

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name The Summit City Las Vegas State NV

Independent Consultant Soil and Water Consulting Date 1/19/2018

Sample Location TEE			6	13			
Sample Identification			d 4 in POTABLE	d 4 in EFFLUENT			
Lab Number			0001-1	0002-1			
Total Exchange Capacity (ME/100 g)			9.29	7.41			
pH (H ₂ O 1:1)			a 8.0	a 7.7			
Organic Matter (360°C LOI) %			0.85	0.83			
Estimated Nitrogen Release lb/A			23	22			
ANIONS	SOLUBLE SULFUR* ppm		41	25			
	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						
EXCHANGEABLE CATIONS	OLSEN lb/A P as P ₂ O ₅ ppm of P		253 83	183 60			
	CALCIUM* lb/A		1968	1577			
	ppm		1476	1183			
	MAGNESIUM* lb/A		153	103			
	ppm		115	77			
	POTASSIUM* lb/A		201	189			
	ppm		151	142			
	SODIUM* lb/A		77	67			
	ppm		58	50			
BASE SATURATION PERCENT							
Calcium %			79.44	79.82			
Magnesium %			10.32	8.66			
Potassium %			4.17	4.91			
Sodium %			2.71	2.93			
Other Bases %			3.40	3.70			
Hydrogen %			0.00	0.00			
EXTRACTABLE MINORS							
Boron** (ppm)			0.73	0.56			
Iron** (ppm)			96	62			
Manganese** (ppm)			19	11			
Copper** (ppm)			1.99	2.24			
Zinc** (ppm)			9.04	5.98			
Aluminum** (ppm)			44	72			
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		15.6	29.8			
	NH ₄ -N (ppm)		6.9	15.6			

d - specific depth

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name The Summit City Las Vegas State NV

Independent Consultant Soil and Water Consulting Date 1/19/2018

Sample Location <u>APPROACH</u>		4				
Sample Identification		d 4 in POTABLE				
Lab Number		0003-1				
Total Exchange Capacity (ME/100 g)		8.64				
pH (H ₂ O 1:1)		a 7.6				
Organic Matter (360°C LOI) %		1.09				
Estimated Nitrogen Release lb/A		28				
ANIONS	SOLUBLE SULFUR* ppm	95				
	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	339 111				
EXCHANGEABLE CATIONS	CALCIUM* lb/A	1668				
	ppm	1251				
	MAGNESIUM* lb/A	175				
	ppm	131				
	POTASSIUM* lb/A	348				
	ppm	261				
	SODIUM* lb/A	92				
	ppm	69				
BASE SATURATION PERCENT						
Calcium %		72.40				
Magnesium %		12.64				
Potassium %		7.75				
Sodium %		3.47				
Other Bases %		3.80				
Hydrogen %		0.00				
EXTRACTABLE MINORS						
Boron** (ppm)		0.66				
Iron** (ppm)		96				
Manganese** (ppm)		20				
Copper** (ppm)		1.50				
Zinc** (ppm)		5.36				
Aluminum** (ppm)		90				
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	30.2				
	NH ₄ -N (ppm)	12.6				

d - specific depth

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name The Summit City Las Vegas State NV

Independent Consultant Soil and Water Consulting Date 1/19/2018

Sample Location <u>FAIRWAY</u>		4				
Sample Identification		d 4 in EFFLUENT				
Lab Number		0004-1				
Total Exchange Capacity (ME/100 g)		8.51				
pH (H ₂ O 1:1)		a 7.8				
Organic Matter (360°C LOI) %		0.77				
Estimated Nitrogen Release lb/A		21				
ANIONS	SOLUBLE SULFUR* ppm	129				
	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	198 65				
EXCHANGEABLE CATIONS	CALCIUM* lb/A	1688				
		ppm	1266			
	MAGNESIUM* lb/A	141				
		ppm	106			
	POTASSIUM* lb/A	296				
	ppm	222				
	SODIUM* lb/A	128				
	ppm	96				
BASE SATURATION PERCENT						
	Calcium %	74.38				
	Magnesium %	10.38				
	Potassium %	6.69				
	Sodium %	4.90				
	Other Bases %	3.60				
	Hydrogen %	0.00				
EXTRACTABLE MINORS						
	Boron** (ppm)	0.60				
	Iron** (ppm)	110				
	Manganese** (ppm)	19				
	Copper** (ppm)	1.70				
	Zinc** (ppm)	4.28				
	Aluminum** (ppm)	101				
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	16.4				
	NH ₄ -N (ppm)	10.4				

d - specific depth

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name The Summit City Las Vegas State NV

Independent Consultant Soil and Water Consulting Date 1/19/2018

Sample Location <u>APPROACH</u>		12				
Sample Identification		d 4 in POTABLE				
Lab Number		0005-1				
Total Exchange Capacity (ME/100 g)		9.89				
pH (H ₂ O 1:1)		a 7.9				
Organic Matter (360°C LOI) %		0.85				
Estimated Nitrogen Release lb/A		23				
ANIONS	SOLUBLE SULFUR* ppm	46				
	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	431 141				
EXCHANGEABLE CATIONS	CALCIUM* lb/A	2016				
		ppm	1512			
	MAGNESIUM* lb/A	173				
		ppm	130			
	POTASSIUM* lb/A	336				
	ppm	252				
	SODIUM* lb/A	77				
	ppm	58				
BASE SATURATION PERCENT						
	Calcium %	76.44				
	Magnesium %	10.95				
	Potassium %	6.53				
	Sodium %	2.55				
	Other Bases %	3.50				
	Hydrogen %	0.00				
EXTRACTABLE MINORS						
	Boron** (ppm)	0.78				
	Iron** (ppm)	65				
	Manganese** (ppm)	15				
	Copper** (ppm)	1.66				
	Zinc** (ppm)	7.60				
	Aluminum** (ppm)	51				
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	31.1				
	NH ₄ -N (ppm)	20.2				

d - specific depth

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name The Summit City Las Vegas State NV

Independent Consultant Soil and Water Consulting Date 1/19/2018

Sample Location <u>FAIRWAY</u>		12				
Sample Identification		d 4 in EFFLUENT				
Lab Number		0006-1				
Total Exchange Capacity (ME/100 g)		8.67				
pH (H ₂ O 1:1)		a 7.7				
Organic Matter (360°C LOI) %		0.99				
Estimated Nitrogen Release lb/A		27				
ANIONS	SOLUBLE SULFUR* ppm	113				
	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	510 167				
EXCHANGEABLE CATIONS	CALCIUM* lb/A	1715				
		ppm	1286			
	MAGNESIUM* lb/A	125				
		ppm	94			
	POTASSIUM* lb/A	431				
	ppm	323				
	SODIUM* lb/A	93				
	ppm	70				
BASE SATURATION PERCENT						
	Calcium %	74.16				
	Magnesium %	9.03				
	Potassium %	9.55				
	Sodium %	3.51				
	Other Bases %	3.70				
	Hydrogen %	0.00				
EXTRACTABLE MINORS						
	Boron** (ppm)	0.80				
	Iron** (ppm)	62				
	Manganese** (ppm)	16				
	Copper** (ppm)	1.95				
	Zinc** (ppm)	3.81				
	Aluminum** (ppm)	100				
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	48.7				
	NH ₄ -N (ppm)	39.2				

d - specific depth

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable