

1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACIL

SUBMITTED BY: 001141				DAT	E RECEIV	/ED: May	2 2021	1 SUBMITTED FOR:									
				DAT	E REPOR	TED:											
THE PINNACLE GROUP L	LC			wo	RK ORDE	R NO: 202	2191-0019	5	KEND	ALL	UPCHURC	H					
620 EAST COUNTRY CLU	B RD								85852	112P	4600						
IOWA FALLS IA 50126																	
	SAMPLE		1						PLE ID	2							
	PREV CRO		21-M	14522					CROP IUMBER	21-	M14523						
		V-LO		LOW	OPT	HIGH	V-HIGH		V-L	ow	LOW	OPT	HIGH	V-HIGH			
ORGANIC MATTER	3.1							2.6									
NITROGEN																	
NO3-N																	
opm																	
PHOSPHORUS		1															
103110103																	
P Meh 3	14							14									
opm																	
POTASSIUM (K) Meh 3 ppm	138.			, in the second s				98.									
ZINC (ppm)																	
SULFUR																	
opm SO4-S			Ť		1	1	1				1			1			
ACIDITY pH	5.6	Bppr	n	Fe ppm	Mn ppm	Cu ppm	Na ppm	5.8	Вр	pm	Fe ppm	Mn ppm	Cu ppm	Na ppm			
BUFFER INDEX	6.5							6.7									
CCE %		SALTS	5 mmhc		CI Ibs				SAL		hos/cm	CI II					
CALCIUM ppm			Ca			Na	н				% Ca Mg		Na	н			
MAGNESIUM ppm		-						-									
		SAND	%	SILT	<sup>-</sup> %	CLAY %			SAN	D %	SILT	<sup>-</sup> %	CLAY %				
		TEXTU						_		FURE			e unio den dente ano				
ALL GUIDELINES ARE DN A BROADCAST BASIS		the of married	P FE	ERTILIZ	ER GUID	PELINES			100000000	OP I	ERTILIZ	ER GUI	DELINES				
CROP AND YIELD GOAL	CORN/BE 180/55 BU							CORN 180/55	I/BEANS 5 BU								
NITROGEN (Ibs/A)	190							190									
205 (lbs/A) ISU/ISU	106							106									
<20 (lbs/A) ISU/ISU	160							202									
ZINC (lbs/A)																	
SULFUR (Ibs/A)				Normalities	solvesta m				and the set			N 1600					
LIME NEEDS AS	to pH 6.5		:	2799 lbs	of lime for	6" plow de	pth.	to pH	6.5		1347 lbs	of lime for	<sup>r</sup> 6" plow de	pth.			
100% ENP (lbs/A)	to pH 6.9	5200	lbs of	f lime for	6" plow dej	pth.		to pH 6.9 3548 lbs of lime for 6" plow depth.									

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-38 L

250 7724	
2-3885	ACI

SUBMITTED BY: 001141				DATE	RECEI	VED: May	May 2 2021 SUBMITTED FOR:									
				DATE	REPOR	RTED:										
THE PINNACLE GROUP L	LC.			WOR	KORDE	ER NO: 202	2191-0019	5		NDALL	UPCHURC	н				
620 EAST COUNTRY CLU	IB RD								858	52112F	P4600					
IOWA FALLS IA 50126																
	SAMPLE	ID 3	3					SAM	L PLE IC	) 4						
	PREV CR LAB NUM	OP		~ 4				PREV			N44 4505					
		V-LOW	21-M145	W	OPT	HIGH	V-HIGH			V-LOW	-M14525	OPT	HIGH	V-HIGH		
ORGANIC MATTER	3.7		-					2.8								
NITROGEN																
NO3-N																
ppm																
		-														
PHOSPHORUS																
P Meh 3	13							8								
ppm																
POTASSIUM (K) Meh 3 ppm	156.							103.								
ZINC (ppm)																
SULFUR																
ppm SO4-S																
ACIDITY pH	5.7	B ppm	Fe	ppm	Mn ppm	Cu ppm	Na ppm	5.4	1	B ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm		
BUFFER INDEX	6.4							6.4								
CCE %		SALTS n	nmhos/cm	n	CI Ib	s/A	1		s	ALTS mn	nhos/cm	CI Ib	s/A			
		CEC			ASE SATI			-		CEC		BASE SATU				
CALCIUM ppm		-	Ca	Mg	К	Na	Н				Ca Mg	і К	Na	Н		
MAGNESIUM ppm																
		SAND %		SILT 9	þ	CLAY %				AND %	SIL	Τ%	CLAY %			
ALL GUIDELINES ARE					RGUII	DELINES		-			FERTILIZ					
ON A BROADCAST BASIS CROP AND YIELD GOAL	CORN/BE 180/55 BL	ANS						CORI 180/5	V/BEAN					2		
	190							190								
NITROGEN (Ibs/A) P2O5 (Ibs/A) ISU/ISU	125404-02504							an que contra								
	111							137					_			
	123							198								
ZINC (lbs/A)						+										
SULFUR (Ibs/A)			050	5 lb f	line c. f.:		un film	40.00			2505 11-	af line - f	Clinder al			
LIME NEEDS AS	to pH 6.5					6" plow de	ptn.	to pH 6.5 3525 lbs of lime for 6" plow depth.								
100% ENP (lbs/A)	to pH 6.9	6026 lk	os of lim	ne for 6"	plow de	epth.		to pH 6.9 6026 lbs of lime for 6" plow depth.								

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACIL

SUBMITTED BY: 001141		DATE RECEIVED: May 2 2021								SUBMITTED FOR:								
				DATE F	REPOR	TED:												
THE PINNACLE GROUP L	LC			WORK	ORDE	R NO: 202	2191-0019	5	KE	ENDALL	UPCHUR	сн						
620 EAST COUNTRY CLU	IB RD								85	852112	P4600							
IOWA FALLS IA 50126																		
	SAMPLE	ID 5	5					SAM	I PLE I	D 6								
	PREV CR		1-M1452	6				PREV			1-M14527							
		V-LOW	LO\		OPT	HIGH	V-HIGH			V-LOW	LOW	OPT	HIGH	V-HIGH				
ORGANIC MATTER	3.1							3.0										
NITROGEN																		
NO3-N																		
ppm								-										
PHOSPHORUS																		
P Meh 3	14							20					l					
ppm																		
POTASSIUM (K) Meh 3 ppm	110.							142.										
ZINC (ppm)								_										
SULFUR ppm SO4-S																		
ACIDITY pH	5.2	B ppm	Fe p	pm N	1n ppm	Cu ppm	Na ppm	5.1		B ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm				
BUFFER INDEX	6.2	1						6.2										
CCE %		SALTS m	mhos/cm		CI lbs	s/A				SALTS m	mhos/cm	CI lb:	5/A					
CALCIUM ppm		CEC	Са	% BA Mg	SE SATU K	RATION Na	н			CEC	9 Ca Mg	6 BASE SATU	RATION Na	н				
MAGNESIUM ppm		-		ing		, ia							, ia					
MAGNESION ppm		SAND %		SILT %		CLAY %				SAND %	911	Т %	CLAY %					
		TEXTURI	Ξ	OILT N		OL/T N				TEXTURE		1 /0	OLITI I					
ALL GUIDELINES ARE ON A BROADCAST BASIS		CROF	FERT	ILIZEF		DELINES			I	CROP	FERTILIZ		DELINES					
CROP AND YIELD GOAL	CORN/BE 180/55 BL							CORN 180/5		NS								
NITROGEN (lbs/A)	190							190										
P2O5 (lbs/A) ISU/ISU	106							98										
K2O (lbs/A) ISU/ISU	193							154										
ZINC (lbs/A)																		
SULFUR (lbs/A)																		
LIME NEEDS AS	to pH 6.5		4977	lbs of li	ime for	6" plow de	pth.	to pH	6.5		4977 lbs	of lime for	6" plow de	pth.				
100% ENP (lbs/A)	to pH 6.9	pH 6.9 7679 lbs of lime for 6" plow depth.							to pH 6.9 7679 lbs of lime for 6" plow depth.									

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 513

5-382-3885	ACII

SUBMITTED BY: 001141			DA	LE RECEIV	VED: May	2 2021	021 SUBMITTED FOR:								
			DA	LE REPOR	RTED:										
THE PINNACLE GROUP L	LC		WC	RK ORDE	R NO: 202	2191-0019	15	KENDA	LL UPCHUR	СН					
620 EAST COUNTRY CLU	IB RD							858521	12P4600						
IOWA FALLS IA 50126															
	SAMPLE	ID 7					SAM	LE ID	8						
	PREV CR		1 M14500					CROP IUMBER	21-M14529						
		V-LOW	1-M14528	OPT	HIGH	V-HIGH		V-LO	2	OPT	HIGH	V-HIGH			
ORGANIC MATTER	3.4		Ŀ		·		3.3		·						
NITROGEN															
NO3-N															
ppm															
[FF		-													
PHOSPHORUS															
P Meh 3	9						11								
ppm															
POTASSIUM (K) Meh 3 ppm	119.						125.								
ZINC (ppm)															
SULFUR															
ppm SO4-S															
ACIDITY pH	5.5	B ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm	6.0	B ppn	n Fe ppm	Mn ppm	Cu ppm	Na ppm			
BUFFER INDEX	6.4						6.7								
CCE %		SALTS m	mhos/cm	CI lbs	s/A	1		SALTS	mmhos/cm	CI lb	s/A	I			
ore paul orenances o		CEC		6 BASE SATU				CEC		% BASE SATU					
CALCIUM ppm		-	Ca Mg	g K	Na	Н	-		Ca M	lg K	Na	н			
MAGNESIUM ppm							_								
		SAND %		Τ%	CLAY %			SAND TEXTU		_T %	CLAY %				
ALL GUIDELINES ARE ON A BROADCAST BASIS		CROP	FERTILIZ		DELINES			CRC	P FERTILI	ZER GUI	DELINES				
CROP AND YIELD GOAL	CORN/BE 180/55 BL						CORN 180/5	N/BEANS 5 BU							
NITROGEN (lbs/A)	190						190				-				
P2O5 (lbs/A) ISU/ISU	132						121								
K2O (lbs/A) ISU/ISU	184						178								
ZINC (lbs/A)							1				1				
SULFUR (lbs/A)															
LIME NEEDS AS	to pH 6.5		3525 lbs	of lime for	6" plow de	pth.	to pH	6.5	1347 lbs	of lime for	6" plow de	pth.			
100% ENP (lbs/A)	to pH 6.9	6026 lbs	s of lime for	6" plow de	pth.		to pH 6.9 3548 lbs of lime for 6" plow depth.								

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACIL

SUBMITTED BY: 001141				DAT	E RECE	IVED: May	2 2021		SUBMI	TTE	) FOR	l:			
				DAT	E REPO	RTED:									
THE PINNACLE GROUP L	LC			wo	RK ORD	ER NO: 20	2191-0019	5	KEND	ALL	UPCH	IURC	н		
620 EAST COUNTRY CLU	IB RD								85852	112F	4600				
IOWA FALLS IA 50126															
	SAMPLE	ID 9	)					SAME	PLE ID	10					
	PREV CR LAB NUM	OP	4 144 45						CROP	24	N44 452	14			
		V-LOW	1-M145	0W	OPT	HIGH	V-HIGH		V-L		-M1453		OPT	HIGH	V-HIGH
ORGANIC MATTER	3.9							4.7							
NITROGEN														-	
NO3-N															
ppm															
		1													
PHOSPHORUS															
P Meh 3	20							19							
ppm															
POTASSIUM (K) Meh 3 ppm	137.							151.							
ZINC (ppm)															
SULFUR ppm SO4-S															
ACIDITY pH	6.2	B ppm	Fe	ppm	Mn ppm	Cu ppm	Na ppm	7.1	B p	pm	Fe p	pm	Mn ppm	Cu ppm	Na ppm
BUFFER INDEX	6.8							7.2							
CCE %		SALTS m	imhos/cr	m	CLI	bs/A			SALT	rs mm	hos/cm		CI	os/A	
		CEC	C-		BASE SAT		11		CE		<b>C</b> -		BASE SAT		LT.
CALCIUM ppm		_	Са	Mg	к	Na	Н			8	Ca	Mg	к	Na	н
MAGNESIUM ppm															
		SAND %	_	SILT	<sup>-</sup> %	CLAY %			SAN	D % FURE		SILT	%	CLAY %	
ALL GUIDELINES ARE				TILIZ	ER GU	DELINES	3				FERT	ILIZI	ER GUI	DELINES	
ON A BROADCAST BASIS CROP AND YIELD GOAL	CORN/BE 180/55 BL	ANS					-	CORN 180/55	/BEANS						
NITROGEN (lbs/A)	190							190							
P2O5 (lbs/A) ISU/ISU	98					1		98							

P2O5 (lbs/A ISU/ISU K2O (lbs/A) 162 136 ZINC (lbs/A) SULFUR (lbs/A) LIME NEEDS AS to pH 6.5 621 lbs of lime for 6" plow depth. to pH 6.5 No lime required. to pH 6.9 No lime required. 100% ENP (lbs/A) to pH 6.9 2722 lbs of lime for 6" plow depth.

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885

	$\mathbf{n}$	TT
$\mathbf{A}$		
11		

SUBMITTED BY: 001141		DATE RECEIVED: May 2 202								1 SUBMITTED FOR:							
				DAT	E REP	ORT	TED:										
THE PINNACLE GROUP L	LC			WO	RK ORI	DER	R NO: 202	2191-0019	5	KEND	DALL	UPCHURC	н				
620 EAST COUNTRY CLU	B RD									85852	2112F	4600					
IOWA FALLS IA 50126																	
	SAMPLE	ID	11						SAM	PLE ID	12						
	PREV CROL	OP		4500					PREV	CROP							
			21-M14	4532 LOW	OPT		HIGH	V-HIGH			LOW	-M14533	OPT	HIGH	V-HIGH		
ORGANIC MATTER	5.3					I			3.9								
NITROGEN																	
NO3-N																	
ppm																	
PHOSPHORUS																	
P Meh 3	24								11								
ppm		_															
POTASSIUM (K) Meh 3 ppm	187.								132.								
ZINC (ppm)																	
SULFUR																	
ppm SO4-S																	
ACIDITY pH	5.8	B ppm	F	<sup>=</sup> e ppm	Mn ppr	n	Cu ppm	Na ppm	5.4	Bŗ	ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm		
BUFFER INDEX	6.4								6.4								
CCE %		SALTS r	nmhos/			l lbs//	645					ihos/cm	CI lbs	auto-22775			
		CEC	Са	% Mg	BASE SA		ATION Na	н		C	EC	% Ca Mg	BASE SATU K	RATION Na	н		
CALCIUM ppm		-	Ca	wig	IX.		INA	11			0	ca Mg	ĸ	INd	1.0		
MAGNESIUM ppm				SILT	0/		CLAY %				10.00	SIL	F 0/	CLAY %			
		SAND %		SILT	%		CLAT %				ND %	SIL	1 %	CLAT %			
ALL GUIDELINES ARE ON A BROADCAST BASIS				RTILIZ	ER GL	JIDI	ELINES					FERTILIZ		ELINES			
CROP AND YIELD GOAL	CORN/BE 180/55 BU	ANS		20 M 10 100 100000 10	- Concept Access				CORN 180/5	I/BEANS							
NITROGEN (Ibs/A)	190		_						190								
P2O5 (lbs/A) ISU/ISU	50		+			+			121								
K2O (lbs/A) ISU/ISU	106								169								
ZINC (lbs/A)						+			1								
SULFUR (lbs/A)																	
LIME NEEDS AS	to pH 6.5		35	525 lbs o	of lime f	or 6	" plow de	pth.	to pH	6.5		3525 lbs	of lime for	6" plow de	pth.		
100% ENP (lbs/A)	to pH 6.9	oH 6.9 6026 lbs of lime for 6" plow depth.							to pH	to pH 6.9 6026 lbs of lime for 6" plow depth.							

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACIL

SUBMITTED BY: 001141				DAT	E RECE	IVED: May	2 2021		SUBMIT	ITED	FOR:					
				DAT	E REPO	RTED:										
THE PINNACLE GROUP L	LC.			WOF	RK ORD	ER NO: 202	2191-0019	5	KEND	ALLI	JPCHURC	н				
620 EAST COUNTRY CLU	BRD								85852 <sup>,</sup>	112P	4600					
IOWA FALLS IA 50126																
	SAMPLE		13						LE ID	14						
	PREV CR		21-M14	534					CROP	21-	V14535					
		V-LOV		ow	OPT	HIGH	V-HIGH		V-LC		LOW	OPT	HIGH	V-HIGH		
ORGANIC MATTER	2.8							5.3								
NITROGEN																
NO3-N																
ppm																
PHOSPHORUS																
P Meh 3	12							18								
nnm																
ppm		-									~					
POTASSIUM (K) Meh 3 ppm	128.							143.								
ZINC (ppm)																
SULFUR																
ppm SO4-S																
ACIDITY pH	5.5	B ppm	n Fe	ppm	Mn ppm	Cu ppm	Na ppm	5.6	Врр	om	Fe ppm	Mn ppm	Cu ppm	Na ppm		
BUFFER INDEX	6.4							6.3								
CCE %			mmhos/c			bs/A					nos/cm	CI Ib				
CALCIUM ppm		CEC	Са	% Mg	BASE SAT K	URATION Na	н		CE		% Ca Mg	BASE SATU K	JRATION Na	н		
MAGNESIUM ppm		-						-								
		SAND	%	SILT	%	CLAY %			SANE	0 %	SIL	Г %	CLAY %			
		TEXTU							TEXT							
ALL GUIDELINES ARE ON A BROADCAST BASIS		CRO	P FER	TILIZI	ER GUI	DELINES			CR	OP F	ERTILIZ	ER GUI	DELINES			
CROP AND YIELD GOAL	CORN/BE 180/55 BU							CORN 180/5	N/BEANS 5 BU							
NITROGEN (lbs/A)	190							190								
P2O5 (lbs/A) ISU/ISU	116							98								
K2O (lbs/A) ISU/ISU	174							152								
ZINC (lbs/A)																
SULFUR (lbs/A)																
LIME NEEDS AS	to pH 6.5		352	25 lbs c	of lime fo	r 6" plow de	pth.	to pH	6.5		4251 lbs	of lime for	6" plow de	pth.		
100% ENP (lbs/A)	to pH 6.9	6026	lbs of lir	ne for 6	ა" plow d	epth.		to pH 6.9 6852 lbs of lime for 6" plow depth.								

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885

•	T
A	
_ <b>_ _</b>	

SUBMITTED BY: 001141				DAT	E RE	CEIV	'ED: May	2 2021	2021 SUBMITTED FOR:									
				DAT	E RE	POR	TED:											
THE PINNACLE GROUP L	LC.			WO	RK O	RDEI	R NO: 202	2191-0019	5	KEN	IDALL	UPCHURC	н					
620 EAST COUNTRY CLU	B RD									8585	52112F	P4600						
IOWA FALLS IA 50126																		
	SAMPLE	חו	15						SAM	I PLE ID	16							
	PREV CR	OP							PREV	CROP								
	LAB NUM			14536 LOW	OP.	т	HIGH	V-HIGH			< 21 -LOW	-M14537	OPT	HIGH	V-HIGH			
ORGANIC MATTER	5.9	1-201	•	2000	0		mon	VIIIOII	4.3		-2011	2000		11011	Villon			
NITROGEN																		
NO3-N																		
ppm																		
PHOSPHORUS																		
P Meh 3	23								20									
ppm		_																
POTASSIUM (K) Meh 3 ppm	157.				Ì				161.				Į.					
ZINC (ppm)																		
SULFUR ppm SO4-S																		
ACIDITY pH	7.5	B ppm		Fe ppm	Mn p	pm	Cu ppm	Na ppm	5.7	В	ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm			
BUFFER INDEX	7.3	1							6.4									
CCE %		SALTS	mmhos	s/cm		CI Ibs	/A	1		SA	LTS mn	nhos/cm	CI lbs	5/A	ļ			
		CEC			BASE		RATION				CEC		BASE SATU					
CALCIUM ppm		-	Са	Mg		K	Na	Н				Ca Mg	К	Na	н			
MAGNESIUM ppm																		
		SAND 9		SILT	%		CLAY %				ND % XTURE	SIL	Γ%	CLAY %				
ALL GUIDELINES ARE ON A BROADCAST BASIS		CRO	P FE	RTILIZ	ER G	SUID	ELINES			C	ROP	FERTILIZ	ER GUIE	DELINES				
CROP AND YIELD GOAL	CORN/BE 180/55 BL	ANS J							CORN 180/5	N/BEANS 5 BU	S							
NITROGEN (lbs/A)	190																	
P2O5 (lbs/A) ISU/ISU	50								98									
K2O (lbs/A) ISU/ISU	121								106									
ZINC (lbs/A)									1									
SULFUR (lbs/A)																		
LIME NEEDS AS	to pH 6.5		N	No lime re	quire	d.			to pH	6.5		3525 lbs	of lime for	6" plow de	pth.			
100% ENP (lbs/A)	to pH 6.9	pH 6.9 No lime required.							to pH	to pH 6.9 6026 lbs of lime for 6" plow depth.								

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACIL

SUBMITTED BY: 001141	DA				E RECEIN	/ED: May	2 2021		SUBMIT	TEC	) FOR:			
				DATI	E REPOR	TED:								
THE PINNACLE GROUP L	LC			WOF	RKORDE	R NO: 202	191-0019	5	KEND,	ALL	JPCHURC	н		
620 EAST COUNTRY CLU	B RD								85852	112P	4600			
IOWA FALLS IA 50126														
	SAMPLE	ID	17					SAM	PLE ID	18				
	PREV CRO		21-M1	4538					CROP IUMBER	21	M14539			
		V-LO		LOW	OPT	HIGH	V-HIGH		V-L0		LOW	OPT	HIGH	V-HIGH
ORGANIC MATTER	3.6							4.1						
NITROGEN														
NO3-N														
ppm														
		1												
PHOSPHORUS														
P Meh 3	7							20					2	
			_											
ppm		-												
POTASSIUM (K) Meh 3 ppm	129.							133.						
ZINC (ppm)														
SULFUR														
ppm SO4-S														
ACIDITY pH	5.5	B ppr	n F	Fe ppm	Mn ppm	Cu ppm	Na ppm	5.4	B pp	m	Fe ppm	Mn ppm	Cu ppm	Na ppm
BUFFER INDEX	6.4	1						6.2						
CCE %		SALTS	mmhos	/cm	CI lbs	JA			SALT	Smm	hos/cm	CI lb:	s/A	
		CEC	) Ca	% Mg	BASE SATU K	RATION Na	Н		CE		% Ca Mg	BASE SATU	JRATION Na	Н
CALCIUM ppm		-	Ca	IVIG	ĸ	INA					Ja Wig	ĸ	INd	п
MAGNESIUM ppm		SAND	94	SILT	04	CLAY %			SANE	0%	SILT	Г 94	CLAY %	
		TEXTL		OILT	70	CLAT 70			TEXT		SIL	1 70	CLAT /0	
ALL GUIDELINES ARE ON A BROADCAST BASIS		CRC	P FE	RTILIZI		ELINES			CR	OP F	ERTILIZ	ER GUI	DELINES	
CROP AND YIELD GOAL	CORN/BE 180/55 BU							CORN 180/55	I/BEANS 5 BU					
NITROGEN (Ibs/A)	190							190						
P2O5 (lbs/A) ISU/ISU	143							98						
K2O (lbs/A) ISU/ISU	173							168						
ZINC (lbs/A)														
SULFUR (lbs/A)														
LIME NEEDS AS	to pH 6.5		3	525 lbs c	of lime for	6" plow de	pth.	to pH	6.5		4977 lbs	of lime for	6" plow de	pth.
100% ENP (lbs/A)	to pH 6.9	6026	lbs of I	lime for 6	5" plow dej	oth.		to pH	6.9 7679	9 lbs	of lime for	6" plow de	pth.	

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



SUBMITTED BY: 001141

IOWA FALLS IA 50126

THE PINNACLE GROUP LLC 620 EAST COUNTRY CLUB RD

1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACII

												ACI	
			DA	TE RECEIN	/ED: May	2 2021		SUBMI	TED	D FOR:			
			DA	TE REPOR	RTED:								
_C			wo	ORK ORDE	R NO: 20	2191-0019	5	KEND.	ALL	UPCHURC	н		
3 RD								85852	112P	4600			
SAMPLE						SAM	L PLE ID	20					
PREV CRO								CROP					
	BER		14540 LOW	OPT	HIGH	V-HIGH	LAB N			-M14541	OPT	HIGH	V-HIGH
	V-LO	vv	LOW		нон	V-HIGH		V-L0	<i></i>	LOW		ПОП	V-HIGH
3.7							3.8						
	-												
<u> </u>							10						
6							12						
115													
115							141.						

	LAB NUN		1-M14540				LAB NUN		1-M14541			
		V-LOW	LOW	OPT	HIGH	V-HIGH		V-LOW	LOW	OPT	HIGH	V-HIGH
ORGANIC MATTER	3.7						3.8					
NITROGEN												
NO3-N												
ppm							-					
PHOSPHORUS												
P Meh 3	6		[				12					
ppm												
POTASSIUM (K) Meh 3 ppm	115.						141.					
ZINC (ppm)												
SULFUR ppm SO4-S												
ACIDITY pH	5.0	B ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm	5.5	B ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm
BUFFER INDEX	6.0						6.4					
CCE %		SALTS m		CIIk		•			mhos/cm	CI lb		
CALCIUM ppm		CEC	Ca Mg	BASE SATI	URATION Na	н	-	CEC	9 Ca Mg	6 BASE SATU g K	JRATION Na	н
MAGNESIUM ppm		_					-	_				
		SAND %	I SIL <sup>-</sup>	Τ%	CLAY %			SAND %		Т%	CLAY %	
ALL GUIDELINES ARE			FERTILIZ			1						
ON A BROADCAST BASIS CROP AND YIELD GOAL	CORN/B 180/55 B	EANS					CORN/BI 180/55 B	EANS				
NITROGEN (lbs/A)	190						190					
P2O5 (lbs/A) ISU/ISU	149						116					
K2O (lbs/A) ISU/ISU	188						155					
ZINC (lbs/A)												
SULFUR (lbs/A)												
LIME NEEDS AS	to pH 6.	5	6429 lbs	of lime for	6" plow de	pth.	to pH 6.	5	3525 lbs	of lime for	6" plow de	pth.
100% ENP (lbs/A)	to pH 6.	9 9331 lb:	s of lime for	6" plow de	epth.		to pH 6.9	9 6026 lb	s of lime for	6" plow de	pth.	

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACIL

SUBMITTED BY: 001141				DATE	RECEI	VED: May	2 2021		SUB	MITTE	D FOR:			
				DATE	REPOR	RTED:			1					
THE PINNACLE GROUP L	LC			WOR	KORDE	R NO: 202	2191-0019	5		NDALL	UPCHUR	СН		
620 EAST COUNTRY CLU	B RD								858	52112	P4600			
IOWA FALLS IA 50126														
	SAMPLE	ID 2	1					SAM	L PLE ID	) 22	>			
	PREV CRO	OP	1-M145	42				PREV			-M14543			
		V-LOW		DW	OPT	HIGH	V-HIGH			V-LOW	LOW	OPT	HIGH	V-HIGH
ORGANIC MATTER	2.9							6.4						
NITROGEN														
NO3-N														
ppm														
PHOSPHORUS														
P Meh 3	6		l					109						
ppm														
POTASSIUM (K) Meh 3 ppm	105.							335.						
ZINC (ppm)														
SULFUR ppm SO4-S														
ACIDITY pH	5.5	B ppm	Fep	ppm	Mn ppm	Cu ppm	Na ppm	5.8	1	B ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm
BUFFER INDEX	6.5							6.3						
CCE %		SALTS m	imhos/cm	n	CI Ib	s/A			S	ALTS mr	nhos/cm	CI lbs	s/A	ļ
CALCIUM ppm		CEC	Са	% E Mg	BASE SATU K	JRATION Na	Н			CEC	9 Ca Mg	6 BASE SATU	RATION Na	Н
MAGNESIUM ppm		-		0										
		SAND %		SILT	%	CLAY %			S	AND %	SIL	Т%	CLAY %	
		TEXTUR								EXTURE				
ALL GUIDELINES ARE ON A BROADCAST BASIS		CROP	FERT	TILIZE	R GUI	DELINES			C	ROP	FERTILIZ	ER GUIE	PELINES	
CROP AND YIELD GOAL	CORN/BE/ 180/55 BU	ANS						CORN 180/5	V/BEAN 5 BU	IS				
NITROGEN (lbs/A)	190							190						
P2O5 (lbs/A) ISU/ISU	149							0						
K2O (lbs/A) ISU/ISU	197							0						
ZINC (lbs/A)														
SULFUR (lbs/A)														
LIME NEEDS AS	to pH 6.5		279	9 lbs of	f lime for	6" plow de	pth.	to pH	6.5	_	4251 lbs	of lime for	6" plow de	pth.
100% ENP (lbs/A)	to pH 6.9	6.9 5200 lbs of lime for 6" plow depth.							6.9 6	852 lbs	s of lime for	6" plow de	pth.	

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACIL

SUBMITTED BY: 001141			DAT	E RECEI	/ED: May	2 2021		SUBMI	TTED	) FOR:				
				DAT	E REPOF	RTED:								
THE PINNACLE GROUP L	LC			WOF	RK ORDE	R NO: 202	2191-0019	5	KEND	ALL	UPCHURC	н		
620 EAST COUNTRY CLU	B RD								85852	112P	4600			
IOWA FALLS IA 50126														
	SAMPLE	ID	23					SAM	I PLE ID	24				
	PREV CR	OP						PREV	CROP					
			21-M14	1544 LOW	OPT	HIGH	V-HIGH				-M14545	OPT	HIGH	V-HIGH
ORGANIC MATTER	2.6							3.8					1	
NITROGEN														
NO3-N														
ppm														
PHOSPHORUS		1												
<b>D</b>								10						
P Meh 3	9							10						
ppm														
POTASSIUM (K) Meh 3 ppm	111.							128.						
ZINC (ppm)														
SULFUR ppm SO4-S														
ACIDITY pH	5.8	B ppm	F	e ppm	Mn ppm	Cu ppm	Na ppm	4.9	Вр	om	Fe ppm	Mn ppm	Cu ppm	Na ppm
BUFFER INDEX	6.6							5.9						
CCE %	0.0	SALTS	mmhos/o	cm	CI lb:	 s/A		0.0	SALT	Smm	hos/cm	Сів	s/A	
		CEC			BASE SATU			-	CE			BASE SATU		
CALCIUM ppm		1	Са	Mg	к	Na	Н			0	Ca Mg	к	Na	Н
MAGNESIUM ppm		1												
		SAND S		SILT	%	CLAY %			SANI TEXT		SIL	Т %	CLAY %	
ALL GUIDELINES ARE ON A BROADCAST BASIS				RTILIZ		DELINES		1			FERTILIZ	ER GUI	DELINES	
CROP AND YIELD GOAL	CORN/BE 180/55 BL			- <b>X</b> - 13 - 100 - 100 - 10	The same free and the set of			CORN 180/5	N/BEANS 5 BU			una cale dana dena dena dena		
NITROGEN (lbs/A)	190		_					190						
P2O5 (lbs/A) ISU/ISU	132							126						
K2O (lbs/A) ISU/ISU	192							174						
ZINC (lbs/A)														
SULFUR (lbs/A)								1						
LIME NEEDS AS	to pH 6.5			)73 lbs o	of lime for	⊥ 6" plow de	pth.	to pH	6.5		7155 lbs	of lime for	6" plow de	pth.
100% ENP (lbs/A)					5" plow de	-				60 lb:	s of lime fo			
	Anna Anna Maria	1989 (P89			Bernerstere of the			A STATE OF THE OWNER			ANNY TANÀNG 2020	Jesseere B		

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACIL

SUBMITTED BY: 001141 DA				DAT	E REC	CEIV	ED: May	2 2021		SUE	BMITTE	D FOR:			
				DAT	E REF	POR	TED:								
THE PINNACLE GROUP L	LC			WOF	RK OF	RDEF	R NO: 202	191-0019	5	KE	NDALL	UPCHURC	н		
620 EAST COUNTRY CLU	B RD									85	3521121	P4600			
IOWA FALLS IA 50126															
	SAMPLE	ID	25						SAM			5			
	PREV CRO		21-M1	4546					PREV LAB N			I-M14547			
		V-LO		LOW	OPT	-	HIGH	V-HIGH			V-LOW	LOW	OPT	HIGH	V-HIGH
ORGANIC MATTER	3.5								3.0						
NITROGEN					_										
NO3-N															
ppm															
PHOSPHORUS															
	_														
P Meh 3	9								10						
ppm															
POTASSIUM (K) Meh 3 ppm	102.								120.						
ZINC (ppm)															
SULFUR															
ppm SO4-S															
ACIDITY pH	4.9	B ppn	n i	Fe ppm	Mn p	pm	Cu ppm	Na ppm	4.9		B ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm
BUFFER INDEX	6.0								6.1						
CCE %			mmhos			CI Ibs/				5	SALTS mr		CLI		
CALCIUM ppm		CEC	Ca	% Mg		SATUF K	RATION Na	н			CEC	% Ca Mg	BASE SAT	JRATION Na	н
MAGNESIUM ppm		-													
		SAND	%	SILT	%		CLAY %		-		SAND %	SIL	Г %	CLAY %	
		TEXTU									TEXTURE				
ALL GUIDELINES ARE ON A BROADCAST BASIS		CRC	P FE	RTILIZI	ER G	UID	ELINES				CROP	FERTILIZ	ER GUI	DELINES	
CROP AND YIELD GOAL	CORN/BE 180/55 BU								CORN 180/55		VS				
NITROGEN (lbs/A)	190								190						
P2O5 (lbs/A) ISU/ISU	132								126						
K2O (lbs/A) ISU/ISU	199								183						
ZINC (lbs/A)															
SULFUR (lbs/A)															
LIME NEEDS AS	to pH 6.5		6	429 lbs c	of lime	for 6	5" plow dep	oth.	to pH	6.5		5703 lbs	of lime for	6" plow de	pth.
100% ENP (lbs/A)	to pH 6.9	9331	lbs of	lime for 6	5" plov	v dep	oth.		to pH	6.9	3505 lbs	s of lime for	6" plow de	epth.	

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACIL

				DAT	E RE	CEIV	'ED: May	2 2021		SUBN	ITTE	D FOR:			
				DAT	E RE	POR	TED:								
THE PINNACLE GROUP L	LC			WOF	RK O	RDEI	R NO: 202	2191-0019	5	KEN	DALL	UPCHURC	сн		
620 EAST COUNTRY CLU	BRD									8585	52112F	4600			
IOWA FALLS IA 50126															
	SAMPLE	ID	27						SAM	L PLE ID	28				
	PREV CR		21-M <sup>2</sup>	14548						CROP	21	-M14549			
		V-LO	N	LOW	OP	т	HIGH	V-HIGH		V	-LOW	LOW	OPT	HIGH	V-HIGH
ORGANIC MATTER	3.4								4.4						
NITROGEN															
NO3-N															
ppm															
PHOSPHORUS															
P Meh 3	12								24						
ppm									-						
POTASSIUM (K) Meh 3 ppm	129.								132.						
ZINC (ppm)															
SULFUR ppm SO4-S															
ACIDITY pH	5.5	B ppn	n	Fe ppm	Mn p	opm	Cu ppm	Na ppm	5.3	В	ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm
BUFFER INDEX	6.3	1							6.2						
CCE %		SALTS	mmho	s/cm		CI lbs	/A			SA	LTS mm	hos/cm	CI Ib	s/A	<u>,</u>
		CEC	: Ca		BASE	SATUI K	RATION Na	Н			CEC	% Ca Mo	BASE SATU	JRATION Na	н
CALCIUM ppm		-	Ca	IVIG		ĸ	INA	п				ca wig		INA	
MAGNESIUM ppm		SAND	0/	SILT	. 0/		CLAY %				ND %	011	Т %	CLAY %	
		TEXTU		SILT	70		CLAT %				XTURE	SIL	1 70	CLAT 70	
ALL GUIDELINES ARE ON A BROADCAST BASIS				RTILIZ	ER G	GUID	ELINES					FERTILIZ	ER GUI	DELINES	
CROP AND YIELD GOAL	CORN/BE 180/55 BU	ANS J							CORN 180/5	V/BEANS 5 BU	6				
NITROGEN (lbs/A)	190								190						
P2O5 (lbs/A) ISU/ISU	116								50						
K2O (lbs/A) ISU/ISU	173								169					1	
ZINC (lbs/A)														1	
SULFUR (lbs/A)															
LIME NEEDS AS	to pH 6.5		4	4251 lbs o	of lime	e for 6	5" plow de	pth.	to pH	6.5		4977 lbs	of lime for	6" plow de	pth.
100% ENP (lbs/A)	to pH 6.9	6852	lbs of	lime for 6	6" plo	w dep	oth.		to pH	6.9 76	679 lbs	of lime for	6" plow de	pth.	

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 **ACIL** 

SUBMITTED BY: 001141					ERE	ECEIV	/ED: May	2 2021		SUBMIT	TEC	) FOR:				
				DAT	E RE	POR	TED:									
THE PINNACLE GROUP L	LC			WO	RK O	RDE	R NO: 202	2191-0019	5	KENDA		UPCHURC	Н			
620 EAST COUNTRY CLU	IB RD									858521	12P	4600				
IOWA FALLS IA 50126																
	SAMPLE		29							PLE ID	30					
	PREV CR		21-M <sup>2</sup>	14550						CROP UMBER	21-	M14551				
		V-LOW		LOW	OF	νT	HIGH	V-HIGH		V-LC		LOW	OPT		HIGH	V-HIGH
ORGANIC MATTER	3.2								4.4							
NITROGEN																
NO3-N																
ppm																
PHOSPHORUS		1														
P Meh 3	10								10							
P Meh 3	12								12							
ppm																
POTASSIUM (K) Meh 3 ppm	112.			ĺ					126.							
ZINC (ppm)																
SULFUR																
ppm SO4-S																
ACIDITY pH	5.3	B ppm		Fe ppm	Mn	ppm	Cu ppm	Na ppm	5.4	Врр	m	Fe ppm	Mn ppi	m	Cu ppm	Na ppm
BUFFER INDEX	6.3								6.2							
CCE %		SALTS r	nmho	s/cm		CI lbs	5/A			SALTS	5 mm	hos/cm	c	) Ibs	/A	
		CEC					RATION			CE			BASE S			
CALCIUM ppm		-	Ca	Mg		K	Na	Н	-		1	Ca Mg	K		Na	Н
MAGNESIUM ppm				0117	- 0/						~	0.1.7	- 0/			
		SAND %		SILT	%		CLAY %			SAND		SILT	%		CLAY %	
ALL GUIDELINES ARE ON A BROADCAST BASIS				RTILIZ	ER	GUID	ELINES		-			ERTILIZ	ER GI	JID	ELINES	
CROP AND YIELD GOAL	CORN/BE 180/55 BU								CORN 180/55	I/BEANS 5 BU						
NITROGEN (lbs/A)	190								190							
P2O5 (lbs/A) ISU/ISU	116								116							
K2O (lbs/A) ISU/ISU	191								177							
ZINC (lbs/A)																
SULFUR (lbs/A)																
LIME NEEDS AS	to pH 6.5		2	4251 lbs (	of lim	e for (	6" plow de	pth.	to pH	6.5		4977 lbs (	of lime	for 6	5" plow dep	oth.
100% ENP (lbs/A)	to pH 6.9	6852 II	os of	lime for (	6" plo	w dep	oth.		to pH	6.9 7679	lbs	of lime for (	6" plow	dep	oth.	
						1			1000				-			

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 **ACIL** 

SUBMITTED BY: 001141 D				DAT	E REG	CEIV	ED: May	2 2021		SUE	BMITTE	D FOR:			
				DATI	E REF	POR	TED:			1					
THE PINNACLE GROUP L	LC			WOF		RDEF	R NO: 202	191-0019	5	KE	NDALI		СН		
620 EAST COUNTRY CLU	B RD									858	852112	P4600			
IOWA FALLS IA 50126															
	SAMPLE		31							PLE II		2			
	PREV CRO		21-M1	14552						CROF		1-M14553			
		V-LO\		LOW	OPT	- [	HIGH	V-HIGH			V-LOW	LOW	OPT	HIGH	V-HIGH
ORGANIC MATTER	3.3								2.8						
NITROGEN															
NO3-N															
ppm															
PHOSPHORUS															
P Meh 3	13								38						
ppm															
POTASSIUM (K) Meh 3 ppm	104.			I					123.						
ZINC (ppm)															
SULFUR															
ppm SO4-S						,									
ACIDITY pH	5.1	B ppn	n   I	Fe ppm	Mn p	pm	Cu ppm	Na ppm	5.9		B ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm
BUFFER INDEX	6.2								6.7						
CCE %			mmhos			CI lbs/				\$		mhos/cm		os/A	
CALCIUM ppm		CEC	Ca	% Mg		SATUF K	RATION Na	н			CEC		% BASE SAT /lg K	URATION Na	Н
MAGNESIUM ppm															
		SAND		SILT	%		CLAY %				SAND %		LT %	CLAY %	
ALL GUIDELINES ARE				RTILIZI	ER G	UID	ELINES						ZER GUI	DELINES	
ON A BROADCAST BASIS CROP AND YIELD GOAL	CORN/BE/ 180/55 BU	ANS							CORN 180/5	V/BEAI					
NITROGEN (Ibs/A)	190								190						
P2O5 (lbs/A) ISU/ISU	111								0						
K2O (lbs/A) ISU/ISU	197								180						
ZINC (lbs/A)									1						
SULFUR (lbs/A)															
LIME NEEDS AS	to pH 6.5		4	1977 lbs c	of lime	for 6	5" plow de	pth.	to pH	l 6.5		1347 lb:	s of lime fo	r 6" plow de	pth.
100% ENP (lbs/A)	to pH 6.9	oH 6.9 7679 lbs of lime for 6" plow depth.							to pH	6.9 3	3548 lb	s of lime fo	r 6" plow d	epth.	

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soli-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/



1126 N. Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 E. Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 MEMBER 1201 Lincoln Highway ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 ACIL

SUBMITTED BY: 001141 DA			DAT	E RECEIV	VED: May	2 2021		SUBMITTED FOR:	
			DAT	E REPOR	RTED:				
THE PINNACLE GROUP L	LC		wo	RK ORDE	R NO: 202	2191-00195	5	KENDALL UPCHURCH	
620 EAST COUNTRY CLU	B RD							85852112P4600	
IOWA FALLS IA 50126									
	SAMPLE	ID 33					<u> </u>		
	PREV CRO	OP							
	LAB NUME	BER 21	-M14554	OPT	HIGH	V-HIGH	-		
ORGANIC MATTER	2.5	V-LOW	LOW			V-HIGH		Ν	
NITROGEN			.,						
NO3-N									
ppm		-							
PHOSPHORUS									
P Meh 3	01								E
P Meh 3	91						W		Е
ppm		-							
POTASSIUM (K) Meh 3 ppm	234.								
ZINC (ppm)		-							
SULFUR							[	S	
ppm SO4-S									
ACIDITY pH	7.4	B ppm	Fe ppm	Mn ppm	Cu ppm	Na ppm	Ad	ditional Notes:	
BUFFER INDEX	7.3								
CCE %		SALTS mm		CI lbs					
		CEC	% Ca Mg	BASE SATU K	JRATION Na	н			
CALCIUM ppm			ca wg	ĸ	INA	11			
MAGNESIUM ppm		CAND %	011	F 0/			-		
		SAND % TEXTURE	SIL	%	CLAY %				
ALL GUIDELINES ARE			FERTILIZ		DELINES		1		
ON A BROADCAST BASIS CROP AND YIELD GOAL	CORN/BE/ 180/55 BU	ANS							
NITROGEN (Ibs/A)	190		-				1		
P2O5 (lbs/A) ISU	0						1		
K2O (lbs/A) ISU	0		+				1		
ZINC (lbs/A)					+		1		
SULFUR (lbs/A)			+				1		
LIME NEEDS AS	to pH 6.5	No lime r	required		1		-		
100% ENP (lbs/A)	to pH 6.9								
	0.9 PH 0.9	NU IIIIe I	equired.				5 e		

MVTL is a certified laboratory through North American Proficiency and Ag LabCertification Programs following approved NCR-13 Standards. Phosphorus results are determined colorimetrically except where noted.

Soil-test value ranges for phosphorous and potassium are based onCrop Nutrient and Limestone Recommendations in Iowa (PM 1688). To determine Maximum Return to Nitrogen Rate considering (N price/ lb.)/(corn price): http://cnrc.agron.iastate.edu/