

Table OP-5b-2 Laboratory Analyses (Page 1 of 6)

Profile Number	Sample Depth (inches)	Soil Horizon	LQD Topsoil Suitability Parameters						Additional Fertility Analyses					
			pH (S.U.) ⁽¹⁾	Electrical Conductivity (mmhos/cm)	Saturation (%)	Sodium Adsorption Ratio	Selenium (ppm)	Boron (ppm)	Lime Estimate	Calcium (meq/L)	Magnesium (meq/L)	Sodium (meq/L)	Potassium (meq/L)	Organic Matter (%)
LQD Topsoil Suitability Criteria ⁽²⁾			5.5 - 8.5	0-8	25-80	0 - 10	<0.1	<5.0	--	--	--	--	--	--
Pepal Sandy Loam														
NW Pad PR-1	0-3	A	6.3	0.1	26.1	1.2	0.049	0.01	Low	0.4	0.1	0.6	0.2	1.0
	3-12	Bw	7.1	0.2	30.4	1.1	0.045	0.03	Low	0.8	0.2	0.8	<0.1	1.3
	12-16	Bw	7.4	0.2	33.8	0.7	0.015	0.02	Low	1.4	0.4	0.7	<0.1	0.6
	16-48	Cr	8.8	0.7	32.9	5.0	0.040	0.02	Very High	3.0	0.6	6.7	<0.1	0.9
NW Pad PR-2	0-3	A	7.2	0.2	24.0	1.8	0.041	0.03	Low	0.7	0.2	1.2	0.2	1.1
	3-10	Bw	7.3	0.2	31.2	3.4	0.019	0.03	Low	0.5	0.1	1.9	<0.1	0.9
	10-18	Bk	7.8	1.9	31.6	8.6	0.032	0.02	Medium	5.7	1.9	16.7	<0.1	0.7
	18-38	C/Cr	8.3	5.2	38.4	12.0	0.034	0.11	Very High	31.0	9.2	53.7	0.1	0.5
	18-38 ⁽³⁾	C/Cr	8.3	5.4	35.3	12.1	0.035	0.13	Very High	31.6	9.5	54.8	0.1	0.5
NC Pad PR-1	0-3	A	6.9	0.2	29.1	0.9	0.019	0.02	Low	0.7	0.2	0.6	0.2	1.1
	3-11	B	7.3	0.2	29.9	0.6	0.025	0.03	Low	1.5	0.6	0.7	<0.1	0.8
	11-18	Bk	8.1	0.2	26.4	3.3	0.039	0.02	Low	0.4	0.1	1.7	<0.1	0.7
	18-40	C/Cr	8.5	1.1	28.3	6.1	0.022	0.03	High	3.2	1.4	9.2	0.1	0.5
	40-62	Cr	8.0	4.8	29.0	8.2	0.045	0.16	High	44.1	14.4	44.4	0.8	0.4
SE Pad2 PR-1	0-3	A	6.5	0.2	20.6	1.3	0.032	0.01	Low	0.7	0.2	0.8	0.2	0.9
	3-16	Bw	7.1	0.1	26.1	1.6	0.028	0.01	Low	0.3	0.0	0.7	<0.1	0.5
	16-30	Bc	8.7	1.3	29.0	10.5	0.045	0.03	Medium	3.1	1.0	14.9	0.1	0.5
	30-52	C/Cr	8.3	0.3	26.5	1.2	0.057	0.02	Low	1.3	0.4	1.1	<0.1	0.4
NE Pad PR-1	0-3	A	7.0	0.3	22.1	1.2	0.035	0.02	Low	0.8	0.3	0.9	0.2	1.2
	3-8	Bw	7.4	0.1	28.1	0.9	0.036	0.03	Low	0.7	0.1	0.5	<0.1	0.9
	8-16	BC	7.7	0.2	28.1	0.8	0.037	0.02	Low	0.8	0.1	0.6	<0.1	0.4
	16-34	C/Cr	8.5	0.2	27.8	0.9	0.035	0.01	Medium	1.1	0.1	0.7	<0.1	0.3
	34-68	Cr	8.8	0.3	23.7	2.0	0.036	0.00	Medium	1.5	0.2	1.9	<0.1	0.2
NE Pad PR-2	0-3	A	5.5	0.2	28.1	0.8	0.042	0.03	Low	0.6	0.2	0.5	0.3	1.1
	3-16	Bw	7.0	0.1	27.2	1.3	0.048	0.03	Low	0.5	<0.1	0.6	<0.1	0.5
	16-30	Bk	8.2	0.3	26.9	1.3	0.045	0.02	High	1.6	0.8	1.4	<0.1	0.7
	30-62	C/Cr	8.2	3.7	27.7	5.5	0.047	0.11	High	26.7	16.6	25.6	0.3	0.5

Table OP-5b-2 Laboratory Analyses (Page 2 of 6)

Profile Number	Sample Depth (inches)	Soil Horizon	Texture Information				Nutrient and Trace Element Availabilty						
			Sand (%)	Silt (%)	Clay (%)	Texture ⁽¹⁾	Nitrate NO3-N (ppm)	Phosphorus (ppm)	Potassium (ppm)	Zinc (ppm)	Iron (ppm)	Manganese (ppm)	Copper (ppm)
LQD Topsoil Suitability Criteria ⁽²⁾			--	--	--	--	--	--	--	--	--	--	--
Pepal Sandy Loam													
NW Pad PR-1	0-3	A	69	16	15	SL	10.7	6.2	99.2	0.28	9.43	1.93	0.83
	3-12	Bw	51	26	23	SCL	4.6	1.8	51.6	0.06	2.53	0.47	0.75
	12-16	Bw	62	20	18	SL	6.6	0.3	24.9	0.06	0.89	0.37	0.54
	16-48	Cr	69	9	22	SCL	7.7	0.6	24.4	0.03	0.45	0.21	0.50
NW Pad PR-2	0-3	A	59	27	14	SL	5.3	2.8	110	0.22	4.44	0.95	1.19
	3-10	Bw	43	29	28	CL	2.2	0.3	53.3	0.11	2.32	0.54	0.95
	10-18	Bk	51	29	20	L	5.7	0.3	27.2	0.10	0.90	0.29	0.93
	18-38	C/Cr	50	37	13	L	8.7	3.1	17.0	0.08	0.73	0.22	0.67
	18-38 ⁽³⁾	C/Cr	50	36	14	L	8.9	3.1	16.9	0.08	0.79	0.20	0.65
NC Pad PR-1	0-3	A	70	15	15	SL	3.0	2.5	119	<0.01	4.85	0.83	0.88
	3-11	B	61	15	24	SCL	3.3	0.6	50.3	<0.01	2.96	0.28	0.69
	11-18	Bk	52	27	21	SCL	5.9	0.6	34.1	0.03	2.05	0.39	0.55
	18-40	C/Cr	65	19	16	SL	4.8	0.6	29.8	<0.01	1.61	<0.01	0.41
	40-62	Cr	65	19	16	SL	8.8	1.2	76.4	0.48	3.11	0.66	0.30
SE Pad2 PR-1	0-3	A	71	16	13	SL	3.9	3.7	83.9	0.17	7.03	1.27	0.87
	3-16	Bw	65	19	16	SL	4.9	0.9	43.7	0.11	3.47	0.53	1.18
	16-30	Bc	70	15	15	SL	2.3	6.2	54.0	0.04	1.12	0.32	0.42
	30-52	C/Cr	79	7	14	SL	3.5	2.5	19.3	0.03	1.03	0.20	0.55
NE Pad PR-1	0-3	A	67	21	12	SL	5.5	3.7	153	0.27	6.17	1.13	1.40
	3-8	Bw	58	20	22	SCL	9.2	0.9	77.4	0.08	3.3	0.52	1.10
	8-16	BC	78	7	15	SL	5.5	1.2	25.3	0.03	1.38	0.24	0.65
	16-34	C/Cr	84	4	12	LS	6.2	6.5	19.5	<0.01	0.88	0.15	0.47
	34-68	Cr	80	8	12	SL	6.7	7.4	17.3	0.03	1.25	0.35	0.57
NE Pad PR-2	0-3	A	65	19	16	SL	5.9	8.1	180	0.76	20.9	5.09	1.86
	3-16	Bw	58	25	17	SL	10.3	0.6	63.8	0.11	4.75	1.04	1.07
	16-30	Bk	55	27	18	SL	10.3	0.9	54.9	0.05	2.62	0.68	0.75
	30-62	C/Cr	79	8	13	SL	8.3	11.2	51.7	0.10	2.32	0.50	0.85

Table OP-5b-2 Laboratory Analyses (Page 3 of 6)

Profile Number	Sample Depth (inches)	Soil Horizon	LQD Topsoil Suitability Parameters						Additional Fertility Analyses					
			pH (S.U.) ⁽¹⁾	Electrical Conductivity (mmhos/cm)	Saturation (%)	Sodium Adsorption Ratio	Selenium (ppm)	Boron (ppm)	Lime Estimate	Calcium (meq/L)	Magnesium (meq/L)	Sodium (meq/L)	Potassium (meq/L)	Organic Matter (%)
LQD Topsoil Suitability Criteria ⁽²⁾			5.5 - 8.5	0-8	25-80	0 - 10	<0.1	<5.0	--	--	--	--	--	--
Pepal Sandy Loam (cont'd)														
EW Rd PR-3	0-3	A	7.1	0.2	27.7	0.6	0.028	0.03	Low	1.0	0.4	0.5	1.1	1.0
	3-16	Bw	7.7	0.2	26.4	1.5	0.033	0.04	Low	0.9	0.3	1.1	0.1	0.7
	16-30	Bck	8.3	0.9	29.8	4.9	0.024	0.02	High	3.0	1.3	7.2	0.1	0.6
	30-55	C/Cr	8.3	5.7	31.6	7.1	0.030	0.11	High	43.3	21.2	40.3	0.5	0.5
EW Rd PR-5	0-3	A	7.1	0.2	23.6	1.1	0.033	0.02	Low	0.7	0.3	0.8	0.2	1.0
	3-10	Bw1	7.6	0.1	32.2	1.4	0.044	0.03	Low	0.4	0.1	0.7	<0.1	0.8
	10-16	Bw2	8.1	0.2	28.2	<0.1	0.036	0.02	Low	<0.1	<0.1	0.0	<0.1	0.4
	16-25	Bck	8.3	0.2	22.4	2.5	0.040	0.02	Very High	0.8	<0.1	1.7	<0.1	0.8
	25-53	C/Cr	8.3	2.2	40.7	6.5	0.046	0.05	Medium	8.8	2.7	15.7	<0.1	0.4
EW Rd PR-6	0-3	A	7.0	0.2	25.4	0.6	0.015	0.03	Low	0.7	0.3	0.5	0.1	1.0
	3-14	Bw	7.3	0.1	27.9	1.1	0.051	0.02	Low	0.3	0.1	0.5	<0.1	0.6
	14-28	Bck	8.6	0.2	30.4	1.0	0.045	0.01	Very High	1.5	0.3	0.9	<0.1	0.5
	28-56	C/Cr	8.3	2.1	29.6	8.9	0.030	0.05	High	6.3	3.3	19.5	0.2	0.9
Poposhia Loam														
EW Rd PR-1	0-3.5	A	6.4	0.2	31.1	1.1	0.032	0.03	Low	0.6	0.1	0.7	0.3	2.4
	3.5-14	Bw	6.4	0.2	26.8	1.5	0.022	0.02	Low	0.4	0.1	0.7	0.4	1.0
	14-24	Bc	6.9	0.1	22.7	1.6	0.029	0.01	Low	0.2	<0.1	0.5	<0.1	0.4
	24-35	C/Cr	6.9	0.1	34.5	1.2	0.019	0.01	Low	0.2	<0.1	0.4	<0.1	0.8
EW Rd PR-4	0-4	A	6.1	0.3	34.6	1.1	0.025	0.03	Low	1.1	0.4	0.9	0.5	1.7
	4-19	Bw	6.7	0.1	29.0	1.4	0.013	0.01	Low	0.3	<0.1	0.6	0.1	0.9
	19-34	Bc	6.2	0.1	25.7	2.6	0.016	0.01	Low	<0.1	<0.1	0.4	0.1	0.3
	34-58	C/Cr	6.5	0.1	22.4	2.7	0.031	0.01	Low	<0.1	<0.1	0.4	0.1	0.5
	34-58 ⁽³⁾	C/Cr	6.3	0.1	22.6	3.2	0.032	0.01	Low	<0.1	<0.1	0.4	<0.1	0.5
EW Rd PR-7	0-4	A	6.2	0.3	47.5	1.0	0.038	0.04	Low	1.2	0.4	0.9	0.3	4.0
	4-12	Bw1	5.9	0.1	53.1	0.9	0.040	0.04	Low	0.6	0.2	0.6	0.1	1.6
	12-22	Bw2	6.4	0.1	29.1	1.3	0.033	0.02	Low	0.2	<0.1	0.5	<0.1	0.8
	22-47	C	7.6	0.2	28.2	0.5	0.027	0.01	Low	0.9	0.2	0.3	0.1	0.3

Table OP-5b-2 Laboratory Analyses (Page 4 of 6)

Profile Number	Sample Depth (inches)	Soil Horizon	Texture Information				Nutrient and Trace Element Availabilty						
			Sand (%)	Silt (%)	Clay (%)	Texture ⁽¹⁾	Nitrate NO3-N (ppm)	Phosphorus (ppm)	Potassium (ppm)	Zinc (ppm)	Iron (ppm)	Manganese (ppm)	Copper (ppm)
LQD Topsoil Suitability Criteria ⁽²⁾			--	--	--	--	--	--	--	--	--	--	--
Pepal Sandy Loam (cont'd)													
EW Rd PR-3	0-3	A	77	13	10	SL	3.8	4.3	235	<0.01	5.6	1.63	1.10
	3-16	Bw	54	27	19	SL	4.5	<0.1	70.4	<0.01	3.97	0.28	0.91
	16-30	Bck	66	15	19	SL	5.3	0.9	29.2	<0.01	1.62	0.18	0.70
	30-55	C/Cr	80	6	14	SL	8.0	11.2	40.9	<0.01	0.93	0.06	0.52
EW Rd PR-5	0-3	A	72	13	15	SL	12.0	2.8	117	0.21	3.86	1.19	0.97
	3-10	Bw1	49	26	25	SCL	3.1	<0.1	28.0	0.09	1.44	0.28	1.49
	10-16	Bw2	50	30	20	L	1.2	<0.1	15.2	0.04	0.96	0.20	1.21
	16-25	Bck	61	26	13	SL	4.2	<0.1	11.7	0.01	1.02	0.18	0.60
	25-53	C/Cr	69	17	14	SL	7.5	0.6	14.0	0.01	0.77	0.15	0.42
EW Rd PR-6	0-3	A	65	18	17	SL	2.8	3.7	129	0.24	4.54	1.34	0.79
	3-14	Bw	59	17	24	SCL	1.3	0.3	29.1	0.05	1.49	0.28	0.61
	14-28	Bck	79	7	14	SL	4.9	0.3	10.1	0.04	0.48	0.19	0.33
	28-56	C/Cr	80	8	12	SL	8.3	1.2	47.6	0.04	0.66	0.19	1.02
Poposhia Loam													
EW Rd PR-1	0-3.5	A	61	27	12	SL	6.5	7.4	252	0.68	22.9	3.85	1.67
	3.5-14	Bw	63	22	15	SL	6.0	2.5	190	0.21	19.1	0.96	1.25
	14-24	Bc	73	13	14	SL	9.2	2.5	54.8	0.06	9.42	0.53	0.65
	24-35	C/Cr	82	4	14	SL	4.8	1.8	32.0	0.04	3.20	0.25	0.98
EW Rd PR-4	0-4	A	49	37	14	L	7.7	10.6	246	0.57	27.7	3.88	1.51
	4-19	Bw	54	30	16	SL	4.2	10.6	122	<0.01	21.5	0.64	0.92
	19-34	Bc	75	8	17	SL	8.2	3.1	49.8	<0.01	5.53	0.18	0.87
	34-58	C/Cr	79	8	13	SL	4.3	3.1	42.7	<0.01	9.32	0.08	0.44
	34-58 ⁽³⁾	C/Cr	79	7	14	SL	3.8	3.1	47.0	<0.01	9.02	0.09	0.46
EW Rd PR-7	0-4	A	33	52	15	SiL	11.4	14.9	320	1.85	39.5	5.83	3.04
	4-12	Bw1	38	43	19	L	4.7	3.1	158	0.24	14.6	0.74	1.13
	12-22	Bw2	49	26	25	SCL	4.9	0.6	92.1	0.07	5.50	0.34	0.71
	22-47	C	80	6	14	SL	8.9	0.6	23.5	0.06	1.21	0.16	0.48

Table OP-5b-2 Laboratory Analyses (Page 5 of 6)

Profile Number	Sample Depth (inches)	Soil Horizon	LQD Topsoil Suitability Parameters						Additional Fertility Analyses					
			pH (S.U.) ⁽¹⁾	Electrical Conductivity (mmhos/cm)	Saturation (%)	Sodium Adsorption Ratio	Selenium (ppm)	Boron (ppm)	Lime Estimate	Calcium (meq/L)	Magnesium (meq/L)	Sodium (meq/L)	Potassium (meq/L)	Organic Matter (%)
LQD Topsoil Suitability Criteria ⁽²⁾			5.5 - 8.5	0-8	25-80	0 - 10	<0.1	<5.0	--	--	--	--	--	--
Teagulf Sandy Loam														
EW Rd PR-2	0-2	A	7.0	0.1	22.9	0.8	0.013	0.02	Low	0.7	0.1	0.5	0.1	0.7
	2-7	Bw	7.2	0.1	31.2	0.9	0.026	0.02	Low	0.6	0.1	0.5	<0.1	0.9
	7-14	Ck	7.4	0.2	29.3	0.7	0.024	0.02	Low	1.1	0.3	0.5	<0.1	0.4
	14-27	C/Cr	8.2	0.2	31.8	1.0	0.023	0.01	Medium	1.0	0.1	0.8	<0.1	0.2
EW Rd PR-8	0-2	A	7.0	0.2	21.1	1.3	0.038	0.02	Low	0.7	0.2	0.9	<0.1	0.8
	2-6	B	7.4	0.1	31.1	0.4	0.041	0.01	Low	0.1	<0.1	0.1	<0.1	0.7
	6-15	BC	7.7	0.8	29.1	<0.1	0.040	<0.01	Low	<0.1	<0.1	0.0	<0.1	0.4
	15-27	C/Cr	8.4	0.2	27.8	0.6	0.044	0.01	High	1.8	0.4	0.6	<0.1	0.3
	27-53	Cr	8.5	0.3	28.2	1.7	0.015	0.01	Medium	1.9	0.3	1.8	<0.1	0.2
	27-53 ⁽³⁾	Cr	8.6	0.3	28.2	1.5	0.016	0.01	Medium	1.8	0.2	1.6	<0.1	0.3

Table OP-5b-2 Laboratory Analyses (Page 6 of 6)

Profile Number	Sample Depth (inches)	Soil Horizon	Texture Information				Nutrient and Trace Element Availabilty						
			Sand (%)	Silt (%)	Clay (%)	Texture ⁽¹⁾	Nitrate NO3-N (ppm)	Phosphorus (ppm)	Potassium (ppm)	Zinc (ppm)	Iron (ppm)	Manganese (ppm)	Copper (ppm)
LQD Topsoil Suitability Criteria ⁽²⁾			--	--	--	--	--	--	--	--	--	--	--
Teagulf Sandy Loam													
EW Rd PR-2	0-2	A	73	14	13	SL	5.7	3.1	114	0.23	6.34	1.11	0.92
	2-7	Bw	74	12	14	SL	4.3	1.2	42.8	<0.01	2.67	0.36	1.03
	7-14	Ck	82	5	13	SL	4.3	1.2	27.6	<0.01	1.31	0.01	0.89
	14-27	C/Cr	86	2	12	LS	3.9	0.9	24.6	<0.01	0.97	<0.01	0.23
EW Rd PR-8	0-2	A	67	19	14	SL	7.6	2.5	84.2	0.23	4.46	0.86	0.77
	2-6	B	67	15	18	SL	11.2	0.6	34.0	0.08	2.03	0.38	0.70
	6-15	BC	80	4	16	SL	3.5	<0.1	14.8	0.33	1.05	0.45	0.61
	15-27	C/Cr	81	2	17	SL	6.2	0.3	8.89	0.08	0.52	0.21	0.33
	27-53	Cr	81	4	15	SL	9.2	2.5	7.06	0.07	0.43	0.17	0.54
	27-53 ⁽³⁾	Cr	80	6	14	SL	9.7	2.1	7.96	0.07	0.46	0.18	0.49