

**Table 4. Soil chemical properties for weighted profiles mean of soil map units (SMUs) in the study area.**

Mapping Unit	Profile No.	Depth profile (cm)	pH (1:1)	ECe dsm <sup>-1</sup>	Soluble cations (meq/L)				Soluble anions (meq/L)			Gypsum content (%)	CaCO <sub>3</sub> content (%)	CEC (cmol <sup>(+)</sup> /kg)	ESP (%)
					Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Cl <sup>-</sup>	HCO <sub>3</sub> <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>				
Alluvial Fan1	2	150	7.58	3.04	13.31	4.17	11.84	1.13	16.82	12.87	0.77	0.44	9.17	4.13	11.36
	3	150	8.03	6.46	36.96	3.57	16.27	7.75	38.98	24.34	1.23	0.16	6.93	8.04	12.13
	7	150	7.70	6.28	37.97	5.95	15.73	2.93	38.30	23.10	1.14	0.90	6.69	7.13	12.92
	8	150	7.30	3.77	19.36	2.91	14.12	1.45	23.26	12.90	1.68	0.29	10.00	6.92	13.54
Alluvial Fan2	1	150	7.85	5.30	26.87	3.35	20.60	2.20	31.60	20.60	0.75	1.83	4.13	2.52	8.75
	4	150	7.64	1.64	6.87	1.41	6.25	1.84	5.46	10.18	0.70	0.68	10.55	5.52	2.53
	5	150	7.49	6.24	33.15	3.86	26.87	2.27	43.44	20.24	2.49	1.66	12.74	9.01	14.25
Alluvial Fan3	11	150	7.55	2.45	12.26	2.91	6.80	2.46	9.97	14.00	0.52	0.17	11.59	1.20	7.53
Bajada	6	150	7.69	4.96	25.52	3.99	16.52	3.50	32.77	14.79	1.97	1.35	7.10	5.20	13.16
	9	150	8.01	5.51	36.66	3.37	10.53	5.27	37.93	16.51	1.36	1.92	10.07	7.50	14.09
	10	150	7.71	6.75	42.83	4.31	18.15	2.91	42.56	22.67	2.91	2.74	9.45	7.91	13.67
	16	150	8.23	3.32	20.69	1.06	9.41	2.01	17.06	15.08	1.03	0.74	7.87	10.88	11.84
Inland playa	15	150	7.75	42.83	177.73	7.76	225.16	17.58	374.55	29.55	24.18	4.20	32.17	24.00	30.53
Decantation Basin	12	150	8.03	2.79	14.41	3.10	4.88	5.55	14.17	13.14	0.64	4.59	6.20	11.11	19.91
	13	150	7.59	2.61	12.98	1.49	9.83	1.83	13.87	11.67	0.57	2.40	9.90	8.57	8.85
	14	150	7.94	13.32	69.92	5.79	48.77	8.74	100.80	22.83	9.57	7.16	6.77	9.64	27.88
	18	150	7.63	8.34	57.40	2.17	22.16	1.66	55.35	21.58	6.46	4.52	2.46	12.84	13.24
	19	150	8.03	7.61	39.54	13.01	16.51	7.00	50.91	20.83	4.29	2.95	0.94	9.08	15.45
	20	150	7.45	6.39	44.05	3.30	10.47	1.57	45.32	12.86	1.17	0.68	3.30	12.08	13.11
High terrace	17	150	7.73	7.58	35.84	3.55	31.18	4.80	57.23	15.68	2.95	1.59	3.22	26.52	25.32
	21	150	7.44	10.92	41.40	4.02	53.82	9.93	88.82	16.50	3.85	3.27	12.42	13.48	28.13
	22	150	7.41	11.52	52.36	4.50	44.05	14.21	91.13	17.31	6.75	2.42	2.17	12.89	29.84
	23	150	7.91	13.53	70.98	3.82	52.68	7.78	112.23	17.07	5.99	5.85	5.10	11.90	33.89
old alluvial plain	27	150	7.63	29.54	160.44	1.63	111.36	22.02	270.34	13.35	11.76	5.35	1.04	9.83	24.41
	28	150	7.70	38.83	153.79	1.62	190.70	42.18	362.13	18.13	8.02	7.90	2.91	37.69	32.30
	29	150	8.08	33.75	160.91	4.43	168.83	3.32	278.26	26.75	32.48	7.66	0.96	13.59	33.63
Young alluvial plain	25	150	7.79	3.12	15.13	2.62	9.68	3.79	17.64	12.21	1.34	0.99	1.20	22.68	25.38
Dry valleys	24	150	7.64	20.57	66.93	6.27	83.91	48.61	176.81	22.17	6.76	2.19	1.33	7.23	13.06
	26	150	8.39	16.83	60.24	4.54	79.98	23.55	140.08	22.03	6.21	6.71	2.52	5.55	13.11