lb/A

BROOKSIDE LABORATORIES, INC.

58251-1

SOIL AUDIT AND INVENTORY REPORT

Name Ringler Energy City Cardington State OH

Independent Consultant Brookside Consultants of Ohio, Inc. Date 10/13/2015

Sample Location	ETGEN/FOUST	D
Sample Identification		d 8 in
Lab Number		1496-1
Total Exchange Capacity (ME/100 g)		15.31
pH (H_2O 1:1)		5.1
Organic Matter (humus) %		3.03
Estimated Nitrogen Release	lb/A	107
ANIONS: SOLUBLE SULFUR*	ppm	12
PHOSPHORUS: MEHLICH III	lb/A P as P_2O_5	232
	ppm of P	38
BRAY II	lb/A P as P_2O_5	153
	ppm of P	25
OLSEN	lb/A P as P_2O_5	
	ppm of P	
EXCHANGEABLE CATIONS: CALCIUM*	lb/A	3035
	ppm	1138
MAGNESIUM*	lb/A	544
	ppm	204
POTASSIUM*	lb/A	304
	ppm	114
SODIUM*	lb/A	59
	ppm	22
BASE SATURATION PERCENT		
Calcium	%	37.17
Magnesium	%	11.10
Potassium	%	1.91
Sodium	%	0.62
Other Bases	%	7.20
Hydrogen	%	42.00
EXTRACTABLE MINORS		
Boron* (ppm)		0.37
Iron* (ppm)		261
Manganese* (ppm)		49
Copper* (ppm)		2.51
Zinc* (ppm)		2.01
Aluminum* (ppm)		923
OTHER TESTS: Soluble Salts (mmhos/cm)		
Chlorides (ppm)		

d - specific depth

* Mehlich III Extractable