

EF44 - TANNERY FARM SOIL TESTING RESULTS - 2022

Approved By: General Manager

Version: 1

Issue Date: 24 March 2021

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*Not Tested (NT) No Sample (NS)

ANALYSIS	IRRIGATION SECTOR 1				IRRIGATION SECTOR 2				IRRIGATION SECTOR 3				IRRIGATION SECTOR 4			
	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE
pH - pH units	5.7	5.5	8	6.40	5.4	7.9	8	7.10	5.5	5.7	5.9	5.70	5.1	5	6.5	5.53
Electrical Conductivity µS/cm	260	250	430	313.33	330	540	240	370.00	180	150	380	236.67	180	240	320	246.67
TKN-N - mg/kg	1640	400	480	840.00	1940	740	290	990.00	1590	500	430	840.00	1920	460	450	943.33
Available Phosphorus (Colwell P) - mg/kg	136.6	43.7	8.9	63.07	144.5	17.8	8.7	57.00	115.3	16.1	7.5	46.30	107.5	17.3	10.8	45.20
Emerson Aggregate Class - Class	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Permeability - mm/hr	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Exchangeable Calcium - mg/kg	27	13	14	18.00	48	89	9	48.67	18	4.1	11	11.03	21	27	16	21.33
Exchangeable Magnesium - mg/kg	7.5	4.3	6.1	5.97	7.6	11	2.2	6.93	4.2	2.1	3.8	3.37	4.1	6.5	4.1	4.90
Exchangeable Potassium - mg/kg	323	300	237	286.67	272	231	210	237.67	192	220	347	253.00	190	197	261	216.00
Exchangeable Sodium - mg/kg	46	52	110	69.33	48	46	66	53.33	34	32	110	58.67	26	31	84	47.00
Available Nitrate - mg/kg	0.64	7.8	4.5	4.31	26	11	5.6	14.20	5.3	5.1	4.7	5.03	11	3.9	5.6	6.83
Total Nitrogen - %	1640	408	485	844.33	1970	753	297	1006.67	1600	505	435	846.67	1930	464	456	950.00
Cadium - mg/kg	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50
Organic Carbon - %	2	0.2	0.1	0.77	1.9	0.3	0.1	0.77	1.8	0.3	0.1	0.73	1.8	0.1	0.1	0.67
Total Phosphorus - mg/kg	529	107	95.4	243.80	475	202	117	264.67	416	109	142	222.33	361	125	136	207.33
Chromium - mg/kg	91	24.8	32	49.27	150	52	32	78.00	53	28	34	38.33	59	24	30	37.67
Chromium VI- mg/kg	1	1	1	1.00	1	1	1	1.00	1	1	1	1.00	1	1	1	1.00
Total Sulfur (LECO) - %	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Available Phosphorus (Bray P) - mg/kg	133.9	26	5	54.97	98.1	20.2	5.3	41.20	74	4.9	1.8	26.90	76.9	6.3	2.7	28.63
Exchangeable Aluminium - mg/kg	10	1	1	30.00	27	1	1	9.67	46	55	2	34.33	36	52	25	37.67
SAR - SAR Units	2.11	3.19	6.18	3.83	1.7	1.22	5.11	2.68	1.88	3.2	7.29	4.12	1.36	1.39	4.85	2.53
Chloride - mg/kg	53	26	46	41.67	49	22	42	37.67	21	15	67	34.33	22	12	19	17.67
CEC - cmol/kg	6.7	21.02	20.25	15.99	8.18	20.33	10.72	13.08	6.45	11	17.42	11.62	6.73	9.82	16.46	11.00
ESP - %of ECEC	3	7.1	10.4	6.83	12.4	4.7	12	9.70	7.4	9.3	10.8	9.17	7.1	6.9	10.8	8.27

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Leather Naturally

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ANALYSIS	IRRIGATION SECTOR 5				IRRIGATION SECTOR 6				IRRIGATION SECTOR 7				IRRIGATION SECTOR 8			
	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE
pH - pH units	5.3	5.4	5.5	5.40	5.7	6.2	6.9	6.27	5.3	6	6.3	5.87	6.7	6.4	6.5	6.53
Electrical Conductivity µS/cm	97	98	180	125.00	160	120	260	180.00	160	460	370	330.00	120	130	630	293.33
TKN-N - mg/kg	690	480	350	506.67	1090	470	680	746.67	1450	490	650	863.33	1520	490	270	760.00
Available Phosphorus (Colwell P) - mg/kg	38.3	24	12.6	24.97	48.8	23.7	8	26.83	42.1	9.8	8.5	20.13	56.3	11.7	8.3	25.43
Emerson Aggregate Class - Class	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Permeability - mm/hr	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Exchangeable Calcium - mg/kg	6	3.9	6.7	5.53	12	18	32	20.67	24	90	28	47.33	13	18	45	25.33
Exchangeable Magnesium - mg/kg	2.7	1.5	1.8	2.00	4.9	17	48	23.30	4.5	19	9.9	11.13	2.3	3.8	19	8.37
Exchangeable Potassium - mg/kg	91	166	247	168.00	203	223	253	226.33	147	235	270	217.33	206	230	253	229.67
Exchangeable Sodium - mg/kg	20	19	42	27.00	41	36	96	57.67	16	74	110	66.67	13	18	190	73.67
Available Nitrate - mg/kg	4.5	6.8	7.3	6.20	2.2	6.4	7.6	5.40	8.5	8.3	8.2	8.33	0.13	1.6	11	4.24
Total Nitrogen - %	695	487	357	513.00	1090	479	689	752.67	1460	498	658	872.00	1520	492	281	764.33
Cadmium - mg/kg	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50
Organic Carbon - %	0.5	0.1	0.1	0.23	1.1	0.1	0.1	0.43	0.8	0.1	0.1	0.33	1.5	0.1	0.1	0.57
Total Phosphorus - mg/kg	194	111	130	145.00	266	96.6	99.4	154.00	244	98.6	210	184.20	363	126	109	199.33
Chromium - mg/kg	19	21	27	22.33	53	24	37	38.00	27	19	27	24.33	42	25	29	32.00
Chromium VI- mg/kg	1	1	1	1.00	1	1	1	1.00	1	1	1	1.00	1	1	1	1.00
Total Sulfur (LECO) - %	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Available Phosphorus (Bray P) - mg/kg	26.3	12.8	3.8	14.30	31.9	7.3	1.9	13.70	32	2.7	4.5	13.07	46.9	4.3	4.9	18.70
Exchangeable Aluminium - mg/kg	47	79	61	62.33	7	6	1	4.67	3	5	8	5.33	2	16	3	7.00
SAR - SAR Units	1.7	2.07	3.72	2.50	2.52	1.46	2.51	2.16	0.79	1.85	4.55	2.40	0.87	1.01	5.99	2.62
Chloride - mg/kg	15	15	15	15.00	23	19	74	38.67	10	19	21	16.67	10	14	75	33.00
CEC - cmol/kg	3.66	7.52	15.83	9.00	6.78	10.92	18.46	12.05	4.74	14.38	18.09	12.40	6.29	10.71	12.77	9.92
ESP - % of ECEC	6.1	8	14	9.37	8.2	12.3	14.4	11.63	6.3	7.9	11.1	8.43	10.5	14.5	8.4	11.13

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ANALYSIS	IRRIGATION SECTOR 9				IRRIGATION SECTOR 10				IRRIGATION SECTOR 11				IRRIGATION SECTOR 12			
	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE
pH - pH units	6.2	5.5	7.3	6.33	5.9	5.5	5.9	5.77	5.7	5.6	5.7	5.67	5.9	7.8	5.4	6.37
Electrical Conductivity µS/cm	89	65	330	161.33	99	84	250	144.33	190	130	420	246.67	160	230	450	280.00
TKN-N - mg/kg	1240	250	380	623.33	1030	390	230	550.00	1320	380	350	683.33	1090	240	400	576.67
Available Phosphorus (Colwell P) - mg/kg	116.9	14.2	10.4	47.17	73.2	21.4	9.1	34.57	128.3	10.6	10	49.63	57.9	10.3	8.6	25.60
Emerson Aggregate Class - Class	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Permeability - mm/hr	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Exchangeable Calcium - mg/kg	9.5	3.7	74	29.07	9.7	6.3	7.5	7.83	21	4.1	14	13.03	14	26	21	20.33
Exchangeable Magnesium - mg/kg	3.6	4.3	350	119.30	3.5	1.7	3.2	2.80	4.9	1.5	6.2	4.20	3.8	4.8	8.2	5.60
Exchangeable Potassium - mg/kg	206	257	238	233.67	167	190	275	210.67	220	158	273	217.00	211	342	384	312.33
Exchangeable Sodium - mg/kg	8.2	12	180	66.73	20	14	85	39.67	38	37	150	75.00	41	28	110	59.67
Available Nitrate - mg/kg	0.1	2.2	3.8	2.03	0.95	7.6	3.8	4.12	0.1	4.5	6.5	3.70	1.8	3.6	10	5.13
Total Nitrogen - %	1240	252	387	626.33	1030	398	234	554.00	1320	385	357	687.33	1090	244	410	581.33
Cadmium - mg/kg	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50
Organic Carbon - %	1	0.1	0.1	0.40	1	0.1	0.1	0.40	1.2	0.1	0.1	0.47	1	0.1	0.1	0.40
Total Phosphorus - mg/kg	364	94.6	87.4	182.00	283	113	110	168.67	437	81	99.1	205.70	311	64.8	91.6	155.80
Chromium - mg/kg	45	18	32	31.67	38	21	31	30.00	38	17	27	27.33	26	16	36	26.00
Chromium VI- mg/kg	1	1	1	1.00	1	1	1	1.00	1	1	1	1.00	1	1	1	1.00
Total Sulfur (LECO) - %	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!				#DIV/0!
Available Phosphorus (Bray P) - mg/kg	91.7	5.1	8.3	35.03	62	11.9	3.5	25.80	86	4.2	1.8	30.67	43.6	2.3	1	15.63
Exchangeable Aluminium - mg/kg	4	25	2	10.33	33	14	2	16.33	28	39	17	28.00	12	21	1	11.33
SAR - SAR Units	0.57	1.01	1.94	1.17	1.4	1.28	6.55	3.08	1.94	3.97	8.39	4.77	2.51	1.32	5.16	3.00
Chloride - mg/kg	13	10	130	51.00	12	16	23	17.00	21	13	46	26.67	21	28	59	36.00
CEC - cmol/kg	6.05	13.6	17.98	12.54	3.67	9.21	18.49	10.46	6.35	7.45	15.81	9.87	4.81	14.68	20.75	13.41
ESP - %of ECEC	2.6	11.7	12.8	9.03	5.1	13.8	19.5	12.80	7.2	11.8	9.6	9.53	10.1	11.6	13.9	11.87

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ANALYSIS	SLUDGE INJECTION AREA 1				SLUDGE INJECTION AREA 1B				SLUDGE INJECTION AREA 2				SLUDGE INJECTION AREA 3			
	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE
pH - pH units	8	8.3	7.2	7.83	7.5	8.4	7.4	7.77	7.3	6.6	6.6	6.83	6.7	7.2	7.4	7.10
Electrical Conductivity µS/cm	330	490	670	496.67	1400	200	160	586.67	400	130	260	263.33	110	75	60	81.67
TKN-N - mg/kg	2130	1670	460	1420.00	1480	470	233	727.67	1140	440	340	640.00	960	493	200	551.00
Available Phosphorus (Colwell P) - mg/kg	158.8	47.2	7.2	71.07	84.6	17	6.1	35.90	75.4	11	8.4	31.60	66.6	11.3	9.4	29.10
Emerson Aggregate Class - Class	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Permeability - mm/hr	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Exchangeable Calcium - mg/kg	3936	44.5	1680	1886.83	5506	3621	1601	3576.00	2614	1080	746	1480.00	1128	1215	1775	1372.67
Exchangeable Magnesium - mg/kg	226	615	1041	627.33	212	790	1382	794.67	202	271	516	329.67	111	379	1157	549.00
Exchangeable Potassium - mg/kg	332	285	268	295.00	391	247	295	311.00	167	133	186	162.00	275	195	258	242.67
Exchangeable Sodium - mg/kg	34	184	173	130.33	30	394	242	222.00	112	47	165	108.00	15	27	113	51.67
Available Nitrate - mg/kg	2.1	13	0.33	5.14	6.2	0.1	2.8	3.03	0.47	0.1	0.1	0.22	0.38	0.84	0.26	0.49
Total Nitrogen - %	2130	1690	542	1454.00	1490	470	233	731.00	1140	447	342	643.00	961	493	201	551.67
Cadnium - mg/kg	0.5	0.5	0.8	0.60	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50
Organic Carbon - %	1.8	1.1	0.2	1.03	1.6	0.3	0.2	0.70	1.6	0.4	0.1	0.70	1.2	0.3	0.1	0.53
Total Phosphorus - mg/kg	478	358	106	314.00	439	146	115	233.33	531	131	124	262.00	407	120	110	212.33
Chromium - mg/kg	73.5	47.8	37.1	52.80	228	59.5	34.9	107.47	48.8	27.1	28.7	34.87	24.2	25.5	36.2	28.63
Chromium VI - mg/kg	1	1	1	1.00	1	1	1	1.00	1	1	1	1.00	1	1	1	1.00
Total Sulfur (LECO) - %	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Available Phosphorus (Bray P) - mg/kg	215.1	39.5	2.3	85.63	116.2	20.2	3.3	46.57	101.5	6.3	3	36.93	67.5	5.8	1.8	25.03
Exchangeable Aluminium - mg/kg	1	1	1	0.00	1	1	1	1.00	1	1	9	3.67	1	1	1	1.00
SAR - SAR Units	0.2	1.7	2.12	1.34	0.2	0.76	2.15	1.04	0.76	0.69	0.87	0.77	0.2	0.33	0.55	0.36
Chloride - mg/kg	23	31	170	74.67	20	24	44	29.33	31	36	16	27.67	17	12	10	13.00
CEC - cmol/kg	22.51	28.73	18.4	23.21	30.38	26.92	21.19	26.16	15.63	8.19	9.44	11.09	7.33	9.83	19.58	12.25
ESP - %of ECEC	0.7	2.8	4.1	2.53	0.4	6.4	5	3.93	3.1	2.5	7.6	4.40	0.6	1.2	2.5	1.43

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Leather Naturally

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ANALYSIS	SLUDGE INJECTION AREA 4				SLUDGE INJECTION AREA 5			
	0-10 cm	10-30 cm	30-60 cm	AVE	0-10 cm	10-30 cm	30-60 cm	AVE
pH - pH units	7.7	7.2	7.1	7.33	7.4	7.4	7.5	7.43
Electrical Conductivity µS/cm	290	64	80	144.67	290	110	61	153.67
TKN-N - mg/kg	1200	264	210	558.00	900	343	290	511.00
Available Phosphorus (Colwell P) - mg/kg	116.9	15.1	12.9	48.30	117.3	16.6	7.1	47.00
Emerson Aggregate Class - Class	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Permeability - mm/hr	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Exchangeable Calcium - mg/kg	2997	1051	1363	1803.67	2983	1264	1225	1824.00
Exchangeable Magnesium - mg/kg	128	252	514	298.00	94	163	714	323.67
Exchangeable Potassium - mg/kg	311	119	168	199.33	230	122	181	177.67
Exchangeable Sodium - mg/kg	22	22	65	36.33	31	15	45	30.33
Available Nitrate - mg/kg	0.27	0.18	0.1	0.18	0.34	0.1	1	0.48
Total Nitrogen - %	1200	264	210	558.00	905	343	291	513.00
Cadmium - mg/kg	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50
Organic Carbon - %	1.3	0.2	0.1	0.53	1.1	0.2	0.1	0.47
Total Phosphorus - mg/kg	412	124	121	219.00	419	122	112	217.67
Chromium - mg/kg	34.5	17.7	27.4	26.53	23.9	24.1	22.4	23.47
Chromium VI- mg/kg	1	1	1	1.00	1	1	1	1.00
Total Sulfur (LECO) - %	NT	NT	NT	#DIV/0!	NT	NT	NT	#DIV/0!
Available Phosphorus (Bray P) - mg/kg	138.9	6.1	2.6	49.20	137.9	11.6	1.2	50.23
Exchangeable Aluminium - mg/kg	1	1	1	1.00	1	1	6	2.67
SAR - SAR Units	0.2	0.25	0.91	0.45	0.24	0.29	0.35	0.29
Chloride - mg/kg	33	12	11	18.67	20	10	20	16.67
CEC - cmol/kg	16.92	7.74	11.57	12.08	16.39	8.04	12.84	12.42
ESP - %of ECEC	0.6	1.2	2.4	1.40	0.8	0.8	1.5	1.03