

lb/A

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

89490-5

Name Quail Creek Golf Club City Green Valley State AZIndependent Consultant Soil and Water Consulting Date 3/12/2025

Sample Location				COYOTE	TEE	FAIRWAY	GREEN		
Sample Identification					6	6	6		
Lab Number					1181-1	1182-1	1183-1		
Total Exchange Capacity (ME/100 g)					7.30	13.18	5.70		
pH (H ₂ O 1:1)					a 8.1	a 7.8	a 8.7		
Organic Matter (360°C LOI) %					1.10	4.08	0.49		
Estimated Nitrogen Release					lb/A	42	91	20	
ANIONS	SOLUBLE SULFUR*				ppm	45	112	16	
	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		32	41	32		
			ppm of P		7	9	7		
EXCHANGEABLE CATIONS	CALCIUM*		lb/A		2248	3738	1574		
			ppm		1124	1869	787		
	MAGNESIUM*		lb/A		80	180	62		
			ppm		40	90	31		
	POTASSIUM*		lb/A		272	586	474		
			ppm		136	293	237		
	SODIUM*		lb/A		348	856	342		
			ppm		174	428	171		
BASE SATURATION PERCENT									
Calcium					%	76.99	70.90	69.04	
Magnesium					%	4.57	5.69	4.53	
Potassium					%	4.78	5.70	10.66	
Sodium					%	10.36	14.12	13.04	
Other Bases					%	3.30	3.60	2.70	
Hydrogen					%	0.00	0.00	0.00	
EXTRACTABLE MINORS									
Boron** (ppm)						0.76	1.14	0.28	
Iron** (ppm)						74	135	56	
Manganese** (ppm)						40	57	12	
Copper** (ppm)						0.94	1.43	< 0.2	
Zinc** (ppm)						1.48	3.97	0.77	
Aluminum** (ppm)						74	112	151	
OTHER TESTS	Soluble Salts (mmhos/cm)								
	Chlorides (ppm)								
	NO3-N (ppm)				< 0.5	5.3	1.3		
	NH4-N (ppm)				< 0.5	1.2	< 0.5		

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

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Sample Location				QUAIL	TEE	FAIRWAY	GREEN		
Sample Identification					6	6	6		
Lab Number					1184-1	1185-1	1186-1		
Total Exchange Capacity (ME/100 g)					5.86	20.13	5.82		
pH (H ₂ O 1:1)					a 8.7	a 7.9	a 8.7		
Organic Matter (360°C LOI) %					0.46	4.51	0.33		
Estimated Nitrogen Release lb/A					18	95	13		
ANIONS	SOLUBLE SULFUR* ppm				16	169	16		
	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	14 3	50 11	14 3			
EXCHANGEABLE CATIONS	CALCIUM*		lb/A	1838	6368	1692			
			ppm	919	3184	846			
	MAGNESIUM*		lb/A	72	198	76			
			ppm	36	99	38			
	POTASSIUM*		lb/A	216	568	328			
			ppm	108	284	164			
	SODIUM*		lb/A	244	896	320			
			ppm	122	448	160			
BASE SATURATION PERCENT									
Calcium %					78.41	79.09	72.68		
Magnesium %					5.12	4.10	5.44		
Potassium %					4.73	3.62	7.23		
Sodium %					9.05	9.68	11.95		
Other Bases %					2.70	3.50	2.70		
Hydrogen %					0.00	0.00	0.00		
EXTRACTABLE MINORS									
Boron** (ppm)					0.42	1.18	0.24		
Iron** (ppm)					101	43	38		
Manganese** (ppm)					191	29	12		
Copper** (ppm)					1.33	1.20	< 0.2		
Zinc** (ppm)					1.15	7.50	0.62		
Aluminum** (ppm)					768	32	142		
OTHER TESTS	Soluble Salts (mmhos/cm)								
	Chlorides (ppm)								
	NO3-N (ppm)				2.2	9.6	< 0.5		
	NH4-N (ppm)				24.9	0.7	< 0.5		

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Sample Location		ROADRUNNER	TEE	FAIRWAY	GREEN		
Sample Identification			6	6	6		
Lab Number			1187-1	1188-1	1189-1		
Total Exchange Capacity (ME/100 g)			8.57	21.03	6.78		
pH (H ₂ O 1:1)			a 7.7	a 8.0	a 8.0		
Organic Matter (360°C LOI) %			2.24	5.34	1.63		
Estimated Nitrogen Release lb/A			65	102	53		
ANIONS	SOLUBLE SULFUR*	ppm	59	151	25		
	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	14 3	23 5	9 2		
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	2352	6694	1982		
		ppm	1176	3347	991		
	MAGNESIUM*	lb/A	112	200	80		
		ppm	56	100	40		
	POTASSIUM*	lb/A	364	514	362		
		ppm	182	257	181		
	SODIUM*	lb/A	660	960	368		
		ppm	330	480	184		
BASE SATURATION PERCENT							
Calcium		%	68.61	79.58	73.08		
Magnesium		%	5.45	3.96	4.92		
Potassium		%	5.45	3.13	6.85		
Sodium		%	16.74	9.92	11.80		
Other Bases		%	3.70	3.40	3.40		
Hydrogen		%	0.00	0.00	0.00		
EXTRACTABLE MINORS							
Boron** (ppm)			0.64	0.89	0.64		
Iron** (ppm)			56	20	50		
Manganese** (ppm)			13	15	22		
Copper** (ppm)			0.72	0.73	2.35		
Zinc** (ppm)			2.27	2.02	3.37		
Aluminum** (ppm)			61	3	59		
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		2.4	8.0	3.9		
	NH ₄ -N (ppm)		1.5	1.3	0.6		

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