

SUMMER 2017
Data Collection Report
Soil & Water Consulting



Chimera Golf Club at Tuscany



SOIL and WATER CONSULTING

Course Name: Chimera Golf Club at Tuscany

Date & Time of Visit: June 25, 2017

	<u>6/16/15</u>	<u>6/6/16</u>	<u>6/25/17</u>
Air Temperature	20%/110°	10%/105°	16%/95°
Greens Temperature	74°	68.8°	78°
Fairway Temperature	78°	72.3°	80°

WATER	Acceptable Range For Water Sample	Pond #18 <u>6/16/15</u>	Pond #8 <u>6/16/15</u>	Pond #1 <u>6/6/16</u>	Direct Line #18 <u>6/25/17</u>	Wet Well <u>6/25/17</u>
pH		7.23	7.76	6.74	7.84	6.54
EC	<2.25 mmhos/cm	2.00	1.07	1.90	1.86	1.93
Sodium		231.30	94.40	229.20	223.50	223.20
Calcium	20 - 60 ppm	104.40	79.45	101.60	97.45	99.68
Magnesium	10 - 25 ppm	33.81	24.65	32.72	28.85	28.43
Potassium	5 - 20 ppm	18.87	5.53	18.69	16.28	15.97
Phosphorus	0.1 - 0.4 ppm	1.28	<0.20	0.31	<0.20	<0.20
Nitrate	5 - 50 ppm	12.11	0.33	14.24	14.18	13.37
Sulfur	30 - 90 ppm	355.50	236.67	364.50	298.62	364.50
Bicarbonate	<120 ppm	150.29	180.05	148.11	145.93	51.55
Boron	<0.67 ppm	0.37	0.14	0.38	0.33	0.32
Chloride	<177 ppm	294.12	96.00	289.35	266.21	256.67



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TEE	Acceptable Range For Alkaline Soils Sample	1,7,16,18 (avg) 6/16/15	1,7,16,18 (avg) 6/6/16	1,7,16,18 (avg) 6/25/17
Organic Matter (Humus)	2 - 3%	4.88	2.70	3.40
Sulfur	12 - 16 ppm	136.00	104.25	332.25
Olsen - Phosphorus	13 - 20 ppm	35.00	32.75	30.25
Calcium - TEC of 6 - 12	1,000 lbs/acre	5,522.00	4,567.00	5,421.00
	>7% base saturation or at least 200			
Magnesium	lbs/acre	11.84%/595	11.13%/468.5	10.96%/585.5
Potassium - TEC of 0 - 35	100 ppm	837.00	578.00	688.50
Copper	>0.8 ppm	1.44	0.99	0.84
Manganese	>1 ppm	3.25	1.25	0.00
Zinc	>1 - 2 ppm	7.09	6.48	6.73
FAIRWAY	Acceptable Range For Alkaline Soils Sample	1,7,16,18 (avg) 6/16/15	1,7,16,18 (avg) 6/6/16	1,7,16,18 (avg) 6/25/17
Organic Matter (Humus)	2 - 3%	4.29	1.89	2.17
Sulfur	12 - 16 ppm	4,500.25	3,245.75	3,663.50
Olsen - Phosphorus	13 - 20 ppm	44.75	26.25	22.75
Calcium - TEC of 6 - 12	1,000 lbs/acre	16,667.50	9,296.00	13,130.50
	>7% base saturation or at least 200			
Magnesium	lbs/acre	5.42%/679	6.28%/447.50	6.08%/627
Potassium - TEC of 0 - 35	100 ppm	1,767.75	1,115.50	1,340.75
Copper	>0.8 ppm	1.82	1.20	1.11
Manganese	>1 ppm	4.00	1.75	<1.25
Zinc	>1 - 2 ppm	4.00	3.39	3.48

GREENS	Acceptable Range For Alkaline Soils Sample	1,7,16,18 (avg) 6/16/15	1,7,16,18 (avg) 6/6/16	1,7,16,18 (avg) 6/25/17
Organic Matter (Humus)	2 - 3%	2.42	1.85	2.07
Sulfur	12 - 16 ppm	151.50	183.00	277.50
Olsen - Phosphorus	13 - 20 ppm	24.50	19.75	14.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	2,620.50	2,053.50	2,647.50
	>7% base saturation or at least 200			
Magnesium	lbs/acre	9.65%/304.5	10.20%/253.50	9.215%/328.50
Potassium - TEC of 0 - 35	150 ppm	1,117.25	708.75	954.75
Copper	>0.8 ppm	0.70	0.64	0.54
Manganese	4 ppm or more	<1	1.75	<1
Zinc	>1 - 2 ppm	7.39	7.59	7.34



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TEE	Acceptable Range For Saturated Paste Sample	1,7,16,18 (avg) 6/16/15	1,7,16,18 (avg) 6/6/16	1,7,16,18 (avg) 6/25/17
Nitrate - Ryegrass	5 - 10 ppm	101.58	<0.5	
Nitrate - Bermudagrass	10 - 15 ppm			67.63
Phosphorus	2 - 10 ppm	1.34	2.33	2.60
Potassium	40 - 100 ppm	38.20	26.65	55.06
Calcium	60 - 200 ppm	257.48	124.49	366.06
Magnesium	20 - 70 ppm	71.57	34.66	102.03
Sodium	0 - 30 ppm	266.18	216.45	669.18
Soluble Salts	<1,920 ppm	1,691.25	1,114.75	3,172.75
Bicarbonate	<60 ppm	147.64	235.50	287.36
Chloride	<1,000 ppm	212.00	194.75	688.00
SAR	<4%	3.79	4.45	8.02

FAIRWAY	Acceptable Range For Saturated Paste Sample	1,7,16,18 (avg) 6/16/15	1,7,16,18 (avg) 6/6/16	1,7,16,18 (avg) 6/25/17
Nitrate - Ryegrass	5 - 10 ppm	87.55	<0.5	
Nitrate - Bermudagrass	10 - 15 ppm			83.68
Phosphorus	2 - 10 ppm	1.01	1.32	2.67
Potassium	40 - 100 ppm	133.08	73.88	97.24
Calcium	60 - 200 ppm	542.03	470.70	604.28
Magnesium	20 - 70 ppm	149.80	107.44	158.30
Sodium	0 - 30 ppm	811.90	515.56	935.41
Soluble Salts	<1,920 ppm	3,485.00	2,865.75	4,566.50
Bicarbonate	<60 ppm	149.47	230.01	321.52
Chloride	<1,000 ppm	668.00	348.50	963.25
SAR	<4%	7.58	5.56	8.73

GREENS	Acceptable Range For Saturated Paste Sample	1,7,16,18 (avg) 6/16/15	1,7,16,18 (avg) 6/6/16	1,7,16,18 (avg) 6/25/17
Nitrate - Bermudagrass	10-15 ppm	12.10	<0.5	9.50
Phosphorus	2 - 7 ppm	1.88	1.82	1.60
Potassium	25-40 ppm	38.21	32.02	49.09
Calcium	50- 75 ppm	228.65	217.05	321.34
Magnesium	15-30 ppm	60.17	55.20	90.81
Sodium	0 - 30 ppm	242.50	222.78	685.87
Soluble Salts	<1,000 ppm	1,360.75	1,492.00	3,024.25
Bicarbonate	<60 ppm	46.37	99.45	166.56
Chloride	<200 ppm	225.50	261.25	824.00
SAR	<4%	3.81	3.49	8.71