TABLE 19.--ENGINEERING INDEX TEST DATA

Soil name, report number, horizon, and depth in inches	Classification		Grain-size distribution[1]											Liquid[2] limit	Plasticity[2] index	Shrinkage		
			Percentage passing sieve--								Percentage smaller than--							
	AASHTO	Unified	3 in.	1-3/4 in.	5/8 in.	3/8 in.	No. 4	No. 10	No. 40	No. 200	.05 mm	.005 mm	.002 mm			Limit	Linear	Ratio
Angelo silty clay loam[3]: (S77TX-235-003)																		
A2---------- 3-9	A-7-6(20)	CL	100	100	100	100	100	100	98	90	80	40	23	43	19	18	11.3	1.74
Bw----------18-32	A-7-6(27)	CL	100	100	100	100	99	98	97	90	82	54	43	47	27	16	14.3	1.89
Bk----------32-50	A-6 (18)	CL	100	100	98	98	96	93	87	80	76	52	41	40	21	19	10.2	1.77
Broome silt loam[4]: (S74TX-235-001)																		
Bkt1---------- 5-18	A-6 (16)	CL	100	100	100	100	99	99	98	93	78	30	22	34	16	19	7.7	1.76
Bkt3----------24-36	A-6 (23)	CL	100	100	100	100	100	100	100	97	84	38	30	38	23	17	10.5	1.86
Cho gravelly loam[5]: (S77TX-235-004)																		
A---------- 0-8	A-6 (7)	CL	100	89	81	74	69	66	66	52	46	21	15	38	19	17	10.3	1.80
Ck----------25-80	A-1-a (0)	SM	100	100	95	88	69	45	21	15	9	4	3	40	5	33	3.3	1.41
Conger loam[6]: (S74TX-235-002)																		
A---------- 0-6	A-4 (3)	ML-CL	100	100	100	99	97	95	90	53	42	15	14	24	7	15	4.7	1.85
Bw---------- 6-17	A-6 (5)	CL	100	100	100	98	91	83	77	52	42	19	12	31	14	18	6.7	1.81
Ck----------22-72	A-6 (5)	CL	100	100	99	95	87	79	73	54	48	26	16	32	15	19	6.9	1.77
Dev very gravelly loam[7]: (S77TX-235-006)																		
A2---------- 4-24	A-2-7 (1)	GC	100	87	69	62	52	40	26	23	22	13	9	43	23	15	12.8	1.84
Bw----------24-80	A-2-7 (0)	GP-GC	100	94	64	54	40	25	10	8	8	5	3	43	24	15	13.2	1.88
Ector very gravelly loam[8]: (S77TX-235-002)																		
A---------- 0-10	A-7-5 (3)	GM	100	86	68	61	51	45	41	37	32	13	9	58	20	25	13.0	1.55
Nuvalde silty clay loam[9]: (S77TX-235-005)																		
Ap---------- 0-5	A-6 (11)	CL	100	100	100	100	100	100	99	84	76	34	22	32	14	18	7.5	1.80
Bw----------11-26	A-6 (21)	CL	100	100	100	100	100	99	98	88	83	47	38	39	22	14	12.0	1.87
Bk----------26-48	A-6 (22)	CL	100	100	98	98	98	96	95	89	84	55	38	39	25	14	12.7	1.97
Rioconcho silty clay loam[10]: (S77TX-235-001)																		
A1---------- 0-24	A-7-6(27)	CL	100	100	100	100	100	100	100	99	92	49	34	46	24	19	12.3	1.77
Bk----------56-80	A-7-6(36)	CH	100	100	100	100	100	100	98	96	91	57	46	52	34	13	17.5	1.97

[1] For soil materials larger than 3/8 inch, square mesh wire sieves that are slightly larger than equivalent round sieves were used, but this difference in procedure does not seriously affect the data.
[2] Liquid limit and plasticity index values were determined by the AASHTO-89 methods, except that soil was added to the water.

TABLE 19.--ENGINEERING INDEX TEST DATA--Continued

[3] Angelo: From Irion County Courthouse, 3.8 miles NE. on U.S. 67, 3.1 miles N. on Ranch Road 853, 90 feet E. in range.
[4] Broome: From Barnhart, 22.2 miles N. on Texas Highway 163, 3.3 miles E. on a caliche road, 22 yards E. in range.
[5] Cho: From Irion County Courthouse, 3.8 miles NE. on U.S. 67, 12.7 miles N. on Ranch Road 853, 70 yards N. in range.
[6] Conger: From the Irion County Courthouse, 3.8 miles NE. on U.S. 67, 8.6 miles N. on Ranch Road 853, 0.5 mile W. on a caliche road, 50 yards N. in range.
[7] Dev: From the Irion County Courthouse, 0.3 mile S. on U.S. 67, 3.9 miles W. on a caliche road, 100 yards S. in range.
[8] Ector: From the Irion County Courthouse, 19.0 miles W. on Ranch Road 2469, 200 feet N. in range.
[9] Nuvalde: The typical pedon for the series is described in the section "Soil Series and Their Morphology." The liquid limit and plasticity index for the Ap horizon are lower than those described as typical for the series. Data are considered for a taxadjunct to the Nuvalde series.
[10] Rioconcho: The typical pedon for the series is described in the section "Soil Series and Their Morphology."