

Elkhorn Timber Sale - Moisture Density (south end)

CAN NO.	Gross wt. wet (g)	Gross wt. Dry (g)	can wt. (g)	Net wt. Dry (g)	status	db (g/cc)
40	97.72	91.55	39.63	51.92	skid	1.73
47	97.22	90.38	40.18		skid	1.67
42	98.99	95.12	39.83		skid	1.84
30	98.01	91.32	37.92	53.40	skid	1.78
49	97.71	89.83	40.46		skid	1.65
48	91.02	82.00	40.25		harvest	1.39
32	78.76	65.61		27.50	control	.92
27	66.41	56.26		18.43	harvest	.61
36	70.95	62.60		24.77	control	.83
5	80.70	70.68		32.56	control	1.09
4	92.57	81.69		44.82	harvest	1.49
8	80.53	69.13	39.70		control	.98
3	88.49	77.47		39.98	control	1.33
	67.60	60.35		22.25	harvest	.74
1	74.45	65.36		27.51	harvest	.92

can No.	Gross wt. wet	Gross wt. Dry	Can wt.	Net wt. Dry	status	db
17	80.86	75.71	37.65	38.06	control	1.27
5	87.34	75.62	37.81	37.81	skid	1.26
12	66.04	57.40		19.23	harvest	.64
43	63.18	58.88	39.36		control	.65
6	71.16	62.96		25.06	harvest	.84
39	64.66	56.46	40.01		harvest	.55
34	80.52	75.15		37.20	control	1.24
28	82.67	72.67		34.71	harvest	1.16
13	90.66	81.62		43.67	skid	1.46
41	83.81	73.84	40.24		harvest	1.12
18	89.04	79.27		41.56	skid	1.39
8	88.83	80.22		42.38	skid	1.41
23	83.62	76.34		39.25	control	1.31
26	81.42	76.32		38.47	control	1.28
37	102.54	92.41	40.20		skid	1.74

D-1 ELKHORN Timber Sale Compaction 1982

South End

S. End

control	<u>x</u>	<u>x²</u>
	.92	.85
	.83	.69
	1.09	1.19
	.98	.96
	<u>1.33</u>	<u>1.77</u>
	5.15	5.46

$$s = \sqrt{\frac{5.46 - \frac{(5.15)^2}{5}}{4}}$$

$$\bar{x} = 1.03$$

$$= .20$$

$$CV = 19.4\%$$

-kid	1.73	2.99
	1.67	2.79
	1.84	3.39
	1.78	3.17
	<u>1.65</u>	<u>2.72</u>
	8.67	15.06

$$s = \sqrt{\frac{15.06 - \frac{(8.67)^2}{5}}{4}}$$

$$\bar{x} = 1.73$$

$$= .08$$

$$CV = 4.6\%$$

harvest	1.39	1.93
	.61	.37
	1.49	2.22
	.74	.55
	<u>.92</u>	<u>.85</u>
	5.15	5.92

$$s = \sqrt{\frac{5.92 - \frac{(5.15)^2}{5}}{4}}$$

$$\bar{x} = 1.03$$

$$= .39$$

$$CV = 37.9\%$$

D-1 ELKHORN Timber Sale Compaction

North End

control	X	X ²
	1.27	1.61
	.65	.42
	1.24	1.54
	1.31	1.72
	<u>1.28</u>	<u>1.64</u>
	5.75	6.93

$$s = \sqrt{\frac{6.93 - \frac{(5.75)^2}{5}}{4}} \quad \bar{x} = 1.15$$

$$= .28$$

$$CV = 24\%$$

skid	X	X ²
	1.26	1.59
	1.46	2.13
	1.39	1.93
	1.41	1.99
	<u>1.74</u>	<u>3.03</u>
	7.26	10.67

$$s = \sqrt{\frac{10.67 - \frac{(7.26)^2}{5}}{4}} \quad \bar{x} = 1.45$$

$$= .18$$

$$CV = 12.4\%$$

carvest	X	X ²
	.64	.41
	.84	.71
	.55	.30
	1.16	1.35
	<u>1.13</u>	<u>1.25</u>
	4.31	4.02

$$s = \sqrt{\frac{4.02 - \frac{(4.31)^2}{5}}{4}} \quad \bar{x} = .86$$

$$= .28$$

$$CV = 32.6$$

D-1 Elkhorn Timber Sale Compaction

D-1 ELKHORN Timber Sale Compaction

confidence limits

S. End

confidence limits (.10 level)

std. error control: .09 $1.03 \pm (2.132) .09 = .84 \text{ to } 1.22$

skid: .04 $1.73 \pm (2.132) .04 = 1.64 \text{ to } 1.82$

Harvest: .17 $1.03 \pm (2.132) .17 = .67 \text{ to } 1.39$

N. End

std. errors

confidence limits (.10 level)

control: .13 $1.15 \pm (2.132) .13 = .87 \text{ to } 1.43$

skid: .08 $1.45 \pm (2.132) .08 = 1.28 \text{ to } 1.62$

Harvest: .13 $.86 \pm (2.132) .13 = .58 \text{ to } 1.14$

Mean of N. End

control : 1.15

skid : 1.45

harvest : .86

$X - \bar{X}$: control $\sum (X - \bar{X})^2 = .32$

$$1.27 - 1.15 = .12$$

$$.65 - 1.15 = -.50$$

$$1.24 - 1.15 = .09$$

$$1.31 - 1.15 = .16$$

$$1.28 - 1.15 = .13$$

$X - \bar{X}$: skid $\sum (X - \bar{X})^2 = .13$

$$1.26 - 1.45 = -.19$$

$$1.46 - 1.45 = .01$$

$$1.39 - 1.45 = -.06$$

$$1.41 - 1.45 = -.04$$

$$1.74 - 1.45 = .29$$

$X - \bar{X}$: harvest $\sum (X - \bar{X})^2 =$

$$.64 - .86 = -.22$$

$$.84 - .86 = -.02$$

$$.55 - .86 = -.31$$

$$1.16 - .86 = .30$$

$$1.12 - .86 = .26$$

Mean of S. End

control : 1.03
skid : 1.73
harvest : 1.03

S.E. S. End

control : .09 $1.03 \pm (2.132) .09 = .84 \text{ to } 1.22$
skid : .04 $1.73 \pm (2.132) .04 = 1.64 \text{ to } 1.82$
Harvest : .17 $1.03 \pm (2.132) .17 = .67 \text{ to } 1.39$

S.E. N. End

90% conf. interval
control : .13 $1.15 \pm (2.132) .13 = .87 \text{ to } 1.43$
skid : .08 $1.45 \pm (2.132) .08 = 1.28 \text{ to } 1.62$
Harvest : .13 $.86 \pm (2.132) .13 = .58 \text{ to } 1.14$