

Table 3.--Velocity components, slope, ablation, and surface lowering at velocity stakes.

Stake	x' (feet)	y' (feet)	\bar{y}' (a)	V _x (fpy)	V _y (fpy)	V _z (fpy)	V _{x'} (fpy)	V _{y'} (fpy)	V _{z'} (fpy)	tan α	V _a summer (fpd)	V _a year (fpy)	V _s (fpy)
17-5	-1,630	+1,700	+0.49	209	-111	-28	237						
4	-2,200	0	0	323	-25	-68	324	b ₀	-9	0.083			-9
3	-770	+150	+0.05	378	-53	-45	383	b ₀	-50	.074			-11.0
2	-350	+970	+0.39	331	-108	+17	348		+3	.118			-10.7
1	-790	+1,050	+0.57	305	-59	+3	310		+49	.086			-11.2
									+48	.156			-11.0
8-10	+1,580	-230		324			325			c.05			
9	+4,080	+131	+0.064	253	+17					c.035			
8	+4,788	+1,432	+0.703	198	-46	+14.3	198	-56.2	-3.0	.0568		c-6	-7.3
7	+4,800	+1,130	+0.554	202	d-19			d-28.6					
6	+4,888	+903	+0.443	235	-2.4	-9.1	235	-15.1	+1.8	.0455		c-6	-8.5
4	+4,977	0	0	246.5	+12.7	-7.9	246	b ₀	-0.5	.0301		c-7	-8.3
3	+5,039	-627	-0.307	240	+13.7	-8.4	240	+1.0	-0.2	.0343	-0.177	-5.6	-7.3
2	+5,043	-993	-0.487	230.5	+19.7	-7.8	230	+7.9	+0.8	.0376		c-6	-6.5
1	+4,875	-1,985	-0.974	37	d ₀	+5.5	37	d+15	+5.5	c ₀		c-10	-5.0
3-12	+6,323	-1,390	-0.678	212	d+12		212			.0714			
11	+7,080	-1,700	-0.830	172	-57		172			.1613			
10	+7,066	+1,790	+0.795	168	d+20	+10.6	168	c+21.1		c.0625		-7.6	
9	+7,254	+1,168	+0.519	232.5	d+19.5	-3.4	232	+22.5	+6.3	.042		-3.9	
8	+7,273	+1,119	+0.497	232.5	+18.5	-3.3	232	+21.5	+6.4	.0417		-6.1	-5.4
7	+7,287	+1,076	+0.478	234	d+17.5	-2.7	234	+20.5	+7.0	.042		-4.4	
6	+7,338	+794	+0.353	243.5	d+9	-3.9	244	+12	c+8.3	c.0500		-6.9	-5.4
5	+7,551	+313	+0.139	249	d ₀	-9.1	249	+3	c+1.4	c.042		-5.2?	-7.0
4	+7,735	-550	-0.252	242.5	-6.0	-12.2	242	-3	+6.2	.0758	-0.129	-7.4	-5.7
3a	+7,787	-1,320	-0.629	205	d-10	-11.1	205	-9	+3.4	.0705		-8.6	-4.2
3	+7,730	-1,720	-0.819	138	d-20	+2.3	138	-18	+8.8	.0472		-9.5	-7.0
2	+7,669	-1,954	-0.930	71.5	d-13.7	+6.6	72	-13	+10.3	.0510		-12.5	-8.2
1	+7,624	-2,045	-0.975	36.5	d-8.2	+6.4	36	-8	+8.1	.0472		c-16	
5-4	+8,840	+320	+0.154	228	d+5	-11.8	228	+5	+2.8	.0641			
3	+8,860	-500	-0.241	223	d-1.5	-13.4	223	-1.5	+0.6	.0625		c-8	-6.0
2	+8,880	-1,755	-0.845	125	d-17.4	+6.4	125	-17.4	+13.3	.0555		-9.3	
1	+8,830	-2,005	-0.965	70	d-14.6		70	-14.6				c-11	
6-8	+11,200	-320		183	+40.5	-2.4	186		+6.6	.0481	-0.164	c-10.5	-8.5
7	+10,245	+746	+0.330	193	+23.2	-4.8	193	+21.8	+7.6	.0641		c-9	-6.3
6	+9,870	0	0	214	+1.6	-10.3	214	b ₀	+6.2	.0769			
4	+10,100	-427	-0.189	209	+2.8	-7.3	209	+1.2	+5.1	.0595	-0.184	c-9.7	-8.7
3	+10,129	-1,312	-0.581	158	-6.8	+3.3	158	-8.0	+5.0	.0526		c-10	-5.5
2b	+9,614	-1,840	-0.814	99.5	-17.0	+7.8	100	-17.7	+13.8	.0595	-0.147	-14.8	-4.8
2	+10,068	-1,833	-0.811	98.3	-18.4	+6.6	98	-19.1	+12.4	.0595	-0.147	-15.0	-4.8
2a	+10,543	-1,874	-0.830	86.4	-13.5	+8.6	86	-14.1	+14.3	.0658	-0.187	-15.9	-4.6
1	+10,068	-2,035	-0.900	64.2	-17.4	+7.8	64	-17.9	+11.4	.0555		-17	-3.7
15-2	+13,080	0	0	143.2	+73.1	+1.9	161	b ₀	+9.2	.045		c-10	-10.5
1	+12,570	-1,670	-0.77	38.5	+20.7	+6.2	43.7	-1.1				c-11	
14-5	+18,300	+170	-0.08	120.3	+54.1	+2.3	132	0	+9.9	.058	-0.133	-11.2	-10.5
4	+21,800	0	0	94.9	+40.6	+2.7	103	b ₀	+10.2	.074	-0.175	-13.8	-5.5
3	+20,120	0	0	107.5	+45.8	+1.8	117	b ₀	+8.4	.057	-0.129	-11.2	-6.7
2	+20,150	+1,400	+0.72	98.6	+37.0	+1.6	105.4	-5.0	+10.0	.077	-0.146	-12.3	-8.8
1	+20,150	+1,780	+0.91	85.4	+33.5	+9.0	91.7	-2.9	+16	.080	-0.154	-14.2	-10.3
12-5	+27,493	0	0	38.4	+5.3	+1	39	b ₀	+5.9	.126	-0.202	-19.3	-8.0
4	+27,990	0	0	31.6	+6.1	+1	32	+1.7	+5.5	.139	-0.220	-20.3	-11.0
3	+28,431	0	0	23.4	+6.7	d+2	24	+3.5	+6.5	.190	-0.224	-20.1	-13.0
2	+28,691	0	0	11.7	+0.5	+3.8	12	-1.1	+6.1	.191	-0.227	-20.3	-15.0

a $\bar{y}' = \frac{y' - y_{\text{centerline}}}{y_{\text{centerline}}}$

b These points determine the flow centerline.

c Approximate value.

d Assumed value.

Location of stakes is shown on figure 10.