09/19/2023	143	BACK FIELD	WALDO	
PRINT DATE	LAB NO.	SAMPLE IDENTIFICATION	COUNTY	ACRES OR SQ. FT.

### •SOIL QUALITY ANALYSIS

Report For:

EXAMPLE SOIL HEALTH REPORT

# MAINE SOIL TESTING SERVICE UNIVERSITY OF MAINE 1865 **5722 DEERING HALL** ORONO, MAINE 04469-5722

Soil Chemistry/Fertility Factors

NUTRIENT CHEMISTRY (see Numerical Results sect:	PARAMETERS ion for more information)		Page 1	ABOVE
Level Found	LOW	MEDIUM	OPTIMUM	OPTIMUM
	xxxxxxxxxxxxxxx	XXXXXXXXXXXXXXXX	XXXXXXXX	
Major nutrients Nitrate-N (ppm) 5	xxxxxxx			
Phosphorus(lb/A) 13.3	xxxxxxxxxxxxxxxx	XXXXXXXXXXXXXXX	CX	
Potassium (% Sat) 2.1	xxxxxxxxxxxxxxxx	XXX		
Calcium (% Sat) 75.9	xxxxxxxxxxxxxxxx	XXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX	XXXXX
Magnesium (% Sat) 22.1	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXX	XXXXX
	XXXXXXXXXXXX			
Micronutrients Boron (ppm) 0.5	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	X	
	xxxxxxxxxxxxxxx	XXXXXXXXXXXXXX	XXXXX	
	XXXXXXXXXXXXXXXXXX	X		
Manganese (ppm) 5.6	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXX	XXXXXX	
Zinc (ppm) 1.0	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX	XX	
RECOMMENDED ADDITION	ONS FOR ORGANIC	PRODUCTION - Crop	Code # 392	

No lime recommended. Soil pH is at or above the optimum level for this crop.

Magnesium level is sufficient to meet crop requirement.

To meet major nutrient requirements, apply (on each 1000 sq. ft.):

Nitrogen(2.5 lb) - from 20 lb bloodmeal or feathermeal or 100 lb alfalfa meal.

Phosphorus(1.1 lb) - from 7 lb bonemeal or bonechar.

Potassium(4.7 lb) - from 9 lb potassium sulfate or 100 lb alfalfa meal (see Nitrogen).

\*\*Note: not all sources of potassium sulfate approved for organic certification.

If you are using wood ash, discontinue until lime is needed again.

Sub-Optimum Nitrogen: Apply full rate of any recommended (1/2 rate if mid-season). 15 bushel cow or horse manure or 7-8 bushel poultry, sheep, goat, or rabbit manure/1000 sq. ft. can substitute for 1/4-1/3 recommended nutrients (apply in fall).

#### Apply fertilizer in spring. Apply 1/2 Nitrogen at planting time, 1/2 3-4 weeks later. For information on micronutrient management and recommendations, see enclosed form. (Test methodology: pH in water and Mehlich buffer, available nutrients by modified Morgan extract) (Organic matter measured by LOI, P determined colorimetrically, all others measured by ICP-OES) • NUMERICAL RESULTS CEC and nutrient balance calculations are based on present pH of 6.5 Level 6.5 6.20 13.3 150 660 3750 9.1(A) 2.1 22.1 75.9 0.0 Found Phosphorus Potassium Magnesium Calcium (lb/A) (lb/A) (lb/A) (lb/A) Lime Mg Ca Acidity Soil pH Index 2 (1b/A) (me/100 g (% Saturation) Optimum Range 6.0-7.0 20-40 see % Saturation levels < 10 N/A 10-20 60-80 Level 6 0.35 3.3 5.8 5.6 1.0 Found Additional Results or Comments: Organic Sulfur Copper Iron Manganese Zinc Lead scan: NORMAL BACKGROUND LEVEL -Matter(% (ppm) (ppm) (ppm) (ppm) (ppm)

Normal 15 25-.60 6 10 Range Level 0.5 5 5 N/A 14 Found Boron Sodium Soluble Salts Nitrate-N Ammonium-N Extras (mmhos/cm) (ppm) (ppm) (ppm) (ppm) Normal 0.5 - 1.2< 100 20 - 30< 10 Range

no health risk.

11/02/2023	143	BACK FIELD	WALDO	
PRINT DATE	LAB NO.	SAMPLE IDENTIFICATION	COUNTY	

# • SOIL QUALITY ANALYSIS REPORT FOR:

#### **EXAMPLE SOIL HEALTH REPORT**

MAINE SOIL TESTING SERVICE UNIVERSITY OF MAINE 5722 DEERING HALL ORONO,MAINE 04469-5722

Physical & Biological Factors

BIOLOGICAL & PHYSICAL PARAMETERS

(see Numerical Results section for more information)

Page 2

Biological factors FC	ound	LOW	OPTIMUM	HIGH
Organic Matter(%)	5.8	+++++++++++++++++++++++++	++++	
POXC (active C)	975	+++++++++++++++++++++++++++++++++++++++	++++++++++++++++	+++++++++++
Respiration(CO2)	80	+++++++++++++++++++		
Potential N Min.	60	+++++++++++++++++++++++++	+++++	
Physical factors				
WS Aggregates (%)	27	++++++		
Available Water(%)	11	+++++++++++++++++++++++++++++++++++++++	++++++++++++	
Pot. Root Depth(in)	18	+++++++++++++++++++++++++	++++++++++	

Soil Texture Class: Sandy loam TOC: 3.0 % Total N: .30 % C/N ratio: 9.

#### RECOMMENDED ADDITIONS & MANAGEMENT PRACTICES

#### To Improve Soil Biological Health:

Include green manure crops in rotation to improve OM & biological activity.

Increase use of compost or cover crops to improve OM & biological activity.

#### To Improve Soil Workability & Water Handling

Include sod or grain cover crops to build/maintain structure, water storage, & drainage. Manure will also improve soil structure, water storage, & drainage.

Avoid traffic on wet soil to minimize compaction.

Break up traffic pan by mechanical ripping and/or deep rooted crops.

Improve infiltration with surface mulch, zone tillage, or deep-rooted crops.

#### Suggested Reading & References:

Building Soils for Better Crops - Sustainable Soil Management, USDA-SARE (sare.org/Learning-Center/Books)

USDA Soil Health website (nrcs.usda.gov/wps/portal/nrcs/main/soils/health/)

## • NUMERICAL RESULTS (Test methodology: Biomass by 25C incubation/Solvita, Organic matter by LOI, PMN from 40C incubation,) (WSA by Eijkelkamp, Available H2O from % SME, Hardness by penetrometer, Rooting depth to 300 psi)

_	Level Found	5.8	975	80	60	27	11.1	100	250	18	
			Prmanganate Ox. C (ppm)			% Stable Aggregates				Pot. Root Depth(in)	
	Optimum	5-8 %	500-800	110-200	50-100	> 40	> 8	< 150	< 250	12-24	