SOIL TEST REPORT UNIVERSITY OF DELAWARE - SOIL TESTING LABORATORY NEWARK, DELAWARE 19717-1303 BACKGROUND INFORMATION: Grower copy 12/05/16 12/05/16 12/13/16 1411 602093 NEW CASTLE WETLANDS BAG NO. LAB'NO. DATE COMPLETE COUNTY DATE RECEIVED DATE SAMPLED FIELD NAME OR NO. ACRES COUNTY AGENT ADDITIONAL COPY TO: SOIL TEST FOR: GROWER CARRIE MURPHY JAMES MEEK 30 THE STRAND NEW CASTLE, DE NEW CASTLE CO. EXT. 461 WYOMING RD. NEWARK, DE 19716-1303 19720 302-831-2506 INJ SAMPLE SOL SOIL SOL. DRA NAGE PRESENT COVER INFRICTATION TILLAGE SOIL NAME NEVER PaOs HaD TIA TYPE VIELD OF T/A WHEN MOS AGO TYPE N OTHER NUTRIENTS LAST CROP MANURE SOIL TEST RESULTS: OPTIMUM LOW MEDIUM ****** 4.7 pH P ************* 68 PHOSPHORUS EXCESSIVE MOEX VALUE K 41 ************* POTASSIUM INDEX VALUE 70 ***************************** Mg MAGNESIUM INTEX VALUE Ca ************ 44 CALCIUM INDEX VALUE 150 50 75 100 25 69.3 17.17.0 1 0.5 25. 5 12.4 35.6 6.7 7.48 CEC SL Base S ORGANIC SOL SALTS % Phosphorus Zn SO.S В Mn ENCLOSURES BUFFER pH Saharati a/100 BS/ACRE MATTER UNHORICI

SUGGESTED FERTILIZER PROGRAM:

CROP: WARM SEASON GRASSES AND	-1	**************************************						
WILDFLOWER MIXES	T/A	TYPE	N	P205	K20	S	B	
YIELD GOAL: N/A	L	ME	LBS/A	LBS/A	LBS/	LBS/A	LBS	

- Apply 125 lbs lime per 1000 square feet. Lime will be most effective if broadcast and incorporated. If surface applying the lime, you may prefer to split the recommended rate into multiple applications of 40-50 lbs/1000 square feet each and apply several months apart until the full rate has been applied.
- Although warm season grasses and many wildflowers grow well on soils with low fertility, establishing optimum soil P and K levels at or prior to seeding will improve stand vigor and longevity. Apply 0.75 lbs K₂O per 1000 square feet [e.g., 1.25 lbs muriate of potash (0-0-60)] and broadcast over the soil surface at or prior to planting.
- 3. Soil test P is in the optimum range so no additional phosphate is needed at this time.
- For late summer plantings, a small amount of N (~0.5 lb N per 1000 square feet) may be beneficial and help improve stand establishment.
- For spring plantings, do not apply nitrogen at planting as it will encourage weed growth. Instead, wait until the plants are 2-4 inches tall. If weed pressure is low at this time, broadcast 1 to 1.25 lbs N/1000 square feet
- In subsequent years once the stand has been established, apply 1 to 1.25 lbs N per 1000 square feet in late May or early June after growth has reached 6 inches or more.
- For further assistance, contact your local cooperative extension office or visit the University of Maryland Extension website at http://extension.umd.edu/hgic/attracting-wildlife

ACKGR	OUND IN	FORMA	TION:		Grower	cop	У			-				
		CASTLE			12/05/16 DATE RECEIVED		12/13/1	6 14	12 602	094				
		UNTY					ATE COMPLET	TE LAB	NO. BAG	BAG NO.				
SOIL TEST FOR: GROWER				ADDITIC	ADDITIONAL COPY TO: COUNTY AGENT CARRIE MURPHY									
				JAMES 30 THE NEW CA	MEEK STRAND ASTLE, D) DE	1972	NEV 46	W CASTL 1 WYOMI	E CO. NG RD E 197	EXT. 16-1303	\$		
SOIL	NAME	D	SOIL RAINAGE	50IL COLOR		AMPLE DEPTH	TILLAG	E	PRESENT	COVER	IRRIGATION	NU PUM		
								NE	VER					
1	AST CROP			D OF TH	TIA WHEN	N	PHON KHO	MOS.	AGD TIA LAST LIME	TYPE	OTHER NUTRI	EMTS		
OIL TEST	RESULT	rs:	10	w	MEDIUM			OPT	IMUM					
PHOSPHORUS		5.0	****	*****	******	*****	*****					Ŋ		
OTASSIUM		135	****	******	*****	*****	*****	****	*****	*****	*****	k		
AGNESIUM		144	*****	*****	******	****	*****	****	*****	*****	*****	***		
ALCIUM	Ca	125	****	******	*****	****	*****	****	*****	*****	*****	11		
	INDEX VALUE L		0	25		50		78		100				
1.4	30.9	42.9	15.7	4.8		7.	.63 2	20.4	7.0		1			
B	Mn	Zn	SO4-S	% ORGANIC MATTER	SOL SALTS	BUFFE		nosphorus sturation	CEC meq/100gm	% Base Saturation	ENCLOSU	JRES		

CROP: WARM SEASON GRASSES AND		**************************************							
WILDFLOWER MIXES	T/A	TYPE	N	P2O6	K20	S	В		
YIELD GOAL: N/A	L	IME	LBS/A	LBS/A	LES	LBS/A	LES/A		

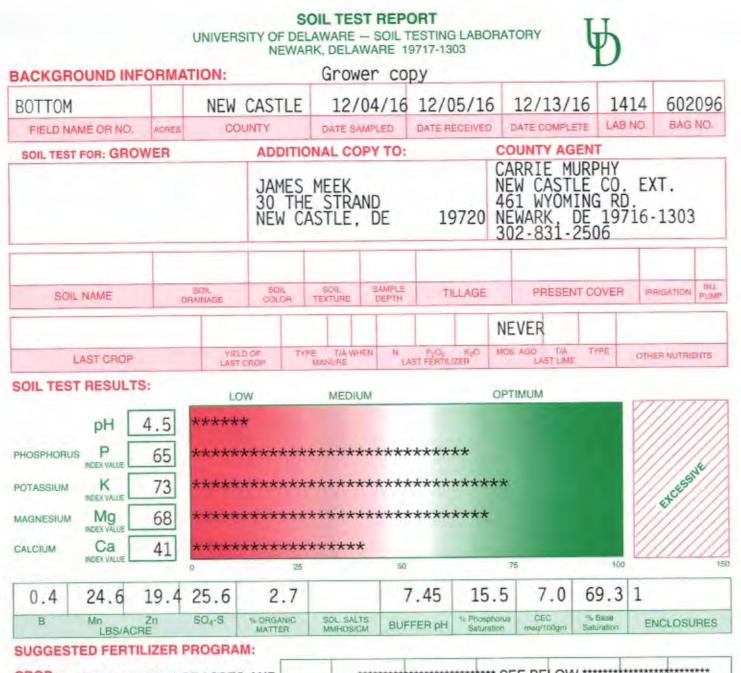
- Apply 75 lbs lime per 1000 square feet. Lime will be most effective if broadcast and incorporated. If surface applying the lime, you may prefer to split the recommended rate into multiple applications of 30-40 lbs/1000 square feet each and apply several months apart until the full rate has been applied.
- Soil test P is in the optimum range. No additional phosphate is needed at this time.
- Soil test K is in the optimum range so no additional potash is needed at this time.
- For late summer plantings, a small amount of N (~0.5 lb N per 1000 square feet) may be beneficial and help improve stand establishment.
- For spring plantings, do not apply nitrogen at planting as it will encourage weed growth. Instead, wait until the plants are 2-4 inches tall. If weed pressure is low at this time, broadcast 1 to 1.25 lbs N/1000 square feet
- In subsequent years once the stand has been established, apply 1 to 1.25 lbs N per 1000 square feet in late May or early June after growth has reached 6 inches or more.
- For further assistance, contact your local cooperative extension office or visit the University of Maryland Extension website at http://extension.umd.edu/hgic/attracting-wildlife

SOIL TEST REPORT UNIVERSITY OF DELAWARE - SOIL TESTING LABORATORY NEWARK, DELAWARE 19717-1303 BACKGROUND INFORMATION: Grower copy 12/13/16 1413 602095 12/04/16 12/05/16 RIGHT SIDE NEW CASTLE LAB NO. BAG NO. DATE COMPLETE COUNTY DATE RECEIVED DATE SAMPLED FIELD NAME OR NO. ACRES COUNTY AGENT ADDITIONAL COPY TO: SOIL TEST FOR: GROWER CARRIE MURPHY JAMES MEEK 30 THE STRAND NEW CASTLE, DE NEW CASTLE CO. EXT. 461 WYOMING RD. NEWARK, DE 19716-1303 19720 302-831-2506 CAMPLE FUMP SOIL SOIL SOL PRESENT COVER ARIGATION TILLAGE SOIL NAME NEVER TYPE NELD OF LAST PERTILIZER T/A TYPE MOS. ADD T/A WHEN 84 OTHER NUTRIENTS LAST CROP SOIL TEST RESULTS: MEDIUM OPTIMUM LOW ****** pH 4.6 P ********** 42 PHOSPHORUS EXCESSIVE INCER VALUE ********************* 60 POTASSIUM K NEEK VALUE ************************************ 76 Mg MAGNESIUM INDEX VALU Ca 51 *************** GALCIUM NPFX VALUE 100 150 25 50 75 69.3 1 7.47 12.6 7.0 12.2 37.3 0.6 67.9 3.6CEC % Esse 50-S ORGANIC SOL BALTS >> Phosphorus B Zn Mn ENCLOSURES BUFFER pH Saturati 0110 LBS/ACRE RETTAM MARINER

SUGGESTED FERTILIZER PROGRAM:

CROP: WARM SEASON GRASSES AND	**************************************								
WILDFLOWER MIXES	T/A	TYPE	N	P205	K ₂ O	S	В		
YIELD GOAL: N/A	L	IME	LBS/A	LBS/A	LBS/	LBS/A	LBS/A		

- Apply 125 lbs lime per 1000 square feet. Lime will be most effective if broadcast and incorporated. If surface applying the lime, you may prefer to split the recommended rate into multiple applications of 40-50 lbs/1000 square feet each and apply several months apart until the full rate has been applied.
- Although warm season grasses and many wildflowers grow well on soils with low fertility, establishing optimum soil P and K levels at or prior to seeding will improve stand vigor and longevity. Apply 0.75 lbs P₂O₅ per 1000 square feet [e.g., 1.6 lbs triple super phosphate (0-46-0)] and mix in to the soil surface at or prior to planting.
- 3. Soil test K is in the optimum range so no additional potash is needed at this time.
- For late summer plantings, a small amount of N (~0.5 lb N per 1000 square feet) may be beneficial and help improve stand establishment.
- For spring plantings, do not apply nitrogen at planting as it will encourage weed growth. Instead, wait until the plants are 2-4 inches tall. If weed pressure is low at this time, broadcast 1 to 1.25 lbs N/1000 square feet
- In subsequent years once the stand has been established, apply 1 to 1.25 lbs N per 1000 square feet in late May or early June after growth has reached 6 inches or more.
- For further assistance, contact your local cooperative extension office or visit the University of Maryland Extension website at http://extension.umd.edu/hgic/attracting-wildlife



CROP: WARM SEASON GRASSES AND		**************************************								
WILDFLOWER MIXES	T/A.	TYPE	N	P205	K20	S	В			
YIELD GOAL: N/A	LI	ME	LBS/A	LBS/A	LBS/	LES/A	LBS/A			

- Apply 125 lbs lime per 1000 square feet. Lime will be most effective if broadcast and incorporated. If surface applying the lime, you may prefer to split the recommended rate into multiple applications of 40-50 lbs/1000 square feet each and apply several months apart until the full rate has been applied.
- 2. Soil test P is in the optimum range. No additional phosphate is needed at this time.
- Soil test K is in the optimum range so no additional potash is needed at this time.
- For late summer plantings, a small amount of N (~0.5 lb N per 1000 square feet) may be beneficial and help improve stand establishment.
- For spring plantings, do not apply nitrogen at planting as it will encourage weed growth. Instead, wait until the plants are 2-4 inches tall. If weed pressure is low at this time, broadcast 1 to 1.25 lbs N/1000 square feet
- In subsequent years once the stand has been established, apply 1 to 1.25 lbs N per 1000 square feet in late May or early June after growth has reached 6 inches or more.
- For further assistance, contact your local cooperative extension office or visit the University of Maryland Extension website at http://extension.umd.edu/hgic/attracting-wildlife