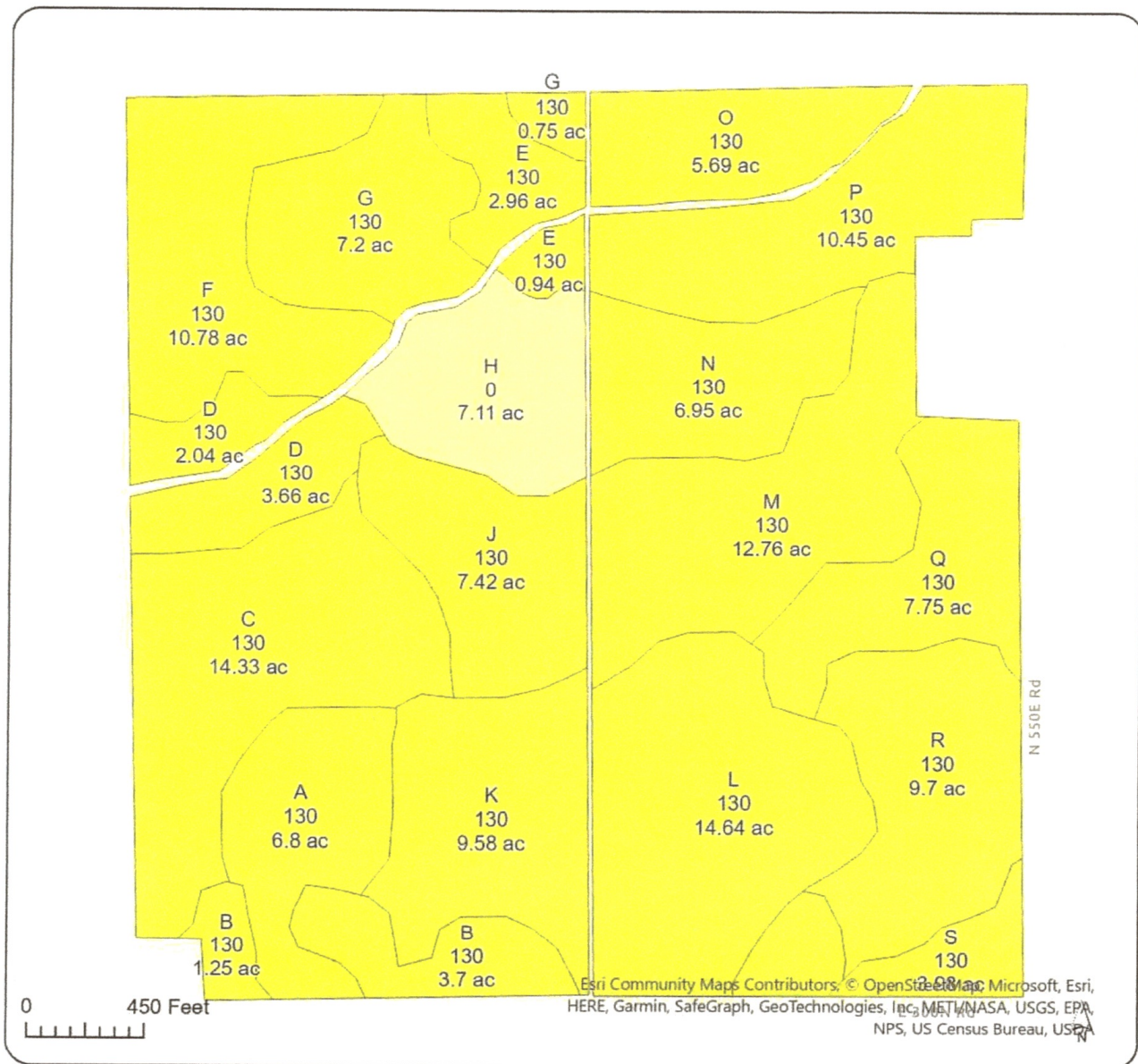


Soil Test Results From July, 2022

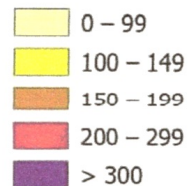
Potash (0-0-60), Sulfur (90%), and ZnSO₄ (35%)



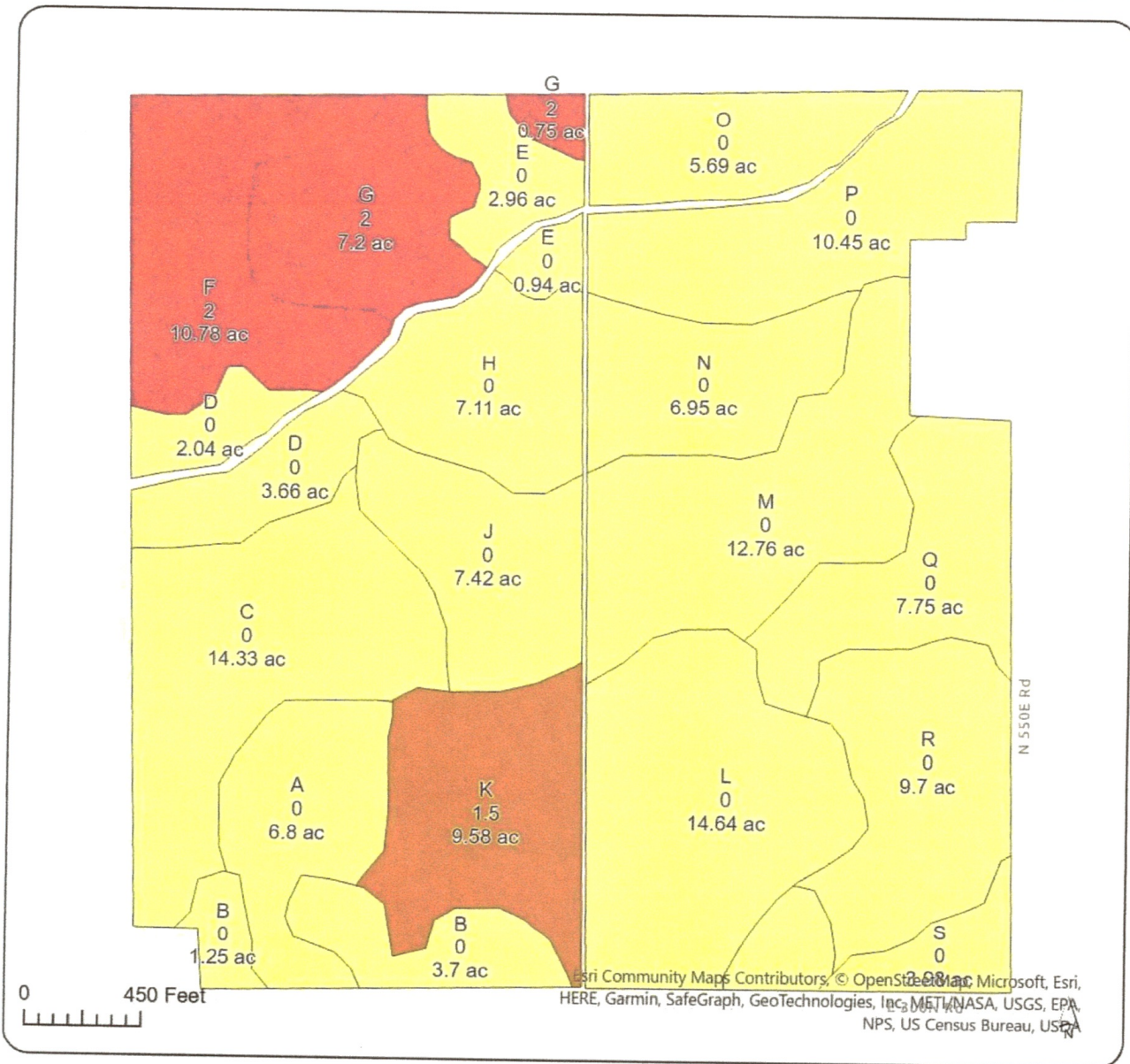
Grower: Ulfers, Don
 Farm: Ulfers, Don
 Field: F3-Gibson City
 Year: 2022
 Total Potash Blend: 9.32 tons
 Avg Potash Blend: 123.86 lbs/acre
 Spread Area: 143.3 acres (95%)
 Acres: 150.44



Potash Blend (lbs/acre)



Dolomite Lime



Grower: Ulfers, Don
 Farm: Ulfers, Don
 Field: F3-Gibson City
 Year: 2022
 Total Mag Lime: 51.83 tons
 Avg Mag Lime: 0.34 tons/acre
 Spread Area: 28.3 acres (19%)
 Acres: 150.44



Mag Lime (tons/acre)

0 - 0.99
1.00 - 1.49
1.50 - 1.99
2.00 - 2.99
> 3.00

1b/A

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

34878-39

Name Don Ulfers City Melvin State ILIndependent Consultant BCS, LLC Date 07/22/2022

Sample Location			GIBSON CITY		F3	F3	F3	F3	F3
Sample Identification					A	B	C	D	E
Lab Number					2121-1	2122-1	2123-1	2124-1	2125-1
Total Exchange Capacity (ME/100 g)					14.86	16.15	14.03	18.75	22.12
pH	Buffer (SMP/Sikora)			7.0	7.1	7.0	7.0	7.0	
	H ₂ O (1:1)			6.0	6.0	5.5	5.7	5.7	
Organic Matter (360°C LOI) %					3.31	3.21	3.17	3.94	4.84
Estimated Nitrogen Release lb/A					83	82	82	89	98
ANIONS	SOLUBLE SULFUR* ppm				10	11	12	13	13
	PHOSPHORUS	MEHLICH III	lb/A P as P ₂ O ₅	275	692	339	289	311	
			ppm of P	60	151	74	63	68	
		BRAY II	lb/A P as P ₂ O ₅	559	1067	531	412	508	
			ppm of P	122	233	116	90	111	
EXCHANGABLE CATIONS	CALCIUM*	lb/A	4914	5318	4650	6082	7004		
		ppm	2457	2659	2325	3041	3502		
	MAGNESIUM*	lb/A	438	446	380	678	900		
		ppm	219	223	190	339	450		
	POTASSIUM*	lb/A	514	714	570	500	600		
		ppm	257	357	285	250	300		
	SODIUM*	lb/A	40	36	44	38	44		
		ppm	20	18	22	19	22		
BASE SATURATION PERCENT									
	Calcium	%	82.67	82.32	82.86	81.09	79.16		
	Magnesium	%	12.28	11.51	11.29	15.07	16.95		
	Potassium	%	4.43	5.67	5.21	3.42	3.48		
	Sodium	%	0.59	0.48	0.68	0.44	0.43		
	Other Bases	%	NA	NA	NA	NA	NA		
	Hydrogen	%	0.00	0.00	0.00	0.00	0.00		
EXTRACTABLE MINORS									
	Boron* (ppm)		0.71	0.68	0.58	0.73	0.60		
	Iron* (ppm)		183	374	187	171	165		
	Manganese* (ppm)		67	35	116	51	44		
	Copper* (ppm)		2.28	2.73	1.84	2.81	2.68		
	Zinc* (ppm)		2.49	5.37	2.35	2.02	2.37		
	Aluminum* (ppm)		644	596	753	736	680		
OTHER TESTS	Soluble Salts (mmhos/cm)								
	Chlorides (ppm)								

* Mehlich III Extractable

lb/A

BROOKSIDE LABORATORIES, INC.

34878-39

SOIL AUDIT AND INVENTORY REPORT

Name Don Ulfers City Melvin State ILIndependent Consultant BCS, LLC Date 07/22/2022

Sample Location <u>GIBSON CITY</u>		F3	F3	F3	F3	F3
Sample Identification		F	G	H	J	K
Lab Number		2126-1	2127-1	2128-1	2129-1	2130-1
Total Exchange Capacity (ME/100 g)		17.43	19.78	22.55	18.20	13.50
pH	Buffer (SMP/Sikora)	6.8	6.8	7.0	7.0	6.9
	H ₂ O (1:1)	5.4	5.6	5.9	6.0	5.5
Organic Matter (360°C LOI) %		3.75	4.09	5.01	4.25	3.26
Estimated Nitrogen Release lb/A		88	91	100	92	83
ANIONS	SOLUBLE SULFUR* ppm	12	11	13	10	11
	MEHLICH III lb/A P as P ₂ O ₅	380	261	243	307	279
	ppm of P	83	57	53	67	61
	BRAY II lb/A P as P ₂ O ₅	536	513	444	357	412
	ppm of P	117	112	97	78	90
EXCHANGABLE CATIONS	OLSEN lb/A P as P ₂ O ₅					
	ppm of P					
	CALCIUM* lb/A	5094	5838	7072	5876	4210
	ppm	2547	2919	3536	2938	2105
	MAGNESIUM* lb/A	504	664	988	590	450
	ppm	252	332	494	295	225
	POTASSIUM* lb/A	650	514	522	744	436
	ppm	325	257	261	372	218
	SODIUM* lb/A	40	38	40	44	38
	ppm	20	19	20	22	19
BASE SATURATION PERCENT						
Calcium %		73.06	73.79	78.40	80.71	77.96
Magnesium %		12.05	13.99	18.26	13.51	13.89
Potassium %		4.78	3.33	2.97	5.24	4.14
Sodium %		0.50	0.42	0.39	0.53	0.61
Other Bases %		NA	NA	NA	NA	NA
Hydrogen %		9.62	8.47	0.00	0.00	3.39
EXTRACTABLE MINORS						
Boron* (ppm)		0.53	0.60	0.66	0.68	0.48
Iron* (ppm)		186	181	175	190	175
Manganese* (ppm)		80	57	48	65	74
Copper* (ppm)		2.28	2.64	2.41	1.88	1.99
Zinc* (ppm)		2.38	2.19	2.54	2.31	2.28
Aluminum* (ppm)		711	671	680	698	691
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					

* Mehlich III Extractable

1b/A

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

34878-39

Name Don Ulfers City Melvin State ILIndependent Consultant BCS, LLC Date 07/22/2022

Sample Location <u>GIBSON CITY</u>		F3	F3	F3	F3	F3
Sample Identification		L	M	N	O	P
Lab Number		2131-1	2132-1	2133-1	2134-1	2135-1
Total Exchange Capacity (ME/100 g)		17.85	20.93	20.13	23.57	24.37
pH	Buffer (SMP/Sikora)	7.0	7.0	7.1	7.0	7.0
	H ₂ O (1:1)	5.7	6.0	6.0	5.9	6.0
Organic Matter (360°C LOI) %		4.25	4.80	4.36	4.72	5.06
Estimated Nitrogen Release lb/A		92	98	94	97	100
ANIONS	SOLUBLE SULFUR* ppm	11	12	10	12	10
	MEHLICH III lb/A P as P ₂ O ₅	224	408	261	311	348
	ppm of P	49	89	57	68	76
	BRAY II lb/A P as P ₂ O ₅	440	605	385	485	559
	ppm of P	96	132	84	106	122
EXCHANGABLE CATIONS	OLSEN lb/A P as P ₂ O ₅					
	ppm of P					
	CALCIUM* lb/A	5694	6642	6552	7384	7724
	ppm	2847	3321	3276	3692	3862
	MAGNESIUM* lb/A	700	814	682	1024	996
BASE SATURATION PERCENT	ppm	350	407	341	512	498
	POTASSIUM* lb/A	470	650	634	570	644
	ppm	235	325	317	285	322
	SODIUM* lb/A	44	46	44	50	38
	ppm	22	23	22	25	19
BASE SATURATION PERCENT						
Calcium %		79.75	79.34	81.37	78.32	79.24
Magnesium %		16.34	16.20	14.12	18.10	17.03
Potassium %		3.38	3.98	4.04	3.10	3.39
Sodium %		0.54	0.48	0.48	0.46	0.34
Other Bases %		NA	NA	NA	NA	NA
Hydrogen %		0.00	0.00	0.00	0.00	0.00
EXTRACTABLE MINORS						
Boron* (ppm)		0.68	0.84	0.67	0.85	0.64
Iron* (ppm)		178	234	199	197	189
Manganese* (ppm)		61	56	63	51	36
Copper* (ppm)		2.12	2.38	2.18	2.66	2.99
Zinc* (ppm)		2.21	2.70	2.41	2.93	3.74
Aluminum* (ppm)		703	722	706	695	628
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					

* Mehlich III Extractable

1b/A

BROOKSIDE LABORATORIES, INC. 34878-39

SOIL AUDIT AND INVENTORY REPORT

Name Don Ulfers City Melvin State ILIndependent Consultant BCS, LLC Date 07/22/2022

Sample Location		<u>GIBSON CITY</u>		F3	F3	F3			
Sample Identification				Q	R	S			
Lab Number				2136-1	2137-1	2138-1			
Total Exchange Capacity (ME/100 g)				26.04	18.85	16.61			
pH	Buffer (SMP/Sikora)			7.1	7.0	7.1			
	H ₂ O (1:1)			6.0	5.8	5.8			
Organic Matter (360°C LOI) %				4.38	4.62	3.42			
Estimated Nitrogen Release lb/A				94	96	84			
ANIONS	SOLUBLE SULFUR* ppm			13	11	12			
	PHOSPHORUS	MEHLICH III lb/A P as P ₂ O ₅		256	266	357			
			ppm of P		56	58	78		
		BRAY II lb/A P as P ₂ O ₅		563	490	536			
			ppm of P		123	107	117		
	OLSEN lb/A P as P ₂ O ₅								
		ppm of P							
EXCHANGABLE CATIONS	CALCIUM* lb/A			8168	5980	5606			
		ppm		4084	2990	2803			
	MAGNESIUM* lb/A			1130	762	422			
		ppm		565	381	211			
	POTASSIUM* lb/A			632	502	584			
		ppm		316	251	292			
	SODIUM* lb/A			46	38	40			
		ppm		23	19	20			
BASE SATURATION PERCENT									
Calcium %			78.42	79.31	84.38				
Magnesium %			18.08	16.84	10.59				
Potassium %			3.11	3.41	4.51				
Sodium %			0.38	0.44	0.52				
Other Bases %			NA	NA	NA				
Hydrogen %			0.00	0.00	0.00				
EXTRACTABLE MINORS									
Boron* (ppm)			0.72	0.68	0.53				
Iron* (ppm)			174	166	187				
Manganese* (ppm)			62	43	119				
Copper* (ppm)			2.63	2.08	2.38				
Zinc* (ppm)			2.47	2.09	3.18				
Aluminum* (ppm)			716	659	752				
OTHER TESTS	Soluble Salts (mmhos/cm)								
	Chlorides (ppm)								

* Mehlich III Extractable