55	9.87	17.44	60	$1,046.40
W to X Traction Rock (Crushed)	4.08	3.55	9.87	17.50	10	$175.00
W to X Landing Rock (Jawrun)	4.17	3.55	9.87	17.59	70	$1,231.30
W to X Landing Rock (Jawrun)	4.33	3.55	9.87	17.75	70	$1,242.50
W to X Energy Dissipator (Rip Rap)	3.63	3.55	9.87	17.05	5	$85.25
Y to Z 0 290 (Jawrun)	3.78	3.55	9.87	17.20	180	$3,096.00
Y to Z 75 130 (Crushed)	3.77	3.55	9.87	17.19	10	$171.90
Y to Z Intersection Widening (Jawrun)	3.75	3.55	9.87	17.17	30	$515.10
Y to Z Landing Rock (Jawrun)	3.82	3.55	9.87	17.24	60	$1,034.40
AA to BB 0 410 (Jawrun)	4.31	3.55	9.87	17.73	220	$3,900.60
AA to BB 60 355 (Crushed)	4.31	3.55	9.87	17.73	40	$709.20
AA to BB Intersection Widening (Jawrun)	4.27	3.55	9.87	17.69	50	$884.50
AA to BB Landing Rock (Jawrun)	4.35	3.55	9.87	17.77	70	$1,243.90
CC to DD 0 310 (Jawrun)	4.34	3.55	9.87	17.76	170	$3,019.20
CC to DD 80 190 (Crushed)	4.34	3.55	9.87	17.76	20	$355.20
CC to DD Intersection Widening (Jawrun	4.31	3.55	9.87	17.73	30	$531.90
CC to DD Landing Rock (Jawrun)	4.38	3.55	9.87	17.80	70	$1,246.00
EE to FF 35435 47290 (Crushed)	4.80	3.55	9.87	18.22	1410	$25,690.20
EE to FF 47290 60210 (Crushed)	2.18	3.55	9.87	15.60	1530	$23,868.00
EE to FF Culvert Backfill/bedding (Crushe	13.11	1.70	9.87	24.68	30	$740.40
EE to FF Energy Dissipator (Rip Rap)	13.11	1.20	9.87	24.18	5	$120.90
EE to FF Energy Dissipator (Rip Rap)	12.65	1.20	9.87	23.72	5	$118.60
EE to FF Energy Dissipator (Rip Rap)	12.60	1.20	9.87	23.67	5	$118.35
EE to FF Culvert Backfill/bedding (Crushe	12.15	1.70	9.87	23.72	10	$237.20
EE to FF Culvert Backfill/bedding(30yd ea	9.17	1.70	9.87	20.74	450	$9,333.00
EE to FF Energy Dissipator(5yd each) (Ri	9.17	1.20	9.87	20.24	75	$1,518.00
EE to FF Culvert Removal (Crushed)	10.12	1.70	9.87	21.69	35	$759.15
EE to FF Road Widening (Jawrun)	10.12	3.55	9.87	23.54	10	$235.40
EE to FF Road Widening (Crushed)	10.00	3.55	9.87	23.42	5	$117.10
EE to FF Energy Dissipator (Rip Rap)	9.91	1.20	9.87	20.98	5	$104.90
EE to FF Fill Armor (Rip Rap)	9.46	1.20	9.87	20.53	20	$410.60
EE to FF Road Widening (Jawrun)	9.46	3.55	9.87	22.88	15	$343.20

EE to FF Road Widening (Crushed)	9.17	3.55	9.87	22.59	10		$225.90
EE to FF Road Widening (Jawrun)	9.17	3.55	9.87	22.59	15		$338.85
EE to FF Road Widening (Crushed)	8.45	3.55	9.87	21.87	10		$218.70
EE to FF Buttress & Energy Dissipator (R	8.26	1.20	9.87	19.33	70		$1,353.10
EE to FF Energy Dissipator (Rip Rap)	7.79	1.20	9.87	18.86	5		$94.30
EE to FF Energy Dissipator (Rip Rap)	7.02	1.20	9.87	18.09	5		$90.45
EE to FF Road Widening (Jawrun)	7.02	3.55	9.87	20.44	15		$306.60
EE to FF Road Widening (Crushed)	6.91	3.55	9.87	20.33	10		$203.30
EE to FF Road Widening (Jawrun)	6.91	3.55	9.87	20.33	15		$304.95
EE to FF Road Widening (Crushed)	6.79	3.55	9.87	20.21	10		$202.10
EE to FF Culvert Removal (Crushed)	6.79	1.70	9.87	18.36	25		$459.00
EE to FF Energy Dissipator (Rip Rap)	6.79	1.20	9.87	17.86	20		$357.20
EE to FF Backfill (Jawrun)	6.00	1.70	9.87	17.57	60		$1,054.20
EE to FF Bedding/Backfill (Crushed)	6.00	1.70	9.87	17.57	60		$1,054.20
EE to FF Rock Buttress (Rip Rap)	5.64	1.20	9.87	16.71	20		$334.20
EE to FF Rock Buttress (Crushed)	5.06	3.55	9.87	18.48	20		$369.60
EE to FF Rock Buttress (Rip Rap)	5.06	1.20	9.87	16.13	190		$3,064.70
EE to FF Rock Buttress (Crushed)	4.88	3.55	9.87	18.30	30		$549.00
EE to FF Energy Dissipator (Rip Rap)	4.25	1.20	9.87	15.32	10		$153.20
EE to FF Rock Buttress (Rip Rap)	4.25	1.20	9.87	15.32	115		$1,761.80
EE to FF Rock Buttress (Crushed)	3.39	3.55	9.87	16.81	20		$336.20
EE to FF Energy Dissipator (Rip Rap)	3.15	1.20	9.87	14.22	5		$71.10
EE to FF Energy Dissipator (Rip Rap)	3.09	1.20	9.87	14.16	10		$141.60
EE to FF Energy Dissipator (Rip Rap)	3.09	1.20	9.87	14.16	5		$70.80
EE to FF Rock Buttress (Rip Rap)	2.79	1.20	9.87	13.86	40		$554.40
EE to FF Rock Buttress (Crushed)	2.79	3.55	9.87	16.21	20		$324.20
EE to FF Backfill (Jawrun)	6.79	1.70	9.87	18.36	260		$4,773.60
EE to FF Bedding/Backfill (Crushed)	6.79	1.70	9.87	18.36	60		$1,101.60
EE to FF Energy Dissipator (Rip Rap)	1.64	1.20	9.87	12.71	20		$254.20
EE to FF Energy Dissipator (Rip Rap)	2.68	1.20	9.87	13.75	10		$137.50
EE to FF Energy Dissipator (Rip Rap)	2.68	1.20	9.87	13.75	10		$137.50
EE to FF Buttress/Energy Dissipator (Rip	1.91	1.20	9.87	12.98	40		$519.20
EE to FF Road Widening (Jawrun)	1.82	3.55	9.87	15.24	10		$152.40
EE to FF Road Widening (Crushed)	1.73	3.55	9.87	15.15	5		$75.75
EE to FF Energy Dissipator (Rip Rap)	1.46	1.20	9.87	12.53	5		$62.65
EE to FF Culvert Backfill/bedding(20yd ea	1.39	1.70	9.87	12.96	240		$3,110.40
EE to FF Energy Dissipator(5yd each) (Ri	1.38	1.20	9.87	12.45	60		$747.00
EE to FF Turnout Hardening (Jawrun)	1.59	1.50	9.87	12.96	120		$1,555.20
EE to FF Waste Area Approaches (Jawrui	3.43	1.50	9.87	14.80	60		$888.00
EE to FF Spot Rock (Crushed)	2.82	1.20	9.87	13.89	100		$1,389.00
A to B 1+00 Stockpile(Crushed)	3.92	1.00	9.87	14.79	2000		$29,580.00
				Total C.Y.	15750	Sub Total	$263,768.60

TOTAL ROCKING COSTS	$263,768.60

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

Sale: **Kilchis Company**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
10.3	Pavement	30
11.0	Main Lines	7
0.0	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	Brush Cutter	$402.10		$4.00	0.00	12.50	12.5	$50.00	$452.10
1	Graders	$516.99		$3.65	0.00	8.25	8.25	$30.11	$547.10
1	Excavators (Large)	$595.14	1	$44.80	0.00	8.25	8.25	$369.60	$964.74
1	Tractors (D6)	$567.85	2	$7.10	0.00	8.25	8.25	$58.58	$626.43
2	Dump Truck (Off Hiway)	$1,134.75	1	$4.75	0.00	8.25	8.25	$78.38	$1,213.13
1	Water Truck (1500 Gal)	$181.90		$2.85	0.00	8.25	8.25	$23.51	$205.41

	TOTAL MOVE-IN COSTS:	$4,008.91

OREGON DEPARTMENT OF FORESTRY
CRUISE REPORT
Kilchis Company

Type of Sale

Regeneration harvest, Recovery

Legal Description

Section(s) 35, 36 of T2N R9W, Section(s) 2 of T1N R9W W.M

Sale Acreage

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

	ACRES	
	Gross	Net
Unit 1 (Modified Clearcut)	145	103
Unit 2 (Modified Clearcut)	121	102
Unit 3 (Modified Clearcut)	52	62
Total	328	257

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.

Cruising Procedures

A. Cruise Method

The timber sale was cruised using variable plot sampling. All conifers 8” DBH and greater containing 20 board feet and all hardwoods 10” DBH and greater containing 30 board feet were recorded on all plots. Species, DBH (to nearest inch), merchantable bole length (to nearest foot), form factor, and defect were recorded for all measure trees. Merchantable heights were recorded to 6” and 7” outside bark for conifers and hardwoods, respectively.

B. Plot size

Unit	BAF	Spacing
1	40.00	500’ x 500’
2	40.00	500’ x 500’
3	27.78	350’ x 350’

C. Grading System

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

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.

Net sale acreage was used for volume calculation.

	Cruise Statistics (Board Foot Volumes)			
Unit	Acres	Number of Plots	SE (%)	CV (%)
1	103	19	12.7	54.1
2	102	21	9.5	42.7
3	52	21	10.3	46.3
Project Total	257	59	10.83	47.7

Hidden Defect and Breakage

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

Timber Description

Unit 1 is a clearcut of mixed Douglas-fir, western hemlock and red alder with several other minor species. Big leaf maple is the only reserve species outside of Green Tree Reserve Area. The Unit was burnt from the Tillamook Burn in 1933 the unit was seeded 1965.

Unit 2 is a clearcut is a clearcut of mixed Douglas-fir, western hemlock and red alder with several other minor species. Big leaf maple is the only reserve species outside of Green Tree Retention Area. The unit was burned in the Tillamook burn 1933 and Tillamook III 1945 it was reseeded in 1968.

Unit 3 is a clearcut is a clearcut of mixed Douglas-fir, western hemlock and red alder with several other minor species. Big leaf maple is the only reserve species outside of Green Tree Retention Area. The unit was burned in the Tillamook burn 1933 and Tillamook III 1945 no previous seed history.

Sale Unit	Age	Species	DBH	Merchantable Bole Height (feet)
1	53	Douglas-fir	16.7	60
		Red Alder	14.8	32
		Sitka Spruce	26.8	45
		Western Hemlock	17.9	43
2	58	Douglas-fir	13.9	53

		Red alder	13.4	43
		Sitka Spruce	19.0	42
		Western Hemlock	25.0	66
3	56	Douglas-fir	16.7	67
		Red Alder	13.8	37
		Sitka Spruce	19.0	43
		Western Hemlock	19.0	96

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

Cruiser /Dates

ODF Staff Cruised; October - November 2024.

Revenue Distribution

BOF – 100%

Tax Code: 5600 (100%)

Deed Numbers: 15, 161

Attachments

Volume Summary Table (3)

Stand Table (3)

Log Stock Table (3)

Species, Sort, Grade Table (3)

Logging Plan (3)

Stand and Log Stock Tables Species Key

DF - Douglas-fir
RA - Red alder
SS - Sitka spruce
WH - Western Hemlock
BM – Big Leaf Maple LEAVE

TC TLOGSTVB

Log Stock Table - MBF

Project: KWIT

T01N R09W S02 T0100 **T01N R09W S02 T0100**

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	
01N	09W	02	UNIT 1	0100	103.00	19	63	Page 1 Date 12/17/2024 Time 10:56:43AM

Spp	S T	So rt	Gr de	Log Len	Gross MBF	% Def	Net MBF	% Spc	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
									Net Volume by Scaling Diameter in Inches											
DF		CO	2	40	365	1.1	361	30.5						121	100	53	39	47		
DF		CO	3	16	3		3	.2					3							
DF		CO	3	40	665	.7	660	55.8			168	51	351	24	34	32				
DF		CO	4	12	3		3	.2		3										
DF		CO	4	14	2		2	.2		2										
DF		CO	4	15	21		21	1.8			21									
DF		CO	4	16	9		9	.8		9										
DF		CO	4	18	9		9	.8					9							
DF		CO	4	19	8		8	.7		8										
DF		CO	4	20	3		3	.2		3										
DF		CO	4	22	4		4	.3		4										
DF		CO	4	24	7		7	.6		7										
DF		CO	4	25	4		4	.3		4										
DF		CO	4	26	5		5	.4		5										
DF		CO	4	28	11		11	1.0		11										
DF		CO	4	30	6		6	.5		6										
DF		CO	4	32	10		10	.9		10										
DF		CO	4	33	12		12	1.0		6		5								
DF		CO	4	36	6		6	.5		6										
DF		CO	4	38	15		15	1.3		15										
DF		CO	4	40	13		13	1.1		13										
DF		CO	4	41	11		11	.9		11										
DF		Totals			1,191		1,182	73.2		123	189	57	363	144	135	85	39	47		
RA		H	3	40	24		24	10.7					24							
RA		H	4	16	9		9	4.0			9									
RA		H	4	17	13		13	5.7			13									
RA		H	4	21	4		4	1.8			4									
RA		H	4	22	7	33.3	4	2.0			4									
RA		H	4	27	3		3	1.5			3									
RA		H	4	31	13		13	5.8			13									
RA		H	4	34	35		35	15.8			35									
RA		H	4	36	22		22	10.2			22									
RA		H	4	39	21		21	9.5			21									
RA		H	4	40	76	3.3	73	33.1			47	26								
RA		Totals			225	2.1	221	13.7			171	26	24							
SS		CO	2	40	51		51	58.7								51				
SS		CO	3	40	30		30	34.4								30				
SS		CO	4	21	6		6	6.9			6									
SS		Totals			87		87	5.4			6					81				
WH		CO	2	40	91	7.4	84	79.9						52			32			
WH		CO	3	40	6		6	5.9				6								
WH		CO	4	16	7		7	6.6		7										
WH		CO	4	30	3		3	2.9		3										
WH		CO	4	33	5		5	4.7		5										
WH		Totals			112	6.0	105	6.5		15		6		52			32			
BM		H	2	40	18		18	87.0						18						

TC TLOGSTVB

Log Stock Table - MBF

Project: **KWIT**

T01N R09W S02 T0100

T01N R09W S02 T0100

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
01N	09W	02	UNIT 1	0100	103.00	19	63

Page 2
Date 12/17/2024
Time 10:56:43AM

Spp	S T	So rt	Gr de	Log Len	Gross MBF	% Def	Net MBF	% Spc	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
BM		H	4	22	3		3	13.0			3									
BM		Totals			21		21	1.3			3			18						
Total All Species					1,636	1.2	1,615	100.0		138	368	89	387	215	135	166	71	47		

TC TSTNDSUM

Stand Table Summary

Project **KWIT**

T01N R09W S02 T0100 **T01N R09W S02 T0100**

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1
01N	09W	02	UNIT 1	0100	103.00	19	63	Date:	12/17/2024
								Time:	10:56:45AM

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	1	80	17	5.563	3.03	5.56	5.3	20.0	.84	30	111	87	30	11
DF		11	3	81	63	13.792	9.10	18.39	10.3	42.5	5.41	190	782	557	195	81
DF		12	1	88	88	3.863	3.03	7.73	11.2	45.0	2.46	86	348	254	89	36
DF		13	1	82	64	3.292	3.03	3.29	22.4	60.0	2.10	74	197	216	76	20
DF		14	1	83	73	2.838	3.03	5.68	14.6	40.0	2.36	83	227	243	85	23
DF		16	1	77	88	2.173	3.03	4.35	21.8	75.0	2.71	95	326	279	98	34
DF		17	6	84	89	11.549	18.20	23.10	25.2	89.2	16.60	582	2,060	1,710	600	212
DF		18	4	84	90	6.868	12.14	13.74	28.5	98.7	11.17	392	1,356	1,150	404	140
DF		19	4	83	97	6.164	12.14	12.33	33.6	112.5	11.82	415	1,387	1,218	427	143
DF		20	2	81	90	2.781	6.07	5.56	35.1	107.5	5.56	195	598	573	201	62
DF		22	5	84	95	5.747	15.17	11.49	43.3	161.0	14.18	498	1,850	1,461	513	191
DF		24	1	82	101	.966	3.03	1.93	58.6	195.0	3.23	113	377	332	117	39
DF		27	1	83	100	.763	3.03	1.53	74.0	265.0	3.22	113	404	331	116	42
DF		32	1	83	101	.543	3.03	1.09	103.9	410.0	3.22	113	445	331	116	46
DF		33	1	83	104	.511	3.03	1.02	76.4	350.0	2.23	78	358	229	80	37
DF		39	1	86	122	.366	3.03	1.10	120.9	593.3	3.78	133	651	390	137	67
DF		Totals	34	83	78	67.778	103.16	117.87	27.1	97.4	90.88	3,189	11,477	9,361	3,284	1,182
RA		10	1	76	26	6.130	3.34	6.13	6.3	20.0	1.06	39	123	109	40	13
RA		11	2	79	48	10.133	6.69	5.07	14.6	50.0	2.03	74	253	209	76	26
RA		12	1	77	18	4.257	3.34	4.26	7.9	20.0	.92	33	85	95	34	9
RA		13	1	82	54	3.628	3.34	3.63	20.1	60.0	2.01	73	218	207	75	22
RA		14	1	79	43	3.128	3.34	3.13	19.6	40.0	1.69	61	125	174	63	13
RA		16	4	83	54	9.579	13.37	9.58	32.4	62.5	8.53	310	599	879	320	62
RA		17	2	76	55	4.243	6.69	4.24	25.6	70.0	2.98	109	297	307	112	31
RA		19	1	80	42	1.698	3.34	1.70	36.8	50.0	1.72	63	85	177	64	9
RA		20	1	82	66	1.533	3.34	1.53	54.5	150.0	2.30	84	230	237	86	24
RA		22	1	69	40	1.267	3.34	1.27	16.7	30.0	.58	21	38	60	22	4
RA		24	1	69	50	1.064	3.34	1.06	21.5	30.0	.63	23	32	65	24	3
RA		25	1	80	45	.981	3.34	.98	75.7	60.0	2.04	74	59	210	77	6
RA		Totals	17	79	44	47.640	56.84	42.57	22.6	50.3	26.50	963	2,143	2,729	992	221
WH		12	1	79	17	3.351	2.63	3.35	7.4	20.0	.79	25	67	81	25	7
WH		20	1	88	88	1.206	2.63	2.41	37.6	140.0	2.91	91	338	299	94	35
WH		22	1	83	84	.997	2.63	1.99	43.6	125.0	2.78	87	249	286	89	26
WH		31	1	83	101	.502	2.63	1.00	103.9	365.0	3.34	104	367	344	107	38
WH		Totals	4	82	49	6.056	10.53	8.76	35.0	116.5	9.81	307	1,020	1,011	316	105
SS		20	1	72	25	1.930	4.21	1.93	25.7	30.0	1.29	50	58	133	51	6
SS		25	1	79	106	1.235	4.21	1.24	107.4	400.0	3.45	133	494	355	137	51
SS		34	1	70	33	.668	4.21									
SS		40	1	83	80	.482	4.21	.48	165.5	600.0	2.08	80	289	214	82	30
SS		Totals	4	75	56	4.315	16.84	3.65	71.9	230.7	6.82	262	841	702	270	87
BM		21	1	82	78	.875	2.11	1.75	39.7	115.0	1.84	69	201	189	71	21
BM		Totals	1	82	78	.875	2.11	1.75	39.7	115.0	1.84	69	201	189	71	21
OC		25	1	88	85	.618	2.11									
OC		26	1	89	123	.571	2.11									
OC		34	1	90	119	.334	2.11									
OC		Totals	3	89	107	1.522	6.32									
Totals			63	81	64	128.187	195.79	174.61	27.4	89.8	135.85	4791	15,684	13,992	4,934	1,615

TC TLOGSTVB

Log Stock Table - MBF

Project: **KWIT**

T02N R09W S33 T0100

T02N R09W S33 T0100

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02N	09W	33	UNIT 2	0100	102.00	21	105

Date 12/17/2024

Time 11:05:59AM

Spp	S T	So rt	Gr de	Log Len	Gross MBF	% Def	Net MBF	% Spc	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
									Net Volume by Scaling Diameter in Inches											
DF		CO	2	40	199	3.5	192	9.8						135		57				
DF		CO	3	40	1,398	.4	1,393	71.3			530	555	309							
DF		CO	4	12	4		4	.2		4										
DF		CO	4	13	6		6	.3		6										
DF		CO	4	14	24		24	1.2		24										
DF		CO	4	15	3		3	.2		3										
DF		CO	4	16	32		32	1.6		32										
DF		CO	4	17	14		14	.7		14										
DF		CO	4	18	32		32	1.6		32										
DF		CO	4	19	22		22	1.1		22										
DF		CO	4	20	20		20	1.0		20										
DF		CO	4	21	14		14	.7		14										
DF		CO	4	22	9		9	.4		9										
DF		CO	4	23	7		7	.4		7										
DF		CO	4	25	3		3	.2		3										
DF		CO	4	26	36		36	1.8		36										
DF		CO	4	27	59	7.4	55	2.8		55										
DF		CO	4	28	4		4	.2		4										
DF		CO	4	30	7		7	.4		7										
DF		CO	4	31	7		7	.3		7										
DF		CO	4	35	18		18	.9		18										
DF		CO	4	36	10		10	.5		10										
DF		CO	4	39	12		12	.6		12										
DF		CO	4	40	32		32	1.6		32										
DF		Totals			1,972		1,956	89.0		370	530	555	309	135		57				
RA		H	4	29	15		15	8.6			15									
RA		H	4	30	13		13	7.2			13									
RA		H	3	40	62		62	34.5					62							
RA		H	4	22	8		8	4.6			8									
RA		H	4	27	8		8	4.6			8									
RA		H	4	31	19	14.3	16	9.2			16									
RA		H	4	33	10		10	5.7			10									
RA		H	4	40	46		46	25.7				46								
RA		Totals			182	1.5	179	8.1			71	46	62							
SS		CO	3	40	24		24	64.0						15		9				
SS		CO	4	20	1		1	3.9		1										
SS		CO	4	34	6	25.0	5	12.7		5										
SS		CO	4	35	7		7	19.4		7										
SS		Totals			39	4.1	38	1.7		13				15		9				
WH		CO	2	40	23		23	90.9								23				
WH		CO	4	24	2		2	9.1			2									
WH		Totals			25		25	1.1			2					23				
Total All Species					2,218		2,197	100.0		383	604	601	370	150		90				

TC TSTNDSUM

Stand Table Summary

Project **KWIT**

T02N R09W S33 T0100 **T02N R09W S33 T0100**

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	
02N	09W	33	UNIT 2	0100	102.00	21	105	Page: 1 Date: 12/17/2024 Time: 11:06:00AM

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.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		8	1	80	21	6.759	2.36	6.76	3.2	20.0	.62	22	135	63	22	14
DF		9	1	80	55	5.340	2.36	5.34	7.8	30.0	1.19	42	160	121	43	16
DF		10	3	80	69	12.977	7.08	17.30	9.2	32.5	4.53	159	562	462	162	57
DF		11	7	84	73	25.025	16.52	35.75	11.1	44.0	11.31	397	1,573	1,153	405	160
DF		12	10	83	78	30.040	23.59	48.06	13.1	45.0	17.97	631	2,163	1,833	643	221
DF		13	11	83	68	28.156	25.95	43.51	14.6	45.3	18.16	637	1,971	1,852	650	201
DF		14	12	83	73	26.484	28.31	41.93	18.1	55.3	21.59	758	2,317	2,202	773	236
DF		15	12	84	78	23.070	28.31	44.22	17.9	61.7	22.61	793	2,730	2,306	809	278
DF		16	9	84	78	15.208	21.23	30.42	19.2	60.6	16.67	585	1,842	1,700	597	188
DF		17	4	85	88	5.987	9.44	11.97	25.3	95.0	8.64	303	1,138	881	309	116
DF		18	3	84	86	4.005	7.08	8.01	28.6	98.3	6.52	229	788	665	233	80
DF		19	5	84	92	5.991	11.80	11.98	31.8	110.0	10.86	381	1,318	1,108	389	134
DF		20	4	83	86	4.326	9.44	7.57	36.0	124.3	7.77	273	941	793	278	96
DF		21	3	84	86	2.943	7.08	5.89	38.4	118.3	6.44	226	696	657	230	71
DF		22	1	86	75	.894	2.36	.89	46.3	150.0	1.18	41	134	120	42	14
DF		26	1	85	102	.640	2.36	1.28	69.1	265.0	2.52	88	339	257	90	35
DF		28	1	82	114	.552	2.36	1.10	83.6	330.0	2.63	92	364	268	94	37
DF		Totals	88	83	73	198.396	207.62	321.99	17.6	59.5	161.20	5,656	19,172	16,442	5,769	1,956
RA		11	1	79	47	3.752	2.48	3.75	12.4	40.0	1.28	47	150	131	48	15
RA		12	1	80	43	3.153	2.48	3.15	14.7	40.0	1.28	46	126	130	47	13
RA		13	3	82	61	8.059	7.43	10.75	16.0	45.0	4.72	172	484	481	175	49
RA		14	1	83	72	2.316	2.48	2.32	28.4	90.0	1.81	66	208	184	67	21
RA		15	3	84	83	6.053	7.43	8.07	23.7	97.5	5.25	191	787	536	195	80
RA		16	1	70	36	1.773	2.48									
RA		Totals	10	81	61	25.107	24.76	28.04	18.6	62.6	14.33	521	1,755	1,462	532	179
SS		14	1	83	46	1.782	1.90	1.78	21.1	40.0	.98	38	71	100	38	7
SS		15	1	79	44	1.552	1.90	1.55	23.2	30.0	.94	36	47	95	37	5
SS		22	1	82	72	.722	1.90	1.44	41.3	110.0	1.55	60	159	158	61	16
SS		25	1	77	64	.559	1.90									
SS		42	1	77	71	.198	1.90	.20	157.6	460.0	.81	31	91	83	32	9
SS		Totals	5	81	52	4.812	9.52	4.98	33.0	73.9	4.27	164	368	436	168	38
WH		25	1	88	78	.559	1.90	1.12	55.4	220.0	1.98	62	246	202	63	25
WH		Totals	1	88	78	.559	1.90	1.12	55.4	220.0	1.98	62	246	202	63	25
OC		19	1	88	96	.967	1.90									
OC		Totals	1	88	96	.967	1.90									
Totals			105	83	72	229.841	245.71	356.13	18.0	60.5	181.78	6403	21,540	18,542	6,531	2,197

TC TLOGSTVB

Log Stock Table - MBF

Project: KWIT

T02N R09W S36 T0100 **T02N R09W S36 T0100**

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02N	09W	36	UNIT 3	0100	52.00	21	85

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Date 12/17/2024
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Spp	S T	So rt	Gr 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+
DF		CO	2	40	296		296	49.4						117	103	61	16			
DF		CO	3	22	5		5	.8			1			3						
DF		CO	3	27	2		2	.3					2							
DF		CO	3	29	2		2	.3			2									
DF		CO	3	32	2		2	.3			2									
DF		CO	3	38	2		2	.4			2									
DF		CO	3	40	233	.4	232	38.7			80	59	82		10					
DF		CO	4	12	1		1	.2		1										
DF		CO	4	13	0		0	.1		0										
DF		CO	4	14	1		1	.2		1										
DF		CO	4	16	2		2	.3		2										
DF		CO	4	20	5		5	.8		2			3							
DF		CO	4	22	5		5	.9		3	2									
DF		CO	4	24	4		4	.6		4										
DF		CO	4	25	1		1	.2			1									
DF		CO	4	26	3		3	.5		3										
DF		CO	4	27	12		12	2.0		12										
DF		CO	4	30	6		6	1.0		6										
DF		CO	4	32	2		2	.3		2										
DF		CO	4	34	10		10	1.6		10										
DF		CO	4	36	2		2	.3		2										
DF		CO	4	39	6		6	.9		6										
DF		Totals			601		600	71.5		53	90	59	87	121	113	61	16			
RA		H	3	12	5		5	2.8							5					
RA		H	3	40	11		11	5.8					11							
RA		H	4	13	2		2	.9			2									
RA		H	4	16	7		7	3.5			1			5						
RA		H	4	17	4		4	2.3			4									
RA		H	4	19	3		3	1.3			3									
RA		H	4	21	5		5	2.4			5									
RA		H	4	23	18		18	9.0			13		5							
RA		H	4	25	3		3	1.7			3									
RA		H	4	26	2		2	.9			2									
RA		H	4	29	6	25.0	5	2.4			5									
RA		H	4	31	9		9	4.7			9									
RA		H	4	33	4		4	2.0			4									
RA		H	4	35	6		6	2.9			6									
RA		H	4	36	5		5	2.6			5									
RA		H	4	38	11	10.4	10	5.0			10									
RA		H	4	39	21		21	11.0			21									
RA		H	4	40	76		76	38.8			55	21								
RA		Totals			197	1.3	194	23.2			147	21	16	5	5					
BM		H	2	40	7		7	34.6							7					
BM		H	4	14	1		1	5.1			1									
BM		H	4	22	1		1	2.9			1									
BM		H	4	40	11		11	57.4			5	6								
BM		Totals			19		19	2.3			7	6			7					
SS		CO	2	40	14		14	100.0						3			11			

TC TLOGSTVB

Log Stock Table - MBF

Project: KWIT

T02N R09W S36 T0100 **T02N R09W S36 T0100**

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02N	09W	36	UNIT 3	0100	52.00	21	85

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Date 12/17/2024
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Spp	S T	So rt	Gr de	Log Len	Gross MBF	% Def	Net MBF	% Spc	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
SS		Totals			14		14	1.7						3			11			
WH		CO	2	40	8		8	72.7						8						
WH		CO	3	40	3		3	27.3				3								
WH		Totals			12		12	1.4				3		8						
Total All Species					843		839	100.0		53	244	89	103	138	125	61	26			

TC TSTNDSUM

Stand Table Summary

Project **KWIT**

T02N R09W S36 T0100 **T02N R09W S36 T0100**

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	
02N	09W	36	UNIT 3	0100	52.00	21	85	Page: 1 Date: 12/17/2024 Time: 11:01:46AM

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		8	1	80	56	6.136	2.14	6.14	6.6	30.0	1.15	40	184	60	21	10
DF		12	4	84	70	10.908	8.57	16.36	12.6	41.7	5.87	206	682	305	107	35
DF		13	2	83	80	4.647	4.28	6.97	17.0	60.0	3.37	118	418	175	61	22
DF		14	4	84	81	8.014	8.57	14.02	17.5	58.6	6.98	245	821	363	127	43
DF		15	2	85	82	3.491	4.28	6.98	17.5	62.5	3.48	122	436	181	64	23
DF		16	2	85	102	3.068	4.28	6.14	24.0	97.5	4.20	147	598	218	77	31
DF		18	4	83	106	4.848	8.57	9.70	32.2	121.2	8.90	312	1,176	463	162	61
DF		19	2	83	99	2.176	4.28	4.35	35.1	122.5	4.36	153	533	227	79	28
DF		20	5	85	100	4.909	10.71	9.82	38.3	135.0	10.71	376	1,325	557	195	69
DF		21	3	86	96	2.671	6.43	5.34	41.3	148.3	6.29	221	792	327	115	41
DF		22	3	83	125	2.434	6.43	6.49	42.4	173.7	7.84	275	1,128	408	143	59
DF		23	1	85	112	.742	2.14	2.23	38.2	163.3	2.42	85	364	126	44	19
DF		24	4	83	114	2.727	8.57	6.82	43.9	176.0	8.53	299	1,200	444	156	62
DF		26	3	84	108	1.743	6.43	4.07	55.9	234.3	6.48	227	953	337	118	50
DF		27	1	83	140	.539	2.14	1.62	62.6	276.7	2.88	101	447	150	53	23
DF		35	1	83	136	.321	2.14	.96	103.1	500.0	2.82	99	481	147	52	25
DF		Totals	42	84	88	59.372	89.95	108.00	28.0	106.8	86.28	3,028	11,538	4,487	1,574	600
RA		10	4	77	75	16.909	9.22	16.91	13.0	50.0	6.03	219	845	313	114	44
RA		11	3	79	75	10.481	6.92	10.48	16.1	56.7	4.65	169	594	242	88	31
RA		12	3	77	51	8.807	6.92	5.87	12.3	30.0	1.98	72	176	103	37	9
RA		13	5	74	50	12.506	11.53	7.50	14.4	30.0	2.96	108	225	154	56	12
RA		14	4	78	47	8.627	9.22	8.63	17.5	40.0	4.15	151	345	216	79	18
RA		15	2	73	40	3.757	4.61	1.88	24.7	40.0	1.28	46	75	66	24	4
RA		16	2	82	60	3.302	4.61	4.95	24.3	66.7	3.31	120	330	172	63	17
RA		17	2	80	46	2.925	4.61	2.93	33.8	55.0	2.72	99	161	141	51	8
RA		18	2	72	60	2.609	4.61	3.91	16.4	53.3	1.77	64	209	92	33	11
RA		19	3	75	49	3.513	6.92	4.68	27.5	65.0	3.55	129	304	185	67	16
RA		20	1	77	59	1.057	2.31	1.06	56.9	120.0	1.65	60	127	86	31	7
RA		22	1	77	49	.873	2.31	.87	63.1	70.0	1.51	55	61	79	29	3
RA		26	1	86	54	.625	2.31	.63	86.9	180.0	1.50	54	113	78	28	6
RA		27	2	79	53	1.160	4.61	1.16	96.5	150.0	3.08	112	174	160	58	9
RA		Totals	35	77	59	77.152	80.69	71.46	20.4	52.3	40.13	1,459	3,740	2,087	759	194
BM		13	1	82	74	1.435	1.32	1.44	23.8	70.0	.90	34	100	47	18	5
BM		16	1	82	73	.947	1.32	1.89	20.6	70.0	1.04	39	133	54	20	7
BM		26	1	82	73	.359	1.32	.72	59.9	195.0	1.14	43	140	59	22	7
BM		Totals	3	82	74	2.741	3.97	4.05	28.7	92.2	3.08	116	373	160	60	19
SS		15	1	78	35	1.078	1.32									
SS		30	1	85	118	.269	1.32	.54	109.7	500.0	1.54	59	269	80	31	14
SS		Totals	2	79	52	1.347	2.65	.54	109.7	500.0	1.54	59	269	80	31	14
WH		19	1	83	117	.672	1.32	1.34	41.6	165.0	1.79	56	222	93	29	12
WH		Totals	1	83	117	.672	1.32	1.34	41.6	165.0	1.79	56	222	93	29	12
OC		16	1	73	37	.947	1.32									
OC		24	1	89	121	.421	1.32									
OC		Totals	2	78	63	1.369	2.65									
Totals			85	80	71	142.653	181.23	185.39	25.4	87.1	132.82	4718	16,142	6,907	2,453	839

Kilchis Company

Volume Summary

Unit 1-Modified Clearcut				
	103 acres			
	Cruised Net	Cruised Net	Hidden	Net Sale
SPECIES	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	11.48	1182	1%	1170
Hemlock	1.02	105	1%	104
Spruce	0.84	87	1%	86
Noble Fir		0	1%	0
Alder	2.14	221	2%	217
TOTAL	15.48	1595.0		1577

Unit 2-Modified Clearcut				
	102 acres			
	Cruised Net	Cruised Net	Hidden	Net Sale
SPECIES	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	19.17	1956	1%	1936
Hemlock	0.25	25	1%	25
Spruce	0.37	38	1%	38
Noble Fir		0	1%	0
Alder	1.76	179	2%	175
TOTAL	21.54	2198		2174

Unit 3- Modified Clearcut				
	52 acres			
	Cruised Net	Cruised Net	Hidden	Net Sale
SPECIES	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	11.54	600	1%	594
Hemlock	0.22	12	1%	12
Spruce	0.27	14	1%	14
Noble Fir		0	1%	0
Alder	3.74	194	2%	190
TOTAL	15.77	820		810

Kilchis Company

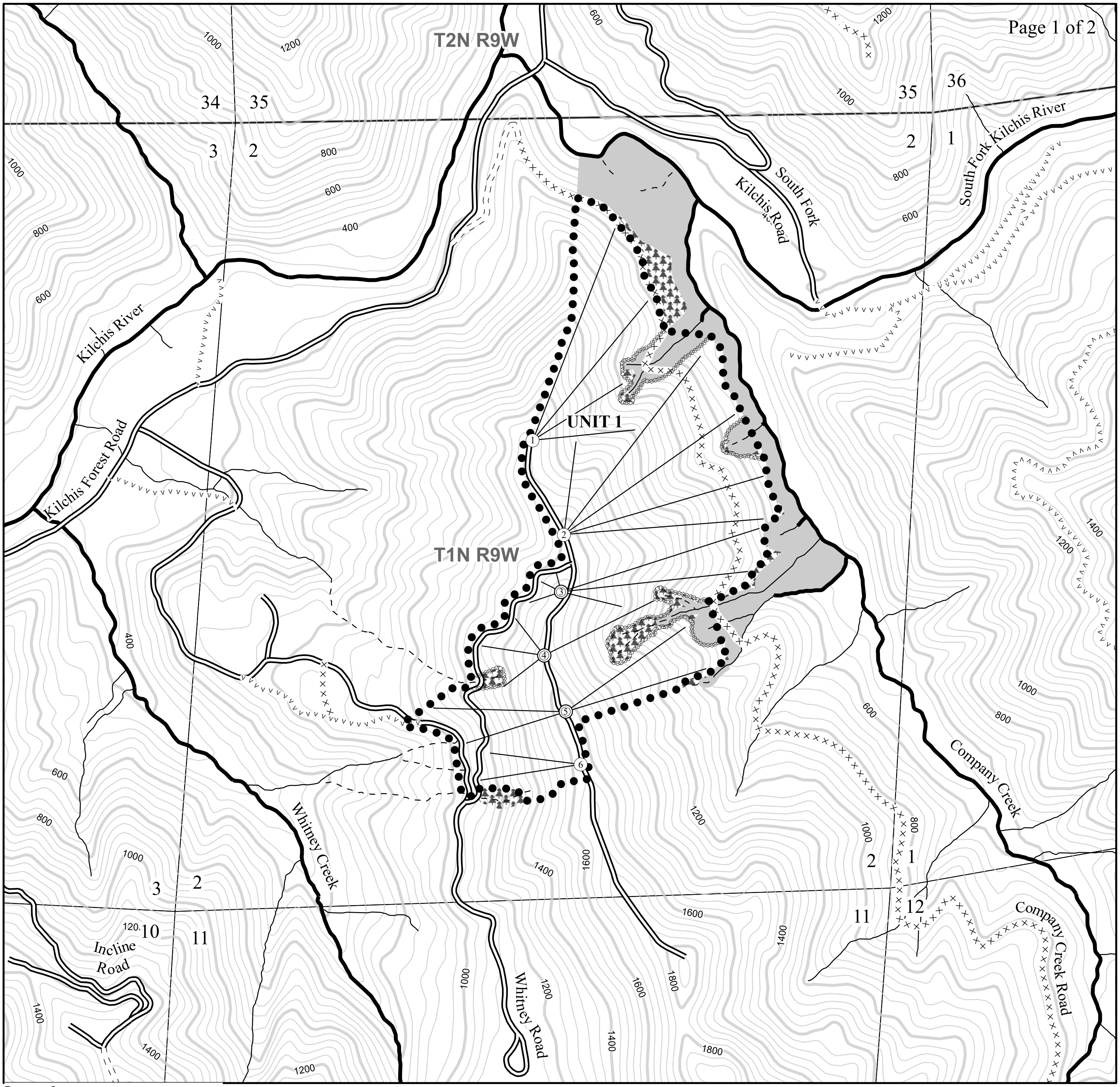
Volume Summary

"STEWARDSHIP IN FORESTRY"

Kilchis Company

Volume Summary

TOTAL SALE VOLUME	257 acres	
SPECIES	Cruised Net (MBF)	Net Sale (MBF)
Douglas-fir	3738	3700
Hemlock	142	141
Spruce	139	138
Noble Fir	0	0
Red Alder	594	582
TOTAL	4613	4561



Legend

- Landing To Be Constructed
- Landing Existing
- Cable Logging
- Timber Sale Boundary
- Riparian Boundary
- Riparian Buffer
- Green Tree Retention
- Type-F Stream
- Type-N Perennial Stream
- Type-N Seasonal Stream
- Surfaced Road
- Unsurfaced Road
- Abandoned Road
- Blocked Road
- 200' Contour
- 40' Contour
- Sections

LOGGING PLAN

FOR TIMBER SALE CONTRACT TL-341-2025-W00958-01
KILCHIS COMPANY
PORTIONS OF SECTIONS 35, 36 of T2N R9W,
SECTION 2 of T1N R9W W.M
TILLAMOOK COUNTY, OREGON

Tillamook District GIS
February 2025
This product is for informational use and may not be suitable for legal, engineering, or surveying purposes.

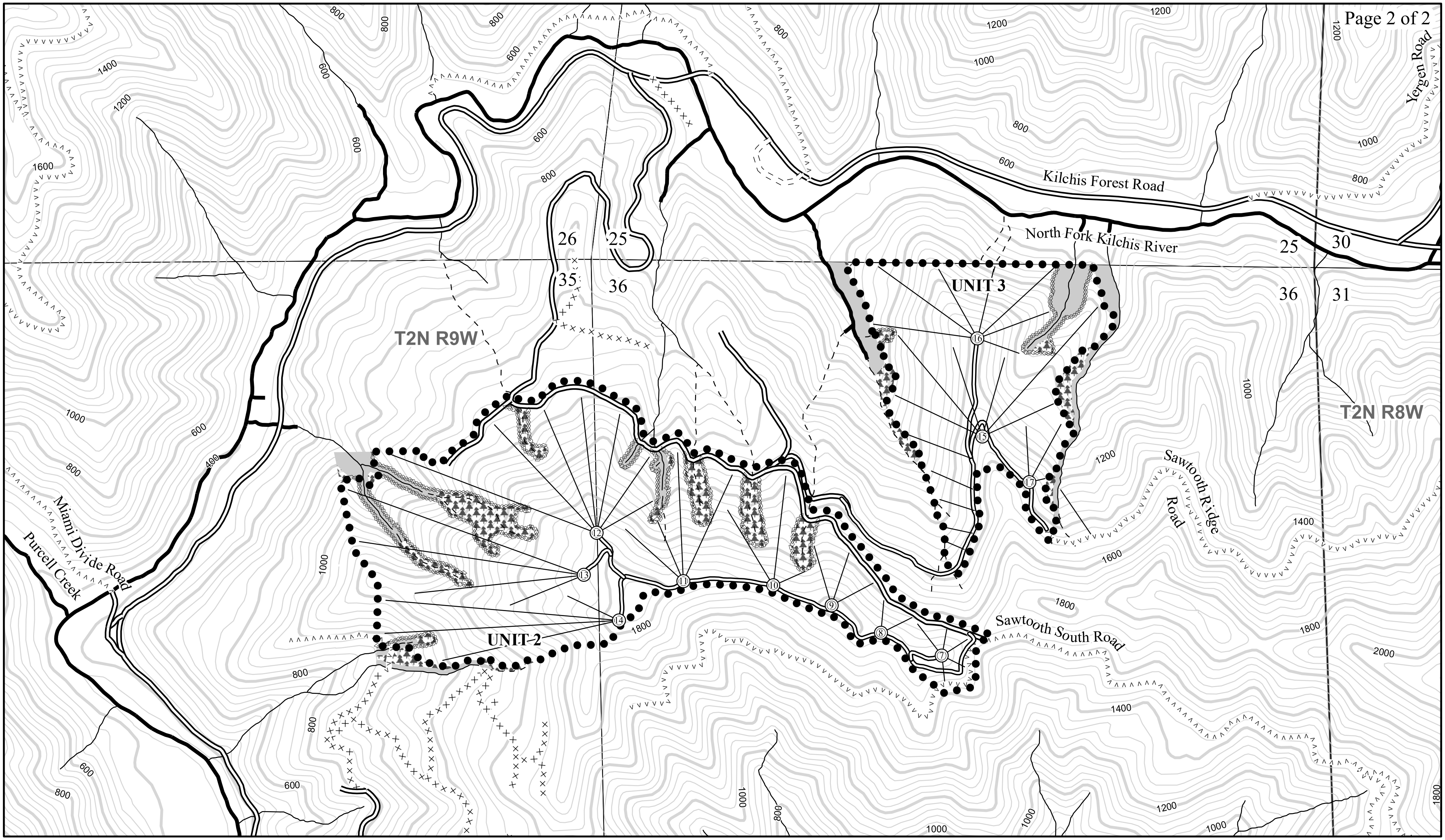
1:12,000
1 inch = 1,000 feet

0 1,000 2,000 Feet

N

NET ACRES

	GROUND	CABLE	TOTAL
UNIT 1	0	103	103
UNIT 2	0	102	102
UNIT 3	0	52	52
TOTAL	0	257	257



◎ Landing To Be Constructed
— Cable Logging
● ● ● Timber Sale Boundary
Riparian Boundary
Riparian Buffer
Green Tree Retention
Type-F Stream
— Type-N Perennial Stream
- - - Type-N Seasonal Stream
Surfaced Road
Unsurfaced Road
v v v v Abandoned Road
× × × Blocked Road
200' Contour
40' Contour
Sections

LOGGING PLAN

FOR TIMBER SALE CONTRACT TL-341-2025-W00958-01
KILCHIS COMPANY
PORTIONS OF SECTIONS 35, 36 of T2N R9W,
SECTION 2 of T1N R9W W.M
TILLAMOOK COUNTY, OREGON

Tillamook District GIS
February 2025
This product is for informational use and may not be suitable for legal, engineering, or surveying purposes.

N

NET ACRES

	GROUND	CABLE	TOTAL
UNIT 1	0	103	103
UNIT 2	0	102	102
UNIT 3	0	52	52
TOTAL	0	257	257

1:12,000
1 inch = 1,000 feet

0 1,000 2,000 Feet