

2019 Dakota Fall Ram Test

Hettinger Research Extension Center

Dr. Christopher Schauer, Dave Pearson, NDSU and Dave Ollila, SDSU

701-567-4323

Comfort Factor = % of fibers in the sample less than 30 microns

Curvature = crimp per inch (bigger is better)

Adjustments - core

Source	Producer	TID	Sample	Lab scoured yield, %	Mean fiber diameter, microns	SD, microns	CV, %	Comfort factor, %	Mean fiber curvature, deg/mm	Standard deviation of curvature, deg/mm	Adjustments - core				
											Fiber Dia equation	Fiber Dia	Variability	Variability	
HREC	TW Schalesky	W-1	Core	65.91	22.75	6.16	27.1	90.9	98.9	61.6		-2.25	-2.25	-6.38	-5.00
HREC	TW Schalesky	W-2	Core	60.86	22.96	5.57	24.3	91.9	84.5	57.7		-2.88	-2.88	-2.88	-2.88
HREC	TW Schalesky	W-3	Core	53.52	23.79	5.69	23.9	90.2	106.7	65.1		-5.37	-5.37	-2.38	-2.38
HREC	Estelle Cook	W-4	Core	59.16	20.94	4.60	22.0	97.6	113.0	64.1		3.18	3.18	0.00	0.00
HREC	Estelle Cook	W-5	Core	63.17	20.99	4.43	21.1	98.2	87.0	56.4		3.03	3.03	1.13	1.13
HREC	Estelle Cook	W-6	Core	57.86	22.61	5.21	23.0	94.1	113.7	70.8		-1.83	-1.83	-1.25	-1.25
HREC	Estelle Cook	W-7	Core	64.17	21.02	4.10	19.5	98.2	105.0	64.0		2.94	2.94	3.13	3.13
HREC	Burton Anderson	W-8	Core	58.81	20.96	4.28	20.4	97.8	107.0	67.2		3.12	3.12	2.00	2.00
HREC	Burton Anderson	W-9	Core	46.77	22.90	4.86	21.2	94.6	109.1	67.2		-2.7	-2.70	1.00	1.00
HREC	Burton Anderson	W-10	Core	51.00	22.40	4.99	22.3	95.0	104.4	64.1		-1.2	-1.20	-0.38	-0.38
HREC	Burton Anderson	W-11	Core	49.28	22.85	5.12	22.4	93.5	118.1	70.3		-2.55	-2.55	-0.50	-0.50
HREC	Beau Chapman	W-12	Core	52.60	22.77	4.35	19.1	96.4	107.4	64.5		-2.31	-2.31	3.63	3.63
HREC	Beau Chapman	W-13	Core	55.35	23.51	5.78	24.6	89.9	97.5	61.8		-4.53	-4.53	-3.25	-3.25
HREC	Beau Chapman	W-14	Core	61.20	22.96	4.63	20.2	95.0	105.7	61.0		-2.88	-2.88	2.25	2.25
HREC	Beau Chapman	W-15	Core	63.49	22.91	4.93	21.5	94.0	107.8	60.4		-2.73	-2.73	0.63	0.63
HREC	Beau Chapman	W-16	Core	60.97	25.50	4.45	17.5	89.6	100.2	58.2		-10.5	-6.00	5.63	5.00
HREC	Tate Ollila	W-17	Core	57.58	21.22	4.30	20.3	97.9	127.2	69.3		2.34	2.34	2.13	2.13
HREC	Tate Ollila	W-18	Core	67.08	21.12	4.58	21.7	98.0	101.5	57.4		2.64	2.64	0.38	0.38
HREC	Shan Garson	W-19	Core	59.77	23.10	5.33	23.1	92.9	107.9	66.1		-3.3	-3.30	-1.38	-1.38
HREC	Shan Garson	W-20	Core	48.98	24.37	5.63	23.1	89.2	126.5	72.9		-7.11	-6.00	-1.38	-1.38
HREC	Ben Pearson	W-21	Core	44.42	23.88	4.62	19.3	92.3	118.4	71.1		-5.64	-5.64	3.38	3.38
HREC	Paul Erk	W-22	Core	61.78	21.95	4.05	18.5	97.4	111.4	70.1		0.15	0.15	4.38	4.38
HREC	Paul Erk	W-23	Core	52.11	22.99	4.97	21.6	93.3	103.7	62.6		-2.97	-2.97	0.50	0.50
HREC	Paul Erk	W-24	Core	63.44	22.26	5.20	23.4	94.8	101.2	64.7		-0.78	-0.78	-1.75	-1.75
HREC	Rocky Hill	W-25	Core												
HREC	Paul Erk	W-26	Core	58.90	22.31	5.01	22.5	95.1	98.2	57.2		-0.93	-0.93	-0.63	-0.63
HREC	Paul Erk	W-27	Core	53.23	22.92	5.06	22.1	94.7	100.7	59.5		-2.76	-2.76	-0.13	-0.13
HREC	Rocky Hill	W-28	Core	64.25	22.58	4.52	20.0	95.9	92.9	58.4		-1.74	-1.74	2.50	2.50
HREC	Paul Erk	W-29	Core	60.14	20.33	3.68	18.1	99.1	122.6	66.2		5.01	5.01	4.88	4.88
HREC	Paul Erk	W-30	Core	58.32	21.38	4.63	21.7	96.6	93.9	57.9		1.86	1.86	0.38	0.38
HREC	Paul Erk	W-31	Core	58.81	20.94	3.98	19.0	98.6	105.9	65.9		3.18	3.18	3.75	3.75
HREC	Ian McGivney	W-32	Core	59.45	22.68	5.22	23.0	94.3	91.3	60.4		-2.04	-2.04	-1.25	-1.25
HREC	Ian McGivney	W-33	Core	55.23	23.48	5.13	21.8	91.6	97.3	59.7		-4.44	-4.44	0.25	0.25
HREC	Ian McGivney	W-34	Core	48.42	22.46	5.62	25.0	92.6	107.4	67.1		-1.38	-1.38	-3.75	-3.75
HREC	Ian McGivney	W-35	Core	50.06	21.67	4.40	20.3	97.3	87.3	56.5		0.99	0.99	2.13	2.13
HREC	Matt Rabel	W-36	Core	58.30	20.45	4.22	20.6	98.8	91.2	58.5		4.65	4.65	1.75	1.75
HREC	Matt Rabel	W-37	Core	53.89	20.28	4.44	21.9	98.1	96.5	59.0		5.16	5.16	0.13	0.13
HREC	Matt Rabel	W-38	Core	56.62	22.61	5.49	24.3	93.6	94.1	61.2		-1.83	-1.83	-2.88	-2.88
HREC	Matt Rabel	W-39	Core	63.81	21.56	5.08	23.6	96.5	92.9	60.0		1.32	1.32	-2.00	-2.00
HREC	Matt Rabel	W-40	Core	56.33	21.78	4.92	22.6	96.3	104.9	60.5		0.66	0.66	-0.75	-0.75
HREC	Matt Rabel	W-41	Core	68.12	21.84	4.34	19.9	97.1	87.4	54.1		0.48	0.48	2.63	2.63
HREC	Jim Forbes	W-42	Core	56.49	20.93	5.03	24.0	96.2	93.7	57.6		3.21	3.21	-2.50	-2.50
HREC	Jim Forbes	W-43	Core	58.59	21.83	4.87	22.3	96.8	94.6	60.0		0.51	0.51	-0.38	-0.38
HREC	Jim Forbes	W-44	Core	51.90	21.23	3.99	18.8	98.7	111.9	67.0		2.31	2.31	4.00	4.00
HREC	Jim Forbes	W-45	Core	54.94	22.05	4.42	20.0	96.4	109.0	64.5		-0.15	-0.15	2.50	2.50
HREC	Jim Forbes	W-46	Core	53.17	21.95	4.80	21.9	95.2	106.9	62.7		0.15	0.15	0.13	0.13
HREC	Jim Forbes	W-47	Core	60.43	21.09	4.21	20.0	98.1	99.6	60.3		2.73	2.73	2.50	2.50
HREC	Jim Forbes	W-48	Core	61.15	23.00	5.64	24.5	91.7	99.7	61.8		-3	-3.00	-3.13	-3.13
	Average			57.44	22.21	4.82	21.68	95.15	103.06	62.65		-0.64	-0.52	0.40	0.41
	Min.			44.42	20.28	3.68	17.50	89.20	84.50	54.10		-10.50	-6.00	-6.38	-5.00
	Max.			68.12	25.50	6.16	27.10	99.10	127.20	72.90		5.16	5.16	5.63	5.00
HREC	David Brown	Y-70	Core	53.65	25.74	5.84	22.7	80.9	89.6	58.4					
HREC	David Brown	Y-71	Core	54.09	23.70	5.41	22.8	89.7	92.0	57.6					
HREC	Hettinger REC	Y-72	Core	50.06	28.18	5.63	20.0	69.6	96.4	59.7					
HREC	Hettinger REC	Y-73	Core	52.18	27.37	5.15	18.8	74.5	90.9	55.1					
HREC	Loni Blackman	Y-74	Core	52.28	23.97	5.24	21.9	91.1	107.3	63.6					
HREC	Loni Blackman	Y-75	Core	50.87	23.97	4.41	18.4	93.1	120.2	71.1					
HREC	Bredahl Columbia	Y-76	Core	49.39	28.51	7.48	26.2	63.2	94.1	60.8					
HREC	Bredahl Columbia	Y-77	Core	64.37	28.29	6.86	24.2	66.5	86.8	56.6					
HREC	Heidi Klick	Y-78	Core	50.23	31.09	8.02	25.8	51.9	86.3	55.5					
HREC	Timber Creek	Y-79	Core	52.51	27.45	5.46	19.9	73.2	94.3	58.7					
HREC	Margaret Eller	Y-80	Core	51.13	28.08	5.69	20.3	69.4	96.1	60.3					
HREC	Stanley	Y-81	Core	62.77	29.66	6.73	22.7	60.1	80.1	52.9					
HREC	Stanley	Y-82	Core	59.36	31.97	7.69	24.1	44.6	85.8	52.5					
HREC	Stanley	Y-83	Core	59.72	31.56	6.77	21.5	46.2	79.2	54.8					
HREC	Peterson	Y-85	Core	53.75	26.01	5.00	19.2	85.0	93.4	57.9					
HREC	Peterson	Y-86	Core	62.32	23.53	4.40	18.7	94.9	93.5	59.2					
HREC	Peterson	Y-87	Core	50.28	25.35	4.67	18.4	89.5	107.5	65.3					