

lb/A

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

89490-2

 Name Quail Creek Golf Club City Green Valley State AZ

 Independent Consultant Soil and Water Consulting Date 10/3/2023

Sample Location				COYOTE		TEE	FAIRWAY	GREEN		
Sample Identification						3	3	3		
Lab Number						1330-1	1331-1	1332-1		
Total Exchange Capacity (ME/100 g)						9.13	14.23	5.82		
pH (H ₂ O 1:1)						a 8.5	a 7.7	a 8.2		
Organic Matter (360°C LOI) %						0.84	4.21	0.36		
Estimated Nitrogen Release						lb/A 34	92	14		
ANIONS	SOLUBLE SULFUR*					ppm 36	80	17		
	PHOSPHORUS	MEHLICH III	lb/A	P as P ₂ O ₅	ppm of P					
		BRAY II	lb/A	P as P ₂ O ₅	ppm of P					
		OLSEN	lb/A	P as P ₂ O ₅	ppm of P	< 5 < 1	73 16	< 5 < 1		
EXCHANGEABLE CATIONS	CALCIUM*		lb/A		2794	4028	1744			
			ppm		1397	2014	872			
	MAGNESIUM*		lb/A		162	270	116			
			ppm		81	135	58			
	POTASSIUM*		lb/A		338	658	306			
			ppm		169	329	153			
	SODIUM*		lb/A		354	764	184			
			ppm		177	382	92			
BASE SATURATION PERCENT										
Calcium %						76.51	70.77	74.91		
Magnesium %						7.39	7.91	8.30		
Potassium %						4.75	5.93	6.74		
Sodium %						8.43	11.67	6.87		
Other Bases %						2.90	3.70	3.20		
Hydrogen %						0.00	0.00	0.00		
EXTRACTABLE MINORS										
Boron** (ppm)						0.42	1.39	< 0.20		
Iron** (ppm)						62	221	73		
Manganese** (ppm)						37	69	14		
Copper** (ppm)						0.72	2.46	< 0.2		
Zinc** (ppm)						1.30	9.84	1.26		
Aluminum** (ppm)						59	80	175		
OTHER TESTS	Soluble Salts (mmhos/cm)									
	Chlorides (ppm)									
	NO3-N (ppm)					1.3	10.5	1.6		
	NH4-N (ppm)					25.1	1.6	< 0.5		

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

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Sample Location <u>QUAIL</u>			TEE	FAIRWAY	GREEN		
Sample Identification			3	3	3		
Lab Number			1333-1	1334-1	1335-1		
Total Exchange Capacity (ME/100 g)			10.84	18.31	6.79		
pH (H ₂ O 1:1)			a 8.1	a 7.7	a 8.6		
Organic Matter (360°C LOI) %			0.69	3.87	0.30		
Estimated Nitrogen Release lb/A			28	89	12		
ANIONS	SOLUBLE SULFUR* ppm		75	158	15		
	MEHLICH III	lb/A P as P ₂ O ₅ ppm of P					
	BRAY II	lb/A P as P ₂ O ₅ ppm of P					
	OLSEN	lb/A P as P ₂ O ₅ ppm of P	< 5 < 1	50 11	9 2		
EXCHANGEABLE CATIONS	CALCIUM*		3464 ppm	5602 ppm	2172 ppm		
	MAGNESIUM*		212 ppm	234 ppm	122 ppm		
	POTASSIUM*		220 ppm	622 ppm	172 ppm		
	SODIUM*		304 ppm	854 ppm	202 ppm		
			152	427	101		
	BASE SATURATION PERCENT						
	Calcium	%	79.89	76.49	79.97		
	Magnesium	%	8.15	5.32	7.49		
	Potassium	%	2.60	4.36	3.25		
	Sodium	%	6.10	10.14	6.47		
	Other Bases	%	3.30	3.70	2.80		
	Hydrogen	%	0.00	0.00	0.00		
EXTRACTABLE MINORS							
Boron** (ppm)			0.68	1.70	< 0.20		
Iron** (ppm)			121	66	65		
Manganese** (ppm)			66	42	14		
Copper** (ppm)			1.26	1.50	< 0.2		
Zinc** (ppm)			3.01	10.84	1.24		
Aluminum** (ppm)			31	9	142		
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		3.7	31.7	2.0		
	NH ₄ -N (ppm)		1.6	4.6	< 0.5		

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Sample Location	ROADRUNNER	TEE	FAIRWAY	GREEN		
Sample Identification		3	3	3		
Lab Number		1336-1	1337-1	1338-1		
Total Exchange Capacity (ME/100 g)		12.82	21.26	5.82		
pH (H ₂ O 1:1)		a 7.5	a 7.9	a 7.7		
Organic Matter (360°C LOI) %		2.67	3.30	1.12		
Estimated Nitrogen Release lb/A		73	83	42		
ANIONS	SOLUBLE SULFUR* ppm	295	736	21		
	PHOSPHORUS MEHLICH III lb/A P as P ₂ O ₅ ppm of P					
	BRAY II lb/A P as P ₂ O ₅ ppm of P					
	OLSEN lb/A P as P ₂ O ₅ ppm of P	32 7	18 4	< 5 < 1		
EXCHANGEABLE CATIONS	CALCIUM* lb/A	3608	5592	1726		
	ppm	1804	2796	863		
	MAGNESIUM* lb/A	158	302	110		
	ppm	79	151	55		
	POTASSIUM* lb/A	328	712	262		
	ppm	164	356	131		
	SODIUM* lb/A	1020	2006	230		
	ppm	510	1003	115		
BASE SATURATION PERCENT						
	Calcium %	70.36	65.76	74.14		
	Magnesium %	5.14	5.92	7.88		
	Potassium %	3.28	4.29	5.77		
	Sodium %	17.30	20.51	8.59		
	Other Bases %	3.90	3.50	3.70		
	Hydrogen %	0.00	0.00	0.00		
EXTRACTABLE MINORS						
	Boron** (ppm)	1.20	2.18	0.40		
	Iron** (ppm)	93	181	74		
	Manganese** (ppm)	28	108	24		
	Copper** (ppm)	1.20	2.54	2.51		
	Zinc** (ppm)	7.01	4.70	4.11		
	Aluminum** (ppm)	44	83	105		
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	16.3	13.9	4.8		
	NH ₄ -N (ppm)	34.5	25.8	5.3		

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