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

N64073

Sample Location ETGEN/FOUST 85A			A				
Sample Identification			d 8 in				
Lab Number			1493-1				
Total Exchange Capacity (ME/100 g)			11.32				
pH (H_2O 1:1)			5.3				
Organic Matter (humus) %			2.50				
Estimated Nitrogen Release		lb/A	93				
ANIONS	SOLUBLE SULFUR*	ppm	11				
ANIONS	PHOSPHORUS MEHLICH III	lb/A P as P_2O_5	159				
		ppm of P	26				
	PHOSPHORUS BRAY II	lb/A P as P_2O_5	110				
		ppm of P	18				
	PHOSPHORUS OLSEN	lb/A P as P_2O_5					
		ppm of P					
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	2619				
		ppm	982				
	MAGNESIUM*	lb/A	419				
		ppm	157				
	POTASSIUM*	lb/A	184				
		ppm	69				
	SODIUM*	lb/A	48				
		ppm	18				
BASE SATURATION PERCENT							
	Calcium	%	43.37				
	Magnesium	%	11.56				
	Potassium	%	1.56				
	Sodium	%	0.69				
	Other Bases	%	6.80				
	Hydrogen	%	36.00				
EXTRACTABLE MINORS							
	Boron* (ppm)		0.33				
	Iron* (ppm)		188				
	Manganese* (ppm)		87				
	Copper* (ppm)		1.88				
	Zinc* (ppm)		1.64				
	Aluminum* (ppm)		792				
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						

d - specific depth

* Mehlich III Extractable