

REPORT NUMBER

**19-333-1045**

COMPLETED DATE

**Dec 4, 2019**

RECEIVED DATE

**Nov 29, 2019**

ACCOUNT

**53300**

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TODAY'S DATE

**Dec 04, 2019****SAM WORTMANN**

IDENTIFICATION

**HARTINGTON**
**42918 163rd St**  
**Bradley SD 57217-5105**
**SOIL ANALYSIS REPORT**

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O. I.	PHOSPHORUS			NEUTRAL AMMONIUM ACETATE(EXCHANGEABLE)								pH		CATION EXCHANGE CAPACITY C.E.C.	PERCENT BASE SATURATION (COMPUTED)				
			P <sub>1</sub> (WEAK BRAY)	P <sub>2</sub> (STRONG BRAY)	OLSEN BICARBONATE P	POTASSIUM		MAGNESIUM		CALCIUM		SODIUM		SOIL pH 1:1	BUFFER INDEX		% K	% Mg	% Ca	% H	% Na
						1:7	RATE	ppm	RATE	ppm	RATE	ppm	RATE								
*355*		percent RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE			meq/100g						
35031	SE 4 B	2.9 M	22 H	87 VH	15 M	120 M	210 H	3072 VH					7.5		17.4	1.8	10.1	88.1	0.0		
35032	SE 5 HILLS	1.8 L	29 H	65 VH		80 L	137 L	3093 VH					7.2		16.8	1.2	6.8	92.0	0.0		
35033	S 6 HILLS	3.1 M	4 VL	50 H	25 VH	234 H	183 M	3895 VH					8.0		21.6	2.8	7.1	90.1	0.0		
35034	SW 7 HILL	2.1 L	4 VL	52 H	20 H	172 H	85 L	2642 VH					7.9		14.4	3.1	4.9	92.0	0.0		
35035	S 8 LOW	3.6 H	49 VH	121 VH		221 H	163 M	3846 VH					7.8		21.2	2.7	6.4	90.9	0.0		
35036	ALFALFA 9	3.1 M	2 VL	16 L	7 L	136 L	164 L	4110 VH					8.0		22.3	1.6	6.1	92.3	0.0		
35037	NW HILLS 15	4.4 H	3 VL	4 VL	22 H	177 H	93 L	3183 VH					7.8		17.1	2.7	4.5	92.8	0.0		
35038	NW R 1	5.2 VH	16 M	58 H	27 VH	232 H	177 L	4113 VH					7.5		22.6	2.6	6.5	90.9	0.0		
35039	NE E 2	3.5 M	55 VH	118 VH		279 VH	173 M	3879 VH					7.6		21.6	3.3	6.7	90.0	0.0		
35040	E C 3	3.4 M	39 VH	80 VH		329 VH	255 VH	2739 H					6.5	6.8	18.1	4.7	11.7	75.7	7.9		

LAB NUMBER	NITRATE-N (FIA)										SULFUR S ICAP		ZINC Zn DTPA		MANGANESE Mn DTPA		IRON Fe DTPA		COPPER Cu DTPA		BORON B SORB. DTPA		EXCESS LIME RATE	SOLUBLE SALTS 1:1	
	SURFACE			SUBSOIL 1			SUBSOIL 2			Total lbs/A	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE		mmhos/ cm	RATE
	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)																
*355*																									
35031			0-6								6	VL	1.3	M	5	L	19	H	1.0	M	0.9	M			
35032			0-6								7	L	1.0	L	4	VL	24	H	0.7	L	0.6	L			
35033			0-6								8	L	1.6	M	4	VL	9	L	0.9	M	1.0	M			
35034			0-6								7	L	1.4	M	3	VL	10	L	0.6	L	0.8	M			
35035			0-6								6	VL	1.7	M	4	VL	15	M	0.9	M	1.2	M			
35036			0-6								8	L	0.8	L	3	VL	13	M	0.9	M	1.3	H			
35037			0-6								16	M	1.5	M	4	VL	9	L	0.8	L	1.0	M			
35038			0-6								16	M	1.3	M	5	L	19	H	0.9	M	1.0	M			
35039			0-6								11	L	2.0	M	4	VL	19	H	1.2	M	1.2	M			
35040			0-6								10	L	2.0	M	10	M	33	VH	1.4	H	0.8	M			

REV.10/17

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**HARTINGTON****42918 163rd St****Bradley SD 57217-5105****SOIL ANALYSIS REPORT**

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O. I.	PHOSPHORUS			NEUTRAL AMMONIUM ACETATE (EXCHANGEABLE)				pH		CATION EXCHANGE CAPACITY C.E.C. meq/100g	PERCENT BASE SATURATION (COMPUTED)				
			P <sub>1</sub> (WEAK 1:7 BRAY)	P <sub>2</sub> (STRONG 1:7 BRAY)	OLSEN BICARBONATE P	POTASSIUM	MAGNESIUM	CALCIUM	SODIUM				% K	% Mg	% Ca	% H	% Na
			percent RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	ppm RATE	SOIL pH 1:1	BUFFER INDEX						
*355*																	
35041	SWW SW10	3.5 M	5 VL	23 M	8 L	114 L	111 L	4064 VH		7.9		21.5	1.4	4.3	94.3	0.0	
35042	NEW 11	3.7 H	52 VH	89 VH		138 L	155 L	4072 VH		7.5		22.0	1.6	5.9	92.5	0.0	

LAB NUMBER	NITRATE-N (FIA)										SULFUR S ICAP		ZINC Zn DTPA		MANGANESE Mn DTPA		IRON Fe DTPA		COPPER Cu DTPA		BORON B SORB. DTPA		EXCESS LIME RATE	SOLUBLE SALTS 1:1 mmhos/ cm		
	SURFACE			SUBSOIL 1			SUBSOIL 2			Total lbs/A																
	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)																	
*355*			0-6																							
35041			0-6								7	L	0.9	L	4	VL	12	M	0.8	L	1.4	H				
35042			0-6								14	M	3.2	H	3	VL	14	M	0.8	L	1.0	M				

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IDENTIFICATION

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**42918 163rd St**  
**Bradley SD 57217-5105**

## SOIL FERTILITY RECOMMENDATIONS (POUNDS PER ACRE)

YOUR SAMPLE NUMBER (LAB NUMBER)	INTENDED CROP	YIELD GOAL	PREVIOUS CROP	SOIL AMENDMENTS				N NITROGEN	P <sub>2</sub> O <sub>5</sub> PHOSPHATE	K <sub>2</sub> O POTASH	Mg MAGNE- SIUM	S SULFUR	Zn ZINC	Mn MANGA- NESE	Fe IRON	Cu COPPER	B BORON
				LIME LBS/A OF	LIME TON	GYPSUM TONS/A	ELEMENTAL SULFUR LBS/A										
SE 4 B (35535031)	SORGHUM	80.0	ALFALFA - ton					20	20	60	--	9	1.2	1.9	--	--	--
	OATS - bu	120.0	SORGHUM					110	30	95	--	27	3.0	4.2	--	0.9	--
	CORN - bu	225.0	CORN - bu					255	60	130	--	27	3.7	4.8	--	0.8	0.5
SE 5 HILLS (35535032)	SORGHUM	80.0	ALFALFA - ton					30	15	75	--	8	1.8	2.2	--	--	--
	OATS - bu	120.0	SORGHUM					120	20	115	--	26	4.3	4.8	--	1.7	1.0
	CORN - bu	225.0	CORN - bu					260	40	160	--	26	5.4	5.5	--	1.5	1.3
S 6 HILLS (35535033)	CORN - bu	220.0	SORGHUM					245	45	45	--	23	2.1	5.3	--	1.0	--
	OATS - bu	130.0	CORN - bu					120	25	35	--	26	1.8	5.2	--	1.3	--
	CORN - bu	230.0	OATS - bu					260	45	45	--	25	2.2	5.6	--	1.0	--
SW 7 HILL (35535034)	CORN - bu	210.0	OATS - bu					240	35	85	22	24	3.0	5.7	--	1.7	0.7
	OATS - bu	130.0	CORN - bu					125	25	70	22	28	2.8	5.9	--	2.3	0.7
	ALFALFA - ton	5.0	OATS - bu					--	25	135	22	21	1.8	3.5	--	1.3	1.0
S 8 LOW (35535035)	CORN - bu	230.0	SORGHUM					260	--	55	--	28	1.6	5.6	--	1.0	--
	OATS - bu	140.0	CORN - bu					130	--	45	--	32	1.5	5.6	--	1.4	--
	CORN - bu	210.0	OATS - bu					230	--	55	--	25	1.5	5.1	--	0.9	--
ALFALFA 9 (35535036)	ALFALFA - ton	5.0	ALFALFA - ton					--	105	175	--	20	3.6	3.5	--	0.8	--
	CORN - bu	220.0	ALFALFA - ton					195	155	115	--	23	6.3	6.0	--	1.0	--
	SORGHUM	80.0	CORN - bu					65	55	55	--	8	2.1	2.5	--	--	--
NW HILLS 15 (35535037)	ALFALFA - ton	5.0	CORN - bu					--	55	130	22	10	1.5	3.1	--	0.9	0.7
	OATS - bu	120.0	CORN - bu					100	45	65	22	12	2.1	4.8	--	1.5	--
	CORN - bu	210.0	OATS - bu					225	80	85	22	11	2.5	5.1	--	1.2	--
NW R 1 (35535038)	ALFALFA - ton	5.0	CORN - bu					--	15	70	--	10	2.1	2.7	--	0.8	0.7
	CORN - bu	210.0	ALFALFA - ton					170	20	45	--	11	3.5	4.5	--	0.9	--
	OATS - bu	120.0	CORN - bu					95	15	35	--	12	3.0	4.2	--	1.2	--
E C 3 (35535040)	SORGHUM	80.0	CORN - bu					70	--	--	--	7	--	--	--	--	--
	CORN - bu	260.0	SORGHUM					300	--	--	--	24	--	1.6	--	--	0.9
	OATS - bu	120.0	CORN - bu					110	--	--	--	21	--	1.2	--	--	0.6
SWW SW10 (35535041)	CORN - bu	190.0	OATS - bu					205	125	115	15	22	5.0	4.6	--	1.0	--
	OATS - bu	100.0	CORN - bu					80	65	80	15	21	3.9	4.0	--	1.2	--
	ALFALFA - ton	5.0	CORN - bu					--	100	200	15	21	3.3	3.1	--	0.9	--

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YOUR SAMPLE NUMBER (LAB NUMBER)	INTENDED CROP	YIELD GOAL	PREVIOUS CROP	SOIL AMENDMENTS				N NITROGEN	P <sub>2</sub> O <sub>5</sub> PHOSPHATE	K <sub>2</sub> O POTASH	Mg MAGNE- SIUM	S SULFUR	Zn ZINC	Mn MANGA- NESE	Fe IRON	Cu COPPER	B BORON
				LIME LBS/A OF	LIME TON	GYP-SUM TONS/A	ELEMENTAL SULFUR LBS/A										
NEW 11	CORN - bu	190.0	OATS - bu					205	--	100	--	13	--	5.2	--	1.0	--
	OATS - bu	100.0	CORN - bu					80	--	70	--	12	--	4.5	--	1.2	--
(35535042)	ALFALFA - ton	5.0	CORN - bu					--	--	175	--	12	--	3.5	--	0.9	0.7

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