

REPORT NUMBER

**20-252-0231**

COMPLETED DATE  
**Sep 11, 2020**

RECEIVED DATE  
**Sep 8, 2020**

ACCOUNT  
**46964**



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TODAY'S DATE  
**Sep 11, 2020**

**Basin Fertilizer  
 Chuck Schlagel  
 204 Montana Ave.  
 Basin WY 82410**

IDENTIFICATION  
**WERBELOW BROTHERS**

**SOIL ANALYSIS REPORT**

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I. percent RATE	PHOSPHORUS						NEUTRAL AMMONIUM ACETATE (EXCHANGEABLE)				pH		CATION EXCHANGE CAPACITY C.E.C. meq/100g	PERCENT BASE SATURATION (COMPUTED)								
			P <sub>1</sub> (WEAK BRAY) 1:7		P <sub>2</sub> (STRONG BRAY) 1:7		OLSEN BICARBONATE P		POTASSIUM K		MAGNESIUM Mg		CALCIUM Ca			SODIUM Na		SOIL pH 1:1	BUFFER INDEX	% K	% Mg	% Ca	% H	% Na
			ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE		ppm	RATE							
*363*																								
74378	Field 1	0.7 VL	4 VL	96 VH	18 H	214 VH	375 VH	2647 H	147 VH	8.3		17.5	3.1	17.9	75.3	0.0	3.7							
74379	Field 2	1.1 VL	19 M	130 VH	15 M	303 VH	567 VH	2959 H	163 VH	8.2		21.0	3.7	22.5	70.4	0.0	3.4							
74380	Field 5&6	1.2 VL	13 L	121 VH	13 M	302 VH	681 VH	3179 H	177 VH	8.3		23.1	3.4	24.6	68.7	0.0	3.3							
74381	Field 7	1.5 VL	17 M	138 VH	16 H	305 VH	757 VH	3122 M	232 VH	8.2		23.7	3.3	26.6	65.8	0.0	4.3							
74382	Field 8	1.4 VL	31 VH	125 VH	14 M	312 VH	647 VH	3104 H	150 VH	8.2		22.4	3.6	24.1	69.4	0.0	2.9							
74383	Field 12	1.7 L	29 H	141 VH	11 M	365 VH	672 VH	3243 H	130 H	8.3		23.3	4.0	24.0	69.6	0.0	2.4							
74384	Field 18	1.8 L	40 VH	144 VH	24 VH	384 VH	774 VH	3643 H	188 VH	8.1		26.5	3.7	24.3	68.9	0.0	3.1							
74385	Field 19	2.0 L	28 H	137 VH	18 H	383 VH	875 VH	3592 M	277 VH	8.2		27.4	3.6	26.6	65.4	0.0	4.4							
74386	Field 20	1.7 L	35 VH	138 VH	25 VH	368 VH	791 VH	3352 M	216 VH	8.4		25.2	3.7	26.2	66.4	0.0	3.7							
74387	Field 21	2.0 L	14 L	135 VH	19 H	306 VH	683 VH	3276 H	185 VH	8.2		23.7	3.3	24.0	69.3	0.0	3.4							

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 RATE	
	SURFACE			SUBSOIL 1			SUBSOIL 2			Total lbs/A	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE	ppm	RATE			
	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)																
*363*																									
74378	7	13	0-6							13	69	VH	2.9	M	4	VL	11	M	0.7	L	1.4	H	M	0.5	L
74379	29	52	0-6							52	63	VH	2.1	M	3	VL	8	L	0.7	L	1.4	H	M	0.6	L
74380	18	32	0-6							32	47	VH	2.0	M	3	VL	9	L	0.7	L	1.3	H	M	0.6	L
74381	17	31	0-6							31	102	VH	1.3	M	3	VL	10	L	0.7	L	1.7	H	M	0.8	L
74382	15	27	0-6							27	38	VH	1.9	M	3	VL	8	L	0.7	L	1.3	H	M	0.5	L
74383	15	27	0-6							27	29	VH	1.5	M	3	VL	7	L	0.7	L	1.3	H	M	0.5	L
74384	28	50	0-6							50	74	VH	2.8	M	3	VL	9	L	0.9	M	1.7	H	M	0.8	L
74385	34	61	0-6							61	96	VH	1.4	M	2	VL	7	L	0.8	L	2.5	VH	M	0.8	L
74386	7	13	0-6							13	59	VH	1.8	M	3	VL	8	L	0.9	M	2.8	VH	M	0.6	L
74387	16	29	0-6							29	77	VH	2.7	M	3	VL	10	L	0.9	M	1.7	H	M	0.6	L

REV.10/17

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Chuck Schlagel  
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Basin WY 82410**

IDENTIFICATION  
**WERBELOW BROTHERS**

**SOIL ANALYSIS REPORT**

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I. percent RATE	PHOSPHORUS					NEUTRAL AMMONIUM ACETATE (EXCHANGEABLE)				pH		CATION EXCHANGE CAPACITY C.E.C. meq/100g	PERCENT BASE SATURATION (COMPUTED)						
			P <sub>1</sub> (WEAK BRAY) 1:7		P <sub>2</sub> (STRONG BRAY) 1:7		OLSEN BICARBONATE P	K	Mg		Ca		Na		SOIL pH 1:1	BUFFER INDEX	% K	% Mg	% Ca	% H	% Na
			ppm	RATE	ppm	RATE			ppm	RATE	ppm	RATE									
*363*																					
74388	Field 22	1.2 VL	23 H	122 VH	19 H	311 VH	674 VH	3305 H	161 VH	8.3		23.6	3.4	23.8	69.8	0.0	3.0				
74389	Field 122	1.6 L	12 L	97 VH	13 M	293 VH	692 VH	3255 H	238 VH	8.2		23.8	3.2	24.2	68.3	0.0	4.3				

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 RATE
	SURFACE			SUBSOIL 1			SUBSOIL 2			Total lbs/A								
	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)	ppm	lbs/A	depth (in)									
*363*																		
74388	14	25	0-6							25	46 VH	2.7 M	3 VL	9 L	0.8 L	1.3 H	M	0.6 L
74389	29	52	0-6							52	99 VH	1.3 M	3 VL	8 L	0.9 M	1.5 H	M	0.8 L

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Basin WY 82410**

IDENTIFICATION

**WERBELOW BROTHERS****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 MAGNESIUM	S SULFUR	Zn ZINC	Mn MANGANESE	Fe IRON	Cu COPPER	B BORON	
				LIME LBS/A OF	LIME TON	GYPSUM TONS/A	ELEMENTAL SULFUR LBS/A											
Field 1 (36374378)	CORN - bu	200.0	BARLEY MALT - bu			0.3	OR	50	240	40	55	--	--	--	4.8	--	1.3	--
	ALFALFA - ton	5.0	BARLEY MALT - bu			0.3	OR	50	--	30	90	--	--	--	3.1	--	1.1	--
	BARLEY MALT - bu	120.0	BARLEY MALT - bu			0.3	OR	50	125	25	50	--	--	--	4.0	--	1.6	--
Field 2 (36374379)	CORN - bu	200.0	BARLEY MALT - bu			0.3	OR	50	195	55	--	--	--	5.5	1.0	1.3	--	--
	ALFALFA - ton	5.0	BARLEY MALT - bu			0.3	OR	50	--	45	--	--	--	3.5	--	1.1	--	--
	BARLEY MALT - bu	120.0	BARLEY MALT - bu			0.3	OR	50	85	35	--	--	--	4.5	1.1	1.6	--	--
Field 5&6 (36374380)	CORN - bu	200.0	DRY BEANS - lbs			0.3	OR	50	205	70	--	--	--	5.5	--	1.3	--	--
	ALFALFA - ton	5.0	DRY BEANS - lbs			0.3	OR	50	--	50	--	--	--	3.5	--	1.1	--	--
	BARLEY MALT - bu	120.0	DRY BEANS - lbs			0.3	OR	50	95	45	--	--	--	4.5	--	1.6	--	--
Field 7 (36374381)	CORN - bu	200.0	BARLEY MALT - bu			0.5	OR	90	215	50	--	--	--	3.3	5.5	--	1.3	--
	ALFALFA - ton	5.0	BARLEY MALT - bu			0.5	OR	90	--	40	--	--	--	2.1	3.5	--	1.1	--
	BARLEY MALT - bu	120.0	BARLEY MALT - bu			0.5	OR	90	105	35	--	--	--	3.0	4.5	--	1.6	--
Field 8 (36374382)	CORN - bu	200.0	BARLEY MALT - bu			0.2	OR	30	220	30	--	--	--	0.4	5.5	1.0	1.3	--
	ALFALFA - ton	5.0	BARLEY MALT - bu			0.2	OR	30	--	25	--	--	--	0.3	3.5	--	1.1	--
	BARLEY MALT - bu	120.0	BARLEY MALT - bu			0.2	OR	30	110	20	--	--	--	0.4	4.5	1.1	1.6	--
Field 12 (36374383)	CORN - bu	200.0	BARLEY MALT - bu			0.1	OR	20	220	35	--	--	--	2.4	5.5	1.5	1.3	--
	ALFALFA - ton	5.0	BARLEY MALT - bu			0.1	OR	20	--	25	--	--	--	1.5	3.5	--	1.1	--
	BARLEY MALT - bu	120.0	BARLEY MALT - bu			0.1	OR	20	105	20	--	--	--	2.1	4.5	1.6	1.6	--
Field 18 (36374384)	CORN - bu	200.0	DRY BEANS - lbs			0.3	OR	50	185	--	--	--	--	5.5	--	0.9	--	--
	ALFALFA - ton	5.0	DRY BEANS - lbs			0.3	OR	50	--	--	--	--	--	3.5	--	0.8	--	--
	BARLEY MALT - bu	120.0	DRY BEANS - lbs			0.3	OR	50	75	--	--	--	--	4.5	--	1.1	--	--
Field 19 (36374385)	CORN - bu	200.0	DRY BEANS - lbs			0.7	OR	110	175	35	--	--	--	2.8	6.1	1.5	1.1	--
	ALFALFA - ton	5.0	DRY BEANS - lbs			0.7	OR	110	--	25	--	--	--	1.8	3.8	--	0.9	--
	BARLEY MALT - bu	120.0	DRY BEANS - lbs			0.7	OR	110	60	25	--	--	--	2.5	5.0	1.6	1.3	--
Field 20 (36374386)	CORN - bu	200.0	BARLEY MALT - bu			0.4	OR	70	230	25	--	--	--	0.9	5.5	1.0	0.9	--
	ALFALFA - ton	5.0	BARLEY MALT - bu			0.4	OR	70	--	20	--	--	--	0.5	3.5	--	0.8	--
	BARLEY MALT - bu	120.0	BARLEY MALT - bu			0.4	OR	70	120	15	--	--	--	0.8	4.5	1.1	1.1	--
Field 21 (36374387)	CORN - bu	200.0	DRY BEANS - lbs			0.3	OR	60	205	40	--	--	--	5.5	--	0.9	--	--
	ALFALFA - ton	5.0	DRY BEANS - lbs			0.3	OR	60	--	30	--	--	--	3.5	--	0.8	--	--
	BARLEY MALT - bu	120.0	DRY BEANS - lbs			0.3	OR	60	95	25	--	--	--	4.5	--	1.1	--	--

REV. 12/03

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**SOIL FERTILITY RECOMMENDATIONS (POUNDS PER ACRE)**

YOUR SAMPLE NUMBER <small>(LAB NUMBER)</small>	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 MAGNESIUM	S SULFUR	Zn ZINC	Mn MANGANESE	Fe IRON	Cu COPPER	B BORON	
				LIME LBS/A OF	LIME TON	GYPSUM TONS/A	ELEMENTAL SULFUR LBS/A											
Field 22  <small>(36374388)</small>	CORN - bu	200.0	DRY BEANS - lbs			0.2	OR	40	215	40	--	--	--	--	5.5	--	1.1	--
	ALFALFA - ton	5.0	DRY BEANS - lbs			0.2	OR	40	--	30	--	--	--	3.5	--	0.9	--	
	BARLEY MALT - bu	120.0	DRY BEANS - lbs			0.2	OR	40	105	25	--	--	--	4.5	--	1.3	--	
Field 122  <small>(36374389)</small>	CORN - bu	200.0	DRY BEANS - lbs			0.6	OR	90	185	70	--	--	--	3.3	5.5	1.0	0.9	--
	ALFALFA - ton	5.0	DRY BEANS - lbs			0.6	OR	90	--	50	--	--	--	2.1	3.5	--	0.8	--
	BARLEY MALT - bu	120.0	DRY BEANS - lbs			0.6	OR	90	75	45	--	--	--	3.0	4.5	1.1	1.1	--

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