



# Down To Earth Labs Inc.

The Science of Higher Yields

Nutrien Ag Solutions  
Weyburn  
Box 278  
Weyburn, SK S4H 2K1

Report #: 95352  
Report Date: 2020-10-27  
Received: 2020-10-20  
Completed: 2020-10-27  
Test Package: SF8

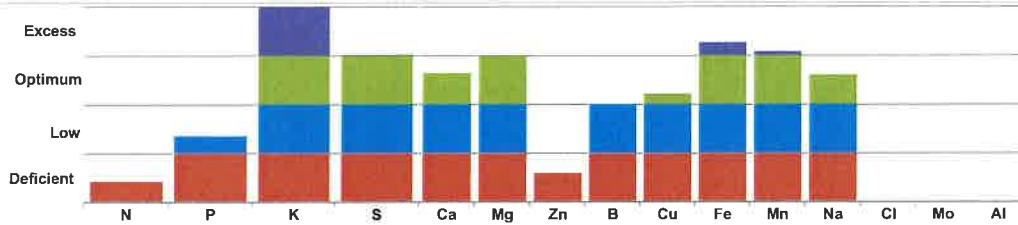
Project:  
Grower: Brown Family Grains  
Farm:  
Field: WH 5-10-20  
H<sub>2</sub>O Mgmt: Dryland

3510 6th Ave North  
Lethbridge, AB T1H 5C3  
403-328-1133  
www.downtoearthlabs.com  
info@downtoearthlabs.com

### Soil Nutrients

Lab ID	Depth	Macros			Secondary			Micros								
		NO <sub>3</sub> -N lbs/ac	P lbs/ac	K lbs/ac	SO <sub>4</sub> -S lbs/ac	Ca ppm	Mg ppm	Zn ppm	B ppm	Cu ppm	Fe ppm	Mn ppm	Na ppm	Cl ppm	Mo ppm	Al ppm
201020O003	0-12	13	34	1810	54	3312	1010	0.3	0.8	1.9	34.9	13.8	141.9			

Available Total 13 34 1810 54 3312 1010 0.3 0.8 1.9 34.9 13.8 141.9



### Soil Characteristics

Lab ID	Depth	OM %	Estimated N Release lbs/ac	pH 1:1	Sol Salts 1:1 dS/m	Lime Req. tonne/ha	% Base Saturation					ECEC	K/Mg Ratio	
							Ca	K	Mg	Na	H			Total
201020O003	0-12	2.9	32	7.1	0.7	0	62.1	4.3	31.2	2.3	0	100	26.6	0.14

### Soil Texture Characteristics

Lab ID	Customer Sample ID	Texture Class	Sand %	Silt %	Clay %	CEC meq/100g

### Laboratory Guidelines

Crop	Yield	Units	N lbs/acre	P <sub>2</sub> O <sub>5</sub> lbs/acre	K <sub>2</sub> O lbs/acre	S lbs/acre	Zn lbs/acre	B lbs/acre	Cu lbs/acre	Fe lbs/acre	Mn lbs/acre
Peas, Field	50	Bushels	20	35	0	0	5	0	0	0	0
Canary Seed	40	Bushels	80	35	0	0	5	0	0	0	0
Canola, Commercial	50	Bushels	140	35	0	0	5	0	0	0	0
Lentils	30	Bushels	10	30	0	0	5	0	0	0	0

Notes: N rate is for canary seed following stubble. Reduce N by 35# if following grass or legume breaking.

Down To Earth Labs Ltd. Laboratory Fertilizer Guidelines are determined by subtracting the sum of the test results from the crop requirements as determined by Alberta Agriculture. Subtract nitrogen credits for legume crops from the guidelines if applicable. Estimated nitrogen release from organic matter is not considered in these guidelines.  
 Subtract out estimated remaining fertilizer in soil deaths not tested through the root zone.  
 Starter fertilizers may be needed in the seed bed to assist seed development. Consult your Agronomist or Crop Advisor for a comprehensive analysis of your soil results for determining fertilizer applications.  
 Lime Requirements are based on a tillage depth of 6" and are estimated based on lime with an ag index of 75. Adjust lime amount according to farming practices.  
 ECEC = Estimated Cation Exchange Capacity, Total %BS = Estimated Total % Base Saturation  
 BDL = Below Detection Limit. These results are not an endorsement of sampling methods.



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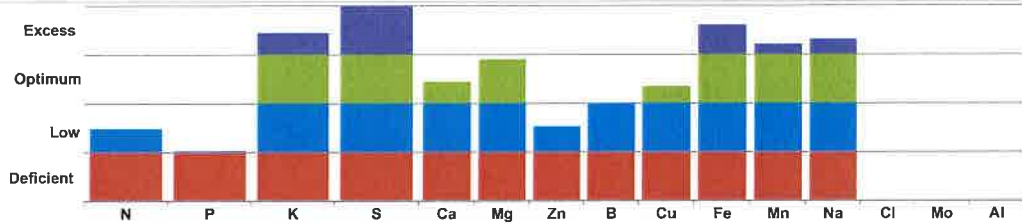
**Report # :** 67109  
**Report Date:** 4/24/2019  
**Received:** 4/18/2019  
**Completed:** 4/24/2019  
**Test Package:** SF14

**Project:**  
**Grower:** Brown Family Grains  
**Farm:**  
**Field:** WH 5-10-20  
**H<sub>2</sub>O Mgmt:** Dryland

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Lab ID	Depth	Soil Nutrients														
		Macros			Secondary			Micros								
		NO3-N lbs/ac	P lbs/ac	K lbs/ac	SO4-S lbs/ac	Ca ppm	Mg ppm	Zn ppm	B ppm	Cu ppm	Fe ppm	Mn ppm	Na ppm	Cl ppm	Mo ppm	Al ppm
190418N011	0-6	24	26	1005	65	2389	910	1.3	0.8	2.4	64.7	25.4	316			
190418N012	6-12	21			383											

Available Total    45       26       1005       449       2389       910       1.3       0.8       2.4       64.7       25.4       316



Lab ID	Depth	Soil Characteristics											ECEC	K/Mg Ratio
		OM %	Estimated N Release lbs/ac	pH 1:1	Sol Salts 1:1 dS/m	Lime Req. tonne/ha	% Base Saturation							
190418N011	0-6	3.3	37	7	0.9	0	Ca 54	K 5.8	Mg 33.9	Na 6.2	H 0	Total 100	22.1	0.17
190418N012	6-12			7.8	1.7									

Lab ID	Soil Texture Characteristics					
	Customer Sample ID	Texture Class	Sand %	Silt %	Clay %	CEC meq/100g
190418N011						
190418N012						

Crop	Yield	Units	Laboratory Guidelines									
			N lbs/acre	P <sub>2</sub> O <sub>5</sub> lbs/acre	K <sub>2</sub> O lbs/acre	S lbs/acre	Zn lbs/acre	B lbs/acre	Cu lbs/acre	Fe lbs/acre	Mn lbs/acre	

**Notes:**

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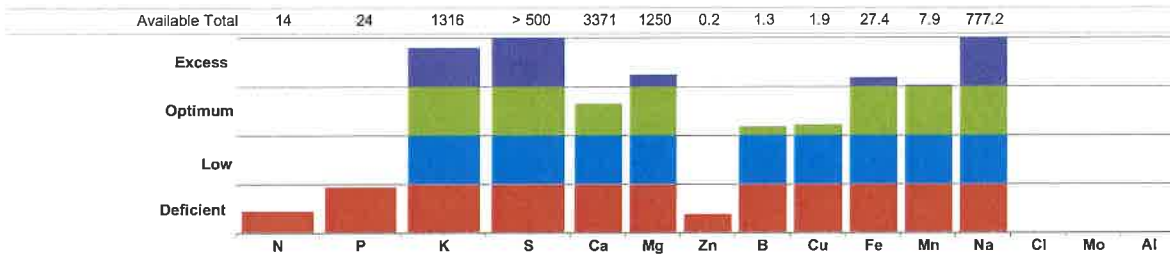
Nutrien Ag Solutions  
Weyburn  
Box 278  
Weyburn, SK S4H 2K1

Report #: 95351  
Report Date: 2020-10-27  
Received: 2020-10-20  
Completed: 2020-10-27  
Test Package: SF8

Project:  
Grower: Brown Family Grains  
Farm:  
Field: NE 6-10-20 W2  
H<sub>2</sub>O Mgmt: Dryland

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Soil Nutrients																	
Lab ID	Depth	Macros			Secondary			Micros									
		NO <sub>3</sub> -N lbs/ac	P lbs/ac	K lbs/ac	SO <sub>4</sub> -S lbs/ac	Ca ppm	Mg ppm	Zn ppm	B ppm	Cu ppm	Fe ppm	Mn ppm	Na ppm	Cl ppm	Mo ppm	Al ppm	
201020O002	0-12	14	24	1316	> 500	3371	1250	0.2	1.3	1.9	27.4	7.9	777.2				



Soil Characteristics														ECEC	K/Mg Ratio
Lab ID	Depth	OM %	Estimated N Release lbs/ac	pH 1:1	Sol Salts 1:1 dS/m	Lime Req tonne/ha	Ca	K	Mg	Na	H	Total			
201020O002	0-12	2.6	29	7.3	2.2	0	53.7	2.7	32.8	10.8	0	100	31.3	0.08	

Soil Texture Characteristics						
Lab ID	Customer Sample ID	Texture Class	Sand %	Silt %	Clay %	CEC meq/100g
201020O002						

Laboratory Guidelines												
Crop	Yield	Units	N lbs/acre	P <sub>2</sub> O <sub>5</sub> lbs/acre	K <sub>2</sub> O lbs/acre	S lbs/acre	Zn lbs/acre	B lbs/acre	Cu lbs/acre	Fe lbs/acre	Mn lbs/acre	
Flax	30	Bushels	80	25	0	0	5	0	0	0	0	
Peas, Field	50	Bushels	20	35	0	0	5	0	0	0	0	
Canary Seed	40	Bushels	80	35	0	0	5	0	0	0	0	
Canola, Commercial	50	Bushels	140	35	0	0	5	0	0	0	0	
Lentils	30	Bushels	10	35	0	0	5	0	0	0	0	

Notes: N rate is for canary seed following stubble. Reduce N by 35# if following grass or legume breaking.

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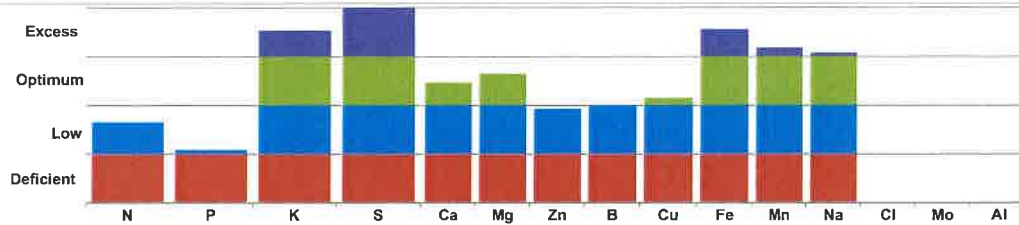
Report #: 67110  
Report Date: 4/24/2019  
Received: 4/18/2019  
Completed: 4/24/2019  
Test Package: SF14

Project:  
Grower: Brown Family Grains  
Farm:  
Field: NE 5-10-20 W2  
H<sub>2</sub>O Mgmt: Dryland

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Lethbridge, AB T1H 5C3  
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Soil Nutrients																
Lab ID	Depth	Macros			Secondary			Micros								
		NO3-N lbs/ac	P lbs/ac	K lbs/ac	SO4-S lbs/ac	Ca ppm	Mg ppm	Zn ppm	B ppm	Cu ppm	Fe ppm	Mn ppm	Na ppm	Cl ppm	Mo ppm	Al ppm
190418N013	0-6	27	27	1082	89	2477	670	1.9	0.8	1.6	60.2	22.3	250.5			
190418N014	6-12	23			> 400											

Available Total    50       27       1082       > 489    2477    670    1.9    0.8    1.6    60.2    22.3    250.5



Soil Characteristics														ECEC	K/Mg Ratio
Lab ID	Depth	OM %	Estimated N Release lbs/ac	pH 1:1	Sol Salts 1:1 dS/m	Lime Req. tonne/ha	Ca	K	Mg	Na	H	Total			
190418N013	0-6	3.5	39	7.1	0.9	0	60.8	6.8	27.1	5.4	0	100	20.3	0.25	
190418N014	6-12			7.4	3.1										

Soil Texture Characteristics						
Lab ID	Customer Sample ID	Texture Class	Sand %	Silt %	Clay %	CEC meq/100g
190418N013						
190418N014						

Laboratory Guidelines											
Crop	Yield	Units	N lbs/acre	P <sub>2</sub> O <sub>5</sub> lbs/acre	K <sub>2</sub> O lbs/acre	S lbs/acre	Zn lbs/acre	B lbs/acre	Cu lbs/acre	Fe lbs/acre	Mn lbs/acre

Notes:

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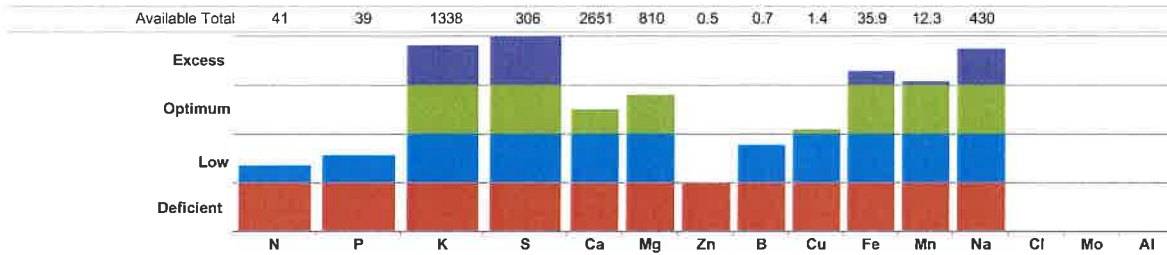
Nutrien Ag Solutions  
Weyburn  
Box 278  
Weyburn, SK S4H 2K1

Report #: 95360  
Report Date: 2020-10-27  
Received: 2020-10-20  
Completed: 2020-10-27  
Test Package: SF8

Project:  
Grower: Brown Family Grains  
Farm:  
Field: SE 8-10-20  
H<sub>2</sub>O Mgmt: Dryland

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Soil Nutrients																	
Lab ID	Depth	Macros			Secondary			Micros									
		NO <sub>3</sub> -N lbs/ac	P lbs/ac	K lbs/ac	SO <sub>4</sub> -S lbs/ac	Ca ppm	Mg ppm	Zn ppm	B ppm	Cu ppm	Fe ppm	Mn ppm	Na ppm	Cl ppm	Mo ppm	Al ppm	
201020O011	0-12	41	39	1338	306	2651	810	0.5	0.7	1.4	35.9	12.3	430				



Soil Characteristics														ECEC	K/Mg Ratio
Lab ID	Depth	OM %	Estimated N Release lbs/ac	pH 1:1	Sol Salts 1:1 dS/m	Lime Req. tonne/ha	Ca	K	Mg	Na	H	Total			
201020O011	0-12	2.6	29	7.3	1	0	58.5	3.8	29.5	8.3	0	100	22.6	0.13	

Soil Texture Characteristics						
Lab ID	Customer Sample ID	Texture Class	Sand %	Silt %	Clay %	CEC meq/100g
201020O011						

Laboratory Guidelines												
Crop	Yield	Units	N lbs/acre	P <sub>2</sub> O <sub>5</sub> lbs/acre	K <sub>2</sub> O lbs/acre	S lbs/acre	Zn lbs/acre	B lbs/acre	Cu lbs/acre	Fe lbs/acre	Mn lbs/acre	
Flax	30	Bushels	50	25	0	0	3	1	0	0	0	
Peas, Field	50	Bushels	0	30	0	0	3	1	0	0	0	
Canary Seed	40	Bushels	50	35	0	0	3	1	0	0	0	
Canola, Commercial	50	Bushels	110	35	0	0	3	1	0	0	0	
Lentils	30	Bushels	0	30	0	0	3	1	0	0	0	

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