Thurston 230 A

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	THURSTON	THURSTON	THURSTON
Sample Identification			250-6	250-7	250-8	250-9	250-10
Lab Number			0063-1	0064-1	0065-1	0066-1	0067-1
Total Exchange Capacity (ME/100 g)			26.76	23.69	20.44	14.57	16.29
pH (H_2O 1:1)			4.7	5.0	4.8	4.6	5.9
Organic Matter (humus) %			2.71	2.48	2.26	1.79	2.05
Estimated Nitrogen Release		lb/A	74	70	65	56	61
ANIONS	SOLUBLE SULFUR*	ppm	12	13	15	13	9
ANIONS – PHOSPHORUS	MEHLICH III	lb/A Pas P_2O_5	78	87	60	32	27
		ppm of P	17	19	13	7	6
	BRAY II	lb/A Pas P_2O_5	137	60	60	23	23
		ppm of P	30	13	13	5	5
	OLSEN	lb/A Pas P_2O_5					
		ppm of P					
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	3466	3578	2728	1696	3652
		ppm	1733	1789	1364	848	1826
	MAGNESIUM*	lb/A	456	476	398	266	714
		ppm	228	238	199	133	357
	POTASSIUM*	lb/A	250	200	204	172	178
		ppm	125	100	102	86	89
	SODIUM*	lb/A	40	42	42	38	50
		ppm	20	21	21	19	25
BASE SATURATION PERCENT							
Calcium		%	32.38	37.76	33.37	29.10	56.05
Magnesium		%	7.10	8.37	8.11	7.61	18.26
Potassium		%	1.20	1.08	1.28	1.51	1.40
Sodium		%	0.32	0.39	0.45	0.57	0.67
Other Bases		%	8.00	7.40	7.80	8.20	5.60
Hydrogen		%	51.00	45.00	49.00	53.00	18.00
EXTRACTABLE MINORS							
Boron* (ppm)			0.59	0.46	0.42	0.28	0.30
Iron* (ppm)			294	186	198	144	129
Manganese* (ppm)			11	38	29	61	41
Copper* (ppm)			3.24	2.24	2.14	1.32	1.70
Zinc* (ppm)			1.55	1.83	1.31	1.18	0.98
Aluminum* (ppm)			1245	1013	1076	1042	822
Other Tests	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						

* Mehlich III Extractable