

Purpose:

The goal of this project was to represent visually the soil zones of the province. We all have an idea of what color the soil zones (Figure 1) should be based on their color designation but what color are the soils across the various soil zones?

Thus, the objective of this project was to collect soils from the different soil zones along three highways to create a visual art work of the soil zones in Saskatchewan.

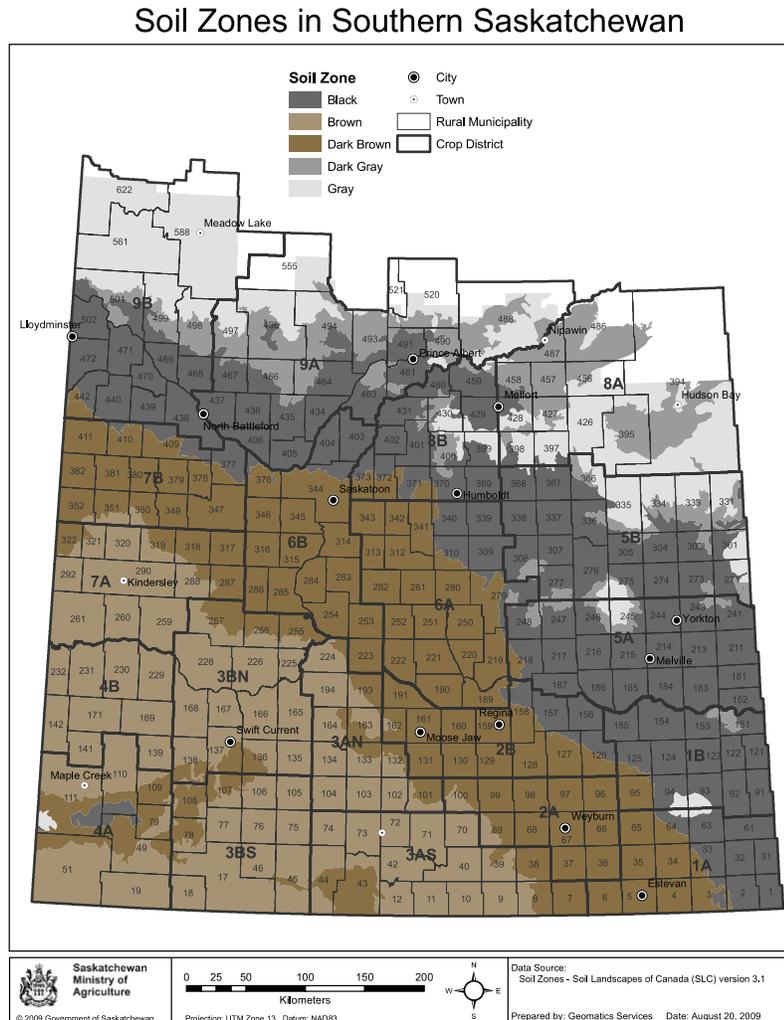


Figure 1. Soil zones of Saskatchewan.

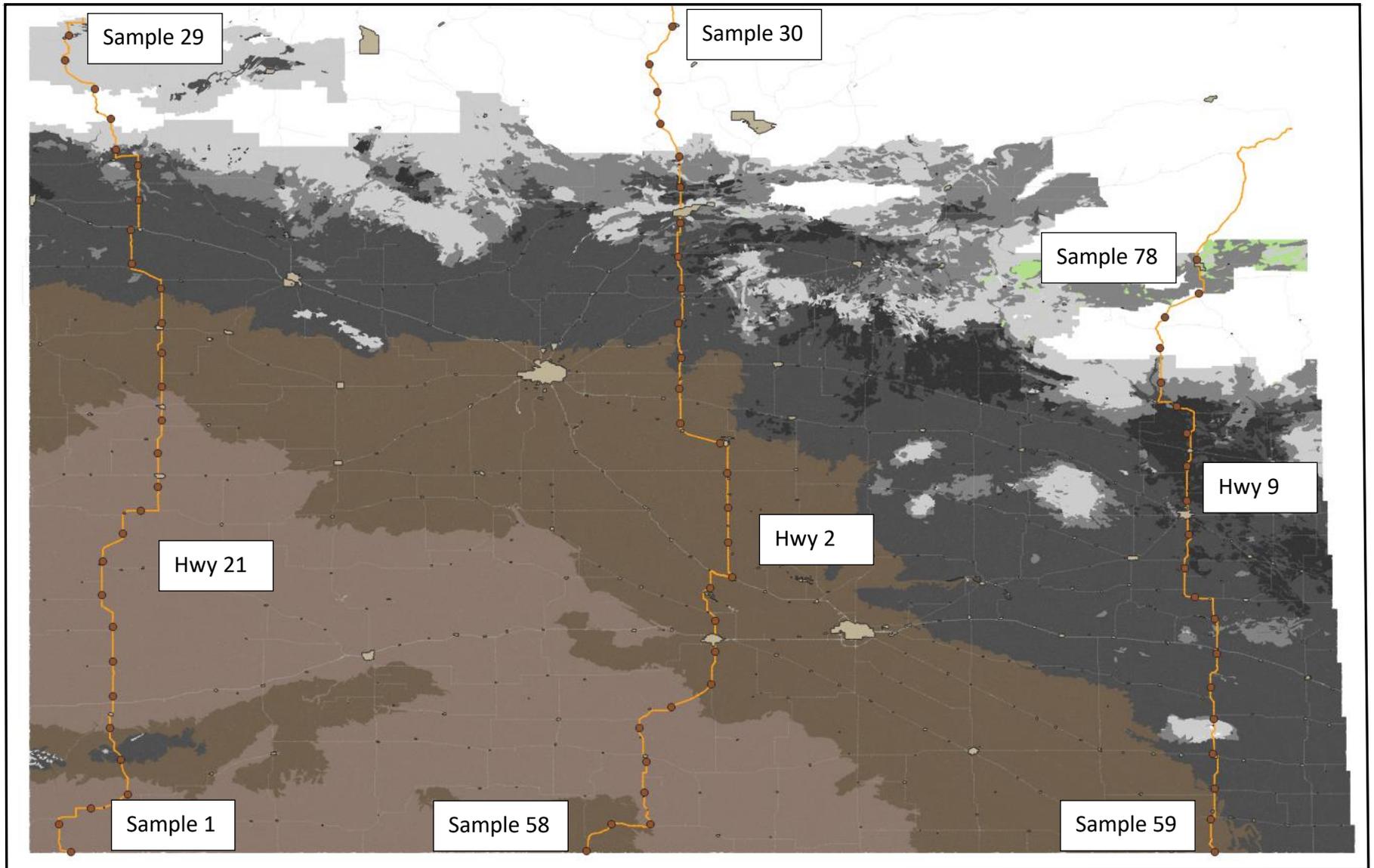


Figure 2. Sampling locations for the project along Highways 21, 2 and 9. (map created by Paul Krug)

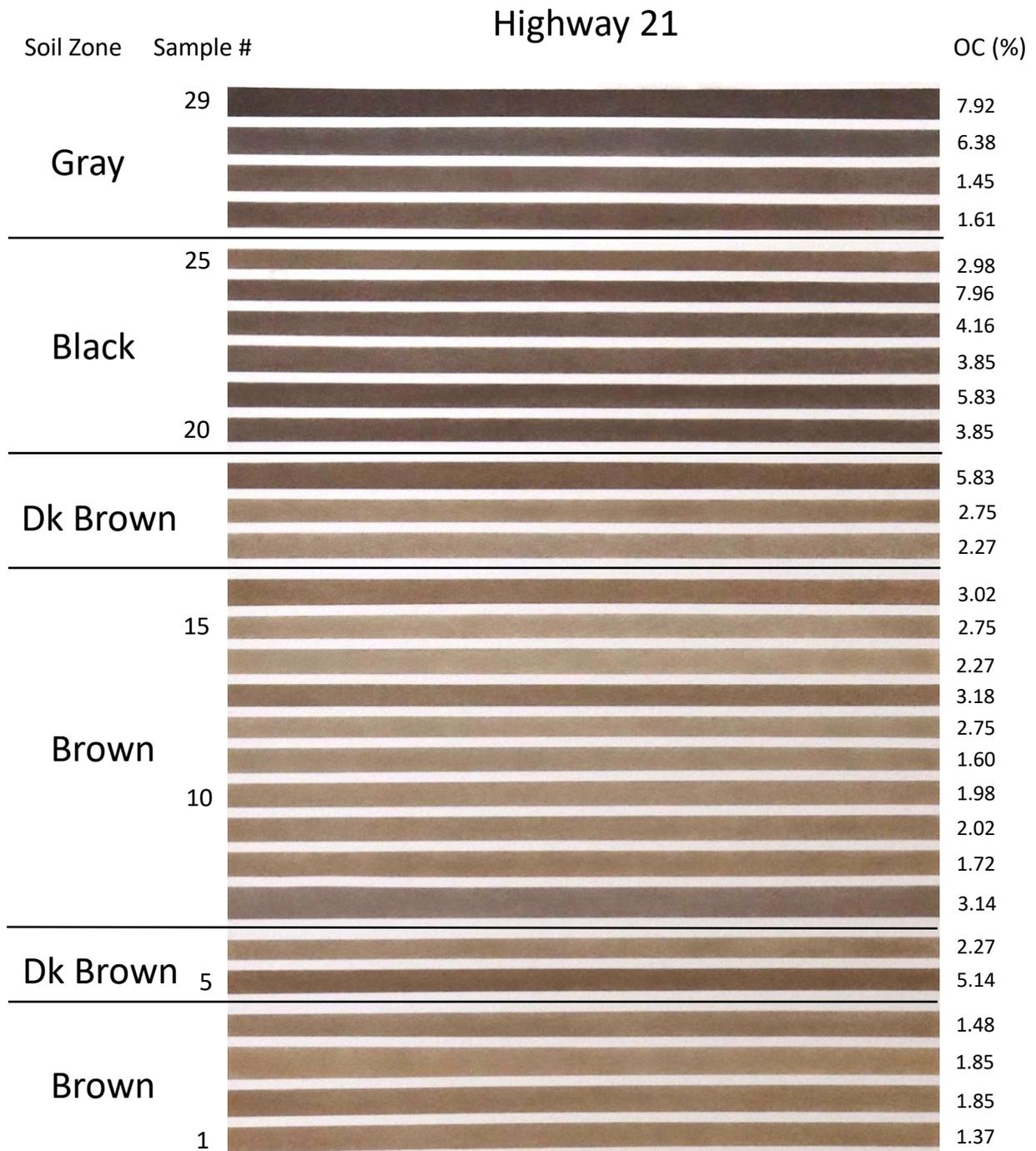


Figure 3. Soil colors for the various soil zones along Highway 21 in Saskatchewan. Samples were collected every 25 km starting at Willow Creek Border Crossing (sample 1) north to Pierceland (sample 29). Soil organic carbon measurements are given on the right side for each sample.

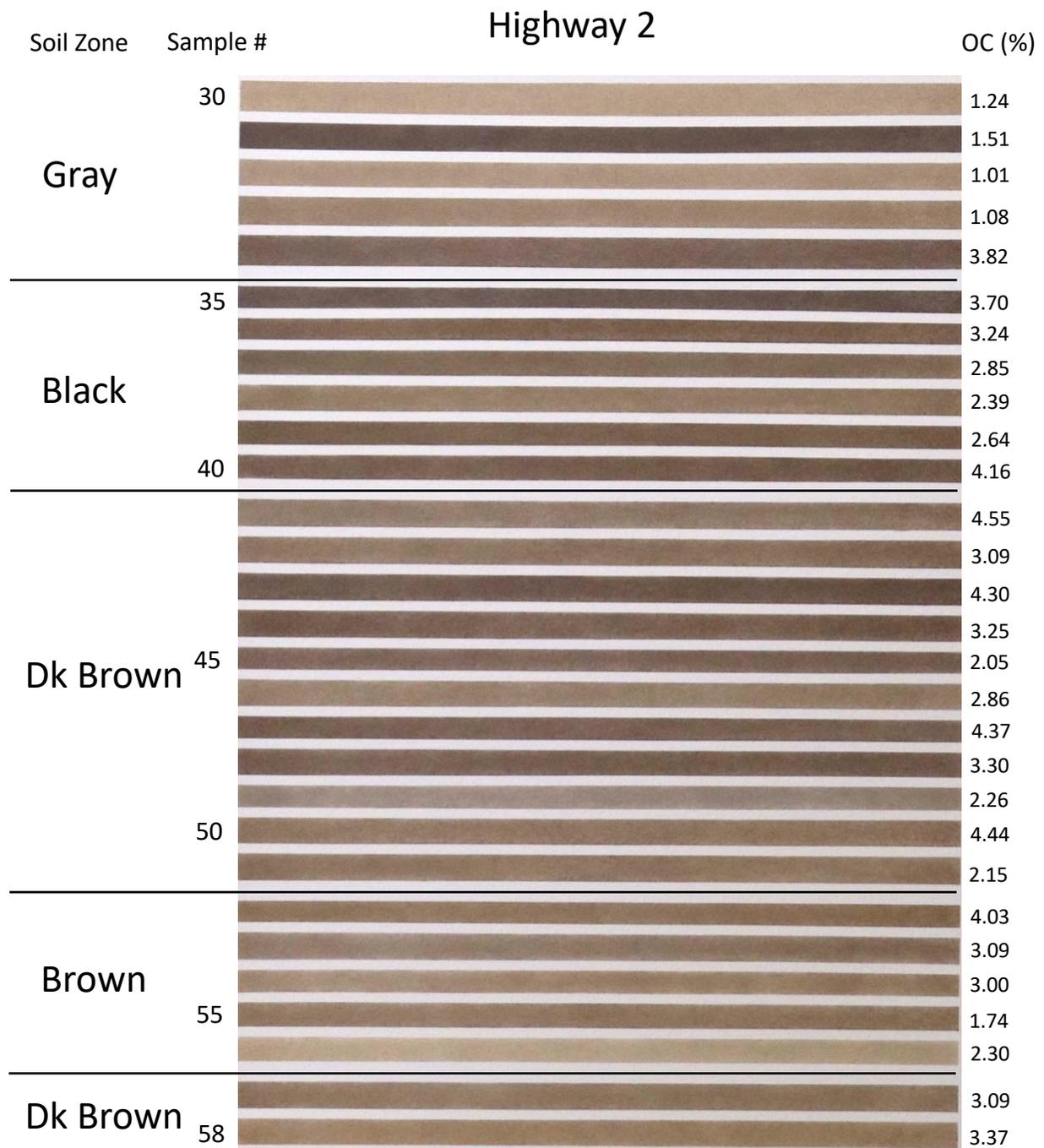


Figure 4. Soil colors for the various soil zones along Highway 2 in Saskatchewan. Samples were collected every 25 km starting at West Poplar Border Crossing (sample 58) north to Weyakwin (sample 30). Soil organic carbon measurements are given on the right side for each sample.

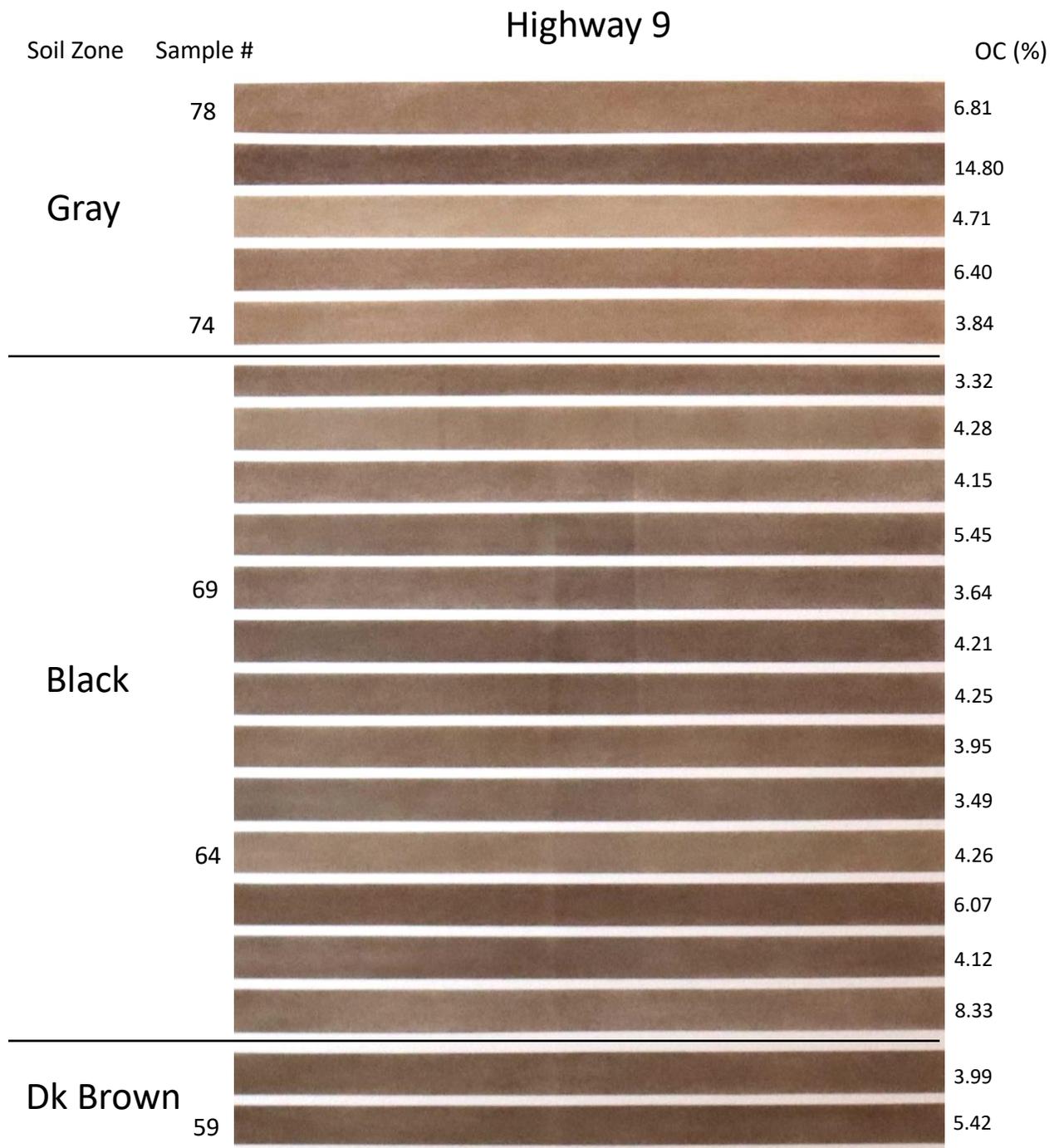


Figure 5. Soil colors for the various soil zones along Highway 9 in Saskatchewan. Samples were collected every 25 km starting at Northgate Border Crossing (sample 59) north to Hudson Bay (sample 78). Soil organic carbon measurements are given on the right side for each sample.

Table 1. Data for each sample point along Highway 21.

Sample #	Km	Soil Zone	Land Cover	OC (%)
1	0	Brown	Pasture	1.37
2	25	Brown	Pasture	1.85
3	50	Brown	Pasture	1.85
4	75	Brown	Hay field	1.48
5	100	Dark Brown	Pasture	5.14
6	125	Dark Brown	Pasture	2.27
7	150	Brown	Pasture	3.14
8	175	Brown	Crop	1.72
9	200	Brown	Crop	2.02
10	225	Brown	Crop	1.98
11	250	Brown	Crop	1.60
12	275	Brown	Crop	2.75
13	300	Brown	Crop	3.18
14	325	Brown	Crop	2.27
15	350	Brown	Crop	2.75
16	375	Brown	Crop	3.02
17	400	Dark Brown	Crop	3.20
18	425	Dark Brown	Crop	2.33
19	450	Dark Brown	Crop	3.75
20	475	Black	Crop	5.83
21	500	Black	Crop	3.85
22	525	Black	Crop	4.16
23	550	Black	Crop	3.54
24	575	Black	Crop	7.96
25	600	Black	Crop	2.98
26	625	Gray	Forest	1.61
27	650	Gray	Forest	1.45
28	675	Gray	Pasture	6.38
29	700	Gray	Crop	7.92

Table 2. Data for each sample point along Highway 2.

Sample #	Km	Soil Zone	Land Cover	OC (%)
30	700	Gray	Forest	1.24
31	675	Gray	Forest	1.51
32	650	Gray	Forest	1.01
33	625	Gray	Forest	1.08
34	600	Gray	Pasture	3.82
35	575	Black	Crop	3.70
36	550	Black	Crop	3.24
37	525	Black	Crop	2.85
38	500	Black	Crop	2.39
39	475	Black	Crop	2.54
40	450	Black	Crop	4.16
41	425	Dark Brown	Crop	4.55
42	400	Dark Brown	Crop	3.09
43	375	Dark Brown	Crop	4.30
44	350	Dark Brown	Crop	3.25
45	325	Dark Brown	Pasture	2.05
46	300	Dark Brown	Crop	2.86
47	275	Dark Brown	Pasture	4.37
48	250	Dark Brown	Crop	3.30
49	225	Dark Brown	Crop	2.26
50	200	Dark Brown	Crop	4.44
51	175	Dark Brown	Crop	2.15
52	150	Brown	Crop	4.03
53	125	Brown	Crop	3.09
54	100	Brown	Crop	3.00
55	75	Brown	Pasture	1.74
56	50	Brown	Pasture	2.30
57	25	Dark Brown	Crop	3.09
58	0	Dark Brown	Pasture	3.37

Table 3. Data for each sample point along Highway 9.

Sample #	Km	Soil Zone	Land Cover	OC (%)
59	0	Dark Brown	Crop	5.42
60	25	Dark Brown	Crop	3.99
61	50	Black	Crop	8.33
62	75	Black	Crop	4.12
63	100	Black	Forest	6.07
64	125	Black	Crop	4.26
65	150	Black	Crop	3.49
66	175	Black	Crop	3.95
67	200	Black	Crop	4.25
68	225	Black	Crop	4.21
69	250	Black	Crop	3.64
70	275	Black	Crop	5.45
71	300	Black	Crop	4.15
72	325	Black	Crop	4.28
73	350	Black	Pasture	3.32
74	375	Gray	Crop	3.84
75	400	Gray	Forest	6.40
76	425	Gray	Forest	4.71
77	450	Gray	Forest	14.80
78	475	Gray	Forest	6.81

Click here to read the news article about Dr. Ken Van Rees' experience creating this artwork.