

# EF44 - TANNERY FARM SOIL TESTING RESULTS

Approved By: General Manager

Version: 2

Issue Date: 04 April 2024

Review Date: 04 April 2027



\*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	6	6.2	5.9	6.03	5.4	5.4	6.2	5.67	5.3	5.3	5.9	5.50	5.5	4.9	5	5.13
Electrical Conductivity µS/cm	420	910	190	506.67	410	240	310	320.00	230	200	370	266.67	270	390	830	496.67
TKN-N - mg/kg	1410	270	370	683.33	1220	450	360	676.67	1290	550	20	620.00	1400	420	300	706.67
Available Phosphorus (Colwell P) - mg/kg	97	7.2	7.9	37.37	23	9.8	3	11.93	52	8.9	5.9	22.27	57	13	9.8	26.60
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	695	645	782	707.33	579	1234	1570	1127.67	647	1535	1612	1264.67	465	983	785	744.33
Exchangeable Magnesium - mg/kg	90	190	286	188.67	114	367	647	376.00	99	501	763	454.33	92	252	450	264.67
Exchangeable Potassium - mg/kg	123	121	104	116.00	137	194	246	192.33	121	190	202	171.00	115	109	139	121.00
Exchangeable Sodium - mg/kg	185	176	247	202.67	252	316	647	405.00	62	448	811	440.33	178	233	433	281.33
Available Nitrate - mg/kg	63	6	6	25.00	61	11	0.82	24.27	99	12	20	43.67	23	4.9	9.9	12.60
Total Nitrogen - %	1470	276	376	707.33	1280	461	361	700.67	1360	562	20	647.33	1430	425	310	721.67
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 - %	1.4	0.1	0.1	0.53	1.4	0.1	0.1	0.53	1.1	0.4	0.2	0.57	1.4	0.4	0.2	0.67
Total Phosphorus - mg/kg	323	114	87.2	174.73	259	121	116	165.33	266	120	124	170.00	276	107	78.7	153.90
Chromium - mg/kg	130	30.9	23.6	61.50	60	29.5	32.1	40.53	53.8	30.9	37.6	40.77	68.6	24.8	25	39.47
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	49.9	3.2	3.1	18.73	13.7	4	2.8	6.83	28.9	4.1	4.5	12.50	28.6	5.2	3.5	12.43
Exchangeable Aluminium - mg/kg	17	32	21	30.00	44	2	2	16.00	32	2	1	11.67	22	66	43	43.67
SAR - SAR Units	4.02	8.66	6.23	6.30	3.93	5.29	7.38	5.53	1.04	3.3	6.24	3.53	2.41	3.03	4.48	3.31
Chloride - mg/kg	88	84	91	87.67	140	39	110	96.33	12	15	50	25.67	43	26	37	35.33
CEC - cmol/kg	5.59	6.31	7.97	6.62	5.83	11.18	16.66	11.22	5.09	14.28	18.41	12.59	4.36	9.09	10.53	7.99
ESP - %of ECEC	14.4	12.2	13.5	13.37	18.8	12.3	16.9	16.00	5.3	13.7	19.2	12.73	17.6	11.2	17.9	15.57

EPA ID LOCATION: 1, 2, 3, 4  
EPA LICENSE NUMBER: 3465

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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	5.1	5.1	5.2	5.13	5.4	5.9	6.3	5.87	6.1	5.3	5.9	5.77	6	5.8	6.2	6.00
Electrical Conductivity µS/cm	560	290	280	376.67	510	801	570	627.00	180	800	660	546.67	420	860	320	533.33
TKN-N - mg/kg	1500	500	350	783.33	1910	410	330	883.33	1160	400	320	626.67	960	400	390	583.33
Available Phosphorus (Colwell P) - mg/kg	147	23	9.2	59.73	188	13	5.6	68.87	52	6.6	17	25.20	66	5.6	4.9	25.50
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	850	610	1108	856.00	815	1142	1569	1175.33	713	1219	971	967.67	744	831	1082	885.67
Exchangeable Magnesium - mg/kg	140	178	477	265.00	179	275	487	313.67	101	466	350	305.67	79	276	608	321.00
Exchangeable Potassium - mg/kg	156	115	173	148.00	203	227	264	231.33	189	221	207	205.67	174	167	168	169.67
Exchangeable Sodium - mg/kg	247	177	390	271.33	310	341	534	395.00	86	357	352	265.00	132	81	178	130.33
Available Nitrate - mg/kg	110	20	9.1	46.37	92	11	14	39.00	44	12	9.5	21.83	110	32	12	51.33
Total Nitrogen - %	1610	520	359	829.67	2000	421	344	921.67	1200	412	330	647.33	1070	432	402	634.67
Cadmium - mg/kg	0.5	0.5	0.5	0.50	0.5	0.6	0.7	0.60	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50
Organic Carbon - %	1.1	0.5	0.1	0.57	2.2	0.1	0.1	0.80	0.9	0.3	0.2	0.47	1	0.1	0.2	0.43
Total Phosphorus - mg/kg	453	180	168	267.00	440	87.9	79.2	202.37	256	178	88	174.00	242	141	132	171.67
Chromium - mg/kg	50.8	22.4	29.6	34.27	70.7	29.4	30.1	43.40	48.5	24.5	30	34.33	29.9	25.5	25.3	26.90
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	111.3	11.5	4.5	42.43	111.2	6.2	4.9	40.77	35.8	2.9	8.9	15.87	49.2	3.4	2.5	18.37
Exchangeable Aluminium - mg/kg	15	48	12	25.00	37	10	2	16.33	2	17	2	7.00	1	2	1	1.33
SAR - SAR Units	3.47	4.54	7.5	5.17	4.45	7.35	8.74	6.85	2.21	3.63	7.95	4.60	2.35	5.72	5.16	4.41
Chloride - mg/kg	130	81	98	103.00	120	86	110	105.33	21	19	32	24.00	81	62	51	64.67
CEC - cmol/kg	7.11	6.21	11.82	8.38	7.96	10.21	14.9	11.02	5.31	12.31	9.85	9.16	5.44	7.32	11.64	8.13
ESP - %of ECEC	15.1	12.4	14.4	13.97	16.9	14.5	15.6	15.67	7	12.6	15.5	11.70	10.6	4.8	6.6	7.33

EPA ID LOCATION: 5, 6, 7, 8  
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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	5.2	5.1	6.7	5.67	5.9	5.4	5.8	5.70	5	5.8	5.2	5.33	4.8	5.7	5.7	5.40
Electrical Conductivity µS/cm	200	450	290	313.33	150	200	990	446.67	160	200	300	220.00	180	120	190	163.33
TKN-N - mg/kg	1310	270	330	636.67	920	300	240	486.67	770	250	220	413.33	720	480	350	516.67
Available Phosphorus (Colwell P) - mg/kg	50	3.6	3.3	18.97	174	4.9	3.3	60.73	108	6.9	4.3	39.73	59	9.5	9.2	25.90
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	528	985	1032	848.33	833	1303	1364	1166.67	858	949	1229	1012.00	488	624	1845	985.67
Exchangeable Magnesium - mg/kg	223	1023	711	652.33	313	579	1479	790.33	171	410	776	452.33	63	184	613	286.67
Exchangeable Potassium - mg/kg	173	213	134	173.33	245	222	294	253.67	405	254	226	295.00	150	190	375	238.33
Exchangeable Sodium - mg/kg	59	308	319	228.67	113	372	645	376.67	148	263	499	303.33	72	76	456	201.33
Available Nitrate - mg/kg	42	2	0.13	14.71	43	3	2.2	16.07	30	5.3	0.91	12.07	27	3.5	4.2	11.57
Total Nitrogen - %	1350	272	330	650.67	964	303	243	503.33	800	255	221	425.33	747	484	355	528.67
Cadmium - mg/kg	0.5	0.5	0.5	0.50	0.5	0.5	0.6	0.53	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50
Organic Carbon - %	1.2	0.1	0.2	0.50	1.3	0.1	0.1	0.50	1.1	0.2	0.1	0.47	0.5	0.7	0.1	0.43
Total Phosphorus - mg/kg	287	86.9	81.1	151.67	319	83.4	88.7	163.70	251	85.7	82.4	139.70	249	131	229	203.00
Chromium - mg/kg	55	26	26.3	35.77	50.5	27.9	26.1	34.83	25.4	23.4	28.5	25.77	26	24	34	28.00
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	27.6	1.8	1.4	10.27	92.5	2.9	2.8	32.73	64.3	2.6	1.4	22.77	47.1	5.6	5.6	19.43
Exchangeable Aluminium - mg/kg	47	3	18	22.67	31	13	2	15.33	17	8	2	9.00	9	50	1	20.00
SAR - SAR Units	1.66	3.65	6.92	4.08	2.63	3.18	8.79	4.87	1.89	4.2	6.8	4.30	1.67	2.23	4.6	2.83
Chloride - mg/kg	30	10	52	30.67	28	57	100	61.67	22	35	43	33.33	34	17	16	22.33
CEC - cmol/kg	5.71	15.36	13.07	11.38	8.2	13.68	22.57	14.82	7.65	10.06	15.32	11.01	3.82	6.06	17.26	9.05
ESP - %of ECEC	4.5	8.7	10.6	7.93	6	11.8	12.4	10.07	8.4	11.4	14.2	11.33	8.2	5.5	11.5	8.40

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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	7.1	7.5	7.3	7.30	7.7	7.9	8.1	7.90	7.7	7.4	7	7.37	7.7	7.7	7.7	7.70
Electrical Conductivity µS/cm	1280	370	370	673.33	280	850	770	633.33	910	220	390	506.67	800	650	490	646.67
TKN-N - mg/kg	1630	320	240	730.00	1550	950	1060	1186.67	950	400	240	530.00	1050	510	400	653.33
Available Phosphorus (Colwell P) - mg/kg	109	8.2	6.2	41.13	6.5	15	7.2	9.57	61	4.9	3	22.97	105	12	3.9	40.30
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	2962	946	759	1555.67	2834	3213	1587	2544.67	1973	1965	1182	1706.67	2791	2185	1668	2214.67
Exchangeable Magnesium - mg/kg	131	176	445	250.67	272	831	691	598.00	104	937	1097	712.67	242	911	1256	803.00
Exchangeable Potassium - mg/kg	224	109	101	144.67	344	159	214	239.00	232	166	145	181.00	280	157	195	210.67
Exchangeable Sodium - mg/kg	15	15	49	26.33	19	75	60	51.33	15	77	175	89.00	128	86	134	116.00
Available Nitrate - mg/kg	120	12	6.6	46.20	23	16	21	20.00	49	5.5	2.7	19.07	14	1.3	0.68	5.33
Total Nitrogen - %	1750	332	247	776.33	1580	966	1080	1208.67	999	407	243	549.67	1060	511	401	657.33
Cadnium - mg/kg	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50	0.5	0.6	0.5	0.53	0.5	0.5	0.5	0.50
Organic Carbon - %	1.6	0.2	0.2	0.67	1.5	0.4	1.1	1.00	1	0.1	0.3	0.47	0.6	0.2	0.3	0.37
Total Phosphorus - mg/kg	457	112	114	227.67	329	224	276	276.33	241	105	97.9	147.97	302	173	121	198.67
Chromium - mg/kg	132	26.3	26	61.43	264	287	124	225.00	33.3	26.6	25	28.30	33.1	25.3	21.1	26.50
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	158.2	7.7	3.7	56.53	84.6	15.7	4.6	34.97	57.7	3.3	1.2	20.73	68.5	10.8	5.2	28.17
Exchangeable Aluminium - mg/kg	1	1	1	0.00	1	1	1	1.00	1	1	1	1.00	1	1	1	1.00
SAR - SAR Units	0.2	0.57	1.34	0.70	0.25	0.65	0.46	0.45	0.29	0.49	1.03	0.60	1.14	1.04	1.53	1.24
Chloride - mg/kg	13	16	11	13.33	12	12	10	11.33	13	41	10	21.33	29	26	22	25.67
CEC - cmol/kg	16.53	6.52	7.99	10.35	17.38	23.63	14.44	18.48	11.38	18.31	16.11	15.27	17.22	19.21	19.77	18.73
ESP - %of ECEC	0.4	0.8	2.7	1.30	0.5	1.4	1.8	1.23	0.5	1.8	4.7	2.33	3.2	2	2.9	2.70

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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	7.9	7.7	7.2	7.60	7.4	6.6	6.4	6.80
Electrical Conductivity µS/cm	870	260	83	404.33	670	250	290	403.33
TKN-N - mg/kg	720	320	200	413.33	590	290	240	373.33
Available Phosphorus (Colwell P) - mg/kg	51	3.9	3.9	19.60	47	5.9	6.2	19.70
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	1785	951	997	1244.33	1351	868	1097	1105.33
Exchangeable Magnesium - mg/kg	102	350	609	353.67	48	241	577	288.67
Exchangeable Potassium - mg/kg	147	147	105	133.00	173	119	144	145.33
Exchangeable Sodium - mg/kg	15	18	81	38.00	15	15	31	20.33
Available Nitrate - mg/kg	32	7.6	3.8	14.47	18	6.6	0.34	8.31
Total Nitrogen - %	752	378	204	444.67	608	297	240	381.67
Cadmium - mg/kg	0.5	0.5	0.5	0.50	0.5	0.5	0.5	0.50
Organic Carbon - %	0.7	0.1	0.1	0.30	0.6	0.1	0.3	0.33
Total Phosphorus - mg/kg	214	132	93.4	146.47	178	96.6	90.2	121.60
Chromium - mg/kg	26.5	27.5	24	26.00	13.6	22	24.7	20.10
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	52.9	3	1.9	19.27	50.1	1	1.4	17.50
Exchangeable Aluminium - mg/kg	2	1	1	1.33	2	8	2	4.00
SAR - SAR Units	0.2	0.52	1.39	0.70	0.27	0.71	0.74	0.57
Chloride - mg/kg	10	22	25	19.00	14	10	10	11.33
CEC - cmol/kg	10.16	8.12	10.37	9.55	7.62	6.89	10.75	8.42
ESP - %of ECEC	0.1	1	3.3	1.47	0	0.6	1.3	0.63