



Ag Testing - Consulting

Account No. : 93997

**Biological Soil Analysis Report**

SOIL & UP AGRONOMY LLC  
PO BOX 616  
ALGORA IA 50571

Invoice No. : 1410301  
Date Received : 09/05/2023  
Date Reported : 09/07/2023

Results For : LUCHAS FARM/GETTING FARMS LTD

Sample ID 1 : 1

Sample ID 3 :

Sample ID 2 :

Sample ID 4 :

Lab No. : 2647

Soil Depth : 0 - 8 in

**Haney - Soil Health Analysis**

1:1 Soil pH	5.8	ICAP Sulfur, ppm S	7.6
1:1 Soluble Salts, mmho/cm	0.44	ICAP Calcium, ppm Ca	575
Excess Lime Rating	NONE	ICAP Magnesium, ppm Mg	128
Organic Matter, %LOI	4.4	ICAP Sodium, ppm Na	35
WDRF Buffer pH	6.6	ICAP Aluminum, ppm Al	137
Soil Respiration CO <sub>2</sub> -C, ppm C	116.2	<b>Calculations</b>	
<b>Water Extract</b>		Microbially Active Carbon (%MAC)	83.9
Total Nitrogen, ppm N	19.1	Organic C : Organic N	18.3
Organic Nitrogen, ppm N	7.6	Organic N : Inorganic N	0.9
Total Organic Carbon, ppm C	139	Organic Nitrogen Release, ppm N	7.6
<b>H3A Extract</b>		Organic Nitrogen Reserve, ppm N	0.0
Nitrate, ppm NO <sub>3</sub> -N	5.4	Organic Phosphorus Release, ppm P	3.6
Ammonium, ppm NH <sub>4</sub> -N	3.0	Organic Phosphorus Reserve, ppm P	< 0.1
Inorganic Nitrogen, ppm N	8.4	<b>Soil Health</b>	
Total (ICAP) Phosphorus, ppm P	10	Soil Health Calculation	13.21
Inorganic (FIA) Phosphorus, ppm P	6.3	Cover Crop Suggestion	60% Legume 40% Grass
Organic Phosphorus, ppm P	3.6		
ICAP Potassium, ppm K	40		
ICAP Zinc, ppm Zn	0.28		
ICAP Iron, ppm Fe	50		
ICAP Manganese, ppm Mn	3.8		
ICAP Copper, ppm Cu	< 0.01		

Reviewed By : Willie Pretorius

10/5/2023

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Page 1 of 2

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Lab No. : 2647

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**Haney - Soil Health Analysis Contd.**

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**Nutrient Quantity Available for Next Crop**

**Nitrogen Savings by using the Haney Test**

Nitrogen, lbs N/A	38.2	Traditional evaluation, lbs N/A	12.9
Phosphorus, lbs P <sub>2</sub> O <sub>5</sub> /A	22.9	Haney Test N evaluation, lbs N/A	38.2
Potassium, lbs K <sub>2</sub> O/A	47.8	Nitrogen Difference, lbs N/A	25.4
Nutrient Value, \$/A	57.29	N savings, \$/A	16.25



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Results For : LUCHAS FARM/GETTING FARMS LTD

Sample ID 1 : 2  
Sample ID 2 :  
Lab No. : 2648

Sample ID 3 :  
Sample ID 4 :  
Soil Depth : 0 - 8 in

**Haney - Soil Health Analysis**

1:1 Soil pH	6.0	ICAP Sulfur, ppm S	8.0
1:1 Soluble Salts, mmho/cm	0.50	ICAP Calcium, ppm Ca	683
Excess Lime Rating	NONE	ICAP Magnesium, ppm Mg	150
Organic Matter, %LOI	5.2	ICAP Sodium, ppm Na	28
WDRF Buffer pH	6.4	ICAP Aluminum, ppm Al	119
Soil Respiration CO <sub>2</sub> -C, ppm C	177.0	<b>Calculations</b>	
<b>Water Extract</b>		Microbially Active Carbon (%MAC)	106.4
Total Nitrogen, ppm N	13.9	Organic C : Organic N	17.7
Organic Nitrogen, ppm N	9.4	Organic N : Inorganic N	1.9
Total Organic Carbon, ppm C	166	Organic Nitrogen Release, ppm N	9.4
<b>H3A Extract</b>		Organic Nitrogen Reserve, ppm N	0.0
Nitrate, ppm NO <sub>3</sub> -N	2.3	Organic Phosphorus Release, ppm P	7.2
Ammonium, ppm NH <sub>4</sub> -N	2.6	Organic Phosphorus Reserve, ppm P	< 0.1
Inorganic Nitrogen, ppm N	4.9	<b>Soil Health</b>	
Total (ICAP) Phosphorus, ppm P	14	Soil Health Calculation	19.01
Inorganic (FIA) Phosphorus, ppm P	6.8	Cover Crop Suggestion	30% Legume 70% Grass
Organic Phosphorus, ppm P	7.2		
ICAP Potassium, ppm K	47		
ICAP Zinc, ppm Zn	0.31		
ICAP Iron, ppm Fe	50		
ICAP Manganese, ppm Mn	2.2		
ICAP Copper, ppm Cu	0.02		

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Page 1 of 2

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Lab No. : 2648

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**Haney - Soil Health Analysis Contd.**

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<b>Nutrient Quantity Available for Next Crop</b>		<b>Nitrogen Savings by using the Haney Test</b>	
Nitrogen, lbs N/A	34.3	Traditional evaluation, lbs N/A	5.6
Phosphorus, lbs P <sub>2</sub> O <sub>5</sub> /A	32.2	Haney Test N evaluation, lbs N/A	34.3
Potassium, lbs K <sub>2</sub> O/A	56.1	Nitrogen Difference, lbs N/A	28.7
Nutrient Value, \$/A	62.54	N savings, \$/A	18.37



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Date Received : 09/05/2023  
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Results For : LUCHAS FARM/GETTING FARMS LTD

Sample ID 1 : 3  
Sample ID 2 :  
Lab No. : 2649

Sample ID 3 :  
Sample ID 4 :  
Soil Depth : 0 - 8 in

**Haney - Soil Health Analysis**

1:1 Soil pH	7.6	ICAP Sulfur, ppm S	13.7
1:1 Soluble Salts, mmho/cm	0.56	ICAP Calcium, ppm Ca	1136
Excess Lime Rating	NONE	ICAP Magnesium, ppm Mg	235
Organic Matter, %LOI	6.4	ICAP Sodium, ppm Na	38
		ICAP Aluminum, ppm Al	114
Soil Respiration CO <sub>2</sub> -C, ppm C	323.8	<b>Calculations</b>	
<b>Water Extract</b>		Microbially Active Carbon (%MAC)	145.5
Total Nitrogen, ppm N	27.1	Organic C : Organic N	11.9
Organic Nitrogen, ppm N	18.7	Organic N : Inorganic N	1.7
Total Organic Carbon, ppm C	223	Organic Nitrogen Release, ppm N	18.7
<b>H3A Extract</b>		Organic Nitrogen Reserve, ppm N	0.0
Nitrate, ppm NO <sub>3</sub> -N	8.1	Organic Phosphorus Release, ppm P	28.7
Ammonium, ppm NH <sub>4</sub> -N	3.2	Organic Phosphorus Reserve, ppm P	< 0.1
Inorganic Nitrogen, ppm N	11.3	<b>Soil Health</b>	
Total (ICAP) Phosphorus, ppm P	127	Soil Health Calculation	26.57
Inorganic (FIA) Phosphorus, ppm P	98.1	Cover Crop Suggestion	20% Legume 80% Grass
Organic Phosphorus, ppm P	28.7		
ICAP Potassium, ppm K	181		
ICAP Zinc, ppm Zn	1.43		
ICAP Iron, ppm Fe	41		
ICAP Manganese, ppm Mn	2.3		
ICAP Copper, ppm Cu	0.14		

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Page 1 of 2

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Ag Testing - Consulting

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Lab No. : 2649

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**Haney - Soil Health Analysis Contd.**

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<b>Nutrient Quantity Available for Next Crop</b>		<b>Nitrogen Savings by using the Haney Test</b>	
Nitrogen, lbs N/A	72.1	Traditional evaluation, lbs N/A	19.5
Phosphorus, lbs P <sub>2</sub> O <sub>5</sub> /A	291.7	Haney Test N evaluation, lbs N/A	72.1
Potassium, lbs K <sub>2</sub> O/A	217.8	Nitrogen Difference, lbs N/A	52.6
Nutrient Value, \$/A	268.78	N savings, \$/A	33.64



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Results For : LUCHAS FARM/GETTING FARMS LTD

Sample ID 1 : 4  
Sample ID 2 :  
Lab No. : 2650

Sample ID 3 :  
Sample ID 4 :  
Soil Depth : 0 - 8 in

**Haney - Soil Health Analysis**

1:1 Soil pH	7.8	ICAP Sulfur, ppm S	15.2
1:1 Soluble Salts, mmho/cm	0.56	ICAP Calcium, ppm Ca	1463
Excess Lime Rating	NONE	ICAP Magnesium, ppm Mg	278
Organic Matter, %LOI	8.1	ICAP Sodium, ppm Na	40
		ICAP Aluminum, ppm Al	63
Soil Respiration CO <sub>2</sub> -C, ppm C	297.5	<b>Calculations</b>	
<b>Water Extract</b>		Microbially Active Carbon (%MAC)	133.6
Total Nitrogen, ppm N	21.3	Organic C : Organic N	15.2
Organic Nitrogen, ppm N	14.7	Organic N : Inorganic N	2.3
Total Organic Carbon, ppm C	223	Organic Nitrogen Release, ppm N	14.7
<b>H3A Extract</b>		Organic Nitrogen Reserve, ppm N	0.0
Nitrate, ppm NO <sub>3</sub> -N	4.5	Organic Phosphorus Release, ppm P	3.7
Ammonium, ppm NH <sub>4</sub> -N	2.0	Organic Phosphorus Reserve, ppm P	< 0.1
Inorganic Nitrogen, ppm N	6.4	<b>Soil Health</b>	
Total (ICAP) Phosphorus, ppm P	32	Soil Health Calculation	27.17
Inorganic (FIA) Phosphorus, ppm P	28.0	Cover Crop Suggestion	20% Legume 80% Grass
Organic Phosphorus, ppm P	3.7		
ICAP Potassium, ppm K	56		
ICAP Zinc, ppm Zn	0.32		
ICAP Iron, ppm Fe	19		
ICAP Manganese, ppm Mn	1.0		
ICAP Copper, ppm Cu	0.02		

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*Laboratories, Inc.*

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Lab No. : 2650

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**Haney - Soil Health Analysis Contd.**

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**Nutrient Quantity Available for Next Crop**

**Nitrogen Savings by using the Haney Test**

Nitrogen, lbs N/A	50.7	Traditional evaluation, lbs N/A	10.7
Phosphorus, lbs P <sub>2</sub> O <sub>5</sub> /A	73.0	Haney Test N evaluation, lbs N/A	50.7
Potassium, lbs K <sub>2</sub> O/A	67.7	Nitrogen Difference, lbs N/A	40.0
Nutrient Value, \$/A	94.76	N savings, \$/A	25.61