

From: Book, Kelli <kelli.book@dnr.iowa.gov> on behalf of Book, Kelli <kelli.book@dnr.iowa.gov> <kelli.book@dnr.iowa.gov>
To: Adam Cook <acook@agsolutionsinc.net>
Cc:
Bcc:
Subject: Re: Supreme Beef NMP
Date: Fri Feb 19 2021 08:19:26 CST
Attachments: 2021 Supreme Beef NMP Part 2.pdf
image001.jpg
image002.jpg

Part 2

KELLI BOOK • Attorney

Legal Services Bureau

Iowa Department of Natural Resources

c 515-210-3408

502 E 9th St, Des Moines, IA 50319

On Thu, Feb 18, 2021 at 3:59 PM Adam Cook <acook@agsolutionsinc.net> wrote:

Kelli,

I would like to get a copy of the NMP for Supreme Beef, LLC. Currently I do not plan to make a comment at the meeting.

Thanks,

Adam Cook

Sales Agronomist, CCA

Newell, IA

712-660-5064

acook@agsolutionsinc.net



Document ID: 0.7.1730.5596-000001

Owner: Book, Kelli <kelli.book@dnr.iowa.gov> on behalf of Book, Kelli <kelli.book@dnr.iowa.gov> <kelli.book@dnr.iowa.gov>

Filename: 2021 Supreme Beef NMP Part 2.pdf

Last Modified: Fri Feb 19 08:19:26 CST 2021



**REPORT NUMBER
17-320-0145**

ACCOUNT
29574

COMPLETED DATE
NOV 18, 2017

RECEIVED DATE
NOV 16, 2017

**ACM/PREMIER CROP
PO BOX 533**

ALGONA IA 50511

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13698
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26794
IDENTIFICATION
CARLSON FARMS
TYLER CARLSON
HOTH FARM

Lab Number	Sample ID	OM %	Phosphorus						Buff index	CEC meq/100	Percent Base Saturation				Surface depth lbs/A	Total lbs/A ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime ppm	Excess Soluble Salts ppm	NH3-N ppm	MP3 Color
			P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm			Mg	Ca	H	Na												
32308594	1	3.1	34	53	233	437	1894	6.7		13.7	4.4	26.6	69.0	0.0											0.6	
32308595	2	2.5	34	51	231	546	2168	6.9		16.0	3.7	28.4	67.9	0.0											0.6	
32308596	3	2.8	70	91	264	554	1996	6.8		15.3	4.4	30.2	65.4	0.0											0.6	
32308597	4	2.2	38	52	249	501	1763	6.8		13.6	4.7	30.7	64.6	0.0											0.6	
32308598	5	2.7	29	37	233	461	1847	6.9		13.7	4.4	28.0	67.6	0.0											0.6	
32308599	6	2.3	56	241	571	2006	7.0		15.4	4.0	30.9	65.1	0.0												0.6	
32308600	7	2.9	44	61	207	498	1783	6.3		6.8	15.2	3.5	27.3	58.7	10.5										0.6	
32308601	8	2.6	48	53	222	480	1748	6.3		6.8	14.9	3.8	26.8	58.7	10.7										0.6	
32308602	9	2.7	32	37	159	456	1599	5.9		6.7	14.7	2.8	25.9	54.4	16.9										0.6	
32308603	10	3.0	58	67	248	475	1675	6.2		6.7	14.8	4.3	26.7	56.6	12.4										0.6	
32308604	11	3.3	34	45	192	461	1735	6.5		6.8	14.1	3.5	27.2	61.5	7.8										0.6	
32308605	12	3.4	29	39	200	428	1699	6.6		6.9	13.4	3.8	26.6	63.4	6.2										0.6	
32308606	13	3.0	26	40	199	453	1848	6.7		13.5	3.8	28.0	68.2	0.0											0.6	
32308607	14	3.5	47	53	232	425	1647	6.0		6.7	14.6	4.1	24.3	56.4	15.2										0.6	
32308608	15	3.3	35	44	263	502	1836	6.6		6.9	14.9	4.5	28.1	61.6	5.8										0.6	
32308609	16	3.0	24	33	201	524	1897	6.7		14.4	3.6	30.3	66.1	0.0											0.6	
32308610	17	3.3	41	53	208	413	1668	6.2		6.7	14.0	3.8	24.6	59.6	12.0										0.6	
32308611	18	2.9	63	82	243	422	1778	6.4		6.8	14.3	4.4	24.6	62.2	8.8										0.6	
32308612	19	3.1	40	48	200	430	1643	6.3		6.8	13.7	3.7	26.2	60.0	10.1										0.6	
32308613	20	2.9	32	43	195	430	1590	6.3		6.8	13.4	3.7	26.7	59.3	10.3										0.6	
32308614	21	3.4	38	57	185	421	1662	6.5		6.9	13.3	3.6	26.4	62.5	7.5										0.6	
32308615	22	2.9	41	52	253	473	1827	6.4		6.8	15.1	4.3	26.1	60.5	9.1										0.6	
32308616	23	2.9	56	68	224	360	1475	6.1		6.7	12.7	4.5	23.6	58.1	13.8										0.6	
32308617	24	3.8	51	57	243	398	1698	6.1		6.7	14.4	4.3	23.0	59.0	13.7										0.6	
32308618	25	3.5	32	35	194	375	1546	6.0		6.7	13.4	3.7	23.3	57.7	15.3										0.6	
32308620	26	3.0	45	54	195	322	1424	5.7		6.7	13.0	3.8	20.6	54.8	20.8										0.6	
32308621	27	3.2	36	39	233	443	1784	6.1		6.7	15.4	3.9	24.0	57.9	14.2										0.6	
32308622	28	2.9	46	48	214	397	1383	5.6		6.6	14.1	3.9	23.5	49.0	23.6										0.6	
32308623	29	2.7	51	59	228	439	1693	6.3		6.8	14.2	4.1	25.8	59.6	10.5										0.6	
32308624	30	2.9	54	64	302	358	1677	6.1		6.7	14.1	5.5	21.2	59.5	13.8										0.6	
32308625	31	3.2	38	48	271	372	1573	6.3		6.8	13.1	5.3	23.7	60.0	11.0										0.6	
32308626	32	3.0	42	50	243	456	1830	6.6		6.9	14.5	4.3	26.2	63.1	6.4										0.6	

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.

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TODAY'S DATE
Nov 18, 2017

ADVANCED CROP MANAGEMENT
PREMIER CROP SYSTEMS
DAN FRIEBERG



REPORT NUMBER
117-320-0145
COMPLETED DATE
Nov 18, 2017
RECEIVED DATE
Nov 16, 2017

ACCOUNT
29574

ACM/PREMIER CROP
PO BOX 533

ALGONA IA 50511

Lab Number	Sample ID	Phosphorus			pH	Buff index	CEC index/meq/100g	Percent Base Saturation			Nitrate Surface			Total lbs/A	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime ppm	Salts ppm	N ppm	Excess Soluble NH3-N ppm	MP3 Color
		OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	K	Mg	Ca	H	Na											
32308627	33	2.7	36	52		231	510	2033	6.5	6.8	16.2	3.7	26.2	62.7	7.4									0.6	
32308628	34	3.0	33	39		231	424	1649	6.2	6.7	14.1	4.2	25.1	58.5	12.2									0.6	
32308629	35	3.3	43	55		203	355	1564	6.0	6.7	13.3	3.9	22.2	58.8	15.1									0.6	
32308630	36	2.7	40	50		183	436	1641	6.3	6.8	13.7	3.4	26.5	59.9	10.2									0.6	
32308631	37	2.7	35	44		192	423	1662	6.5	6.9	13.3	3.7	26.5	62.5	7.3									0.6	
32308632	38	3.5	54	76		289	447	2164	7.0	15.3	4.8	24.3	70.9	0.0									0.6		
32308633	39	3.3	56	66		266	407	1807	6.8		13.1	5.2	25.9	68.9	0.0								0.6		
32308634	40	3.1	57	59		266	357	1558	6.0	6.7	13.4	5.1	22.2	58.1	14.6								0.6		
32308635	41	3.1	45	55		239	389	1859	6.9		13.1	4.7	24.7	70.6	0.0								0.6		
32308636	42	2.8	39	50		218	408	1833	7.2		13.1	4.3	26.0	69.7	0.0								0.6		
32308637	43	3.1	31	42		240	348	1801	6.3	6.8	14.0	4.4	20.7	64.3	10.6								0.6		
32308638	44	2.9	41	49		179	330	1655	6.9		11.5	4.0	23.9	72.1	0.0								0.6		
32308639	45	2.9	22	29		221	375	1799	6.9		12.7	4.5	24.6	70.9	0.0								0.6		
32308640	46	2.9	35	45		302	355	1638	6.4	6.8	13.1	4.3	22.6	62.5	9.0								0.6		
32308641	47	2.9	30	37		205	384	1705	6.0	6.7	14.5	3.6	22.1	53.8	15.5								0.6		
32308642	48	2.7	29	35		181	432	1664	5.9	6.7	14.9	3.1	24.2	55.8	16.9								0.6		
32308643	49	3.4	37	52		234	381	1777	7.1		12.7	4.7	25.0	70.3	0.0								0.6		
32308644	50	3.5	33	44		195	344	1761	6.7		12.2	4.1	23.5	72.4	0.0								0.6		
32308645	51	3.4	37	46		196	359	1625	6.5	6.9	12.5	4.0	23.9	65.0	7.1								0.6		
32308646	52	3.6	51	58		182	329	1476	6.2	6.8	12.0	3.9	22.8	61.5	11.8								0.6		
32308647	53	3.4	50	59		260	322	1489	6.2	6.8	12.3	5.4	21.8	60.5	12.3								0.6		
32308648	54	3.5	45	54		280	408	1810	6.5	6.8	14.3	5.0	23.8	63.3	7.9								0.6		
32308649	55	3.4	25	33		240	449	2047	7.0		14.6	4.2	25.6	70.2	0.0								0.6		
32308650	56	3.3	26	34		186	410	1854	6.4	6.8	14.5	3.3	23.6	63.9	9.2								0.6		
32308651	57	3.5	27	41		236	448	2078	6.5	6.8	15.9	3.8	23.5	65.3	7.4								0.6		
32308652	58	3.4	28	32		197	443	2040	6.8		14.4	3.5	25.6	70.9	0.0								0.6		
32308653	59	2.7	32	41		227	481	1883	6.8		14.0	4.2	28.6	67.2	0.0								0.6		
32308654	60	3.3	27	33		209	436	1830	6.8		13.3	4.0	27.3	68.7	0.0								0.6		
32308655	61	2.9	32	35		209	479	1720	6.5	6.8	14.2	3.8	28.1	60.6	7.5								0.6		
32308656	62	2.9	44	60		237	470	1896	6.5	6.8	15.1	4.0	25.9	62.8	7.3								0.6		
32308657	63	2.8	30	44		184	525	1851	6.9		14.1	3.3	31.0	65.7	0.0								0.6		
32308658	64	3.1	36	43		277	437	1794	6.8		13.3	5.3	27.4	67.3	0.0								0.6		

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.

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TODAY'S DATE
Nov 18, 2017

ADVANCED CROP MANAGEMENT
PREMIER CROP SYSTEMS
DAN FRIEBERG

CARLSON FARMS
TYLER CARLSON
HOOTH FARM

IDENTIFICATION

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RECEIVED DATE
Nov 16, 2017

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ACCOUNT
29574

COMPLETED DATE
Nov 18, 2017
RECEIVED DATE
Nov 16, 2017

ACM/PREMIER CROP
PO BOX 533

ALGONA IA 50511

Lab Number	Sample ID	Phosphorus						pH	Buff	CEC	Percent Base Saturation			Nitrate Surface			Total lbs/A	S ppm	Zn ppm	Min ppm	Fe ppm	Cu ppm	B ppm	Lime ppm	Salts ppm	N ppm	Excess Soluble NH ₃ -N ppm	MP3 Color
		OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	index meg/100	K	Mg	Ca	H	Na	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
32308660	65	3.0	26	34	163	461	1891	6.4	6.8	15.1	2.8	25.4	62.6	9.2													0-6	
32308661	66	3.3	17	30	236	427	1906	7.0		13.7	4.4	26.0	69.6	0.0													0-6	
32308662	67	2.5	38	55	176	446	1993		7.2		14.1	3.2	26.4	70.4	0.0												0-6	
32308663	68	2.1	26	46	19	189	513	2194	7.4		15.7	3.1	27.2	69.7	0.0												0-6	
32308664	69	3.0	24	38		182	418	1746	6.6	6.9	13.5	3.5	25.8	64.7	6.0												0-6	
32308665	70	3.3	29	37	223	429	1751	6.2	6.7	14.7	3.9	24.3	59.6	12.2													0-6	
32308666	71	3.0	24	36	277	394	1941	7.1		13.7	5.2	24.0	70.8	0.0													0-6	
32308667	72	3.0	26	39	19	466	377	1906	7.3		13.9	8.6	22.6	68.8	0.0												0-6	
32308668	73	3.1	29	42		250	352	1666	6.1	6.7	13.8	4.6	21.3	60.4	13.7												0-6	
32308669	74	2.6	31		200	433	1745	6.4	6.8	14.1	3.6	25.6	61.9	8.9												0-6		
32308670	75	3.1	42	59	175	402	1578	6.8	11.7		3.8	28.6	67.6	0.0												0-6		
32308671	76	3.1	38	42	277	502	1748	6.1	6.7	15.8	4.5	26.5	55.3	13.7												0-6		
32308672	77	3.0	34	43		208	544	2091	6.7		15.5	3.4	29.2	67.4	0.0											0-6		
32308673	78	2.8	18	26	187	465	1836	5.9	6.6	16.3	2.9	23.8	56.3	17.0												0-6		
32308674	79	2.7	30	44		245	530	1926	6.5	6.8	15.9	4.0	27.8	60.6	7.6											0-6		
32308675	80	3.4	52	60	167	392	1833	6.7		12.9	3.3	25.3	71.4	0.0												0-6		
32308676	81	3.3	45	79	280	470	2320	6.9		16.2	4.4	24.2	71.4	0.0												0-6		
32308677	82	3.1	46	67	160	421	1898	6.7		13.4	3.1	26.2	70.7	0.0												0-6		

27.55

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TODAY'S DATE
Nov 18, 2017

ADVANCED CROP MANAGEMENT
PREMIER CROP SYSTEMS
DAN FRIEBERG

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IDENTIFICATION

CARLSON FARMS

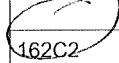
TYLER CARLSON

HOOTH FARM

**Soil Map—Clayton County, Iowa
(Carlson - Farmersburg 2)**



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
162B 	Downs silt loam, 2 to 6 percent slopes	11.6	20.6%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	30.7	54.7%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	4.5	8.0%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	9.4	16.7%
Totals for Area of Interest		56.2	100.0%



Carlson - Farmersburg 2



Doerring Werger



Grower : Carlson Farms

Field : Doerring Werger

Year : 2020

Operation : Soil Sampling

GPS Count : 128

Area : 297.0 ac



REPORT NUMBER
20-094-0103
ACCOUNT
54606
COMPLETED DATE
Apr 7, 2020
RECEIVED DATE
Apr 3, 2020

ACM/RPM
PO Box 533

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IDENTIFICATION

DOERRING - WERGER TYLER CARLSON
CARLSON FARMS
23334 HERON AVE

PAGE 4/4
TODAY'S DATE
Apr 07, 2020

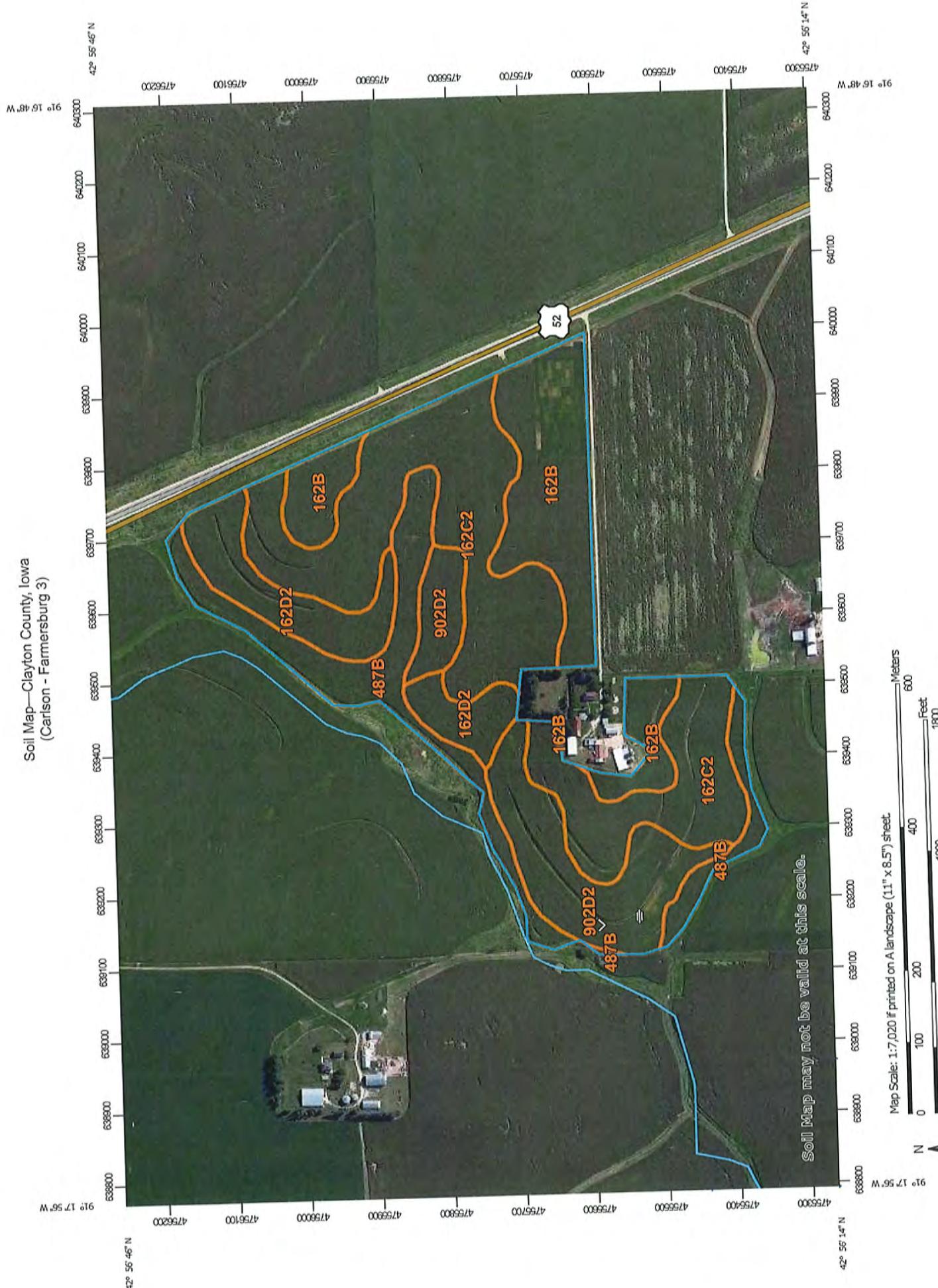
ADVANCED CROP MANAGEMENT
MASTER ACCOUNT

Algona IA 50511-0001

Lab Number	Sample ID	Phosphorus						pH index	Buff index	CEC index	Percent Base Saturation				Nitrate Surface		Total lbs/A	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime ppm	Salts ppm	N ppm	Excess Soluble NH3-N ppm	MP3 Color
		OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm				K	Mg	Ca	H	Na	ppm	ppm											
35956309	97	2.3	48	74	257	505	1922	6.4	6.8	15.9	4.1	26.5	60.4	9.0	0.6	0.6	7											
35956309	98	3.1	45	56	324	418	1673	5.9	6.7	15.3	5.4	22.8	54.7	17.1	0.6	0.6	10											
35956311	99	3.6	125	131	561	483	2084	6.9	15.9	9.0	25.3	65.7	0.0	0.6	0.6	6												
35956312	100	3.1	110	135	464	441	1813	6.9	13.9	8.6	26.4	65.0	0.0	0.6	0.6	6												
35956313	101	2.3	36	59	191	658	2225	6.8	17.1	2.9	32.1	65.0	0.0	0.6	0.6	7												
35956314	102	2.6	28	36	36	585	2110	6.6	6.9	17.0	3.6	28.7	62.1	5.6	0.6	0.6	8											
35956315	103	2.8	43	58	315	517	1860	6.3	6.7	16.1	5.0	26.8	57.8	10.4	0.6	0.6	9											
35956316	104	2.7	62	95	299	544	2076	7.0	15.7	4.9	28.9	66.2	0.0	0.6	0.6	6												
35956317	105	2.9	38	56	268	604	2171	7.0	16.6	4.1	30.3	65.6	0.0	0.6	0.6	7												
35956318	106	3.3	42	55	235	502	1888	6.6	6.9	15.1	4.0	27.7	62.5	5.8	0.6	0.6	7											
35956319	107	2.7	21	24	203	652	2304	6.9	17.5	3.0	31.0	66.0	0.0	0.6	0.6	5												
35956320	108	3.2	24	39	122	599	2051	7.2	15.6	2.0	32.0	66.0	0.0	0.6	0.6	6												
35956321	109	3.3	45	52	169	461	1838	6.2	6.7	15.3	2.8	25.1	60.1	12.0	0.6	0.6	7											
35956322	110	2.4	20	32	172	651	2202	6.7	16.9	2.6	32.1	65.3	0.0	0.6	0.6	7												
35956323	111	2.7	23	32	178	668	2301	7.0	17.5	2.6	31.8	65.5	0.0	0.6	0.6	6												
35956324	112	2.9	19	31	170	528	1953	6.7	14.6	3.0	30.1	66.9	0.0	0.6	0.6	6												
35956325	113	3.1	30	42	221	471	1909	6.3	6.8	15.6	3.6	25.2	61.2	10.0	0.6	0.6	7											
35956326	114	3.0	29	47	219	501	1958	6.6	6.9	15.4	3.6	27.1	63.6	5.7	0.6	0.6	6											
35956327	115	2.9	26	34	143	589	2115	6.9	15.8	2.3	31.1	66.6	0.0	0.6	0.6	6												
35956328	116	2.5	18	28	176	689	2373	6.7	18.1	2.5	31.7	65.8	0.0	0.6	0.6	5												
35956329	117	3.2	36	47	190	464	1793	6.8	13.3	3.7	29.1	67.2	0.0	0.6	0.6	6												
35956330	118	3.0	38	40	186	490	1803	6.5	6.8	14.7	3.2	27.8	61.3	7.7	0.6	0.6	7											
35956331	119	3.2	35	38	170	459	1737	6.9	12.9	3.4	29.7	66.9	0.0	0.6	0.6	6												
35956332	120	3.4	37	45	254	465	1837	6.8	13.7	4.8	28.3	66.9	0.0	0.6	0.6	5												
35956333	121	3.7	37	53	263	548	1860	6.8	14.5	4.7	31.5	63.8	0.0	0.6	0.6	6												
35956334	122	2.5	27	31	168	681	2332	6.8	17.8	2.4	31.9	65.7	0.0	0.6	0.6	5												
35956335	123	3.1	23	25	175	508	2006	6.2	6.7	16.7	2.7	25.3	60.1	11.9	0.6	0.6	6											
35956336	124	3.2	16	24	139	517	2050	6.8	14.9	2.4	28.9	68.7	0.0	0.6	0.6	5												
35956337	125	3.7	32	35	275	474	1851	6.1	6.7	16.2	4.4	24.4	57.1	14.1	0.6	0.6	6											
35956338	126	2.7	21	25	168	565	2133	6.9	15.8	2.7	29.8	67.5	0.0	0.6	0.6	6												
35956340	127	4.2	17	19	135	487	2310	6.3	6.7	17.9	1.9	22.7	64.5	10.9	0.6	0.6	6											
35956341	128	3.5	23	30	167	529	2277	6.8	16.2	2.6	27.2	70.2	0.0	0.6	0.6	6												

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Web Soil Survey
National Cooperative Soil Survey

12/1/2020
Page 1 of 3

Natural Resources
Conservation Service

ISDA

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
162B	Downs silt loam, 2 to 6 percent slopes	16.0	20.3%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	30.0	38.0%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	9.0	11.4%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	11.7	14.8%
902D2	Luana silt loam, 9 to 14 percent slopes, moderately eroded	12.3	15.6%
Totals for Area of Interest		79.0	100.0%



Carlson Farmersburg 3

Doerring Werger



Grower : Carlson Farms

Field : Doerring Werger

Year : 2020

Operation : Soil Sampling

GPS Count : 128

Area : 297.0 ac



REPORT NUMBER **20-094-0103**
 COMPLETED DATE **Apr 7, 2020**
 RECEIVED DATE **Apr 3, 2020**
 ACCOUNT **54606**

ACM/RPM
 PO Box 533

DOERRING - WERGER TYLER CARLSSO
 23334 HERON AVE

Algona IA 50511-0001

Lab Number	Sample ID	Phosphorus			pH	Buff index	CEC index/100	Percent Base Saturation			Nitrate Surface			Total lbs/A	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime Rate	Excess Soluble NH3-N ppm	MP3 Color
		OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	Mg	Ca	H	Na	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
35956286	65	3.3	50	62	276	543	2266	6.7		16.6	4.3	27.3	68.4	0.0			0.6			7			
35956278	66	2.2	42	52	292	499	2379	6.9		16.7	4.0	24.9	71.1	0.0			0.6			6			
35956279	67	2.8	32	76	288	533	2347	6.9		16.9	4.4	26.3	69.3	0.0			0.6			6			
35956280	68	3.3	81	111	382	477	2459	7.2		17.2	5.7	23.1	71.2	0.0			0.6			6			
35956281	69	3.1	40	53	263	529	2194	7.2		16.1	4.2	27.4	68.4	0.0			0.6			5			
35956282	70	3.0	41	51	268	533	2216	7.1		16.2	4.2	27.4	68.4	0.0			0.6			7			
35956283	71	3.5	61	82	263	475	1911	6.5		6.8	15.4	4.4	25.7	62.0	7.9		0.6			6			
35956284	72	3.6	65	95	313	457	1975	7.0		14.5	5.5	26.3	68.2	0.0			0.6			6			
35956285	73	3.8	69	92	301	518	2088	6.9		15.5	5.0	27.8	67.2	0.0			0.6			7			
35956286	74	3.3	31	42	198	541	2031	7.1		15.2	3.3	29.7	67.0	0.0			0.6			5			
35956287	75	3.3	28	39	200	567	2154	7.0		16.0	3.2	29.5	67.3	0.0			0.6			6			
35956288	76	2.6	36	48	185	549	2049	6.6		6.9	16.3	2.9	28.1	62.9	6.1		0.6			6			
35956289	77	3.0	39	49	191	602	2267	6.9		16.8	2.9	29.9	67.2	0.0			0.6			6			
35956290	78	2.1	33	51	200	514	1844	6.8		14.0	3.7	30.6	65.7	0.0			0.6			7			
35956291	79	3.4	88	92	313	600	2235	7.4		17.0	4.7	29.4	65.9	0.0			0.6			6			
35956292	80	2.7	48	62	295	539	2017	6.8		15.3	4.9	29.4	65.7	0.0			0.6			7			
35956293	81	3.2	48	76	286	525	2149	6.9		15.9	4.6	27.5	67.9	0.0			0.6			7			
35956294	82	3.2	53	77	314	601	2215	7.0		16.9	4.8	29.6	65.6	0.0			0.6			7			
35956295	83	3.5	45	63	270	545	2067	6.7		15.6	4.4	29.1	66.5	0.0			0.6			6			
35956296	84	3.2	52	55	280	562	2134	7.0		16.1	4.5	29.1	66.4	0.0			0.6			6			
35956297	85	2.5	31	46	200	541	1977	6.8		14.9	3.4	30.3	66.3	0.0			0.6			7			
35956298	86	2.8	33	53	219	608	2171	7.0		16.5	3.4	30.7	65.9	0.0			0.6			5			
35956299	87	2.5	41	68	63	193	621	2140	7.3		16.4	3.0	31.6	65.4	0.0			0.6			7		
35956300	88	4.2	32	49	155	663	2647	7.2		19.2	2.1	28.8	69.1	0.0			0.6			6			
35956301	89	3.9	38	51	154	625	2525	7.1		18.2	2.2	28.6	69.2	0.0			0.6			6			
35956302	90	3.1	62	81	279	543	2124	7.1		15.9	4.5	28.5	67.0	0.0			0.6			6			
35956303	91	2.7	48	64	55	2410		7.3		16.1	4.1	21.2	74.7	0.0			0.6			6			
35956304	92	2.8	38	58	45	260	542	2361	7.4		17.0	3.9	26.6	69.5	0.0			0.6			6		
35956305	93	3.2	69	107	361	563	2052	7.1		15.9	5.8	29.5	64.7	0.0			0.6			6			
35956306	94	2.8	101	106	461	525	2006	6.9		15.6	7.6	28.0	64.4	0.0			0.6			5			
35956307	95	3.1	82	89	324	577	2048	7.1		15.9	5.2	30.2	64.6	0.0			0.6			6			
35956308	96	3.2	64	93	429	427	1753	6.5		6.8	14.5	7.6	24.5	60.4	7.5								

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TODAY'S DATE
 Apr 07, 2020

ADVANCED CROP MANAGEMENT
 MASTER ACCOUNT
 CARLSON FARMS

DOERRING - WERGER TYLER CARLSSO
 23334 HERON AVE

13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770

COPY TO
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IDENTIFICATION

www.midwestlabs.com

REPORT NUMBER
20-094-0103
ACCOUNT
54606
COMPLETED DATE
Apr 7, 2020
RECEIVED DATE
Apr 3, 2020



ACM/RPM
PO Box 533

13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770

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IDENTIFICATION

CARLSON FARMS

DOERRING - WERGER TYLER CARLSON

23334 HERON AVE

Algona IA 50511-0001

Lab Number	Sample ID	Phosphorus			Potassium			Magnesium			Calcium			Boron			Sulfur			Chloride			Nitrate			Sodium			Zinc			Manganese			Iron			Copper			Molybdenum			Excess Soluble Salts			Ammonium			MP3		
		OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	pH index	Buff meg/100	CEC index	Mg ppm	Ca ppm	H Na	ppm	Ibs/A depth	Ibs/A	Total lbs/A	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime ppm	Salts ppm	N ppm	Color	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm										
35956309	97	2.3	48	74	257	505	1922	6.4	6.8	15.9	4.1	26.5	60.4	9.0				0.6		7																																
35956310	98	3.1	45	56	324	418	1673	5.9	6.7	15.3	5.4	22.8	54.7	17.1				0.6		10																																
35956311	99	3.6	125	131	561	483	2084	6.9		15.9	9.0	25.3	65.7	0.0				0.6		6																																
35956312	100	3.1	110	135	464	441	1813	6.9		13.9	8.6	26.4	65.0	0.0				0.6		6																																
35956313	101	2.3	36	59	191	658	2225	6.8		17.1	2.9	32.1	65.0	0.0				0.6		7																																
35956314	102	2.6	28	36	236	585	2110	6.6	6.9	17.0	3.6	28.7	62.1	5.6				0.6		8																																
35956315	103	2.8	43	58	315	517	1860	6.3	6.7	16.1	5.0	26.8	57.8	10.4				0.6		9																																
35956317	104	2.7	62	95	299	544	2076	7.0		15.7	4.9	28.9	66.2	0.0				0.6		6																																
35956318	105	2.9	38	56	268	604	2171	7.0		16.6	4.1	30.3	65.6	0.0				0.6		7																																
35956319	106	3.3	42	55	235	502	1888	6.6	6.9	15.1	4.0	27.7	62.5	5.8				0.6		7																																
35956320	107	3.7	21	24	203	652	2304	6.9		17.5	3.0	31.0	66.0	0.0				0.6		7																																
35956321	108	3.2	34	39	122	599	2051	7.2		15.6	2.0	32.0	66.0	0.0				0.6		5																																
35956322	109	3.3	45	52	169	461	1838	6.2	6.7	15.3	2.8	27.1	60.1	12.0				0.6		7																																
35956323	110	2.4	32	32	172	651	2202	6.7		15.9	2.6	32.1	65.3	0.0				0.6		7																																
35956324	111	2.7	23	32	178	668	2301	7.0		17.5	2.6	31.8	65.6	0.0				0.6		6																																
35956325	112	2.9	19	31	170	528	1953	6.7		14.6	3.0	30.1	66.9	0.0				0.6		6																																
35956326	113	3.1	30	42	221	471	1909	6.3	6.8	15.6	3.6	25.2	61.2	10.0				0.6		6																																
35956327	114	3.0	29	47	219	501	1988	6.6	6.9	15.4	3.6	27.1	63.6	5.7				0.6		7																																
35956328	115	2.9	26	34	143	589	2115	6.9		15.8	2.3	31.1	66.6	0.0				0.6		6																																
35956329	116	2.5	18	28	176	689	2373	6.7		18.1	2.5	31.7	65.8	0.0				0.6		7																																
35956330	117	3.2	36	47	190	464	1783	6.8		13.3	3.7	29.1	67.2	0.0				0.6		5																																
35956331	118	3.0	38	40	186	490	1803	6.5	6.8	14.7	3.2	27.8	61.3	7.7				0.6		7																																
35956332	119	3.2	35	38	170	459	1737	6.9		12.9	3.4	29.7	66.9	0.0				0.6		5																																
35956333	120	3.4	37	45	254	465	1837	6.8		13.7	4.8	28.8	66.9	0.0				0.6		6																																
35956334	121	3.7	31	53	263	548	1860	6.8		14.5	4.7	31.5	63.8	0.0				0.6		5																																
35956335	122	2.5	27	31	168	681	2332	6.8		17.8	2.4	31.9	65.7	0.0				0.6		5																																
35956336	123	2.1	23	25	175	508	2006	6.2	6.7	16.7	2.7	25.3	60.1	11.9				0.6		6																																
35956337	124	3.2	16	24	139	517	2050	6.8		14.9	2.4	28.9	68.7	0.0				0.6		6																																
35956338	125	3.7	32	35	275	474	1851	6.1	6.7	16.2	4.4	24.4	57.1	14.1				0.6		7																																
35956339	126	2.7	21	25	168	565	2133	6.9		15.8	2.7	29.8	67.5	0.0				0.6		6																																
35956340	127	4.2	17	19	135	487	2310	6.3	6.7	17.9	1.9	22.7	64.5	10.9				0.6		6																																
35956341	128	3.5	23	30	167	529	2277	6.8		16.2	2.6	27.2	70.2	0.0				0.6		6																																

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Web Soil Survey
National Cooperative Soil Survey

Natural Resources
Conservation Service



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
120B	Tama silt loam, driftless, 2 to 6 percent slopes	2.5	4.0%
162B	Downs silt loam, 2 to 6 percent slopes	20.9	33.5%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	31.5	50.3%
483C	Frankville silt loam, 20 to 30 inches to limestone, 5 to 9 percent slopes	2.0	3.2%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	5.6	9.0%
Totals for Area of Interest		62.5	100.0%



Carlson - Farmersburg 5

Doerring Werger



Grower : Carlson Farms

Field : Doerring Werger

Year : 2020

Operation : Soil Sampling

GPS Count : 128

Area : 297.0 ac

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TODAY'S DATE
Apr 07, 2020

REPORT NUMBER
20-094-0103
COMPLETED DATE
Apr 7, 2020
RECEIVED DATE
Apr 3, 2020

ACCOUNT
54606

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PO Box 533
Algona IA 50511-0001
DOERRING - WERGER TYLER CARLSON
CARLSON FARMS
23334 HERON AVE

Algona IA 50511-0001

Lab Number	Sample ID	OM %	Phosphorus			pH index	Buff index	CEC index/meq/100	Percent Base Saturation				Nitrate Surface		Total lbs/A	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime Rate	Excess Soluble Salts	NH3-N ppm	MP3 Color ppm	
			P1 ppm	P2 ppm	Bic ppm				K	Mg	Ca	H	Na	ppm												
35956244	33	2.3	29	36	202	563	1974	6.7	15.1	3.4	31.1	65.5	0.0	0.6	0.6	7										
35956245	34	3.1	39	83	47	241	730	2328	7.4	18.3	3.4	33.2	63.4	0.0	0.6	0.6	7									
35956246	35	2.8	37	55	225	612	2156	6.7	10.5	3.5	30.9	65.6	0.0	0.6	0.6	7										
35956247	36	3.0	54	72	249	468	1788	6.1	6.8	14.8	4.3	26.4	60.4	8.9	0.6	0.6	8									
35956248	37	3.0	35	47	258	516	1904	6.5	6.8	4.2	27.4	60.6	7.8	0.6	0.6	7										
35956249	38	3.2	57	64	293	514	1961	6.8	14.8	5.1	28.9	66.0	0.0	0.6	0.6	6										
35956250	39	3.1	49	58	288	634	2130	7.0	16.7	4.4	31.6	64.0	0.0	0.6	0.6	8										
35956251	40	2.7	29	32	200	599	2033	6.6	6.9	17.0	3.0	29.4	61.7	5.9	0.6	0.6	9									
35956252	41	3.6	60	65	271	442	1826	6.2	6.7	15.3	4.5	24.1	59.7	11.7	0.6	0.6	7									
35956253	42	3.0	64	66	277	463	1801	6.4	6.0	14.9	4.8	25.9	60.4	8.9	0.6	0.6	7									
35956254	43	3.0	41	54	257	538	2037	6.8	15.3	4.3	29.3	66.4	0.0	0.6	0.6	7										
35956255	44	2.7	16	22	171	563	2174	6.6	6.9	17.0	2.6	27.4	63.9	6.1	0.6	0.6	6									
35956256	45	3.4	17	24	146	605	2243	6.6	6.8	17.7	2.1	28.5	63.4	6.0	0.6	0.6	6									
35956257	46	3.8	199	200	540	516	2292	7.1	17.1	8.1	25.1	66.8	0.0	0.6	0.6	7										
35956258	47	3.2	75	128	408	422	1975	6.5	6.8	15.6	6.7	22.5	63.3	7.5	0.6	0.6	7									
35956259	48	3.4	112	115	364	371	1823	6.2	6.7	14.9	6.3	20.7	61.2	11.8	0.6	0.6	6									
35956260	49	3.0	108	120	377	408	2100	6.4	6.8	16.4	5.9	20.7	64.0	9.4	0.6	0.6	6									
35956261	50	3.5	5	127	357	526	2450	6.6	6.8	18.6	4.9	23.6	65.9	5.6	0.6	0.6	8									
35956262	51	3.4	6	108	295	470	2147	6.4	6.8	16.9	4.5	23.2	63.5	8.8	0.6	0.6	9									
35956263	52	3.3	4	78	304	402	1871	5.8	6.6	16.7	4.7	20.1	56.0	19.2	0.6	0.6	9									
35956264	53	3.4	52	90	265	448	1936	5.8	6.6	17.4	3.9	21.5	55.6	19.0	0.6	0.6	9									
35956265	54	3.7	4	110	409	396	1873	5.9	6.6	16.5	6.4	20.0	56.8	16.8	0.6	0.6	8									
35956266	55	3.2	6	113	413	470	2069	6.5	6.8	16.5	6.4	23.7	62.7	7.2	0.6	0.6	9									
35956267	56	3.4	2	128	561	442	1930	6.5	6.8	16.0	9.0	23.0	60.3	7.7	0.6	0.6	9									
35956268	57	3.8	8	111	596	597	2393	6.9	18.5	8.3	26.9	64.8	0.0	0.6	0.6	9										
35956269	58	2.9	17	99	315	437	1885	5.9	6.6	16.8	4.8	21.7	56.4	17.1	0.6	0.6	6									
35956270	59	3.7	6	140	97	372	576	2700	7.4	19.3	4.9	24.9	70.2	0.0	0.6	0.6	7									
35956271	60	3.3	47	61	222	520	2279	6.7	16.3	3.5	26.6	69.9	0.0	0.6	0.6	7										
35956272	61	3.2	64	81	294	563	2265	6.6	6.8	17.9	4.2	26.2	63.3	6.3	0.6	0.6	7									
35956273	62	2.9	56	68	288	535	2222	6.2	6.7	18.5	4.0	24.1	60.1	11.8	0.6	0.6	6									
35956274	63	3.4	110	112	430	440	2078	6.7	15.2	7.3	24.1	68.6	0.0	0.6	0.6	7										
35956275	64	2.9	64	84	360	487	2170	6.6	6.9	16.8	5.5	24.2	64.6	5.7	0.6	0.6	7									

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.

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20-094-0103
 REPORT NUMBER
 COMPLETED DATE
Apr 7, 2020
 RECEIVED DATE
Apr 3, 2020

ACCOUNT
54606

REPORT NUMBER.
 TODAY'S DATE
Apr 07, 2020



ACM/RPM
 PO Box 533

13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com

IDENTIFICATION

CARLSON FARMS
 DOERRING - WERGER TYLER CARLSSO
 23334 HERON AVE

Algona IA 50511-0001

Lab	Sample ID	OM	Phosphorus			K	Mg	Ca	Na	pH index	Buff index	CEC	Percent Base Saturation				Nitrate Surface		Total S	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime Rate	Excess Soluble Salts	NH3-N ppm	MP3 Color ppm
			P1	P2	Bic								K	Mg	Ca	H	Na	ppm lbs/A	ppm lbs/A depth									
35955285	65	3.3	50	62		276	543	2266		6.7		16.6	4.3	27.3	68.4	0.0			0.6		7							
35955276	66	3.3	42	52		262	499	2379		6.9		16.7	4.0	24.9	71.1	0.0			0.6		6							
35955278	67	2.8	62	76		288	533	2347		6.9		16.9	4.4	26.3	69.3	0.0			0.6		6							
35955279	68	3.3	81	111		382	477	2459		7.2		17.2	5.7	23.1	71.2	0.0			0.6		5							
35955280	69	3.1	40	53		263	529	2194		7.1		16.1	4.2	27.4	68.4	0.0			0.6		7							
35955281	70	3.0	41	51		268	533	2216		7.1		16.2	4.2	27.4	68.4	0.0			0.6		6							
35955282	71	3.5	61	82		263	475	1911		6.5		15.4	4.4	25.7	62.0	7.9			0.6		6							
35955283	72	3.6	65	95		313	457	1975		7.0		14.5	5.5	26.3	68.2	0.0			0.6		7							
35955284	73	3.8	69	92		301	518	2088		6.9		15.5	5.0	27.8	67.2	0.0			0.6		5							
35955285	74	3.3	31	42		198	541	2031		7.1		15.2	3.3	29.7	67.0	0.0			0.6		5							
35955286	75	3.3	28	39		200	567	2154		7.0		16.0	3.2	29.5	67.3	0.0			0.6		6							
35955287	76	2.6	35	48		185	549	2049		6.6		6.9	16.3	2.9	28.1	62.9	6.1			0.6		6						
35955288	77	3.0	39	49		191	602	2257		6.9		16.8	2.9	29.9	67.2	0.0			0.6		6							
35955289	78	2.1	33	51		209	374	1844		6.8		14.0	3.7	30.6	65.7	0.0			0.6		7							
35955290	79	3.4	88	92		313	600	2235		7.4		17.0	4.7	29.4	65.9	0.0			0.6		6							
35955291	80	2.7	48	62		295	539	2017		6.8		15.3	4.9	29.4	65.7	0.0			0.6		7							
35955292	81	3.2	58	76		286	525	2149		6.9		15.9	4.6	27.5	67.9	0.0			0.6		7							
35955293	82	3.5	53	77		314	501	2215		7.0		16.9	4.8	29.6	65.6	0.0			0.6		7							
35955294	83	3.5	45	63		270	545	2067		6.7		15.6	4.4	29.1	66.5	0.0			0.6		7							
35955295	84	3.2	52	55		280	562	2134		7.0		16.1	4.5	29.1	66.4	0.0			0.6		6							
35955296	85	2.5	31	46		200	541	1977		6.8		14.9	3.4	30.3	66.3	0.0			0.6		7							
35955297	86	2.8	33	53		219	608	2171		7.0		16.5	3.4	30.7	65.9	0.0			0.6		5							
35955298	87	2.5	41	68	63	193	621	2140		7.3		16.4	3.0	31.6	65.4	0.0			0.6		7							
35955299	88	4.2	32	49		155	663	2647		7.3		19.2	2.1	28.8	69.1	0.0			0.6		6							
35955300	89	3.9	38	51		154	625	2525		7.1		18.2	2.2	28.6	69.0	0.0			0.6		6							
35955301	90	3.1	62	81		279	543	2124		7.1		15.9	4.5	28.5	67.0	0.0			0.6		6							
35955302	91	2.7	48	64	55	257	410	2409		7.3		16.1	4.1	21.2	74.7	0.0			0.6		7							
35955303	92	2.8	38	58	45	260	542	2361		7.4		17.0	3.9	26.6	69.5	0.0			0.6		6							
35955304	93	3.2	69	107		361	563	2052		7.1		15.9	5.8	29.5	64.7	0.0			0.6		6							
35955305	94	2.8	101	106		461	525	2006		6.9		15.6	7.6	28.0	64.4	0.0			0.6		5							
35955306	95	3.1	82	89	324	577	2048		7.1		15.9	5.2	30.2	64.6	0.0			0.6		6								
35955307	96	3.2	64	93	429	427	1753		6.5		6.8	14.5	7.6	24.5	60.4	7.5			0.6		6							

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.

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✓ U.C.

Soil Map—Clayton County, Iowa
(Costigan - E Lane)



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	4.6	14.0%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	5.0	15.2%
163C	Fayette silt loam, 5 to 9 percent slopes	9.9	30.0%
163D2	Fayette silt loam, 9 to 14 percent slopes, moderately eroded	8.2	24.9%
499F	Nordness silt loam, 14 to 25 percent slopes	0.1	0.2%
703D2	Dubuque silt loam, 9 to 14 percent slopes, moderately eroded	1.7	5.1%
703E2	Dubuque silt loam, 14 to 18 percent slopes, moderately eroded	1.3	4.0%
930B	Orion silt loam, 2 to 5 percent slopes, occasionally flooded	2.2	6.7%
Totals for Area of Interest		32.9	100.0%



REPORT NUMBER
20-056-0345
COMPLETED DATE
Feb 27, 2020
RECEIVED DATE
Feb 25, 2020



ACCOUNT
52451
13611 B Street, Omaha, NE 68144 | midwestlabs.com | (402) 334-7770
16660
2203 Ogden Avenue
Rockwell City IA 50579

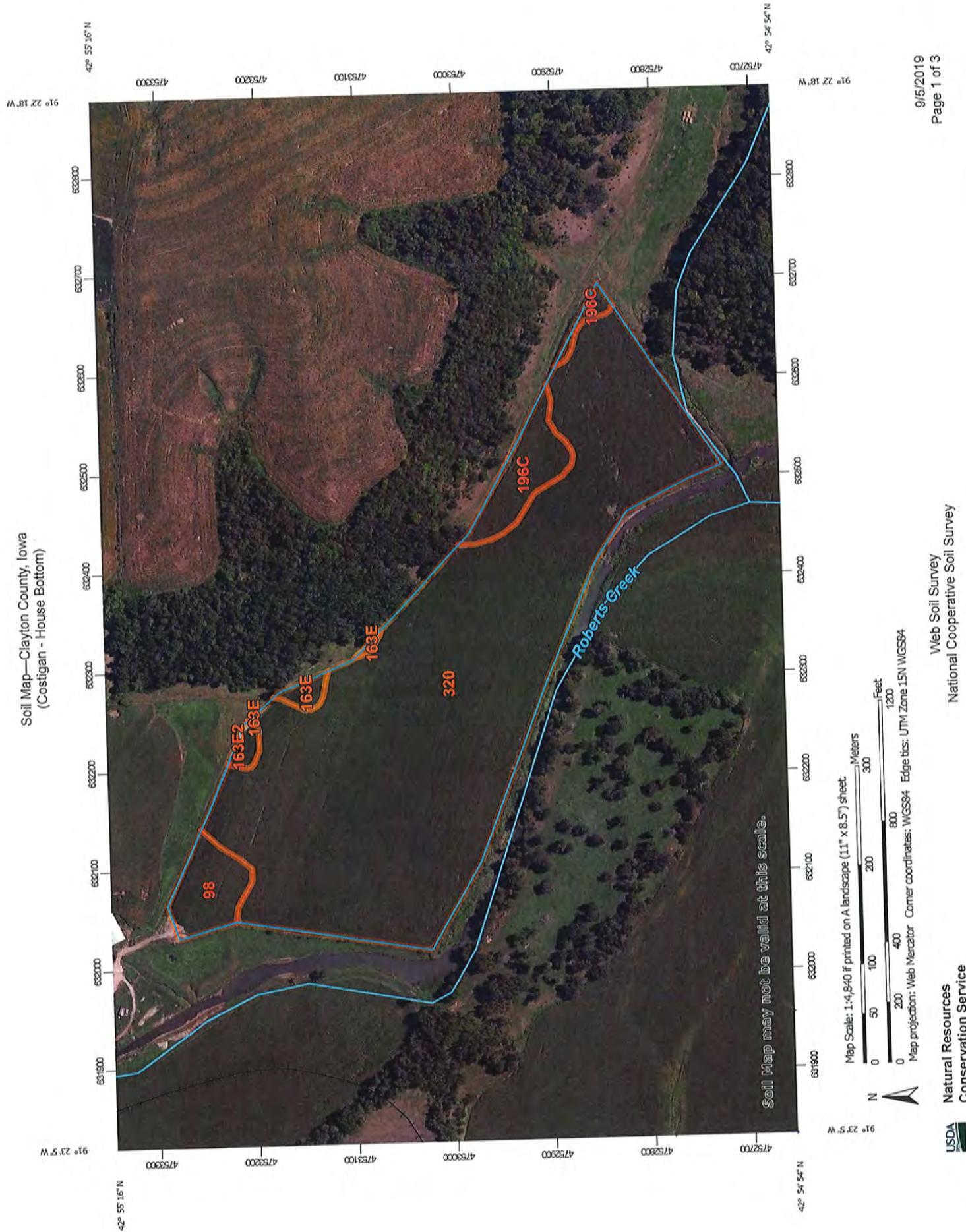
IDENTIFICATION

SOIL ANALYSIS REPORT

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I.	PHOSPHORUS			NEUTRAL AMMONIUM ACETATE (EXCHANGEABLE)			SODIUM	pH	CATION EXCHANGE CAPACITY CEC meq/100g	PERCENT BASE SATURATION (COMPUTED) % K % Mg % Ca % H % Na		
			P ₁ WEAK BRAUN ppm	P ₂ STRONG BRAUN 1:7 RATE ppm	OULSEN BICARBONATE P ppm RATE	POTASSIUM K ppm RATE	MAGNESIUM Mg ppm RATE	CALCIUM Ca ppm RATE						
358	1A11 Por + 2 A11 Pale G 3.1 M 25646 2 A11 Pale G 3.1 M 25647 3 Bold S 25648 4 Dark 2 25649 5 Dark 2 25650 6 Bold Farm 3.3 M 25651 7 Cosh Jane 4.0 H 25652 8 Cosh Jane 3.7 H 25653 9 Cosh Schor 3.7 H 25654 10 Dennis H 3.0 M	2.4 L 99 VH 98 VH 98 VH 105 VH 105 VH 110 VH 120 VH 125 VH 48 VH 106 VH 106 VH 151 VH 38 VH 55 VH 55 VH 59 VH	114 VH 101 VH 105 VH 105 VH 110 VH 120 VH 125 VH 59 VH 151 VH 106 VH 151 VH 151 VH 59 VH 89 VH 89 VH 94 VH	128 VH 101 VH 105 VH 105 VH 110 VH 120 VH 125 VH 59 VH 151 VH 106 VH 151 VH 151 VH 38 VH 55 VH 55 VH 59 VH	413 VH 402 VH 371 VH 352 VH 371 VH 371 VH 351 VH 359 VH 359 VH 359 VH 359 VH 359 VH 317 VH 379 VH 379 VH 387 VH	313 VH 331 VH 306 VH 307 VH 297 VH 288 VH 288 VH 289 VH 289 VH 289 VH 289 VH 317 VH 300 VH 300 VH 318 VH	1928 M 2052 M 1948 H 1967 H 1895 M 1797 H 1821 M 2035 H 1821 M 1821 M 1821 M 2035 H 1906 H 1906 H 1990 H	6.3 6.4 6.6 6.6 6.6 6.5 6.2 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6	6.8 6.8 6.9 6.9 6.8 6.5 6.7 6.9 6.9 6.6 6.6 6.6 6.6 6.6 6.6 6.6	14.9 15.4 14.0 14.1 14.2 13.3 14.1 14.7 14.7 14.5 14.5 14.5 7.1 7.0 7.0 6.8	7.1 6.7 6.8 6.4 6.7 6.8 6.5 6.5 6.5 6.5 6.5 7.0 7.0 7.0 7.0	17.5 17.9 18.2 18.1 17.4 18.0 17.1 18.0 18.0 18.3 18.3 18.3 18.1 18.1 18.1 18.3	64.7 66.6 69.6 69.8 66.7 67.6 64.6 69.2 69.2 68.6 68.6 68.6 69.1 69.1 69.1 68.6	10.7 8.8 5.4 5.7 9.2 7.6 11.8 5.8 5.8 6.3
NITRATE-N (FIA)														
LAB NUMBER	SURFACE	SUBSOIL 1	SUBSOIL 2	Total lbs/A	depth (in)	lb/A	depth (in)	lb/A	depth (in)	lb/A	IRON Fe DTPA ppm RATE	MANGANESE Mn DTPA ppm RATE	ZINC Zn DTPA ppm RATE	
358	ppm	lbs/A	depth (in)	ppm	ppm	lbs/A	ppm	lbs/A	ppm	ppm	ppm	ppm	ppm	
25645			0-6											
25646			0-6											
25647			0-6											
25648			0-6											
25649			0-6											
25650			0-6											
25651			0-6											
25652			0-6											
25653			0-6											
25654			0-6											

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.

Soil Map—Clayton County, Iowa
(Costigan - House Bottom)



Soil Map—Clayton County, Iowa

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
98	Huntsville silt loam, 0 to 2 percent slopes	1.4	4.3%
163E	Fayette silt loam, 14 to 18 percent slopes	0.3	0.9%
163E2	Fayette silt loam, 14 to 18 percent slopes, moderately eroded	0.2	0.8%
196C	Volney channery silt loam, 2 to 12 percent slopes, occasionally flooded	1.8	5.5%
320	Arenzville silt loam, 0 to 3 percent slopes, occasionally flooded	29.1	88.6%
Totals for Area of Interest		32.9	100.0%



House Bottom



Grower : Walz Farms

Field : House Bottom

Year : 2016

Operation : Soil Sampling

GPS Count : 13

Area : 32.4 ac

Soil P1



Grower : Walz Farms

Field : House Bottom

Year : 2016

Average Soil P1 : 135.4 ppm

Minimum Soil P1 : 82.0 ppm

Maximum Soil P1 : 250.0 ppm

Soil P1
(ppm)

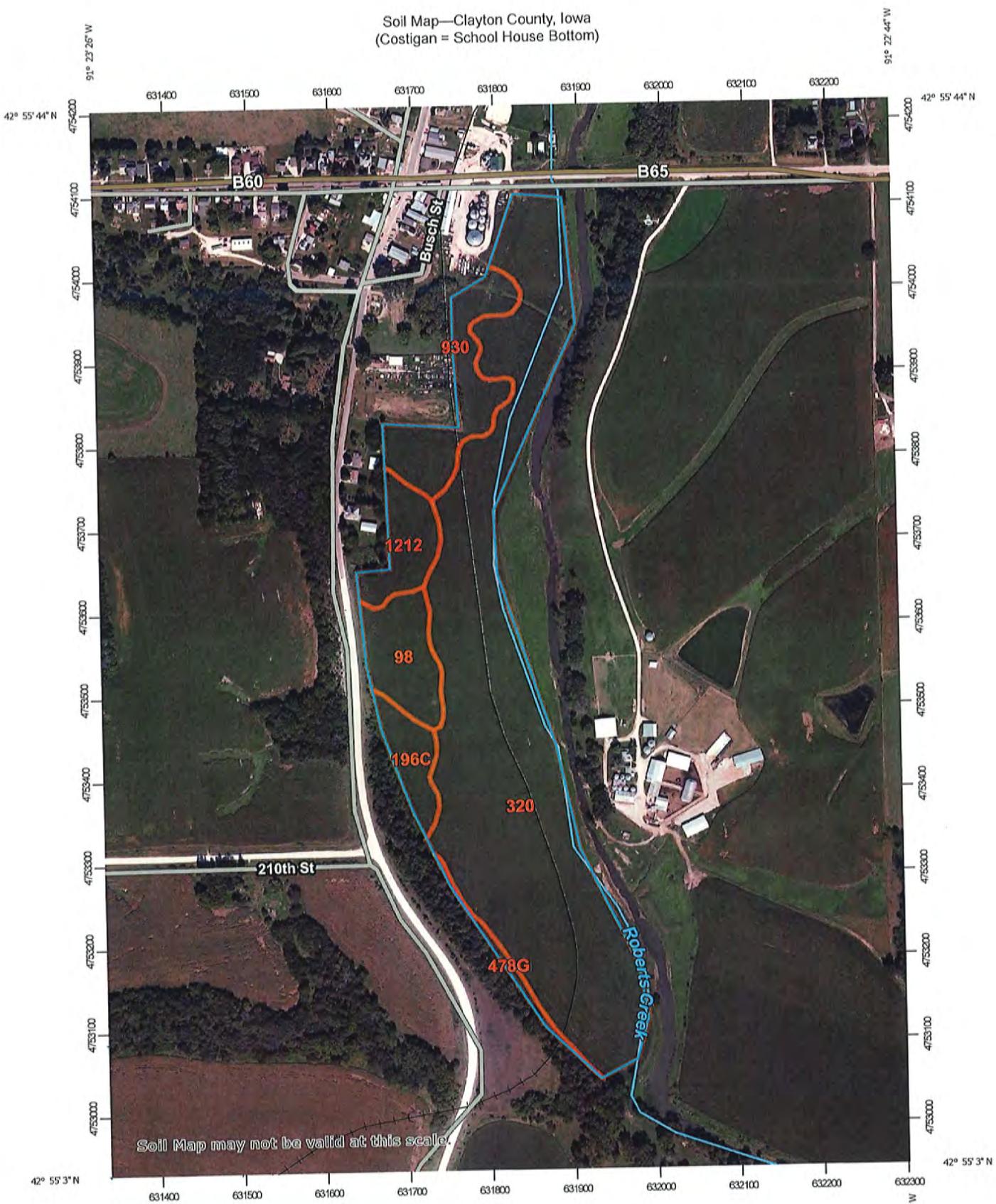
Above 35.00	(32.5 ac - 100.0%)
30.00 - 35.00	(0.0 ac - 0.0%)
20.00 - 30.00	(0.0 ac - 0.0%)
15.00 - 20.00	(0.0 ac - 0.0%)
7.00 - 15.00	(0.0 ac - 0.0%)
Below 7.00	(0.0 ac - 0.0%)

PAGE 1/1

TODAY'S DATE
Apr 27, 2016ACCOUNT
29574REPORT DATE
Apr 27, 2016
RECEIVED DATE
Apr 25, 2016**Midwest**
Laboratories Inc.REPORT NUMBER
16-1116-0134
ACM/PREMIER CROP
PO BOX 533
ALGONA IA 5051113611 "B" Street • Omaha, Nebraska 68144-3693 • (402) 334-7770 • FAX (402) 334-9121
COPY TO
13698
2nd COPY TO
26794
IDENTIFICATION
WALZ FARMS
JARED
HOUSE BOTTOMADVANCED CROP MANAGEMENT
PREMIER CROP SYSTEMS
DAN FRIEBERG

Lab Number	Sample ID	OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	pH index	Buff	CEC index meq/100	Percent Base Saturation			Nitrate Surface			Total S			Excess Soluble Salts			NH3-N MP3 Color		
													K	Mg	Ca	H	Na	ppm	lbs/A	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
29697070	1	4.4	250	251	252	133	346	329	2039	7.0	14.3	7.5	21.2	71.3	0.0	0.6											
29697072	2	3.1	251	252	252	133	346	329	2048	7.4	13.9	6.4	19.7	73.9	0.0	0.6											
29697073	3	3.0	210	211	211	243	353	1904		7.2	13.1	4.8	22.5	72.7	0.0	0.6											
29697074	4	3.1	215	216	216	104	338	423	2121	7.3	15.0	5.8	23.5	70.7	0.0	0.6											
29697075	5	2.5	99	132	71	190	326	2103		7.6	13.7	3.6	19.8	76.6	0.0	0.6											
29697076	6	2.4	98	143	62	231	360	2017		7.6	13.7	4.3	21.9	73.8	0.0	0.6											
29697077	7	2.4	85	156	61	161	277	2115		7.7	13.3	3.1	17.4	79.5	0.0	0.6											
29697078	8	2.3	83	126	53	208	343	1984		7.3	13.3	4.0	21.5	74.5	0.0	0.6											
29697079	9	2.4	81	114	69	195	321	1995		7.6	13.1	3.8	20.4	75.8	0.0	0.6											
29697080	10	2.3	81	148	64	177	382	2175		7.5	14.5	3.1	22.0	74.9	0.0	0.6											
29697081	11	3.0	63	137	49	178	427	2186		7.3	14.9	3.1	23.9	73.0	0.0	0.6											
29697082	12	2.7	82	116	65	214	378	2079		7.3	14.1	3.9	22.3	73.8	0.0	0.6											
29697083	13	2.7	82	141	215	370	2030		7.2	13.8	4.0	22.3	73.7	0.0	0.6												

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.
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Map Scale: 1:6,210 if printed on A portrait (8.5" x 11") sheet.
Meters
N 0 50 100 200 300
0 300 600 1200 1800
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84



Natural Resources
Conservation Service

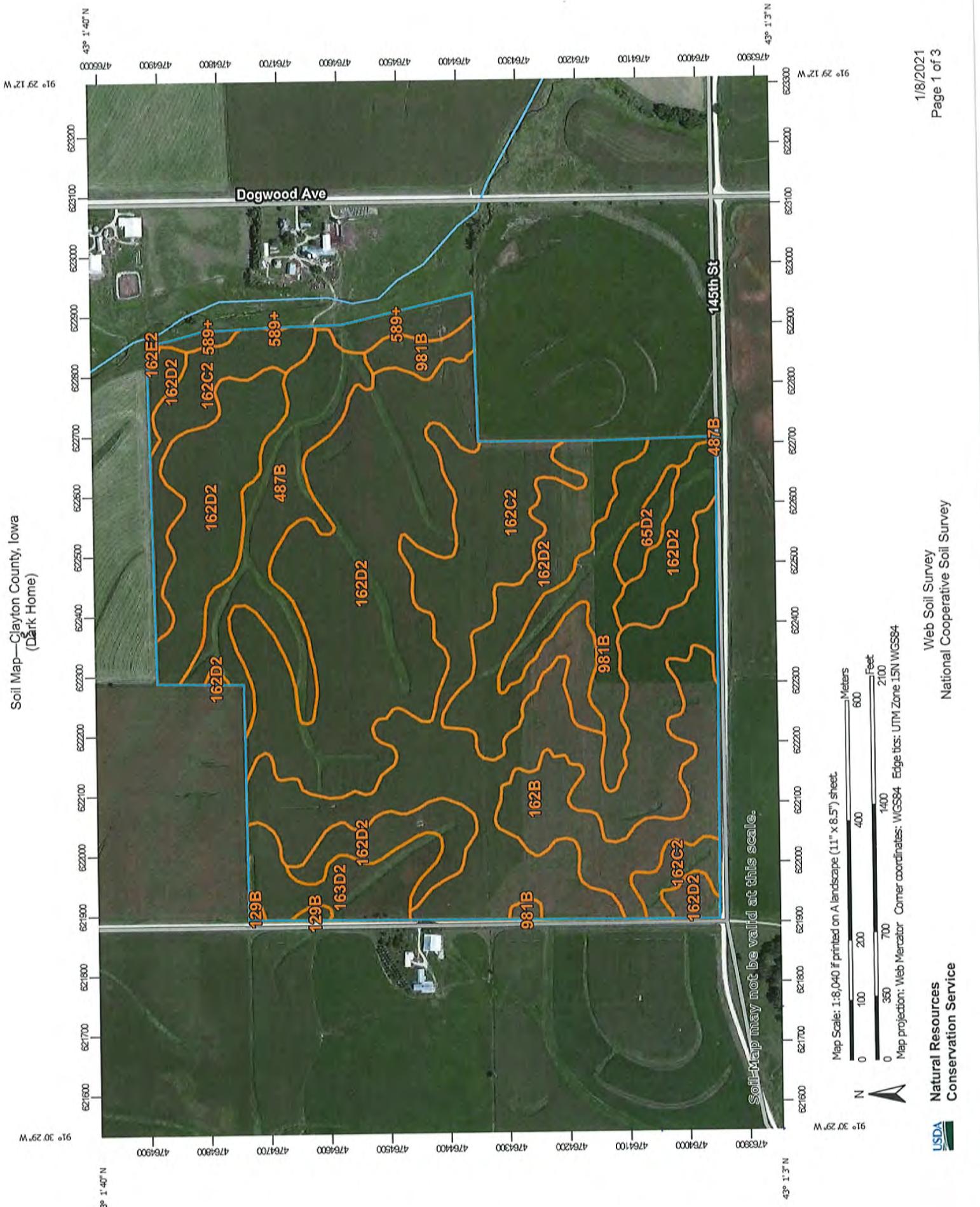
Web Soil Survey
National Cooperative Soil Survey

Soil Map—Clayton County, Iowa

Costigan = School House Bottom

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
98	Huntsville silt loam, 0 to 2 percent slopes	2.9	7.3%
196C	Volney channery silt loam, 2 to 12 percent slopes, occasionally flooded	1.6	4.1%
320	Arenzville silt loam, 0 to 3 percent slopes, occasionally flooded	28.2	72.0%
478G	Rock outcrop-Nordness complex, 25 to 60 percent slopes	0.4	1.1%
930	Orion silt loam, 0 to 3 percent slopes, occasionally flooded	3.9	9.9%
1212	Kennebec silt loam, 0 to 2 percent slopes	2.2	5.5%
Totals for Area of Interest		39.1	100.0%



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
65D2	Lindley loam, 9 to 14 percent slopes, moderately eroded	2.0	1.0%
129B	Arenzville-Chaseburg complex, 1 to 5 percent slopes	0.5	0.3%
162B	Downs silt loam, 2 to 6 percent slopes	13.0	6.5%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	60.7	30.5%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	83.4	41.9%
162E2	Downs silt loam, 14 to 18 percent slopes, moderately eroded	0.1	0.1%
163D2	Fayette silt loam, 9 to 14 percent slopes, moderately eroded	7.4	3.7%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	15.3	7.7%
589+	Otter silt loam, overwash, 0 to 2 percent slopes	3.7	1.8%
981B	Worthen silt loam, 2 to 5 percent slopes	12.9	6.5%
Totals for Area of Interest		199.0	100.0%

Soil Test Points



Crop
Production
Services

echelon

Soil Test Results

Grower: Radloff, Derk

Farm: Home

Field: Home

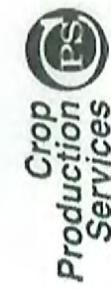
Area: 181.32 ac

Lat: 43.02267°N

Lon: 091.49783°W

Event Date(s): 11/17/2016

Sample ID	pH	BpH	OM	CEC	P Mehlich III	K	S	Zn	Ca	Mg
1	6.3	6.7	4.9	18.0	34	107	14.0	2.8	2,387	457
2	6.8	6.9	3.8	17.3	29	93	18.0	3.1	2,378	553
3	7.1	6.9	4.4	16.3	51	137	9.0	4.1	2,284	535
4	7.0	6.9	4.1	15.6	55	114	13.0	3.3	2,127	536
5	6.5	6.8	3.4	12.8	23	75	5.0	1.8	1,675	385
6	5.9	6.7	3.9	14.1	32	103	17.0	2.0	1,667	358
7	5.8	6.6	4.3	14.7	34	110	23.0	2.0	1,750	338
8	6.6	6.8	4.1	14.2	25	108	8.0	2.2	1,889	422
9	7.0	6.9	4.0	16.2	78	238	9.0	2.9	2,132	579
10	6.4	6.8	4.0	15.8	28	166	6.0	1.7	1,905	527
11	6.0	6.7	3.7	14.9	29	159	4.0	1.9	1,719	434
12	6.6	6.8	3.6	14.6	26	151	3.0	1.8	1,848	484
13	6.3	6.8	3.5	14.5	25	106	13.0	1.8	1,770	458
14	6.4	6.8	3.8	14.3	26	114	11.0	2.3	1,811	426
15	6.7	6.9	3.9	13.4	34	164	1.0	2.1	1,715	443
16	6.3	6.8	4.1	13.4	41	157	8.0	3.0	1,645	397
17	6.7	6.9	3.9	15.5	75	216	15.0	3.8	2,016	495
18	6.6	6.8	4.4	16.0	84	237	29.0	3.6	2,020	511
19	7.2	6.9	3.8	14.6	40	112	6.0	2.8	2,078	466
20	7.2	6.9	3.6	16.1	39	107	13.0	3.5	2,254	539



echelon



55	5.9	6.7	4.1	13.8	37	157	17.0	2.0	1,633	303
56	5.7	6.7	4.4	12.5	42	138	11.0	2.6	1,436	203
57	5.8	6.7	3.8	13.5	36	116	6.0	2.5	1,562	313
58	6.2	6.8	4.1	13.1	30	115	16.0	2.1	1,647	361
59	6.0	6.7	4.1	14.7	43	122	1.0	2.3	1,802	373
60	5.8	6.7	3.6	12.9	45	129	2.0	2.4	1,495	309
61	5.7	6.6	4.5	14.3	35	141	4.0	2.1	1,654	314
62	5.6	6.6	3.7	15.0	25	139	18.0	1.5	1,603	364
63	6.5	6.8	3.5	15.5	22	117	18.0	1.6	1,967	489
64	6.7	6.8	3.9	17.6	22	171	10.0	2.1	2,353	542
65	6.4	6.8	4.1	14.4	26	172	11.0	2.1	1,828	419
66	6.2	6.8	3.9	13.4	29	169	1.0	2.1	1,639	372
67	6.7	6.9	3.8	14.7	38	210	17.0	2.4	1,915	453
68	6.2	6.8	4.3	15.2	56	214	1.0	4.1	1,901	398
69	6.3	6.8	3.5	15.7	18	90	4.0	1.8	2,055	424
70	6.9	6.9	4.1	15.4	57	235	4.0	3.6	2,164	446
71	6.2	6.8	4.0	12.5	45	175	13.0	2.7	1,553	328
72	5.8	6.7	3.9	12.5	42	133	5.0	2.1	1,449	289
73	6.1	6.8	3.8	13.0	27	114	1.0	1.8	1,586	344
74	6.6	6.8	4.6	14.0	79	232	4.0	2.9	1,825	411

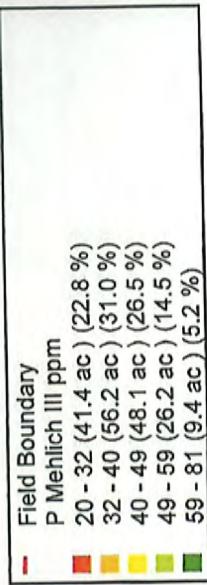
Grower: Hadloff, Dan
 Farm: Home
 Field: Home
 Area: 181.32 ac
 Lat: 43.022679°N
 Lon: 091.49783°W
 Event Date(s): 11/17/2016

Season: 2017

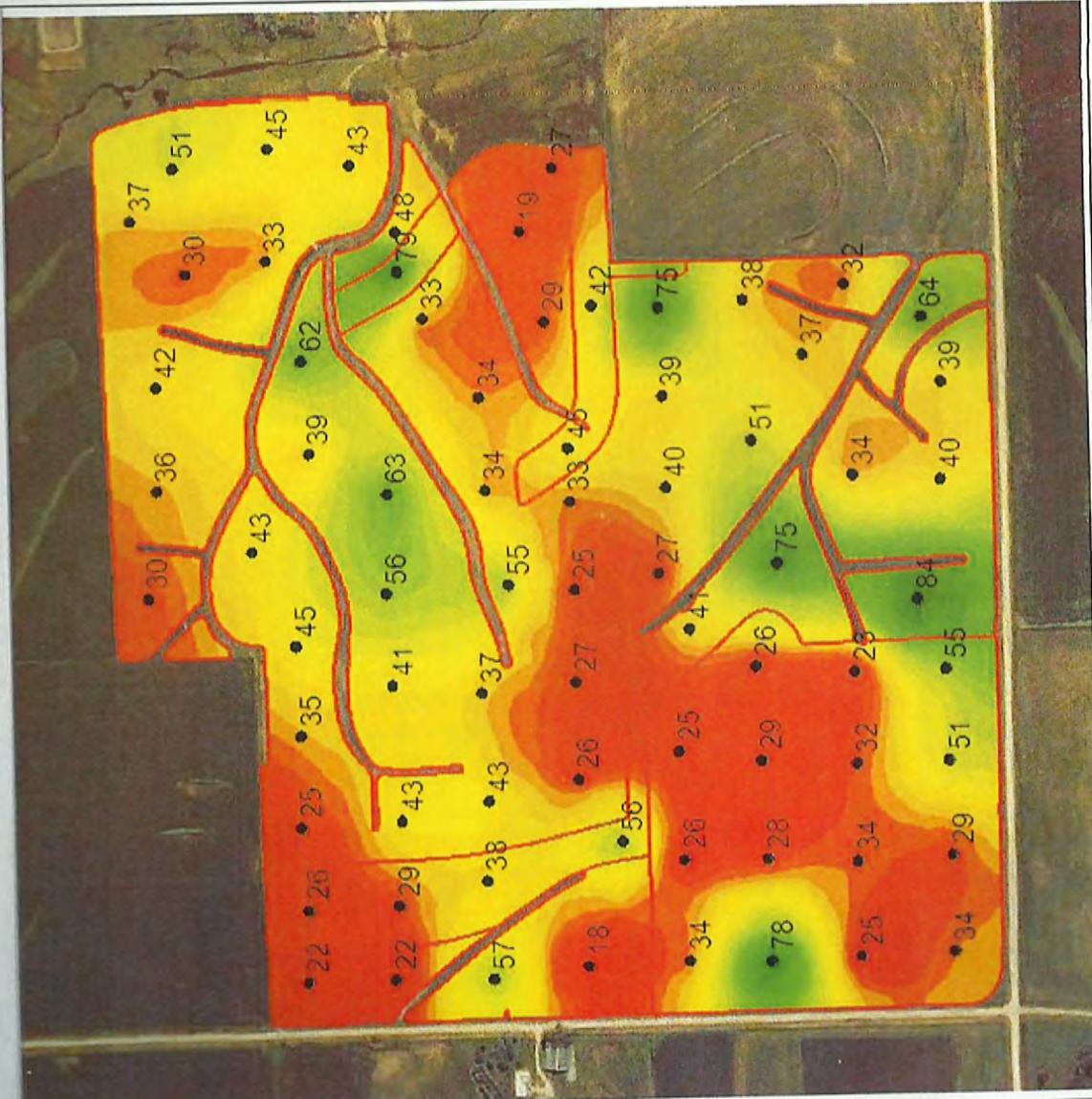
Min: 20.31 ppm

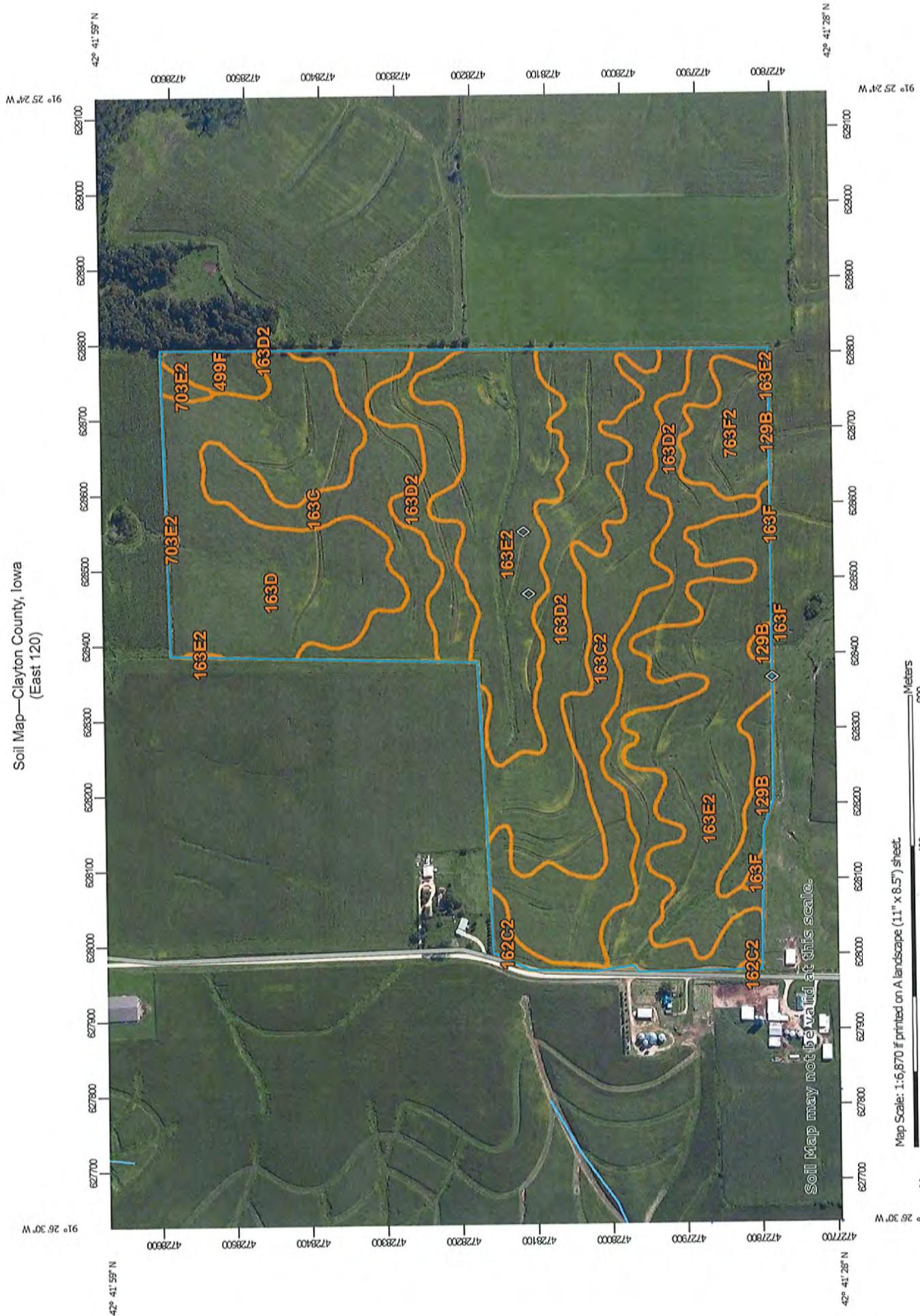
Avg: 40.18 ppm

Max: 80.63 ppm



P Mehlich III





1/8/2021
Page 1 of 3

Web Soil Survey
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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
129B	Arenzville-Chaseburg complex, 1 to 5 percent slopes	2.4	2.0%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	1.0	0.8%
163C	Fayette silt loam, 5 to 9 percent slopes	10.1	8.4%
163C2	Fayette silt loam, 5 to 9 percent slopes, moderately eroded	14.3	11.8%
163D	Fayette silt loam, 9 to 14 percent slopes	21.5	17.8%
163D2	Fayette silt loam, 9 to 14 percent slopes, moderately eroded	33.7	27.9%
163E2	Fayette silt loam, 14 to 18 percent slopes, moderately eroded	31.5	26.1%
163F	Fayette silt loam, 18 to 25 percent slopes	0.2	0.2%
499F	Nordness silt loam, 14 to 25 percent slopes	1.6	1.3%
703E2	Dubuque silt loam, 14 to 18 percent slopes, moderately eroded	0.5	0.5%
763F2	Exette silt loam, 18 to 25 percent slopes, moderately eroded	4.1	3.4%
Totals for Area of Interest		120.8	100.0%

REPORT NUMBER
20-141-0170
COMPLETED DATE
May 22, 2020
RECEIVED DATE
May 20, 2020



TWIN LAKES ENVIRONMENTAL SVC
BECKY SEXTON
2203 OGDEN AVE
ROCKWELL CITY IA 50579-

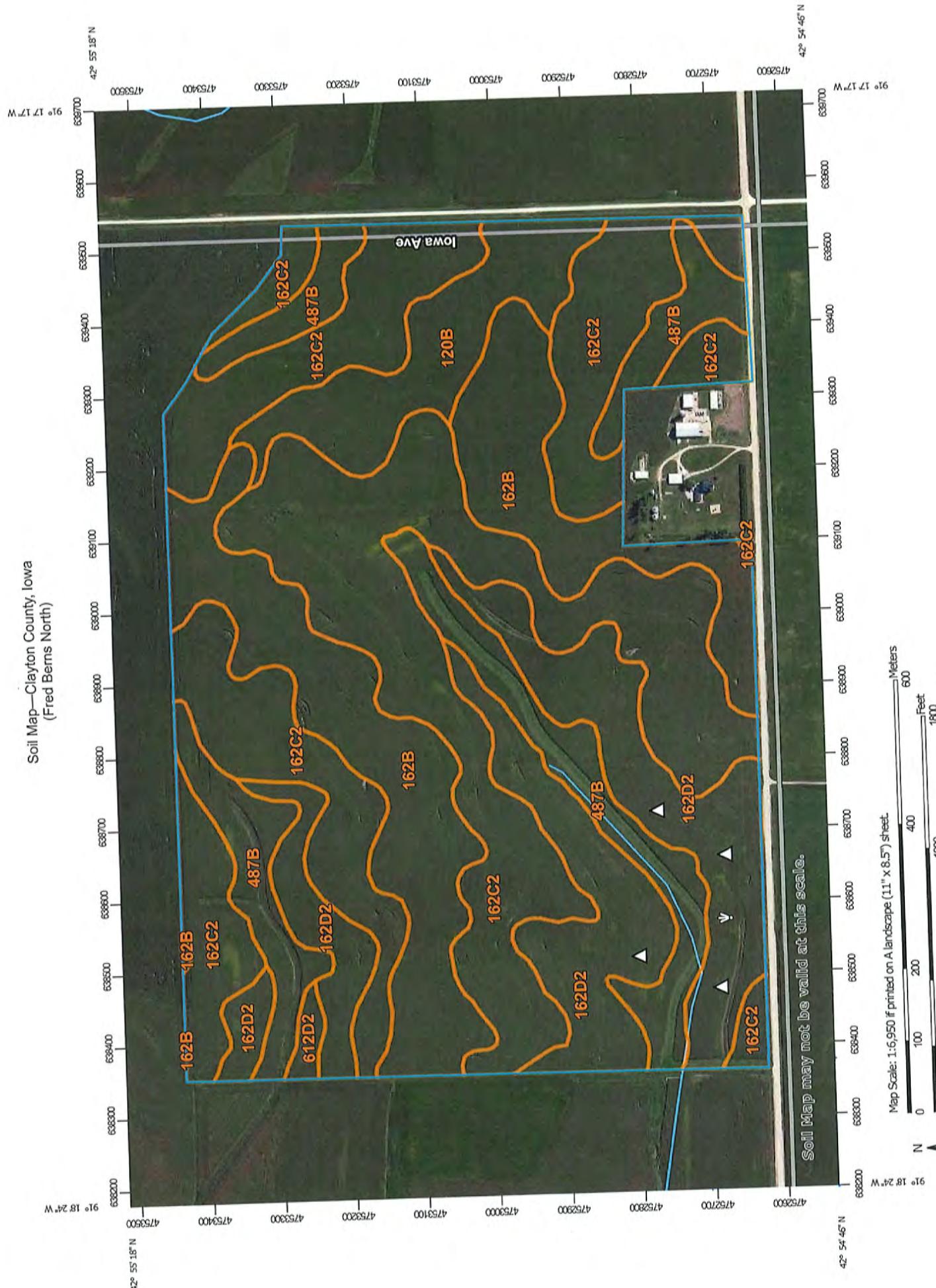
IDENTIFICATION

SOIL ANALYSIS REPORT

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I.	PHOSPHORUS				NEUTRAL AMMONIUM ACETATE (EXCHANGEABLE)				CATION EXCHANGE CAPACITY CEC meq/100g				PERCENT BASE SATURATION (COMPUTED)			
			P ₁ MEAK BAY 1:7 RATE ppm	P ₂ STRONG BAY 1:7 RATE ppm	OULSEN BICARBONATE P RATE ppm	K	MAGNESIUM	CALCIUM	SODIUM	pH	SOIL pH 1:1	BUFFER INDEX	% K	% Mg	% Ca	% H	% Na	
361		1.1 VL	9 L	4 VL	155 M	346 VH	3495 VH		8.0	1.9	13.9	84.2	0.0					
96261		2.4 L	13 L	19 L	191 H	448 VH	2382 M		6.0	6.6	18.9	2.6	19.8	63.0	14.6			
96262	Monroe A	1.3 VL	11 L	117 VH	14 M	138 M	378 VH	3457 VH	7.7	20.8	1.7	15.1	83.2	0.0				
96263		1.9 L	40 VH	134 VH	167 M	475 VH	2828 H		7.4	18.5	2.3	21.4	76.3	0.0				
96264	Monroe B	1.5 VL	27 H	59 VH	148 M	440 VH	2575 M		6.1	6.6	19.7	1.9	18.6	65.4	14.1			
96265	K & G 35	1.0 VL	32 VH	69 VH	163 M	515 VH	2930 H		7.3	19.4	2.2	22.1	75.7	0.0				
96266	East 130	0.8 VL	20 M	138 VH	133 M	614 VH	2276 M		6.6	6.8	17.9	1.9	28.6	63.6	5.9			
96267	K & F 34-35	2.1 L	12 L	102 VH	8 L	157 M	454 VH	3334 H	7.9	20.9	1.9	18.1	80.0	0.0				
96268	Hog Barn IV	1.5 VL	47 VH	127 VH	233 VH	591 VH	2383 H		7.4	17.4	3.4	28.3	68.3	0.0				
96269	Hog Barn S	0.9 VL	14 L	122 VH	13 M	143 M	516 VH	2263 H	7.3	16.0	2.3	26.9	70.8	0.0				
96270	Martins																	
NITRATE-N (FIA)																		
LAB NUMBER	SURFACE			SUBSOIL 1			SUBSOIL 2			Total lbs/A	SULFUR S ICAP	ZINC Zn DTPA	IRON Fe DTPA	MANGANESE Mn DTPA	COPPER Cu DTPA	BORON B sorb. DTPA	SOLUBLE SALTS 1:1 mmhos/cm ²	
	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)	ppm		ppm	ppm	ppm	ppm	ppm	rate	
361																		
96261		0-6																
96262		0-6																
96263		0-6																
96264		0-6																
96265		0-6																
96266		0-6																
96267		0-6																
96268		0-6																
96269		0-6																
96270		0-6																

REV. 10/17

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.
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Web Soil Survey
National Cooperative Soil Survey

Page 1 of 3

Natural
Conserv



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
120B	Tama silt loam, driftless, 2 to 6 percent slopes	14.0	6.3%
162B	Downs silt loam, 2 to 6 percent slopes	41.2	18.5%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	97.8	43.9%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	40.7	18.2%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	28.0	12.6%
612D2	Mottland silt loam, 5 to 14 percent slopes, moderately eroded	1.1	0.5%
Totals for Area of Interest		222.8	100.0%





ACM/PREMIER CROP
PO BOX 533
ALGONA IA 50511

ALGONA IA 50511

Lab Number	Sample ID	Phosphorus						pH	Buff index	CEC meg/100	Percent Base Saturation				Nitrate Surface				Total S	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime Rate	Excess Soluble Salts	NH3-N ppm	MP3 Color
		OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm				K	Mg	Ca	H	Na	ppm	lbs/A depth	ppm	ppm	ppm								
34927374	1	3.2	23	36	21	321	428	2412	7.4		16.4	5.0	21.7	73.3	0.0						0-6							
34927375	2	3.7	24	38	139	492	2333		7.0		16.1	2.2	25.5	72.3	0.0						0-6							
34927376	3	3.1	24	35	164	392	1875		6.5	6.8	14.2	3.0	23.0	66.0	8.0						0-6							
34927377	4	3.7	21	30	132	444	2009		6.3	6.7	15.8	2.1	23.4	63.6	10.9						0-6							
34927379	5	3.5	16	20	146	420	1839		6.1	6.7	15.2	2.5	23.0	60.5	14.0						0-6							
34927380	6	2.9	15	16	146	348	1570		6.4	6.8	12.2	3.1	23.8	64.3	8.8						0-6							
34927381	7	3.1	30	43	153	565	2036		6.7		15.3	2.6	30.8	66.6	0.0						0-6							
34927382	8	3.3	15	20	187	501	1959		6.0	6.7	16.9	2.8	24.7	58.0	14.5						0-6							
34927383	9	3.0	13	17	157	491	1988		5.9	6.6	17.4	2.3	23.5	57.1	17.1						0-6							
34927384	10	3.2	15	18	124	347	1580		5.7	6.6	14.1	2.3	20.5	56.0	21.2						0-6							
34927385	11	3.2	26	36	203	507	2172		6.7		15.6	3.3	27.1	69.6	0.0						0-6							
34927386	12	3.6	18	24	151	390	1722		6.1	6.7	14.2	2.7	22.9	60.6	13.8						0-6							
34927387	13	3.3	25	36	136	443	1958		6.6	6.9	14.7	2.4	25.1	66.6	5.9						0-6							
34927388	14	3.8	19	28	171	396	1927		6.1	6.7	15.6	2.8	21.2	61.8	14.2						0-6							
34927389	15	3.2	15	24	164	466	2060		6.7		14.6	2.9	26.6	70.5	0.0						0-6							
34927390	16	3.5	56	94	53	350	331	2570		8.1		16.5	5.4	16.7	77.9	0.0					0-6							
34927391	17	4.0	41	69	46	216	400	2378		7.3		15.8	3.5	21.1	75.4	0.0					0-6							
34927392	18	3.5	12	14	160	427	2028		6.6	6.9	15.0	2.7	23.7	67.6	6.0						0-6							
34927393	19	3.3	17	23	152	469	2069		6.7		14.6	2.7	26.8	70.5	0.0						0-6							
34927394	20	3.9	22	35	215	483	2183		6.7		15.5	3.6	26.0	70.4	0.0						0-6							
34927395	21	3.4	25	39	200	437	1971		6.9		14.0	3.7	26.0	70.3	0.0						0-6							
34927396	22	3.7	13	19	117	473	2010		6.7		14.3	2.1	27.6	70.3	0.0						0-6							
34927397	23	3.4	21	30	138	518	2250		6.5	6.8	17.2	2.1	25.1	65.4	7.4						0-6							
34927398	24	3.0	15	23	150	328	1520		6.9		10.7	3.6	25.5	70.9	0.0						0-6							
34927399	25	3.2	10	13	140	468	1948		6.3	6.8	15.6	2.3	25.0	62.4	10.3						0-6							
34927400	26	4.0	23	30	169	498	2334		6.5	6.8	17.6	2.5	23.6	66.3	7.6						0-6							
34927401	27	4.0	21	29	168	452	2012		6.0	6.7	16.8	2.6	22.4	59.9	15.1						0-6							
34927402	28	3.4	17	20	187	429	1940		6.6	6.9	14.7	3.3	24.3	66.0	6.4						0-6							
34927403	29	3.2	22	33	197	491	2045		6.2	6.7	16.8	3.0	24.4	60.9	11.7						0-6							
34927404	30	3.4	14	22	15	127	366	1888		7.6		12.8	2.5	23.8	73.7	0.0					0-6							
34927405	31	3.2	19	28	195	484	2112		6.7		15.1	3.3	26.7	70.0	0.0						0-6							
34927406	32	3.3	50	75	45	267	486	2476		7.3		17.1	4.0	23.7	72.3	0.0						0-6						

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.

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Oct 23, 2019

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REASON

TEST

<p



REPORT NUMBER
119-294-0023
COMPLETED DATE
Oct 23, 2019

RECEIVED DATE
Oct 21, 2019

ACM/PREMIER CROP
PO BOX 533

13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770

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IDENTIFICATION

CARLSON FARMS

TYLER CARLSON

FRED BEERS NORTH

ALGONA IA 50511

Lab Number	Sample ID	OM%	Phosphorus		K	Mg	Ca	Na	pH	Buff index	CEC index	K meq/100	Percent Base Saturation			Nitrate Surface		Total lbs/A	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime ppm	Excess Soluble Salts ppm	NH3-N ppm	MP3 Color
			P1 ppm	P2 ppm									Bic ppm	Mg	Ca	Na	pH	ppm										
34927440	65	3.7	36	55	199	590	2629	6.9		18.6	2.7	26.4	70.9	0.0												0.6		
34927441	66	4.8	33	54	35	150	582	2740	7.4		18.9	2.0	25.7	72.3	0.0												0.6	
34927442	67	3.7	21	30	151	523	2116		6.5	6.8	16.5	2.3	26.4	64.1	7.2												0.6	
34927443	68	4.2	35	46	151	563	2566	7.0		17.9	2.2	26.2	71.6	0.0													0.6	
34927444	69	4.5	52	68	168	503	2399	6.5	6.8	17.9	2.4	23.4	67.0	7.2													0.6	
34927445	70	4.5	15	21	144	526	2325	6.6	6.9	17.4	2.1	25.2	66.8	5.9													0.6	
34927446	71	3.7	27	35	157	513	2169	6.5	6.8	16.8	2.4	25.4	64.6	7.6													0.6	
34927447	72	4.5	42	60	41	165	558	2724	7.4		18.7	2.3	24.9	72.8	0.0												0.6	
34927448	73	3.9	39	57	173	575	2495	7.1		17.7	2.5	27.1	70.4	0.0													0.6	
34927449	74	3.6	50	70	230	452	2058	6.4	6.8	16.0	3.7	23.5	64.3	8.5													0.6	
34927450	75	3.6	59	84	59	320	559	2350	7.4		17.2	4.8	27.1	68.1	0.0												0.6	
34927451	76	4.7	129	141	176	550	432	2967	7.4		19.8	7.1	18.2	74.7	0.0												0.6	
34927452	77	4.7	116	134	202	634	396	2814	7.5		19.0	8.6	17.4	74.0	0.0												0.6	
34927453	78	3.7	96	125	81	260	445	2799	7.7		18.4	3.6	20.2	76.2	0.0												0.6	
34927454	79	3.7	41	64	40	167	473	2327	7.7		16.0	2.7	24.6	72.7	0.0												0.6	
34927455	80	3.6	31	43	167	602	2329	7.2		17.1	2.5	29.3	68.2	0.0													0.6	
34927457	81	4.5	37	55	176	563	2501	7.2		17.6	2.6	26.7	70.7	0.0													0.6	
34927458	82	3.5	23	32	151	493	2216	6.7		15.6	2.5	26.3	71.2	0.0													0.6	
34927459	83	4.7	25	36	135	640	2483	7.1		18.1	1.9	29.5	68.6	0.0													0.6	
34927460	84	4.3	32	50	122	565	2378	7.2		16.9	1.9	27.9	70.2	0.0													0.6	
34927461	85	4.9	46	57	131	698	2923	7.1		20.8	1.6	28.0	70.4	0.0													0.6	
34927462	86	4.4	35	56	36	168	578	2550	7.4		18.0	2.4	26.8	70.8	0.0												0.6	
34927463	87	4.2	41	66	173	603	2599	7.2		18.5	2.4	27.2	70.4	0.0													0.6	
34927464	88	3.4	34	55	31	160	576	2464	7.6		17.5	2.3	27.4	70.3	0.0												0.6	
34927465	89	4.0	42	66	34	125	573	2470	7.8		17.4	1.8	27.4	70.8	0.0												0.6	
34927466	90	3.7	60	88	46	165	483	2689	7.8		17.9	2.4	22.5	75.1	0.0												0.6	

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.

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TODAY'S DATE
Oct 23, 2019

ADVANCED CROP MANAGEMENT

PREMIER CROP SYSTEMS

DAN FRIEBERG

Fred Berns North



Grower : Carlson Farms

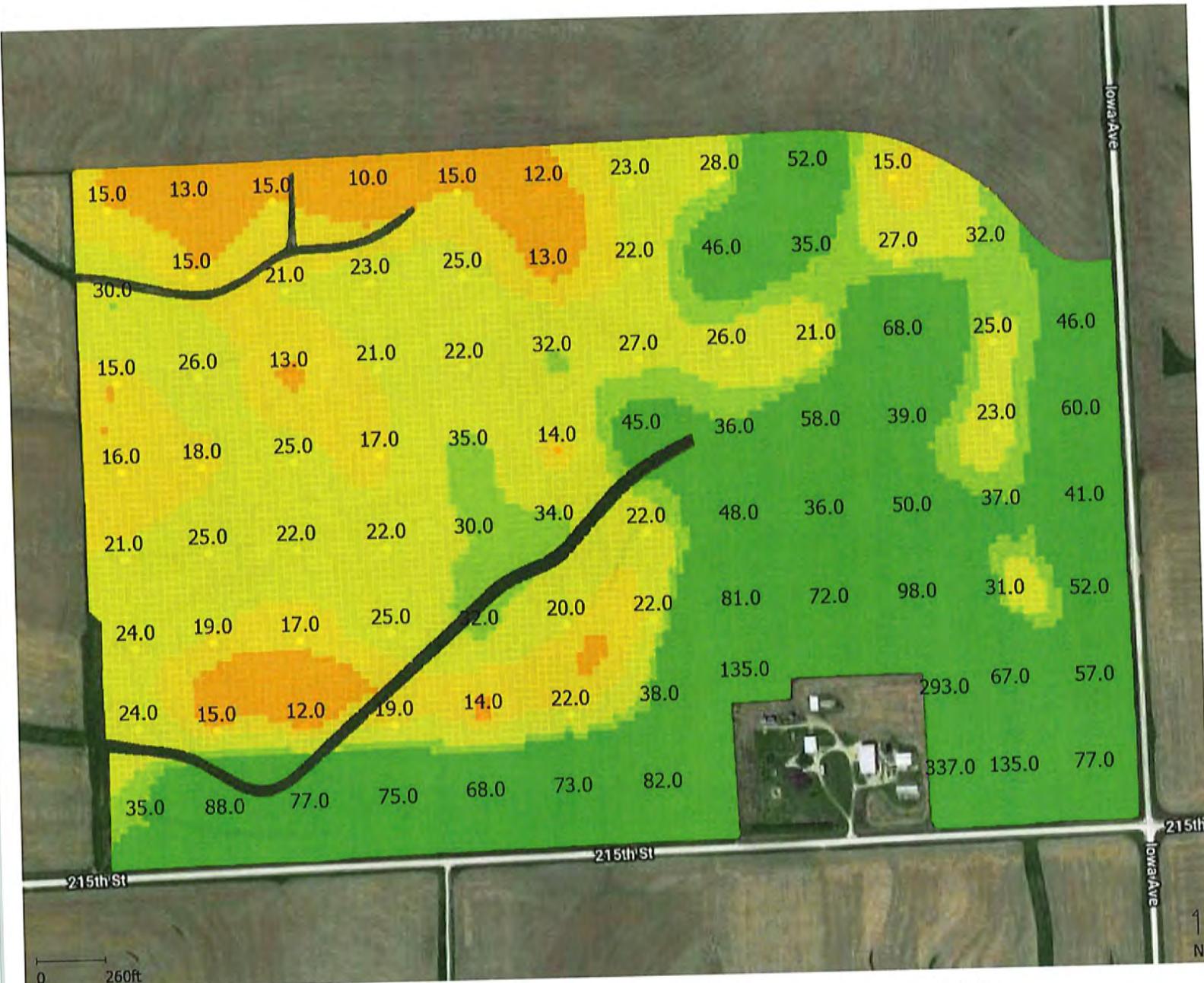
Field : Fred Berns North

Year : 2019

Operation : Soil Sampling

GPS Count : 90

Soil P1



Grower : Carlson Farms

Field : Fred Berns North

Year : 2019

Average Soil P1 : 42.7 ppm

Minimum Soil P1 : 10.0 ppm

Maximum Soil P1 : 337.0 ppm



Web Soil Survey
National Cooperative Soil Survey

Natural Resources
Conservation Service

USDA

1/8/2021
Page 1 of 3

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
65D2	Lindley loam, 9 to 14 percent slopes, moderately eroded	4.1	2.4%
162B	Downs silt loam, 2 to 6 percent slopes	21.5	12.8%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	64.7	38.4%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	40.2	23.9%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	38.0	22.6%
Totals for Area of Interest		168.5	100.0%





REPORT NUMBER
19-294-0022
ACCOUNT
29574

COMPLETED DATE
Oct 23, 2019
RECEIVED DATE
Oct 21, 2019

ACM/PREMIER CROP
PO BOX 533

ALGONA IA 50511

13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770

IDENTIFICATION
CARLSON FARMS
TYLER CARLSON
FRED BEIERS SOUTH

RECEIVED DATE
Oct 23, 2019

TO
ADVANCED CROP MANAGEMENT

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PREMIER CROP SYSTEMS
DAN FRIEBERG

PAGE 1/3
TODAY'S DATE
Oct 23, 2019

Lab Number	Sample ID	Phosphorus			Potassium			Calcium			pH			Buff index	CEC index (meq/100g)	Percent Base Saturation			Nitrate Surface			Total S			Zn Mn Fe Cu B Lime Salts			Excess Soluble NH3-N			MP3 Color		
		OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	Mg ppm	Ca ppm	H ppm	Na ppm			Ibs/A depth	Ibs/A	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
34927302	1	3.9	31	42	30	152	553	2944		7.3	19.7	2.0	23.4	74.6	0.0																0-6		
34927303	2	3.2	15	22	151	467	2176		6.2	6.7	2.2	22.5	62.9	12.4																0-6			
34927304	3	3.0	14	21	134	519	2427		7.0		16.8	2.0	25.7	72.3	0.0															0-6			
34927305	4	3.5	21	36	160	414	2055		6.5	6.8	15.2	2.7	22.7	67.6	7.0															0-6			
34927306	5	3.2	22	32	148	424	2021		6.3	6.8	15.6	2.4	22.6	64.8	10.2															0-6			
34927307	6	3.2	22	36	156	497	2232		6.6	6.9	16.7	2.4	24.8	66.8	6.0															0-6			
34927308	7	3.0	20	29	188	407	1842		6.4	6.8	14.4	3.3	23.6	64.0	9.1															0-6			
34927309	8	2.9	22	28	178	412	1872		6.3	6.8	14.8	3.1	23.2	63.2	10.5															0-6			
34927310	9	3.3	32	48	155	456	1984		7.0		14.1	2.8	27.0	70.2	0.0															0-6			
34927311	10	3.5	18	28	137	455	2120		6.8		14.8	2.4	26.2	71.4	0.0															0-6			
34927312	11	3.1	17	32	19	137	571	2626		7.3		18.2	1.9	26.1	72.0	0.0														0-6			
34927313	12	3.5	13	63	12	145	610	2572		7.3		18.3	2.0	27.8	70.2	0.0														0-6			
34927314	13	2.6	13	26	13	126	557	2120		7.3		15.6	2.1	29.8	68.1	0.0														0-6			
34927315	14	2.7	15	29	141	589	2153		6.5	6.8	17.3	2.1	28.4	62.2	7.3														0-6				
34927316	15	2.6	32	45	152	543	2184		6.6	6.9	16.8	2.3	26.9	65.0	5.8														0-6				
34927317	16	3.6	14	21	137	410	1793		6.2	6.7	14.4	2.4	23.7	62.3	11.6														0-6				
34927318	17	3.1	9	12	105	433	1949		6.2	6.7	15.5	1.7	23.3	62.9	12.1														0-6				
34927319	18	3.3	17	27	138	444	2138		6.3	6.7	16.4	2.2	22.6	65.2	10.0														0-6				
34927320	19	3.2	13	15	135	445	2027		6.0	6.7	16.7	2.1	22.3	60.7	14.9														0-6				
34927321	20	3.0	10	13	121	519	2048		6.4	6.8	16.4	1.9	26.4	62.4	9.3														0-6				
34927322	21	4.6	28	46	219	573	2755		6.9		19.1	2.9	25.0	72.1	0.0														0-6				
34927323	22	3.2	14	54	132	413	1949		6.0	6.7	15.9	2.1	21.6	61.3	15.0														0-6				
34927324	23	3.9	17	24	138	465	2129		6.3	6.7	16.6	2.1	23.3	64.1	10.5														0-6				
34927325	24	4.4	95	110	148	344	455	3234		7.6		20.8	4.2	18.2	77.6	0.0													0-6				
34927326	25	3.1	26	51	19	151	585	2691		7.3		18.7	2.1	26.1	71.8	0.0													0-6				
34927327	26	4.0	40	67	239	594	2653		7.2		18.8	3.3	26.3	70.4	0.0														0-6				
34927328	27	3.3	20	31	134	559	2471		7.2		17.4	2.0	26.8	71.2	0.0														0-6				
34927329	28	3.6	20	25	153	544	2278		6.6	6.9	17.3	2.3	26.2	65.8	5.7														0-6				
34927330	29	5.3	81	119	448	608	2944		6.9		20.9	5.5	24.2	70.3	0.0														0-6				
34927331	30	2.7	18	28	182	563	2310		7.0		16.6	2.8	27.8	69.4	0.0														0-6				
34927332	31	3.4	16	22	148	553	2160		7.0		15.5	2.4	27.6	70.0	0.0														0-6				
34927333	32	4.5	43	69	49	237	506	2532		7.7		17.5	3.5	24.1	72.4	0.0													0-6				

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TODAY'S DATE
Oct 23, 2019ACCOUNT
29574COMPLETED DATE
Oct 23, 2019
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Oct 21, 2019

ACM/PREMIER CROP

PO BOX 533

ALGONA IA 50511

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IDENTIFICATION

CARLSON FARMS

TYLER CARLSON
FRED BEURNS SOUTH

ADVANCED CROP MANAGEMENT

PREMIER CROP SYSTEMS
DAN FRIEBERG

Lab	Sample ID	OM	Phosphorus			K	Mg	Ca	Na	pH	Buff index	CEC meq/100	K	Mg	Ca	H	Na	Percent Base Saturation		Nitrate Surface		Total	S	Zn	Mn	Fe	Cu	B	Lime	Excess Soluble Salts	N	NH3-N	MP3 Color
			P1	P2	Bic													lbs/A	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm				
34927334	33	3.6	28	43	32	167	534	2363	7.4		16.7	2.6	26.6	70.8	0.0			0.6															
34927335	34	4.8	33	47	190	433	2494	7.1		16.6	2.9	21.7	75.4	0.0				0.6															
34927336	35	4.7	48	81		199	477	2724	7.1		18.1	2.8	22.0	75.2	0.0			0.6															
34927337	36	3.7	31	48		151	369	2082	6.8		13.9	2.8	22.1	75.1	0.0			0.6															
34927338	37	3.3	59	91		481	355	1924	6.7		13.8	6.9	21.4	69.7	0.0			0.6															
34927340	38	5.1	109	136	137	567	340	2275	7.3		15.7	9.3	18.0	72.7	0.0			0.6															
34927341	39	4.9	54	105		355	322	2125	6.4		15.6	5.8	17.2	68.1	8.9			0.6															
34927342	40	3.9	24	29		219	431	2150	7.0		14.9	3.8	24.1	72.1	0.0			0.6															
34927343	41	5.0	43	79	43	285	518	2533	7.3		17.7	4.1	24.4	71.5	0.0			0.6															
34927344	42	3.6	20	30		229	472	2263	6.4		6.8	17.4	3.4	22.6	65.0	9.0			0.6														
34927345	43	4.0	22	29		265	407	1944	6.2		6.7	15.7	4.3	21.6	61.9	12.2			0.6														
34927346	44	3.9	57	92		593	407	2101	6.8		15.4	9.9	22.0	68.1	0.0			0.6															
34927347	45	5.0	120	135	140	670	469	2832	7.7		19.8	8.7	19.7	71.6	0.0			0.6															
34927348	46	3.4	39	61		243	458	2030	6.7		14.6	4.3	26.1	69.6	0.0			0.6															
34927349	47	3.7	23	30		258	361	1787	6.3		6.8	14.1	4.7	21.3	63.4	10.6			0.6														
34927350	48	4.0	32	42		225	471	2275	7.2		15.9	3.6	24.7	71.7	0.0			0.6															
34927351	49	4.6	42	67	41	225	435	2227	7.3		15.3	3.8	23.7	72.5	0.0			0.6															
34927352	50	3.6	18	20		172	384	1793	7.2		12.6	3.5	25.4	71.1	0.0			0.6															
34927353	51	3.0	18	25		159	485	1838			6.0	6.7	16.0	2.5	25.3	57.4	14.8																
34927354	52	2.6	15	19		148	381	1619	6.1		6.7	13.5	2.8	23.5	60.0	13.7																	
34927355	53	3.9	14	19		162	438	1854	6.4		6.8	14.6	2.8	25.0	63.5	8.7																	
34927356	54	1.8	38	54		181	194	1008	6.4		6.9	7.8	6.0	20.7	64.6	8.7																	
34927357	55	3.2	14	27		193	480	1999			6.3	6.7	16.2	3.1	24.7	61.7	10.5																
34927358	56	3.6	20	28		166	441	1979	6.4		6.8	15.4	2.8	23.9	64.3	9.0																	
34927359	57	3.1	13	17		151	408	1666	6.1		6.7	14.1	2.7	24.1	59.1	14.1																	
34927360	58	4.2	29	44		231	443	2125	6.6		6.9	15.9	3.7	23.2	66.8	6.3																	
34927361	59	3.3	19	27		150	485	2086	6.6		6.9	15.8	2.4	25.6	66.0	6.0																	
34927362	60	3.3	27	32		206	433	1765	5.9		6.7	15.7	3.4	23.0	56.2	17.4																	
34927363	61	2.9	18	28		210	381	1804	6.4		6.8	14.0	3.8	22.7	64.4	9.1																	
34927364	62	3.8	20	32		147	417	1907	6.4		6.8	14.7	2.6	23.6	64.9	8.9																	
34927365	63	3.8	18	26		197	376	1860	5.9		6.7	15.5	3.3	20.2	60.0	16.5																	
34927366	64	3.6	22	31		209	357	1886	6.0		6.7	15.2	3.5	19.6	62.0	14.9																	

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REPORT NUMBER
19-294-0022
COMPLETED DATE
Oct 23, 2019
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Oct 21, 2019
ACCO
29.

Oct 21, 2019

Oct 21, 2019

ACM/PREMIER CROP
PO BOX 533

AL GONA | A 50511

ALGONA IA 50511												ALGONA IA 50511																																
Lab Number	Sample ID	OM %	Phosphorus			K			Mg			Ca			Na			PH			Buff			CEC			Percent Base Saturation			Nitrate Surface			Total S			Zn Mn Fe Cu B			Excess Soluble NH3-N			MP3 Color		
			P1 ppm	P2 ppm	Bic ppm	K ppm	K ppm	Mg ppm	Ca ppm	Na ppm	PH index	Buff index	CEC index	100 meq/l	K	Mg	Ca	H	Na	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm								
34927387	65	4.2	19	30		202	432	2228			6.4	6.8	16.8	3.1	21.4	66.3	9.2															0.6												
34927388	66	2.6	22	31		149	321	1508			6.3	6.8	11.8	3.2	22.7	63.9	10.2															0.6												
34927389	67	2.6	10	14		127	408	1696			5.6	6.6	15.9	2.0	21.4	53.3	23.3															0.6												
34927370	68	3.2	15	20		129	489	2031			6.0	6.7	17.2	1.9	23.7	59.0	15.4															0.6												
34927371	69	3.6	15	23		173	407	1845			6.2	6.7	14.9	3.0	22.8	61.9	12.3															0.6												
34927372	70	2.8	18	23		116	516	2115			6.9	7.0	15.2	2.0	28.3	69.7	0.0															0.6												
34927373	71	2.0	18	28		150	617	2353			7.2	7.3	22	2.2	29.7	68.1	0.0															0.6												
34927374	72	2.0	21	28		150	617	2353																										0.6										

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Fred Berns South



Grower : Carlson Farms

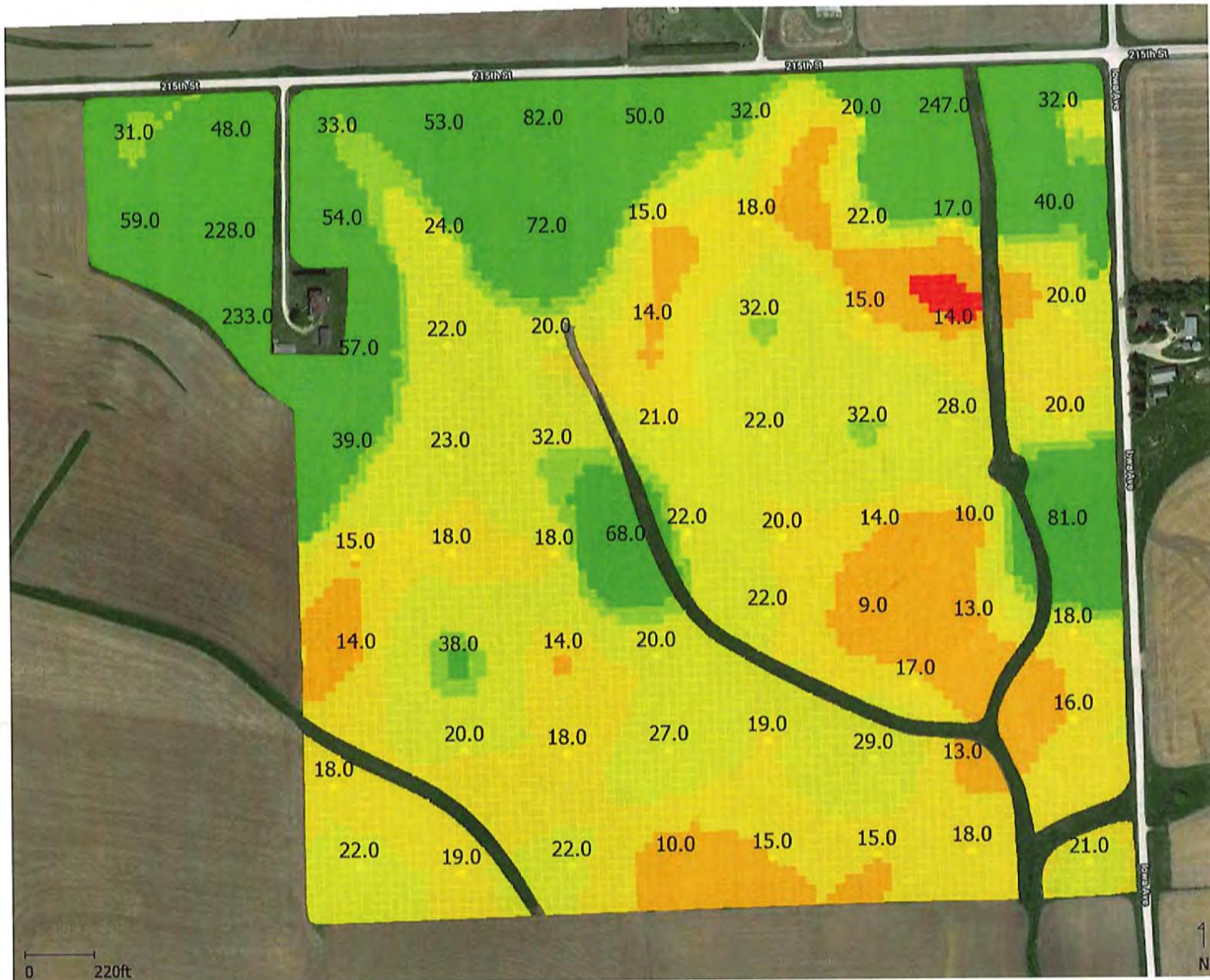
Field : Fred Berns South

Year : 2019

Operation : Soil Sampling

GPS Count : 71

Soil P1



Grower : Carlson Farms

Field : Fred Berns South

Year : 2019

Average Soil P1 : 36.0 ppm

Minimum Soil P1 : 9.0 ppm

Maximum Soil P1 : 247.0 ppm

Soil P1
(ppm)

Land Area Range (ac)	Percentage (%)
Above 35.00	25.9%
30.00 - 35.00	5.1%
20.00 - 30.00	33.1%
15.00 - 20.00	25.3%
7.00 - 15.00	10.3%
Below 7.00	0.3%

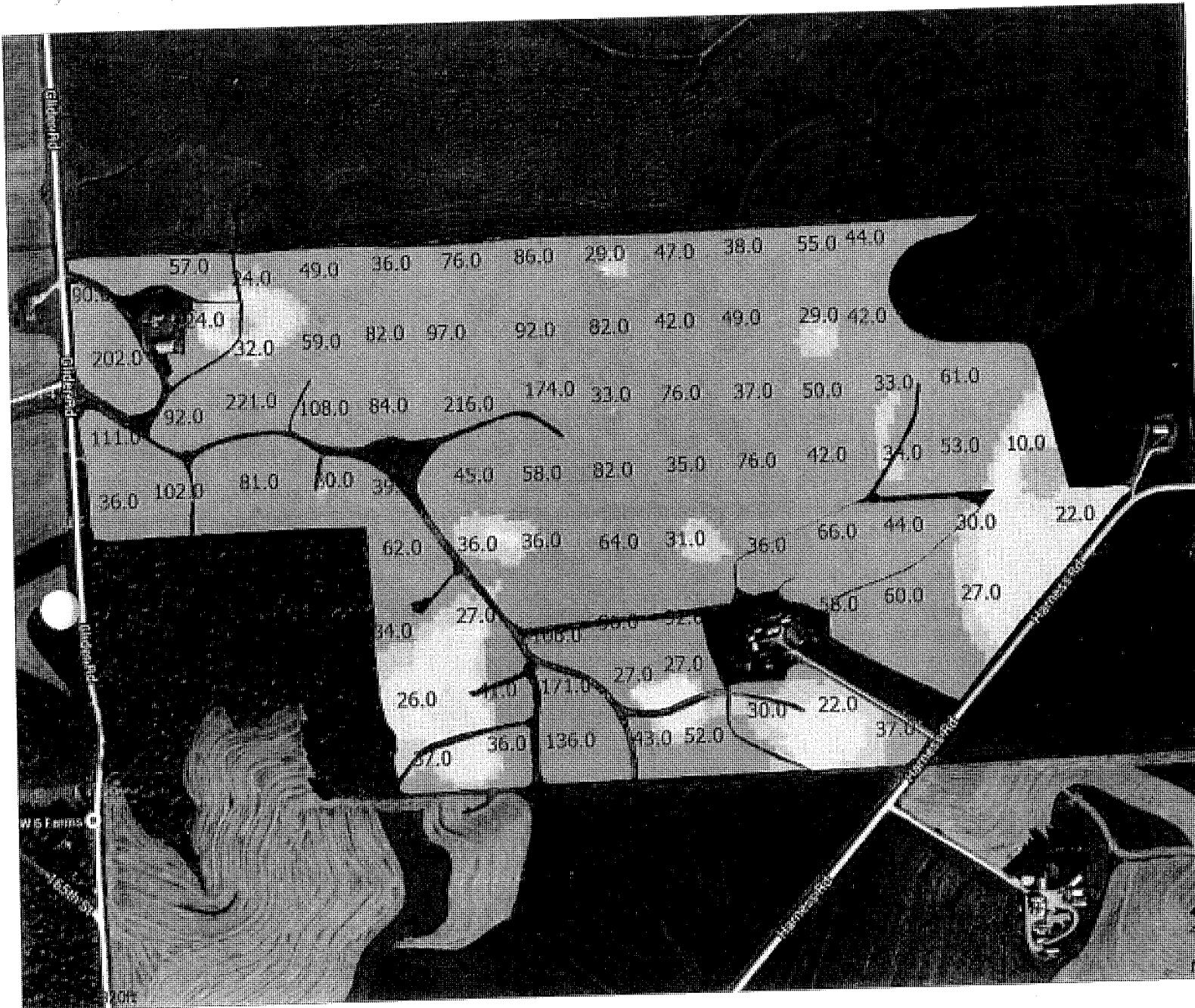


Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
65D2	Lindley loam, 9 to 14 percent slopes, moderately eroded	2.6	1.1%
120B	Tama silt loam, driftless, 2 to 6 percent slopes	0.3	0.1%
162B	Downs silt loam, 2 to 6 percent slopes	19.9	8.4%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	66.1	28.1%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	111.4	47.3%
930	Orion silt loam, 0 to 3 percent slopes, occasionally flooded	4.5	1.9%
981B	Worthen silt loam, 2 to 5 percent slopes	30.6	13.0%
Totals for Area of Interest		235.3	100.0%

Freddy & Freddy's Big

Soil P1

Premier
Growers

Grower : Walz Farms

Field : Freddies and Meiers

Year : 2016

Average Soil P1 : 62.7 ppm

Minimum Soil P1 : 10.0 ppm

Maximum Soil P1 : 221.0 ppm

Soil P1
(ppm)

- Above 35.00 (155.2 ac - 82.3%)
- 30.00 - 35.00 (12.9 ac - 6.9%)
- 20.00 - 30.00 (16.4 ac - 8.7%)
- 15.00 - 20.00 (2.9 ac - 1.5%)
- 7.00 - 15.00 (1.1 ac - 0.6%)
- Below 7.00 (0.0 ac - 0.0%)

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TODAY'S DATE
Apr 27, 2016

16-10-0139
 REPORT DATE
Apr 27, 2016
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Apr 25, 2016
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ACM/PREMIER CROP
PO BOX 533
ALGONA IA 50511

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 WALZ FARMS

FREDDIES AND MEIERS
 W-6

ADVANCED CROP MANAGEMENT
 PREMIER CROP SYSTEMS
 DAN FRIEBERG

Lab Number	Sample ID	Phosphorus						Buff index	CEC index meq/100	Percent Base Saturation						Nitrate						Excess Soluble Salts ppm	NH3-N ppm	MP3 Color	
		OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm			K	Mg	Ca	H	Na	Total lbs/A	S	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm				
29697142	1	3.4	44	53	246	422	1733	6.0	6.7	15.1	4.2	23.3	57.4	15.1								0.6			
29697143	2	3.9	55	75	191	468	1972	5.8	6.6	17.5	2.8	22.3	56.3	18.6								0.6			
29697144	3	3.3	38	54	167	558	1980	6.3	6.7	16.8	2.5	27.7	58.9	10.9								0.6			
29697145	4	3.5	47	62	158	530	1921	6.4	6.8	15.8	2.6	28.0	60.8	8.6								0.6			
29697146	5	3.3	29	37	139	558	2025	6.5	6.8	16.4	2.2	28.4	62.0	7.4								0.6			
29697147	6	3.4	86	96	239	462	1727	6.1	6.7	15.2	4.0	25.3	56.8	13.9								0.6			
29697148	7	3.3	76	89	340	403	1614	6.2	6.7	14.0	6.2	24.0	57.6	12.2								0.6			
29697150	8	4.1	36	40	173	480	1923	6.1	6.7	16.4	2.7	24.4	58.6	14.3								0.6			
29697151	9	3.7	49	62	188	544	2104	6.7	15.5	3.1	29.2	67.7	0.0									0.6			
29697152	10	3.7	24	36	156	482	2116	6.2	6.7	17.0	2.4	23.6	62.2	11.8								0.6			
29697153	11	3.8	57	76	267	413	1741	6.1	6.7	14.9	4.6	23.1	58.4	13.9								0.6			
29697154	12	3.5	90	138	367	516	2021	6.6	6.9	16.3	5.8	26.4	62.0	5.8								0.6			
29697155	13	4.3	202	203	379	495	2090	6.8	15.5	6.3	17.1	67.7	0.0									0.6			
29697156	14	3.1	24	45	176	577	2276	5.9	6.6	20.0	2.3	24.0	56.9	16.8								0.6			
29697157	15	2.9	32	47	161	612	2167	6.2	6.7	18.5	2.2	27.6	58.6	11.6								0.6			
29697158	16	3.3	59	88	154	409	1743	6.3	6.8	14.0	2.8	24.3	62.2	10.7								0.6			
29697159	17	3.1	82	94	251	416	1593	6.0	6.7	14.2	4.5	24.4	56.1	15.0								0.6			
29697160	18	3.8	97	132	350	491	1905	6.8	14.5	6.2	28.2	65.6	0.0									0.6			
29697161	19	3.6	92	105	336	443	1791	6.1	6.7	15.7	5.5	23.5	57.0	14.0								0.6			
29697162	20	3.3	82	109	356	475	1782	6.3	6.8	15.4	5.9	25.7	57.9	10.5								0.6			
29697163	21	3.2	42	60	159	462	1692	6.3	6.8	14.2	2.9	27.1	59.6	10.4								0.6			
29697164	22	3.1	49	70	202	460	1745	6.7		13.1	4.0	29.3	66.7	0.0								0.6			
29697165	23	3.3	29	40	158	454	1750	5.8	6.6	15.9	2.5	23.8	55.0	18.7								0.6			
29697166	24	4.0	42	59	211	438	1852	5.8	6.6	16.7	3.2	21.9	55.4	19.5								0.6			
29697167	25	3.7	61	79	262	599	2098	6.3	6.7	18.1	3.7	27.6	58.0	10.7								0.6			
29697168	26	3.6	33	47	156	427	1771	6.2	6.7	14.5	2.8	24.5	61.1	11.6								0.6			
29697169	27	3.4	50	65	186	478	1782	6.3	6.8	15.0	3.2	26.6	59.4	10.8								0.6			
29697170	28	3.8	37	54	224	459	1831	6.4	6.8	14.9	3.9	25.7	61.4	9.0								0.6			
29697171	29	4.0	76	105	204	522	2069	6.4	6.8	16.7	3.1	26.0	61.9	9.0								0.6			
29697172	30	3.5	33	43	170	552	1978	6.3	6.7	16.7	2.6	27.5	59.2	10.7								0.6			
29697173	31	4.4	174	175	580	518	1851	6.8	15.1	9.8	28.6	61.6	0.0									0.6			
29697174	32	3.7	216	217	471	365	1622	6.5	6.9	13.4	9.0	22.7	60.5	7.8									0.6		

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WALZ FARMSACM/PREMIER CROP
PO BOX 533
ALGONA IA 50511FREDDIES AND MEIERS
W-6ADVANCED CROP MANAGEMENT
PREMIER CROP SYSTEMS
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Lab Number	Sample ID	OM	Phosphorus			K	Mg	Ca	Na	pH	Buff	CEC Index meq/100	Percent Base Saturation			Nitrate			Surface			Total			S	Zn	Mn	Fe	Cu	B	Lime	Salts	N	Excess Soluble NH3-N	MP3-ppm	Color
			P1	P2	Bic								K	Mg	Ca	H	Na	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm				
29697175	33	3.1	84	98		252	273	1325	6.1	6.8	11.1	5.8	20.5	59.7	14.0																	0-6				
29697176	34	3.0	108	124		359	408	1741	6.6	6.9	13.8	6.7	24.6	63.1	5.6																	0-6				
29697177	35	3.7	221	222		410	500	1940	7.1	14.9	7.1	28.0	64.9	0.0																		0-6				
29697178	36	3.3	92	117		422	440	1691	6.7	13.2	8.2	27.8	64.0	0.0																		0-6				
29697179	37	3.6	111	114		396	455	1927	6.7	14.4	7.1	26.3	66.6	0.0																		0-6				
29697180	38	2.8	36	50		148	431	1828	6.6	6.9	13.9	2.7	25.8	65.8	5.7																	0-6				
29697181	39	3.4	65	113	61	206	704	2506	7.5	18.9	2.8	31.0	66.2	0.0																		0-6				
29697182	40	2.9	81	109		218	448	1700	6.7	12.8	4.4	29.2	66.4	0.0																		0-6				
29697183	41	3.2	80	104		275	512	1908	6.7	14.5	4.9	29.4	65.7	0.0																		0-6				
29697184	42	3.2	39	51		321	348	1547	6.2	6.8	13.1	6.3	22.1	59.0	12.6																	0-6				
29697185	43	3.0	45	57		162	601	2112	6.5	6.8	17.3	2.4	28.9	61.0	7.7																	0-6				
29697186	44	3.5	58	82		261	500	1911	6.3	6.7	16.1	4.2	25.9	59.3	10.6																	0-6				
29697187	45	3.9	82	127		272	540	2052	6.5	15.5	4.5	29.0	66.5	0.0																		0-6				
29697188	46	3.4	35	46		169	477	1851	6.5	6.8	14.8	2.9	26.9	62.5	7.7																	0-6				
29697189	47	3.7	76	80		212	482	1832	6.3	6.8	15.3	3.6	26.3	59.9	10.2																	0-6				
29697190	51	3.1	10	16		151	559	1987	6.6	6.9	16.0	3.5	27.0	69.5	0.0																	0-6				
29697191	48	3.5	42	56		194	464	1985	6.8	14.3	3.5	27.0	69.5	0.0																		0-6				
29697192	49	2.9	34	51		191	602	2019	6.7	15.6	3.1	32.2	64.7	0.0																		0-6				
29697193	50	3.3	53	86		242	586	2088	7.2	15.9	3.9	30.7	65.4	0.0																		0-6				
29697194	51	4.2	36	44		174	449	1612	6.1	6.7	14.2	3.1	29.1	62.1	6.4																	0-6				
29697195	52	3.6	13	29	13	108	535	2339	7.5	16.4	1.7	27.2	71.1	0.0																		0-6				
29697196	53	3.3	30	65		184	561	2094	7.0	15.6	3.0	30.0	67.0	0.0																		0-6				
29697197	54	4.1	44	112		216	545	1952	6.5	6.8	16.1	3.4	28.2	60.6	7.8																	0-6				
29697198	55	4.8	66	108		257	512	1912	6.7	14.5	4.5	29.4	66.1	0.0																		0-6				
29697199	56	4.2	36	44		174	449	1785	6.5	6.8	14.0	3.0	25.2	67.2	10.6																	0-6				
29697200	57	3.5	31	39		162	424	1713	6.3	6.8	17.2	4.1	28.8	67.1	0.0																	0-6				
29697201	58	3.5	64	139		278	594	2298	7.0	13.7	3.0	30.0	67.0	0.0																		0-6				
29697202	59	3.0	36	52		160	494	1833	6.7	6.1	14.2	3.1	26.3	56.8	13.8																	0-6				
29697203	60	3.1	36	53		310	456	1837	6.5	6.8	14.9	5.3	25.5	61.6	7.6																	0-6				
29697204	61	3.3	62	79		337	537	1785	7.0	14.3	6.0	31.3	62.7	0.0																		0-6				
29697205	62	3.2	34	55		279	433	1567	6.7	12.2	5.9	29.6	64.5	0.0																		0-6				
29697206	63	3.2	27	40		196	604	1913	7.0	15.1	3.3	33.3	63.4	0.0																		0-6				
29697207	64	3.5	106	141		359	521	1958	6.8	15.1	6.1	28.8	65.1	0.0																		0-6				

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PAGE 3/3

TODAY'S DATE
Apr 27, 2016

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ACCOUNT NO.
29574

REPORT DATE
Apr 27, 2016
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Apr 25, 2016

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AACM/PREMIER CROP
PO BOX 533
AIGONA IA 50511

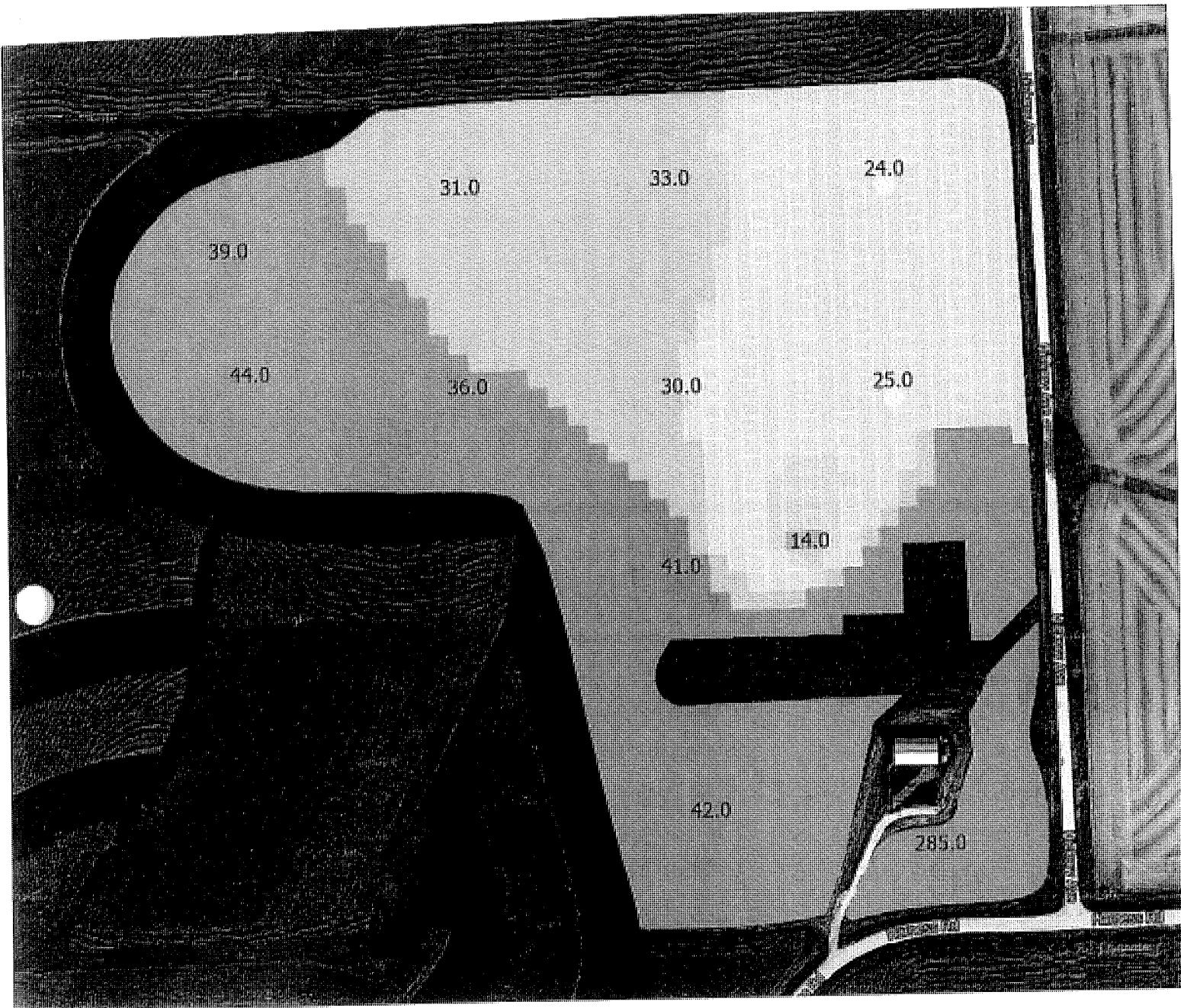
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Soil P1



Premier
Growers



Grower : Walz Farms

Field : Gray Barn

Year : 2016

Average Soil P1 : 53.7 ppm

Minimum Soil P1 : 14.0 ppm

Maximum Soil P1 : 285.0 ppm

Soil P1
(ppm)

Above 35.00	(13.2 ac - 49.2%)
30.00 - 35.00	(6.2 ac - 23.1%)
20.00 - 30.00	(7.0 ac - 26.0%)
15.00 - 20.00	(0.4 ac - 1.5%)
7.00 - 15.00	(0.0 ac - 0.2%)
Below 7.00	(0.0 ac - 0.0%)

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16-100-0137
REPORT DATE
Apr 27, 2016
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 IDENTIFICATION
 WALZ FARMS
 JARED
 GRAY BARN
ACM/PREMIER CROP
PO BOX 533
ALGONA IA 50511

TODAY'S DATE
Apr 27, 2016

ADVANCED CROP MANAGEMENT
 PREMIER CROP SYSTEMS
 DAN FRIEBERG

Lab Number	Sample ID	Phosphorus			Saturation			Percent Base			Nitrate			Total S	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime Rate	Excess Soluble Salts ppm	NH3-N ppm	MP3 Color	
		OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	pH index	Buff CEC meq/100	K	Mg Ca H Na	ppm	lbs/A	depth								
29697128	1	4.2	191	192	171	515	486	2329		7.3	17.0	7.8	23.8	68.4	0.0						0-6			
29697129	2	3.3	42	53		195	514	1995		6.3	6.7	16.5	3.0	26.0	60.5	10.5						0-6		
29697130	3	3.0	41	57		175	512	2009		7.0	14.8	3.0	28.8	68.2	0.0						0-6			
29697131	4	3.3	14	19		162	537	1965		6.5	6.8	15.9	2.6	28.1	61.8	7.5						0-6		
29697132	5	3.5	25	33		298	423	1743		5.6	6.6	17.0	4.5	20.7	51.3	23.5						0-6		
29697133	6	3.4	30	45		227	485	1913		6.6	6.9	15.1	3.9	26.8	63.3	6.0						0-6		
29697134	7	3.3	36	47		147	428	1763		5.7	6.6	16.2	2.3	22.0	54.4	21.3						0-6		
29697135	8	3.2	44	57		187	392	1652		6.4	6.8	13.2	3.6	24.7	62.6	9.1						0-6		
29697136	9	3.1	39	49		222	402	1818		5.9	6.7	15.8	3.9	21.2	57.5	17.4						0-6		
29697137	10	3.4	31	42		175	544	1927		6.6	6.9	15.5	2.9	29.2	62.2	5.7						0-6		
29697138	11	3.0	33	53		180	473	1784		6.3	6.8	14.9	3.1	26.5	59.9	10.5						0-6		
29697139	12	3.0	24	29		165	443	1716		5.5	6.5	17.2	2.5	21.5	49.9	26.1						0-6		

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Soil Map—Clayton County, Iowa
(Goedken East)

Soil Map may not be valid at this scale.

Map Scale: 1:2,740 if printed on A portrait (8.5" x 11") sheet.



0 40 80 120 160 200 Meters

0 100 200 400 600 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 15N WGS84

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
162B	Downs silt loam, 2 to 6 percent slopes	3.2	10.4%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	9.1	29.6%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	13.7	44.3%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	4.8	15.7%
Totals for Area of Interest		30.9	100.0%



Location: TRFS Elkader
Customer: Wirkler Farms
Dates: 2013-11-20

Sample Management Report

Farm: Goedken
Field: East
Acres: 30.10





Soil Test Results

Location: TRFS Elkader
Customer: Wirkler Farms
Dates: 2013-11-20

Farm: Goedken
Field: East
Acres: 30.10

ID	P (ppm)	K (ppm)	pH	OM	CEC	bPH	Ca (ppm)	Mg (ppm)	PerCa	PerK	PerMg	PerNa	PerH	data_region	Id
1	60	216	7.5	3.1	16.9	7.1	2481	472.0	0.0	0.0	0.0	0.0	0.0	1	
2	73	237	7.6	3.0	17.9	7.1	2495	581.0	0.0	0.0	0.0	0.0	0.0	1	
3	36	230	7.4	3.0	16.5	7.1	2260	559.0	0.0	0.0	0.0	0.0	0.0	1	
4	47	230	7.6	2.8	17.7	7.1	2570	513.0	0.0	0.0	0.0	0.0	0.0	1	
5	30	203	6.6	2.6	15.2	6.9	1925	496.0	0.0	0.0	0.0	0.0	0.0	1	
6	46	261	7.0	3.3	15.9	7.1	2169	524.0	0.0	0.0	0.0	0.0	0.0	1	
7	64	265	7.3	3.1	16.3	7.1	2214	546.0	0.0	0.0	0.0	0.0	0.0	1	
8	57	187	7.3	3.3	16.1	7.1	2292	494.0	0.0	0.0	0.0	0.0	0.0	1	
9	72	261	7.6	3.3	17.1	7.1	2458	498.0	0.0	0.0	0.0	0.0	0.0	1	
10	24	143	7.0	2.9	15.6	7.1	2142	548.0	0.0	0.0	0.0	0.0	0.0	1	
11	144	318	7.3	3.2	16.4	7.1	2205	546.0	0.0	0.0	0.0	0.0	0.0	1	
12	35	206	6.9	3.3	16.2	7.1	2189	569.0	0.0	0.0	0.0	0.0	0.0	1	
13	21	231	7.2	3.1	15.7	7.1	2128	536.0	0.0	0.0	0.0	0.0	0.0	1	
Avg.	55	230	7.3	3.1	16.4	7.1	2271	529.4	0.0	0.0	0.0	0.0	0.0	1	
Med.	47	230	7.3	3.1	16.3	7.1	2214	536.0	0.0	0.0	0.0	0.0	0.0	1	



Web Soil Survey
National Cooperative Soil Survey

Natural Resources
Conservation Service



1/8/2021
Page 1 of 3

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
162B	Downs silt loam, 2 to 6 percent slopes	2.8	6.3%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	12.5	28.0%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	24.7	55.3%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	4.6	10.4%
Totals for Area of Interest		44.6	100.0%





Location: TRFS Elkader
Customer: Wirkler Farms
Dates: 2015-10-21

Sample Management Report

Farm: Goedken
Field: West
Acres: 41.71



Google

Map data ©2020 Imagery ©2020, Maxar Technologies, USDA Farm Service Agency



Soil Test Results

Location: TRFS Elkader
Customer: Wirkler Farms
Dates: 2015-10-21

Farm: Goedken
Field: West
Acres: 41.71

ID	P (ppm)	K (ppm)	pH	OM	CEC	bpH	data_region_id
1	20	117	6.8	3.4	15.6	7.1	1
2	26	226	6.7	2.9	15.9	7.1	1
3	25	225	7.3	3.0	16.3	7.1	1
4	24	202	7.6	2.8	17.6	7.1	1
5	27	228	7.4	3.1	15.9	7.1	1
6	29	303	6.9	3.1	14.2	7.1	1
7	35	256	6.5	2.7	15.3	6.8	1
8	33	224	7.3	3.1	17.2	7.1	1
9	45	232	7.0	3.1	15.3	7.1	1
10	44	280	6.5	3.7	14.2	6.8	1
11	37	225	6.9	3.2	14.8	7.1	1
12	72	500	7.4	2.9	15.9	7.1	1
13	45	248	6.8	3.4	15.9	6.8	1
14	45	259	6.5	3.1	15.1	6.8	1
15	28	214	6.5	3.1	15.1	6.8	1
16	30	209	6.4	2.7	15.7	6.8	1
17	55	293	7.1	3.5	15.7	7.1	1
18	79	310	6.5	3.1	15.5	6.8	1
Avg.	39	253	6.9	3.1	15.6	7.0	1
Med.	34	230	6.9	3.1	15.7	7.1	1



1/8/2021
Page 1 of 3

Web Soil Survey
National Cooperative Soil Survey

Natural Resources
Conservation Service


USDA

Heuers

Soil Map—Clayton County, Iowa

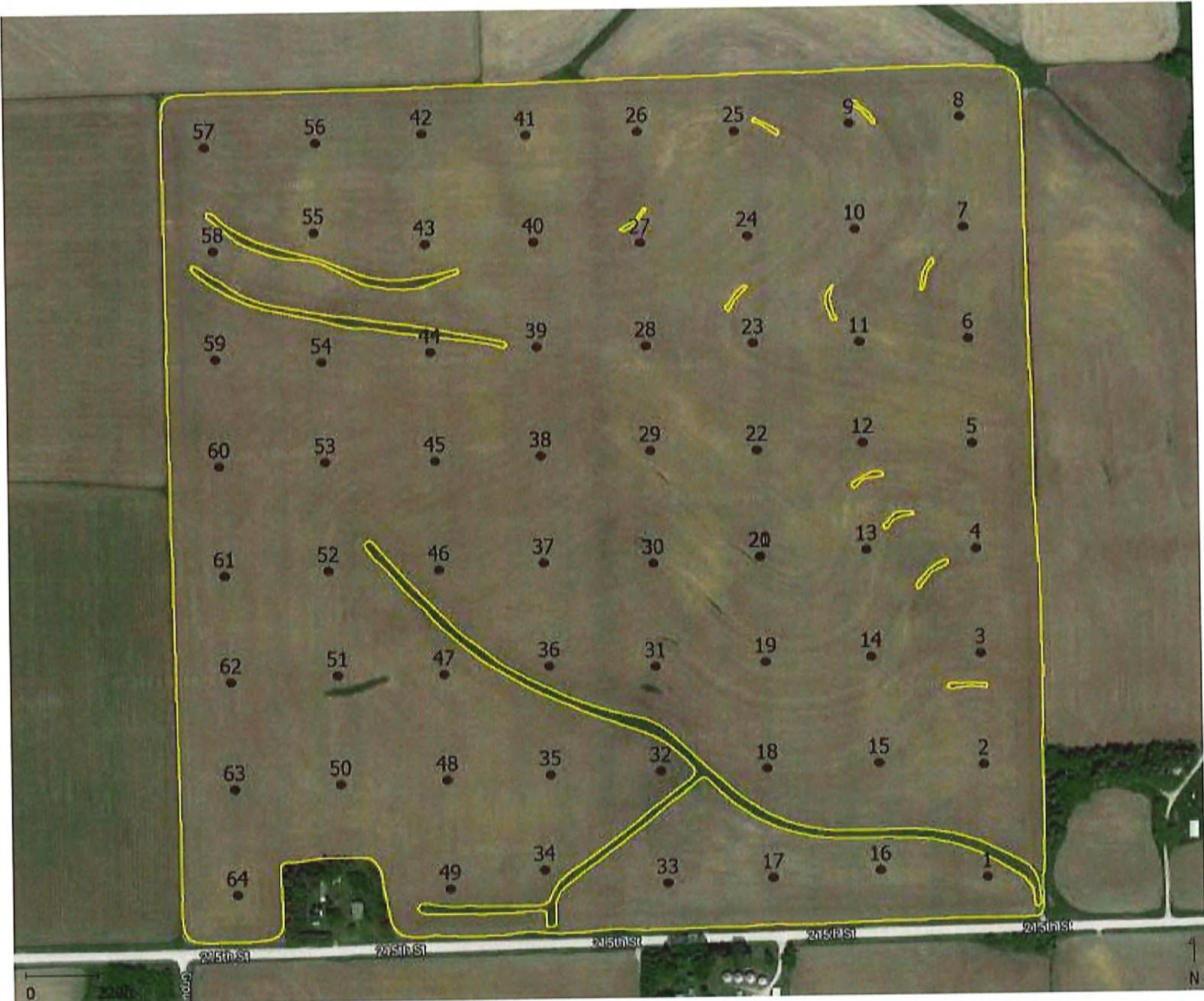
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	58.9	37.3%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	73.7	46.7%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	24.7	15.6%
902D2	Luana silt loam, 9 to 14 percent slopes, moderately eroded	0.6	0.4%
Totals for Area of Interest		158.0	100.0%



Natural Resources
Conservation Service

Heuers



Grower : Carlson Farms

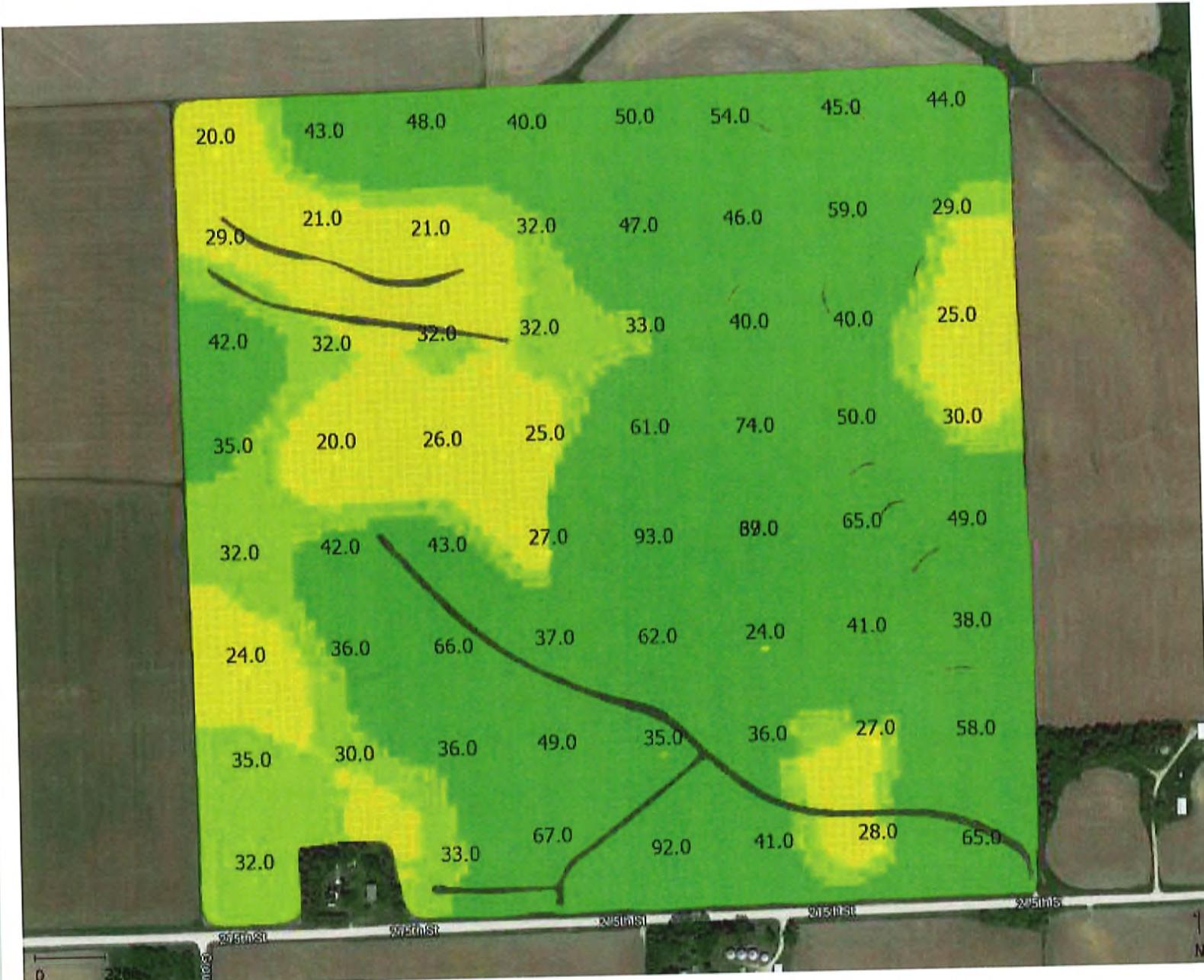
Field : Heuers

Year : 2017

Operation : Soil Sampling

GPS Count : 64

Soil P1



Grower : Carlson Farms

Field : Heuers

Year : 2017

Average Soil P1 : 41.8 ppm

Minimum Soil P1 : 20.0 ppm

Maximum Soil P1 : 93.0 ppm

Soil P1
(ppm)

Above 35.00	(98.9 ac - 63.9%)
30.00 - 35.00	(26.2 ac - 16.9%)
20.00 - 30.00	(29.6 ac - 19.2%)
15.00 - 20.00	(0.0 ac - 0.0%)
7.00 - 15.00	(0.0 ac - 0.0%)
Below 7.00	(0.0 ac - 0.0%)

17-277-0141
 REPORT NUMBER
 COMPLETED DATE
Oct 6, 2017
 RECEIVED DATE
Oct 4, 2017



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IDENTIFICATION
 CARLSON FARMS
 BRENT CARLSON
 HEUERS

ALGONA IA 50511

Lab Number	Sample ID	OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	pH	Buff index	CEC meq/100	Percent Base Saturation			Nitrate Surface			Total S			Zn Mn Fe Cu			Excess Soluble Lime Salts B			NH3-MP3 Color			
													K	Mg	Ca	H	Na	ppm	Ibs/A	ppm	ppm	ppm	ppm	ppm	Rate	ppm	ppm	ppm			
31666702	1	2.9	43	53	39	290	492	2540		7.3		17.5	4.2	23.4	72.4	0.0				0-6											
31666703	2	3.5	38	46	35	376	590	2084		7.3		16.3	5.9	30.2	63.9	0.0				0-6											
31666704	3	3.2	38	54	398	639	1984		7.1			16.3	6.3	32.7	61.0	0.0				0-6											
31666705	4	2.8	49	67	467	561	1918		7.1			15.5	7.7	30.2	62.1	0.0				0-6											
31666706	5	2.9	30	38	267	566	1851		7.0			14.7	4.7	32.1	63.2	0.0				0-6											
31666707	6	2.8	25	34	288	543	1941		6.8			15.0	4.9	30.2	64.9	0.0				0-6											
31666708	7	3.0	29	41	300	602	2036		7.1			16.0	4.8	31.4	63.8	0.0				0-6											
31666709	8	2.6	44	59	321	600	1942		7.0			15.5	5.3	32.3	62.4	0.0				0-6											
31666710	9	2.6	45	56	329	648	2157		7.1			17.0	5.0	31.8	63.2	0.0				0-6											
31666711	10	3.1	59	68	434	479	1814		7.0			14.2	7.8	28.1	64.1	0.0				0-6											
31666712	11	2.9	40	46	403	525	1894		7.2			14.9	6.9	29.4	63.7	0.0				0-6											
31666713	12	3.0	50	60	414	564	1961		7.1			15.6	6.8	30.1	63.1	0.0				0-6											
31666714	13	3.0	65	86	428	540	1853		6.9			14.9	7.4	30.2	62.4	0.0				0-6											
31666715	14	3.2	41	56	342	581	2007		6.9			15.8	5.6	30.6	63.8	0.0				0-6											
31666716	15	3.2	27	37	312	581	2094		7.2			16.1	5.0	30.1	64.9	0.0				0-6											
31666717	16	2.6	28	37	267	479	2187		6.4			6.8	17.1	4.0	23.3	63.9	8.8				0-6										
31666718	17	3.2	41	56	488	418	2332		7.2			16.4	7.6	21.2	71.2	0.0				0-6											
31666719	18	3.0	36	48	343	585	2177		7.1			16.6	5.3	29.4	65.3	0.0				0-6											
31666720	19	3.2	24	34	325	526	1813		6.7			14.3	5.8	30.7	63.5	0.0				0-6											
31666721	20	3.0	37	43	397	569	1892		6.9			15.2	6.7	31.2	62.1	0.0				0-6											
31666722	21	2.9	69	73	502	504	1697		6.5			6.8	15.1	8.5	27.8	56.2	7.5				0-6										
31666723	22	2.7	74	86	503	476	1728		6.6			6.9	14.8	8.7	26.8	58.4	6.1				0-6										
31666724	23	3.0	40	53	286	572	1951		7.0			15.3	4.8	31.2	64.0	0.0				0-6											
31666725	24	2.9	46	61	366	519	1955		7.0			15.0	6.3	28.8	64.9	0.0				0-6											
31666726	25	3.0	54	72	429	551	1910		7.0			15.2	7.2	30.2	62.6	0.0				0-6											
31666727	26	2.8	50	69	289	567	2042		7.1			15.7	4.7	30.1	65.2	0.0				0-6											
31666728	27	2.8	57	241	682	2320		7.0			17.9	3.5	31.8	64.7	0.0																
31666729	28	2.4	33	46	207	542	1765		5.9			6.6	16.7	3.2	27.0	52.8	17.0														
31666730	29	2.1	61	65	282	543	1748		6.3			6.8	15.6	4.6	29.0	56.0	10.4														
31666731	30	2.9	76	80	56	435	507	2031	7.3			15.5	7.2	27.3	65.5	0.0															
31666732	31	3.1	46	62	37	281	561	2052	7.3			15.7	4.6	29.8	65.6	0.0															
31666733	32	4.7	35	52	262	550	2507		6.7			17.8	3.8	25.7	70.5	0.0				0-6											

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Oct 06, 2017

REPORT NUMBER
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IDENTIFICATION
CARLSON FARMS
BRENT CARLSON
HEUERS

ALGONA IA 50511

Lab Number	Sample ID	OM %	Phosphorus			K ppm	Mg ppm	Ca ppm	Na ppm	pH index	Buff	CEC meq/100	Percent Base Saturation			Nitrate Surface			Total S			Zn Mn Fe Cu B Lime Salts			Excess Soluble NH3-N MP3 Color			
			P1 ppm	P2 ppm	Bic ppm								K	Mg	Ca	H	Na	ppm	lbs/A depth	ppm	ppm	ppm	ppm	Rate	ppm	ppm	ppm	
31666735	33	2.8	60	112	55	319	393	2412	7.5		6.2	5.0	20.2	74.8	0.0										0-6			
31666736	34	3.0	45	64	40	320	337	2330	7.5		15.3	5.4	18.4	76.2	0.0										0-6			
31666737	35	3.0	49	60		331	355	2006	6.9		13.8	6.2	21.4	72.4	0.0										0-6			
31666738	36	3.0	37	42		355	327	1883			6.6	6.9	13.9	6.5	19.6	67.7	6.2									0-6		
31666739	37	2.7	30			235	395	2080			6.2	6.7	16.2	3.7	20.3	64.2	11.8									0-6		
31666740	38	2.9	25	34		244	426	2222	7.0		15.3	4.1	23.2	72.7	0.0										0-6			
31666741	39	3.1	32	59		362	388	2085			6.8	14.6	6.4	22.1	71.5	0.0									0-6			
31666742	40	3.2	32	36		303	391	1936			6.6	6.9	14.6	5.3	22.3	66.3	6.1								0-6			
31666743	41	2.9	40	42		349	392	1714			5.7	6.6	16.1	5.6	20.3	53.2	20.9								0-6			
31666744	42	3.2	48	50		304	375	1915			6.5	6.8	14.6	5.3	21.4	65.6	7.7								0-6			
31666745	43	2.7	21	29		268	461	2073			6.4	6.8	16.4	4.2	23.4	63.2	9.2								0-6			
31666746	44	3.0	32	40		278	468	2269			6.9		6.0	4.5	24.4	71.1	0.0								0-6			
31666747	45	2.8	26	36		227	445	2221			6.9		15.4	3.8	24.1	72.1	0.0								0-6			
31666748	46	3.2	43	53		278	342	2034			6.6	6.9	14.6	4.9	19.5	69.7	5.9								0-6			
31666749	47	2.8	66	75		420	355	1947			6.4	6.8	15.2	7.1	19.5	64.0	9.4								0-6			
31666750	48	2.6	36	42		278	454	2025			6.4	6.8	16.0	4.5	23.6	63.3	8.6								0-6			
31666751	49	3.0	33	41		273	403	2242			7.1		15.3	4.6	21.9	73.5	0.0								0-6			
31666752	50	3.0	30	36		291	467	2233			6.5	6.8	17.1	4.4	22.8	65.3	7.5								0-6			
31666753	51	3.1	36	41		268	393	2072			6.6	6.9	15.2	4.5	21.5	68.2	5.8								0-6			
31666754	52	2.9	42	50		368	355	1835			6.5	6.8	14.2	6.6	20.8	64.6	8.0								0-6			
31666755	53	3.1	20	27		340	379	2036			6.9		14.2	6.1	22.2	71.7	0.0								0-6			
31666756	54	2.9	32	40		299	438	2278			7.1		15.8	4.9	23.1	72.0	0.0								0-6			
31666757	55	2.5	21	27		173	469	2070			6.7		14.7	3.0	26.6	70.4	5.8								0-6			
31666758	56	3.0	43	53		357	455	2053			6.9		15.0	6.1	25.3	68.6	0.0								0-6			
31666759	57	3.0	20	21		343	348	1773			6.0	6.7	14.8	5.9	19.6	59.9	14.6								0-6			
31666760	58	2.9	29	31		324	368	1933			6.4	6.8	14.9	5.6	20.6	64.9	8.9								0-6			
31666761	59	2.6	42	47		225	357	1711			6.4	6.8	13.3	4.3	22.4	64.3	9.0								0-6			
31666762	60	3.1	35	42		253	378	1934			7.1		13.5	4.8	23.3	71.9	0.0								0-6			
31666763	61	2.9	32	40		310	457	2192			6.7		15.6	5.1	24.4	70.5	0.0								0-6			
31666764	62	2.9	24	30		292	413	2058			6.5	6.8	15.7	4.8	21.9	65.5	7.8								0-6			
31666765	63	3.0	35	47		293	403	2017			6.4	6.8	15.6	4.8	21.5	64.6	9.1								0-6			
31666766	64	2.7	20	28	19	248	530	2693	7.4		18.5		3.4	23.9	72.7	0.0									0-6			

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.

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Map Unit Legend

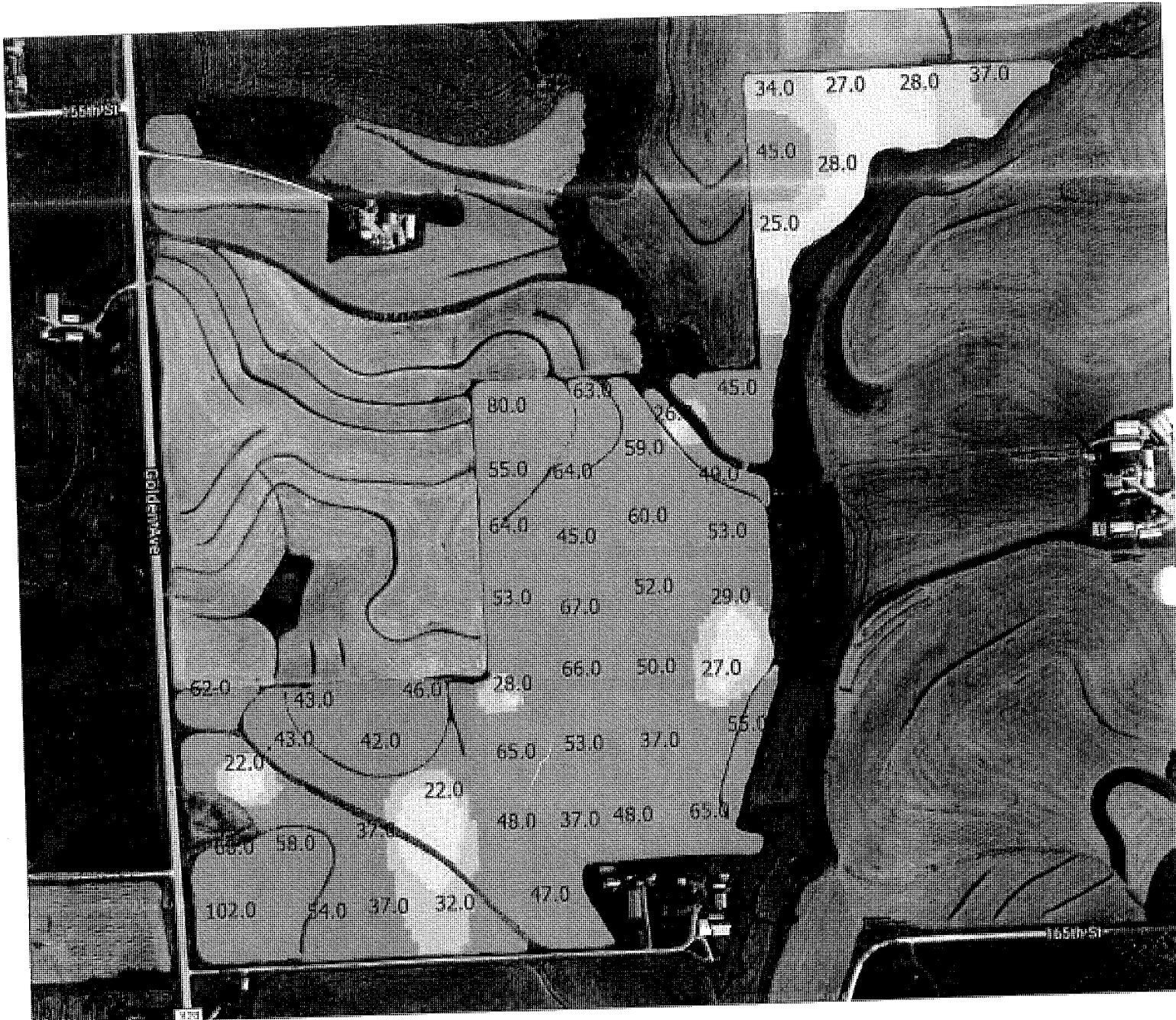
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	1.3	7.9%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	8.4	51.3%
163E2	Fayette silt loam, 14 to 18 percent slopes, moderately eroded	0.0	0.3%
483E2	Frankville silt loam, 20 to 30 inches to limestone, 14 to 18 percent slopes, moderately eroded	1.0	5.9%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	5.7	34.6%
589	Otter silt loam, 0 to 2 percent slopes	0.0	0.0%
Totals for Area of Interest		16.4	100.0%

Soil P1

Home Farm 1



Premier
Grower



Grower : Walz Farms

Field : Keehner

Year : 2016

Average Soil P1 : 47.6 ppm

Minimum Soil P1 : 22.0 ppm

Maximum Soil P1 : 102.0 ppm

Soil P1
(ppm)

Above 35.00 (93.6 ac - 79.3%)
30.00 - 35.00 (13.1 ac - 11.1%)
20.00 - 30.00 (11.3 ac - 9.6%)
15.00 - 20.00 (0.0 ac - 0.0%)
7.00 - 15.00 (0.0 ac - 0.0%)
Below 7.00 (0.0 ac - 0.0%)

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W-6
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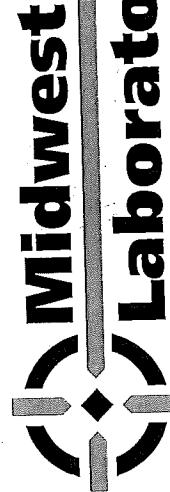
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PREMIER CROP SYSTEMS
DAN FRIEBERG**

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KEEHNER

Lab	Sample ID	OM	Phosphorus			K	Mg	Ca	Na	pH	Buff index	CEC meq/100g	Percent Base Saturation			Nitrate Surface			Total S			NH3-N ppm	MP3 Color		
			P1	P2	Bic								K	Mg	Ca	H	Na	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Number	Number	%	ppm	ppm	ppm								ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
29696924	33	3.7	50	52	220	326	1512	5.8	6.7	13.3	4.2	20.4	56.8	18.6										0-6	
29696925	34	3.4	52	68	253	458	1964	6.1	6.7	16.6	3.9	23.0	59.2	13.9										0-6	
29696926	35	3.4	60	89	297	492	1943	6.4	6.8	16.0	4.8	25.6	60.7	8.9										0-6	
29696927	36	3.4	59	81	279	389	1578	6.3	6.8	13.2	5.4	24.6	59.8	10.2										0-6	
29696928	37	3.1	26	31	271	279	1308	5.4	6.6	13.4	5.2	17.4	48.8	28.6										0-6	
29696929	38	3.4	49	61	351	366	1512	6.0	6.7	13.5	6.7	22.6	56.0	14.7										0-6	
29696930	39	3.1	53	62	282	472	1859	6.0	6.7	16.5	4.4	23.8	56.3	15.5										0-6	
29696931	40	3.0	29	39	207	374	1691	5.8	6.6	14.9	3.6	20.9	56.7	18.8										0-6	
29696932	41	2.8	27	35	140	371	1720	5.9	6.7	14.6	2.5	21.2	58.9	17.4										0-6	
29696933	42	3.5	55	81	230	459	1925	6.6	6.9	14.9	4.0	25.7	64.6	5.7										0-6	
29696934	43	3.4	25	32	213	425	1669	5.7	6.6	15.7	3.5	22.6	53.2	20.7										0-6	
29696935	44	3.3	45	54	237	480	1723	5.7	6.6	16.7	3.6	24.0	51.6	20.8										0-6	
29696936	45	3.1	34	47	205	422	1574	5.3	6.3	17.3	3.0	20.3	45.5	31.2										0-6	
29696937	46	3.1	27	37	201	555	1843	5.9	6.6	17.3	3.0	26.7	53.3	17.0										0-6	
29696938	47	3.1	28	36	182	474	1720	5.6	6.6	17.0	2.7	23.2	50.6	23.5										0-6	
29696939	48	4.1	37	48	311	446	1752	6.1	6.7	15.5	5.1	24.0	56.5	14.4										0-6	
29696940	49	4.4	28	32	373	463	1764	5.7	6.6	17.2	5.6	22.4	51.3	20.7										0-6	
29696941	50	3.1	45	48	298	374	1580	5.4	6.5	16.5	4.6	18.9	47.9	28.6										0-6	

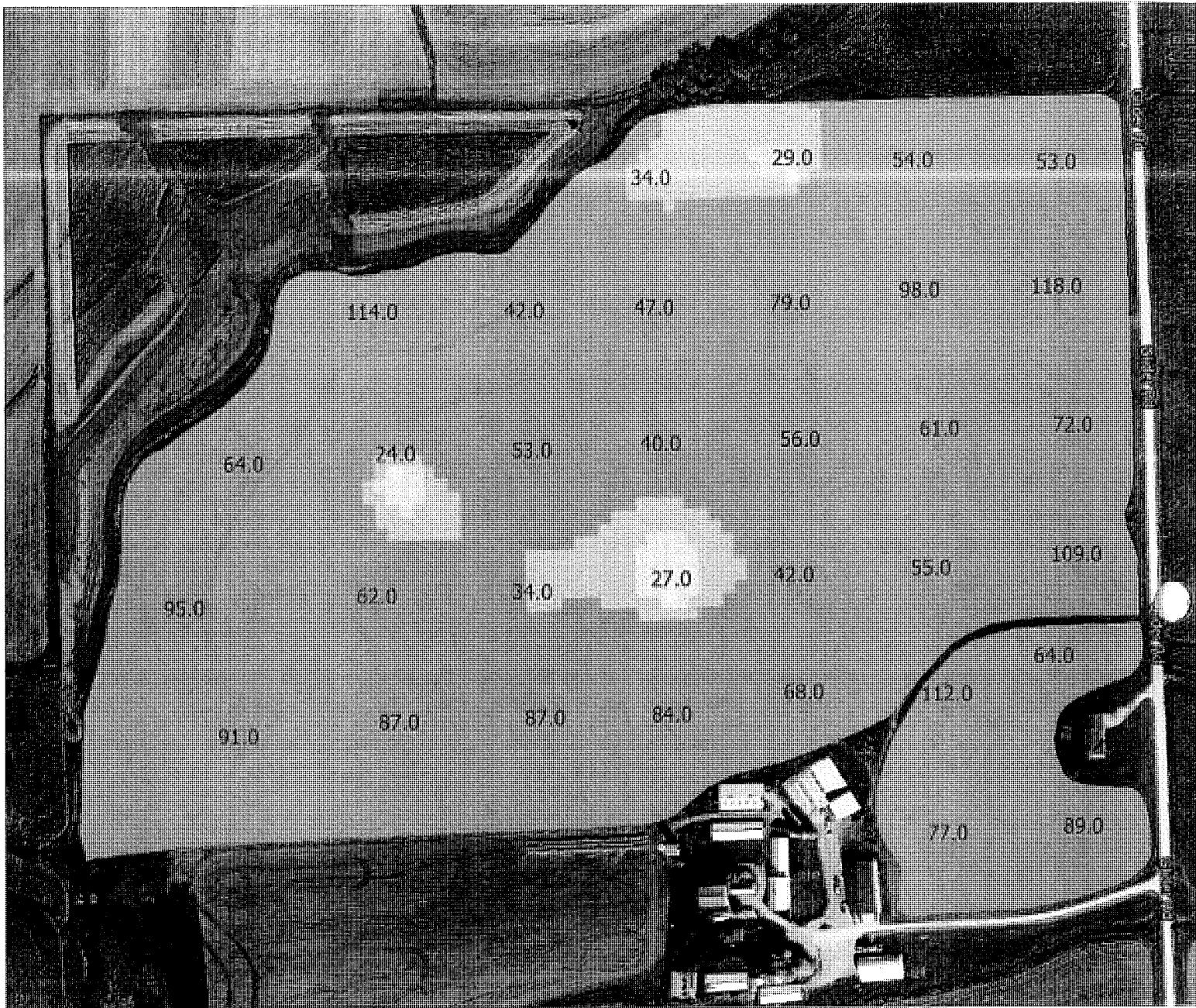
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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
120B	Tama silt loam, driftless, 2 to 6 percent slopes	2.1	2.4%
162B	Downs silt loam, 2 to 6 percent slopes	2.5	2.9%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	28.8	34.1%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	23.2	27.4%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	24.8	29.3%
589	Otter silt loam, 0 to 2 percent slopes	2.9	3.5%
930	Orion silt loam, 0 to 3 percent slopes, occasionally flooded	0.3	0.4%
Totals for Area of Interest		84.7	100.0%

Soil P1



Grower : Walz Farms

Field : Home Farm_N Field

Year : 2016

Average Soil P1 : 67.3 ppm

Minimum Soil P1 : 24.0 ppm

Maximum Soil P1 : 118.0 ppm

Soil P1

(ppm)

Above 35.00 (81.4 ac - 93.5%)
30.00 - 35.00 (4.7 ac - 5.4%)
20.00 - 30.00 (0.9 ac - 1.0%)
15.00 - 20.00 (0.0 ac - 0.0%)
7.00 - 15.00 (0.0 ac - 0.0%)
Below 7.00 (0.0 ac - 0.0%)

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16-116-0133
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IDENTIFICATION

WALZ FARMS

HOME FARM_N FIELD

W-6

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ADVANCED CROP MANAGEMENT

PREMIER CROP SYSTEMS

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Lab Number	Sample ID	OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	pH	Buff index	Percent Base Saturation			Nitrate Surface			S Total			Zn			Mn			Fe			Cu			B			Excess Soluble Salts			NH3-N			MP3 Color		
												K	Mg	Ca	H	Na	ppm	ppm	lbs/A	depth	ppm	ppm	ppm																					
28697069	33	3.2	77	111		208	507	2446		7.0	17.0	3.1	24.9	72.0	0.0				0-6																									

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Soil Map—Clayton County, Iowa
(Home Farm 3)



Map Scale: 1:4,080 if printed on A landscape (11" x 8.5") sheet
0 50 100 150 200 300 600
Map projection: Web Mercator Corner coordinates: WGS84 Edg

Web Soil Survey
National Cooperative Soil Survey

Natural Resources
Conservation Service

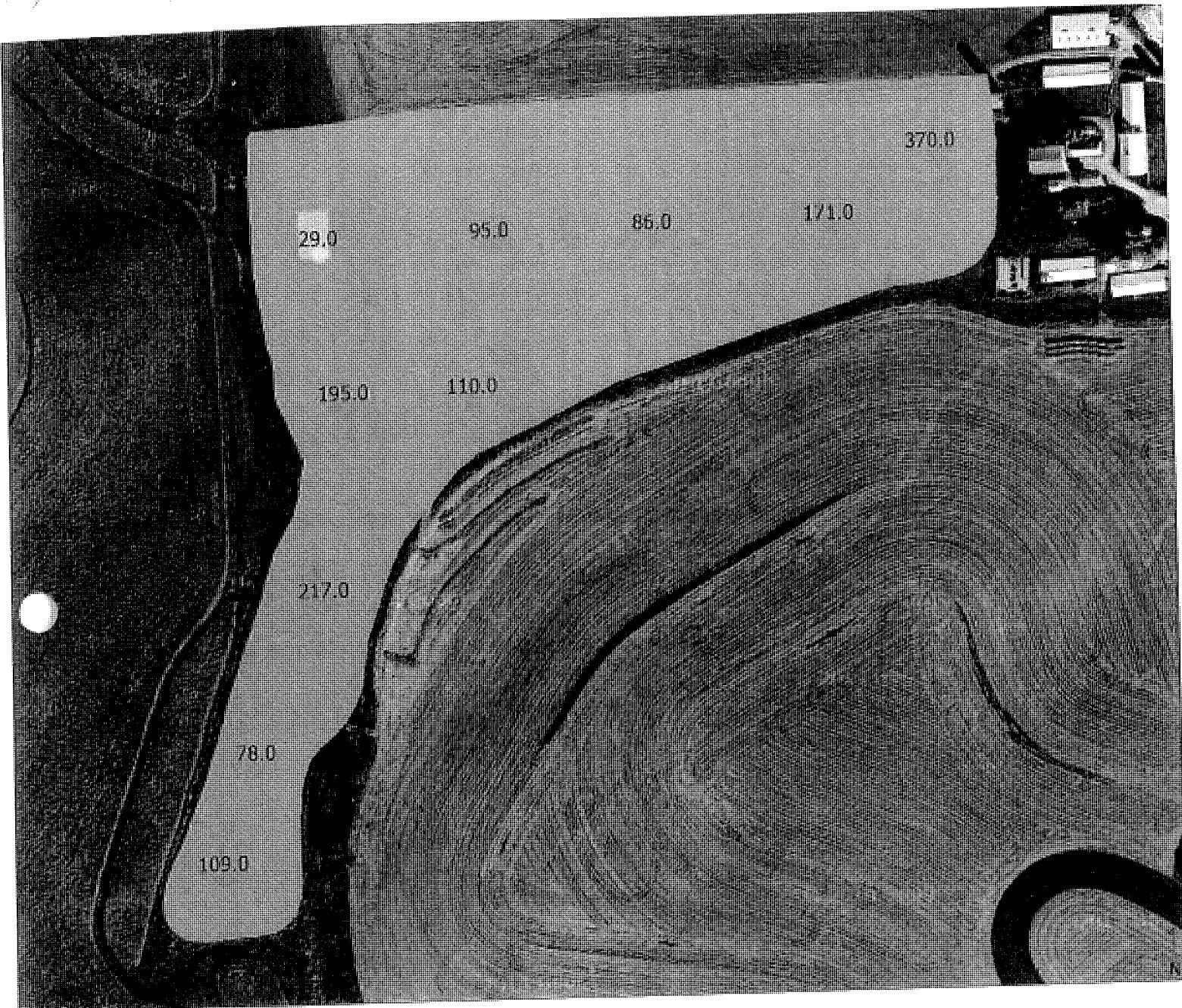
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
98	Huntsville silt loam, 0 to 2 percent slopes	1.2	7.1%
120B	Tama silt loam, driftless, 2 to 6 percent slopes	0.3	1.7%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	3.8	22.1%
589	Otter silt loam, 0 to 2 percent slopes	6.2	36.2%
930	Orion silt loam, 0 to 3 percent slopes, occasionally flooded	1.9	11.0%
1212	Kennebec silt loam, 0 to 2 percent slopes	3.8	21.8%
Totals for Area of Interest		17.2	100.0%





Soil P1



Grower : Walz Farms

Field : Home Farm_Silage

Year : 2016

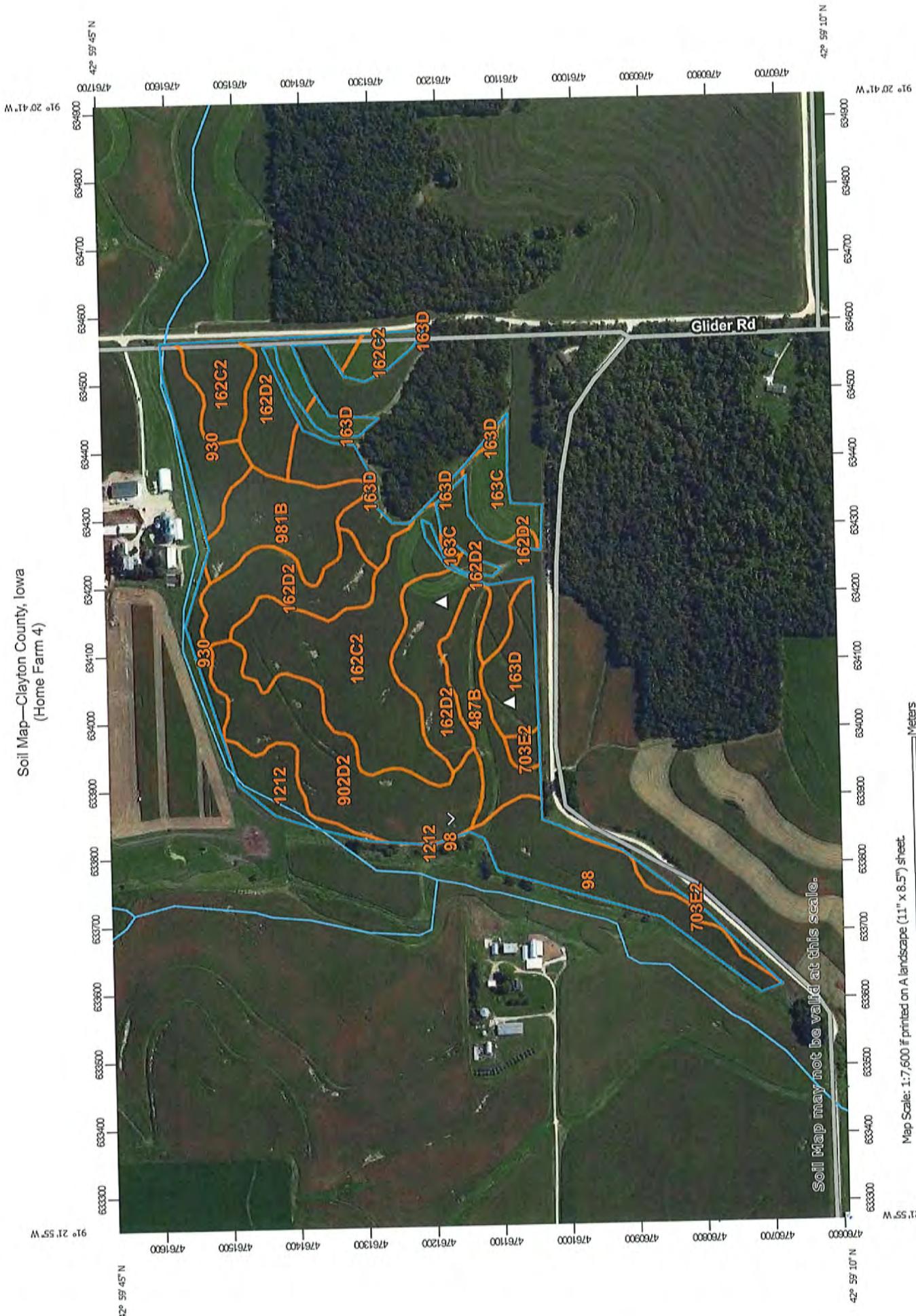
Average Soil P1 : 146.0 ppm

Minimum Soil P1 : 29.0 ppm

Maximum Soil P1 : 370.0 ppm

Soil P1
(ppm)

Above	35.00	(21.3 ac - 99.4%)
30.00 -	35.00	(0.1 ac - 0.6%)
20.00 -	30.00	(0.0 ac - 0.0%)
15.00 -	20.00	(0.0 ac - 0.0%)
7.00 -	15.00	(0.0 ac - 0.0%)
Below	7.00	(0.0 ac - 0.0%)



12/1/2020
Page 1 of 3

Web Soil Survey
National Cooperative Soil Survey

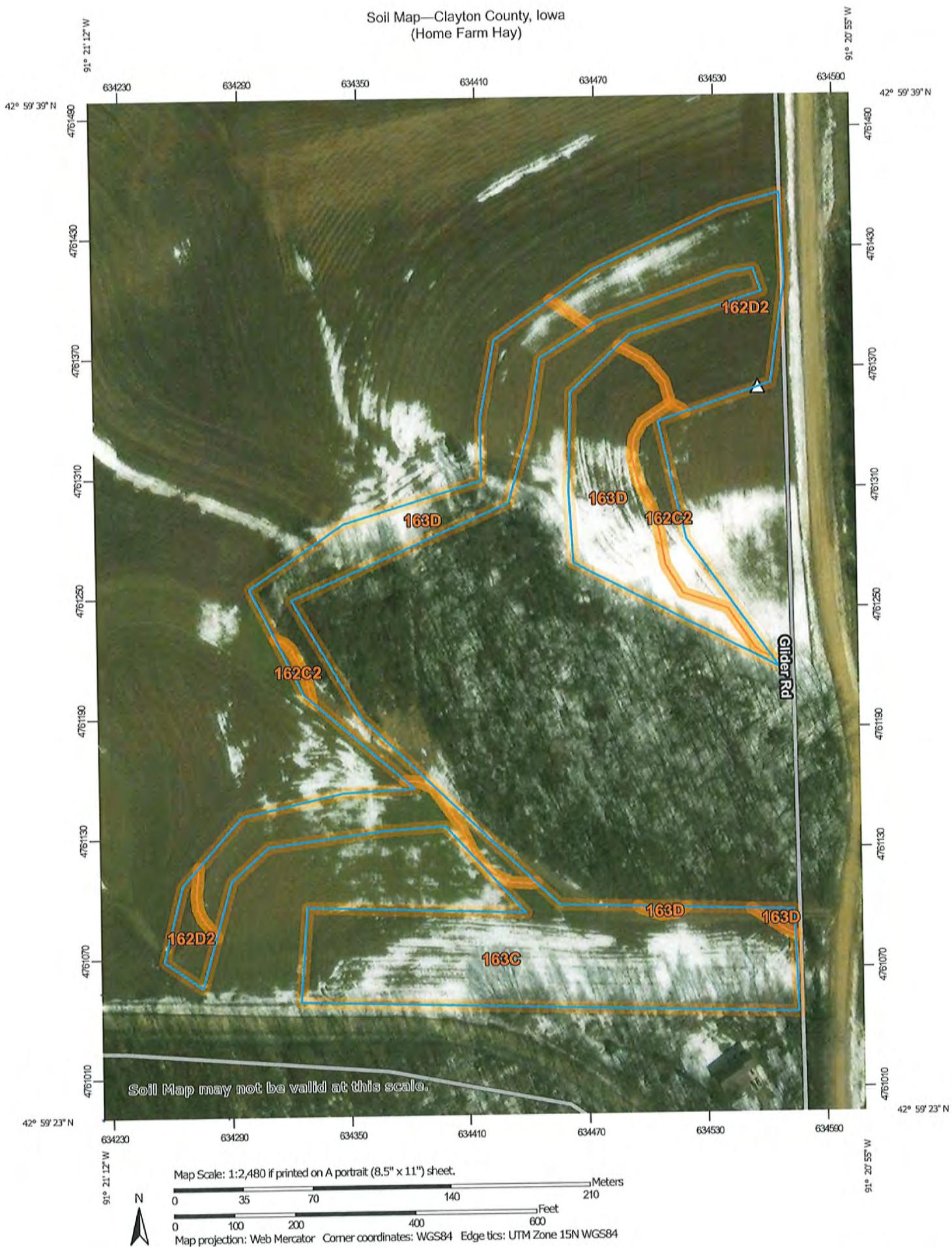
Natural Resources
Conservation Service



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
98	Huntsville silt loam, 0 to 2 percent slopes	7.1	8.9%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	16.9	21.3%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	15.6	19.6%
163C	Fayette silt loam, 5 to 9 percent slopes	2.8	3.5%
163D	Fayette silt loam, 9 to 14 percent slopes	7.2	9.0%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	4.3	5.5%
703E2	Dubuque silt loam, 14 to 18 percent slopes, moderately eroded	1.3	1.7%
902D2	Luana silt loam, 9 to 14 percent slopes, moderately eroded	11.2	14.1%
930	Orion silt loam, 0 to 3 percent slopes, occasionally flooded	4.6	5.8%
981B	Worthen silt loam, 2 to 5 percent slopes	5.9	7.4%
1212	Kennebec silt loam, 0 to 2 percent slopes	2.6	3.2%
Totals for Area of Interest		79.5	100.0%

**Soil Map—Clayton County, Iowa
(Home Farm Hay)**



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	0.4	4.9%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	1.8	19.7%
163C	Fayette silt loam, 5 to 9 percent slopes	3.8	41.9%
163D	Fayette silt loam, 9 to 14 percent slopes	3.0	33.5%
Totals for Area of Interest		9.0	100.0%

Home Hay & Home Farm



Home Farm_S Field



Grower : Walz Farms

Field : Home Farm_S Field

Year : 2016

Operation : Soil Sampling

GPS Count : 41

Area : 89.1 ac

Soil P1



Premier
Growers



Grower : Walz Farms

Field : Home Farm_S Field

Year : 2016

Average Soil P1 : 98.6 ppm

Minimum Soil P1 : 25.0 ppm

Maximum Soil P1 : 260.0 ppm

Soil P1
(ppm)

Above 35.00	(85.1 ac - 95.1%)
30.00 - 35.00	(3.3 ac - 3.7%)
20.00 - 30.00	(1.0 ac - 1.1%)
15.00 - 20.00	(0.0 ac - 0.0%)
7.00 - 15.00	(0.0 ac - 0.0%)
Below 7.00	(0.0 ac - 0.0%)

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6-1116-0132
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HOME FARM_S FIELD

Lab Number	Sample ID	OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	pH	Buff index	CEC index mesg/100	Percent Base Saturation				Nitrate Surface				Total S				Excess Soluble Salts				NH3-N MP3							
													K				Mg				Ca				H				Na				ppm			
													PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM			
296969965	1	2.4	67	90	121	264	1425	6.2	6.8	10.9	2.8	20.2	65.4	11.6																		0-6				
296969966	2	2.6	69	100	129	301	1533	6.0	6.7	12.4	2.7	20.2	61.8	15.3																		0-6				
296969971	3	2.9	67	110	142	315	1774	6.5	6.9	12.9	2.8	20.3	68.8	8.1																		0-6				
296969986	4	2.6	89	132	156	436	1844	6.3	6.8	14.9	2.7	24.4	61.9	11.0																		0-6				
296969988	5	2.4	105	119	183	446	1958	6.6	6.9	14.9	3.1	24.9	65.7	6.3																		0-6				
296969989	6	2.7	133	141	219	416	1762	6.4	6.8	14.1	4.0	24.6	62.5	8.9																		0-6				
296970000	7	3.0	72	106	246	355	1685	6.5	6.9	13.0	4.9	22.8	64.8	7.5																		0-6				
296970011	8	2.4	28	43	156	332	1666	6.1	6.7	13.4	3.0	20.6	62.2	14.2																		0-6				
296970022	9	3.3	37	67	163	405	1850	6.3	6.8	14.5	2.9	23.3	63.8	10.0																		0-6				
296970033	10	3.9	51	83	208	392	1923	6.6	6.9	14.3	3.7	22.8	67.2	6.3																		0-6				
296970044	11	3.2	33	54	142	318	1699	7.1			11.5	3.2	23.0	73.8	0.0																		0-6			
296970055	12	2.8	41	63	207	435	1660	5.8	6.6	15.4	3.4	23.5	53.9	19.2																		0-6				
296970066	13	3.7	57	77	189	370	1591	5.6	6.6	15.0	3.2	20.6	53.0	23.2																		0-6				
296970077	14	3.9	51	69	322	410	1853	6.3	6.8	15.1	5.5	22.6	61.4	10.5																		0-6				
296970088	15	2.9	59	84	188	373	1567	5.9	6.7	13.7	3.5	22.7	57.2	16.6																		0-6				
296970099	16	2.4	27	30	140	415	1621	5.5	6.5	16.1	2.2	21.5	50.3	26.0																		0-6				
296970100	17	2.3	25	36	170	357	1605	5.8	6.7	14.1	3.1	21.1	56.9	18.9																		0-6				
296970111	18	3.4	81	121	188	503	2082	6.0	6.7	17.8	2.7	23.5	58.5	15.3																		0-6				
296970122	19	3.0	46	54	135	377	1665	5.7	6.6	14.9	2.3	21.1	55.9	20.7																		0-6				
296970133	20	3.2	63	78	198	437	1703	5.9	6.7	15.3	3.3	23.8	55.7	17.2																		0-6				
296970144	21	3.7	50	69	216	420	1784	5.3	6.2	18.8	2.9	18.6	47.4	31.1																		0-6				
296970155	22	3.4	132	149	258	450	1823	5.8	6.6	16.7	4.0	22.5	54.6	18.9																		0-6				
296970166	23	2.9	139	142	290	418	1670	6.1	6.7	14.6	5.1	23.9	57.2	13.8																		0-6				
296970177	24	2.8	74	96	194	456	1727	5.3	6.4	18.7	2.7	20.3	46.2	30.8																		0-6				
296970188	25	3.1	90	111	174	418	1703	5.8	6.6	15.3	2.9	22.8	55.7	18.6																		0-6				
296970199	26	3.5	108	135	167	454	1846	5.6	6.6	17.5	2.4	21.6	52.7	23.3																		0-6				
296970200	27	4.8	197	198	245	584	2414	6.1	6.6	20.5	3.1	23.7	58.9	14.3																		0-6				
296970211	28	2.8	98	107	265	456	1803	6.6	6.9	14.4	4.7	26.4	62.6	6.3																		0-6				
296970222	29	2.7	73	95	126	448	1868	6.6	6.9	14.3	2.3	26.1	65.3	6.3																		0-6				
296970233	30	2.9	101	104	200	382	1721	5.9	6.7	14.8	3.5	21.5	58.1	16.9																		0-6				
296970244	31	3.0	124	133	178	490	2012	6.6	6.9	15.5	2.9	26.3	64.9	5.9																		0-6				
296970255	32	3.4	204	205	341	484	2082	6.8	6.8	15.3	5.7	26.4	67.9	0.0																		0-6				

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TODAY'S DATE
Apr 27, 2016

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Apr 27, 2016
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Apr 25, 2016

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ALGONA IA 50511

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IDENTIFICATION

WALZ FARMS

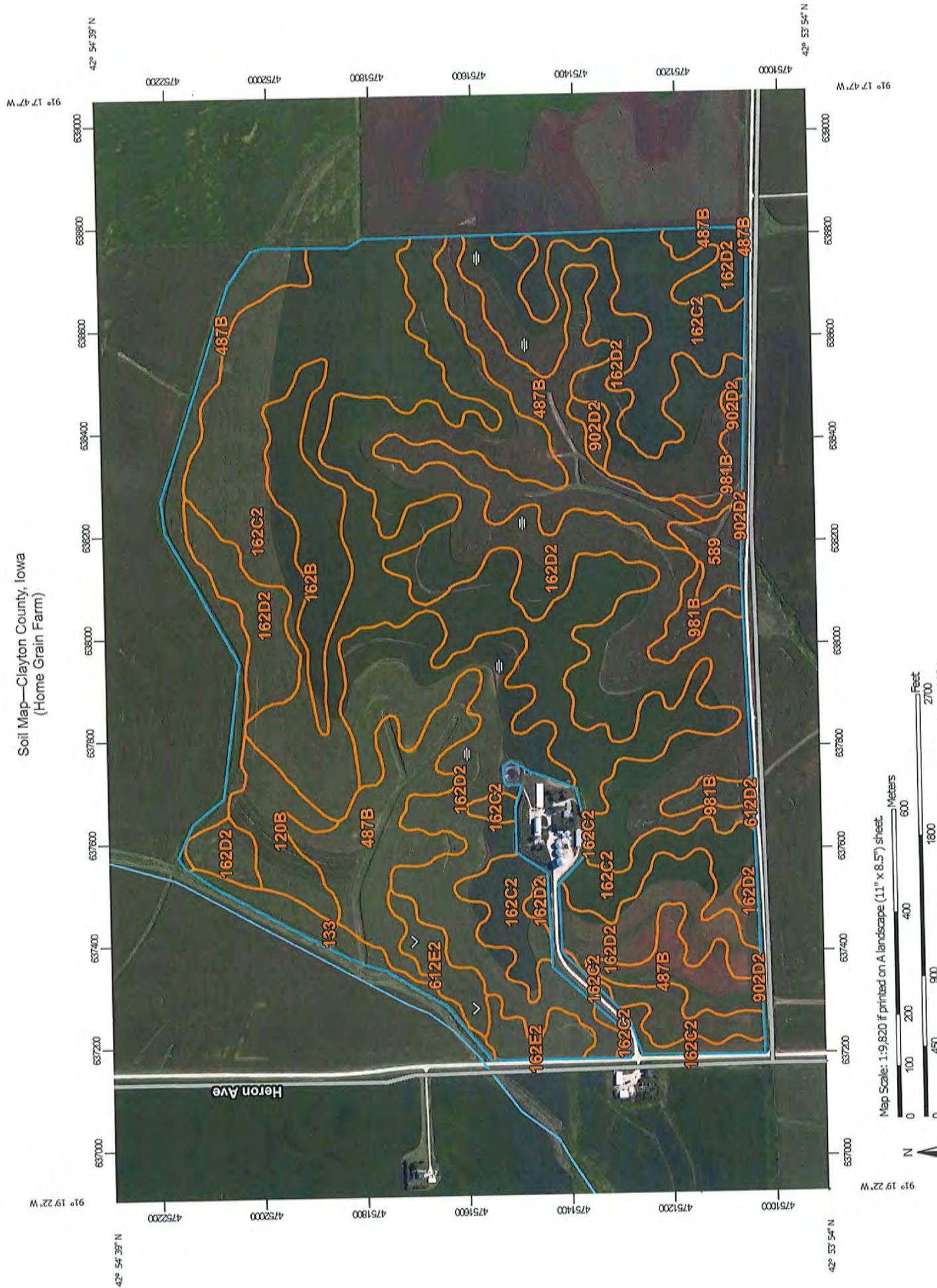
W-6

HOME FARM_S FIELD

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26794

Lab Number	Sample ID	Phosphorus			K	Mg	Ca	Na	pH	Buff index	CEC meq/100	Percent Base Saturation			Nitrate Surface			Total S			Excess Soluble NH3-N			MP3-Color				
		OM %	P1 ppm	P2 ppm								K	Mg	Ca	H	Na	ppm	lbs/A	depth	Ibs/A	S Zn	Mn	Fe	Cu	B	Lime	Salts	N ppm
28697027	33	3.9	161	162	330	461	2032	6.3	6.7	16.5	5.1	23.3	61.6	10.0					0-6									
28697028	34	3.2	97	134	175	342	1645	6.4	6.8	12.6	3.6	22.6	65.3	8.5					0-6									
28697029	35	3.0	77	130	154	591	2219	6.9		16.4	2.4	30.0	67.6	0.0					0-6									
28697030	36	3.4	123	131	252	428	1665	5.5	6.5	16.9	3.8	21.1	49.3	25.8					0-6									
28697031	37	3.0	176	177	299	484	1894	5.8	6.6	17.6	4.4	22.9	53.8	18.9					0-6									
28697033	38	3.0	187	188	276	366	1654	5.9	6.7	14.5	4.9	21.0	57.0	17.1					0-6									
28697034	39	3.0	115	123	232	444	1837	5.6	6.6	17.6	3.4	21.0	52.2	23.4					0-6									
28697035	40	3.4	260	261	388	384	1724	6.5	6.9	13.8	7.2	23.2	62.5	7.1					0-6									
28697036	41	3.6	257	258	330	420	1906	6.3	6.8	15.5	5.5	22.6	61.5	10.4					0-6									

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
120B	Tama silt loam, driftless, 2 to 6 percent slopes	8.4	2.2%
133	Colo silty clay loam, 0 to 2 percent slopes	5.3	1.4%
162B	Downs silt loam, 2 to 6 percent slopes	12.6	3.3%
162C2	Downs silt loam, 5 to 9 percent slopes, moderately eroded	120.0	30.9%
162D2	Downs silt loam, 9 to 14 percent slopes, moderately eroded	160.3	41.3%
162E2	Downs silt loam, 14 to 18 percent slopes, moderately eroded	4.0	1.0%
487B	Otter-Worthen silt loams, 1 to 4 percent slopes	59.3	15.3%
589	Otter silt loam, 0 to 2 percent slopes	3.7	0.9%
612D2	Mottland silt loam, 5 to 14 percent slopes, moderately eroded	0.1	0.0%
612E2	Mottland silt loam, 14 to 18 percent slopes, moderately eroded	4.5	1.2%
902D2	Luana silt loam, 9 to 14 percent slopes, moderately eroded	2.2	0.6%
981B	Worthen silt loam, 2 to 5 percent slopes	7.4	1.9%
Totals for Area of Interest		387.7	100.0%

Home Grain Farm



Grower : Carlson Farms

Field : Home Grain Farm

Year : 2020

Operation : Soil Sampling

GPS Count : 157

Area : 371.7 ac



REPORT NUMBER
20-094-0132
ACCOUNT
54606
COMPLETED DATE
Apr 7, 2020
RECEIVED DATE
Apr 3, 2020

ACM/RPM
PO Box 533

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IDENTIFICATION

CARLSON FARMS
HOME - GRAIN FARM BRENT CARLSO
23334 HERON AVE

Algona IA 50511-0001

Lab Number	Sample ID	Phosphorus						Percent Base Saturation						Nitrate Surface						Total S						Excess Soluble Salts N		MP3 Color		
		OM %	P1 ppm	P2 ppm	Bic ppm	K ppm	Mg ppm	Ca ppm	Na ppm	pH index	Buff meq/100	CEC K	Mg CEC	Ca H	Na	Nitrate ppm	Ibs/A depth	Lbs/A ppm	Total ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Lime ppm	Excess Soluble Salts ppm	N Rate %	Color ppm	
35957084	1	2.6	59	94	49	333	472	2502	7.4	17.3	4.9	22.7	72.4	0.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	
35957085	2	2.6	70	91	318	454	2481	7.2	17.0	4.8	22.3	72.9	0.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6		
35957086	3	2.9	68	96	67	243	380	3047	7.7	19.0	3.9	16.7	80.0	0.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	
35957087	4	2.6	68	114	65	288	418	2536	7.6	16.9	4.4	20.6	75.0	0.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	
35957088	5	1.6	65	68	273	443	2041	7.0	14.6	4.8	25.3	69.9	0.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	
35957089	6	2.7	65	84	262	444	2181	7.1	15.3	4.4	24.2	71.4	0.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	
35957090	7	3.5	68	132	73	364	612	2629	7.5	19.2	4.9	26.6	68.5	0.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	
35957091	8	2.2	48	94	244	471	2081	6.2	6.7	17.0	3.7	23.1	61.2	12.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957092	9	2.6	45	60	321	422	2010	5.7	6.6	18.2	4.5	19.3	55.2	21.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957093	10	3.0	62	97	360	458	2361	7.2	16.5	5.6	23.1	71.3	0.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	
35957094	11	2.6	42	68	214	568	2286	6.4	6.7	18.4	3.0	25.7	62.1	9.2	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957095	12	2.3	38	49	212	486	2144	6.6	6.9	16.3	3.3	24.8	65.8	6.1	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957097	13	2.9	37	50	234	377	1891	6.0	6.7	15.5	3.9	20.3	61.0	14.8	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957098	14	3.1	54	57	261	373	1791	5.5	6.5	17.2	3.9	18.1	52.1	25.9	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957099	15	2.5	67	82	334	379	1864	6.1	6.7	15.5	5.5	20.4	60.1	14.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957100	16	2.9	45	63	225	512	2226	6.6	6.9	17.0	3.4	25.1	65.5	6.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957101	17	3.3	36	47	328	356	1857	5.7	6.6	16.6	5.1	17.9	55.9	21.1	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957102	18	2.3	48	62	361	389	1854	5.8	6.6	16.6	5.6	19.5	55.8	19.1	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957103	19	2.7	61	76	380	423	1960	5.8	6.6	17.7	5.5	19.9	55.4	19.2	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957104	20	4.4	67	107	406	458	2555	6.4	6.7	19.3	5.4	19.8	66.2	8.6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957105	21	4.2	55	65	245	548	2750	6.4	6.7	20.8	3.0	22.0	66.1	8.9	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957106	22	2.5	24	31	163	403	2080	6.2	6.7	16.1	2.6	20.9	64.6	11.9	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957107	23	3.6	38	49	335	393	2109	6.2	6.7	16.7	5.1	19.6	63.1	12.2	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957108	24	4.1	43	55	248	333	1770	6.0	6.7	14.5	4.4	19.1	61.0	15.5	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957109	25	3.2	66	69	483	397	2207	6.2	6.7	17.7	7.0	18.7	62.3	12.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957110	26	3.2	58	63	376	333	1799	5.9	6.7	15.3	6.3	18.1	58.8	16.8	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957111	27	2.0	48	64	340	322	1649	5.6	6.6	15.4	5.7	17.4	53.5	23.4	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957112	28	2.7	58	90	409	317	1734	5.8	6.6	15.3	6.9	17.3	56.7	19.1	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957113	29	2.8	70	104	336	422	2348	6.8	6.6	16.1	5.4	21.8	72.8	0.0	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957114	30	3.3	56	81	266	489	2409	6.4	6.7	18.5	3.7	22.0	65.1	9.2	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957115	31	3.1	62	66	309	418	1950	6.3	6.8	15.6	5.1	22.3	62.5	10.1	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6
35957116	32	3.1	54	67	355	423	1959	6.1	6.7	16.5	5.5	21.4	59.4	13.7	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6

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