Thurston 23-4

lb/A

BROOKSIDE LABORATORIES, INC.

58251-2

SOIL AUDIT AND INVENTORY REPORT

Name Ringler Energy City Carrington State OH

Independent Consultant Brookside Consultants of Ohio, Inc. Date 01/25/2016

Sample Location ASHLEY			THURSTON	THURSTON			
Sample Identification			250-11	250-12			
Lab Number			0068-1	0069-1			
Total Exchange Capacity (ME/100 g)			18.74	17.03			
pH (H_2O 1:1)			6.5	5.3			
Organic Matter (humus) %			2.67	2.29			
Estimated Nitrogen Release		lb/A	73	66			
ANIONS	SOLUBLE SULFUR*	ppm	8	10			
PHOSPHORUS	MEHLICH III	lb/A P as P_2O_5	55	37			
		ppm of P	12	8			
	BRAY II	lb/A P as P_2O_5	69	23			
		ppm of P	15	5			
	OLSEN	lb/A P as P_2O_5					
		ppm of P					
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	4944	2844			
		ppm	2472	1422			
	MAGNESIUM*	lb/A	874	550			
		ppm	437	275			
	POTASSIUM*	lb/A	232	176			
		ppm	116	88			
	SODIUM*	lb/A	52	52			
		ppm	26	26			
BASE SATURATION PERCENT							
Calcium		%	65.96	41.75			
Magnesium		%	19.43	13.46			
Potassium		%	1.59	1.32			
Sodium		%	0.60	0.66			
Other Bases		%	4.90	6.80			
Hydrogen		%	7.50	36.00			
EXTRACTABLE MINORS							
Boron* (ppm)			0.55	0.43			
Iron* (ppm)			172	233			
Manganese* (ppm)			26	36			
Copper* (ppm)			3.04	2.05			
Zinc* (ppm)			2.35	1.76			
Aluminum* (ppm)			798	933			
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						

* Mehlich III Extractable