



WARD
Laboratories, Inc.

Ag Testing - Consulting

Account No. : 24128

Biological Soil Analysis Report

SHELBY COUNTY SWCD
2519 SOUTHWEST AVE
HARLAN IA 51537

Invoice No. : 1185245
Date Received : 07/13/2015
Date Reported : 07/15/2015
Lab No. : 3704

Results For : SHELBY COUNTY SWCD

Sample ID 1 : S-1
Sample ID 2 :

Haney - Soil Health Analysis

1:1 Soil pH	6.8	ICAP Aluminum, ppm Al	224
1:1 Soluble Salts, mmho/cm	0.23	ICAP Iron, ppm Fe	115
Excess Lime Rating	1		
Organic Matter, %LOI	2.2	Calculations	
WDRF Buffer pH	7.2	Organic C:Organic N	7.3
Solvita CO2 Burst		Nitrogen mineralization, ppm N	8.0
CO2-C, ppm C	30.3	Organic Nitrogen Release, ppm N	10.7
		Organic Nitrogen Reserve, ppm N	0.0
Water Extract		Phosphorus mineralization, ppm P	6.1
Total Nitrogen, ppm N	17.8	Organic Phosphorus Reserve, ppm P	< 0.1
Organic Nitrogen, ppm N	10.7	Phosphorus Saturation Al/ Fe, %	9.0
Total Organic Carbon, ppm C	78	Phosphorus Saturation Ca, %	7.0
H3A Extract		Soil Health	
Nitrate, ppm NO3-N	6.5	Soil Health Calculation	6.01
Ammonium, ppm NH4-N	0.8	Cover Crop Suggestion	70% Legume 30% Grass
Inorganic Nitrogen, ppm N	7.3		
Inorganic (FIA) Phosphorus, ppm P	24.5		
Total (ICAP) Phosphorus, ppm P	30.6		
Organic Phosphorus, ppm P	6.1		
ICAP Potassium, ppm K	44		
ICAP Calcium, ppm Ca	435		



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Haney - Soil Health Analysis Contd.

Lab No. : 3704

Nutrient Quantity Available for Next Crop

Nitrogen Savings by using the Haney Test

Nitrogen, lbs N/A	36.0	Traditional evaluation, lbs N/A	13.0
Phosphorus, lbs P2O5/A	70.6	Haney Test N evaluation, lbs N/A	36.0
Potassium, lbs K2O/A	52.5	Nitrogen Difference, lbs N/A	23.0
Nutrient Value, \$/A	76.82	N savings, \$/A	14.71

Fertilizer Recommendations, lbs/A

<u>Crop</u>	<u>Yield Goal</u>	<u>Nitrogen N</u>	<u>Phosphorus P2O5</u>	<u>Potassium K2O</u>
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Invoice No. : 1185245
Date Received : 07/13/2015
Date Reported : 07/15/2015
Lab No. : 3705

Results For : SHELBY COUNTY SWCD

Sample ID 1 : S-2

Sample ID 2 :

Haney - Soil Health Analysis

1:1 Soil pH	6.5	ICAP Aluminum, ppm Al	235
1:1 Soluble Salts, mmho/cm	0.24	ICAP Iron, ppm Fe	111
Excess Lime Rating	1		
Organic Matter, %LOI	3.8	Calculations	
WDRF Buffer pH	7.0	Organic C:Organic N	8.4
Solvita CO2 Burst		Nitrogen mineralization, ppm N	13.9
CO2-C, ppm C	59.7	Organic Nitrogen Release, ppm N	15.9
		Organic Nitrogen Reserve, ppm N	0.0
Water Extract		Phosphorus mineralization, ppm P	9.0
Total Nitrogen, ppm N	26.5	Organic Phosphorus Reserve, ppm P	< 0.1
Organic Nitrogen, ppm N	15.9	Phosphorus Saturation Al/ Fe, %	15.3
Total Organic Carbon, ppm C	134	Phosphorus Saturation Ca, %	10.4
H3A Extract		Soil Health	
Nitrate, ppm NO3-N	9.2	Soil Health Calculation	10.04
Ammonium, ppm NH4-N	1.2	Cover Crop Suggestion	50% Legume 50% Grass
Inorganic Nitrogen, ppm N	10.3		
Inorganic (FIA) Phosphorus, ppm P	44.0		
Total (ICAP) Phosphorus, ppm P	53.0		
Organic Phosphorus, ppm P	9.0		
ICAP Potassium, ppm K	75		
ICAP Calcium, ppm Ca	508		

Reviewed By : Lance Gunderson

7/15/2015

Copy : 1

Page 1 of 2

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web site
www.wardlab.com

4007 Cherry Ave., P.O. Box 788
Kearney, Nebraska 68848-0788



Laboratories, Inc.

Ag Testing - Consulting

Haney - Soil Health Analysis Contd.

Lab No. : 3705

Nutrient Quantity Available for Next Crop

Nitrogen Savings by using the Haney Test

Nitrogen, lbs N/A	52.5	Traditional evaluation, lbs N/A	18.3
Phosphorus, lbs P2O5/A	126.2	Haney Test N evaluation, lbs N/A	52.5
Potassium, lbs K2O/A	90.0	Nitrogen Difference, lbs N/A	34.2
Nutrient Value, \$/A	127.80	N savings, \$/A	21.87

Fertilizer Recommendations, lbs/A

<u>Crop</u>	<u>Yield Goal</u>	<u>Nitrogen N</u>	<u>Phosphorus P2O5</u>	<u>Potassium K2O</u>
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SHELBY COUNTY SWCD
2519 SOUTHWEST AVE
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Invoice No. : 1185245
Date Received : 07/13/2015
Date Reported : 07/15/2015
Lab No. : 3706

Results For : SHELBY COUNTY SWCD

Sample ID 1 : S-3

Sample ID 2 :

Haney - Soil Health Analysis

1:1 Soil pH	6.5	ICAP Aluminum, ppm Al	227
1:1 Soluble Salts, mmho/cm	0.27	ICAP Iron, ppm Fe	113
Excess Lime Rating	1		
Organic Matter, %LOI	3.2	Calculations	
WDRF Buffer pH	6.8	Organic C:Organic N	5.8
Solvita CO2 Burst		Nitrogen mineralization, ppm N	10.1
CO2-C, ppm C	33.1	Organic Nitrogen Release, ppm N	13.7
		Organic Nitrogen Reserve, ppm N	0.0
Water Extract		Phosphorus mineralization, ppm P	7.7
Total Nitrogen, ppm N	27.7	Organic Phosphorus Reserve, ppm P	< 0.1
Organic Nitrogen, ppm N	13.7	Phosphorus Saturation Al/ Fe, %	7.4
Total Organic Carbon, ppm C	79	Phosphorus Saturation Ca, %	6.1
H3A Extract		Soil Health	
Nitrate, ppm NO3-N	13.4	Soil Health Calculation	7.86
Ammonium, ppm NH4-N	1.0	Cover Crop Suggestion	60% Legume 40% Grass
Inorganic Nitrogen, ppm N	14.3		
Inorganic (FIA) Phosphorus, ppm P	17.6		
Total (ICAP) Phosphorus, ppm P	25.3		
Organic Phosphorus, ppm P	7.7		
ICAP Potassium, ppm K	43		
ICAP Calcium, ppm Ca	411		

Reviewed By : Lance Gunderson

7/15/2015

Copy : 1

Page 1 of 2

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Kearney, Nebraska 68848-0788



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Haney - Soil Health Analysis Contd.

Lab No. : 3706

Nutrient Quantity Available for Next Crop

Nitrogen Savings by using the Haney Test

Nitrogen, lbs N/A	56.0	Traditional evaluation, lbs N/A	26.7
Phosphorus, lbs P2O5/A	58.3	Haney Test N evaluation, lbs N/A	56.0
Potassium, lbs K2O/A	52.1	Nitrogen Difference, lbs N/A	29.3
Nutrient Value, \$/A	84.61	N savings, \$/A	18.73

Fertilizer Recommendations, lbs/A

<u>Crop</u>	<u>Yield Goal</u>	<u>Nitrogen N</u>	<u>Phosphorus P2O5</u>	<u>Potassium K2O</u>
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