

SOIL ANALYSIS REPORT

CLIENT:	OWN RESOURCES OPERATING LLC
18250	36695 HWY 385
	PO BOX 250
	WRAY, CO 80758



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LAB NO:	100547
INVOICE NO:	630690
DATE RECEIVED:	08/27/2020
DATE REPORTED:	09/03/2020

SOIL ANALYSIS RESULTS FOR: OWN RESOURCES **FIELD IDENTIFICATION: NEWTON 11-01**

METHOD USED:			1:1 Water-Soil	1:1 Water-Soil	XSL(i)	Mehlich 3 ICP	Ammonium Acetate		Mehlich 3 ICP								
Lab Number	Sample ID	Sample Depth	Soil pH	Buffer pH	Sol. Salts mmho/cm	Excess Lime	% Organic Matter	Phosphorus ppm P	Potassium ppm K	Calcium ppm Ca	Magnesium ppm Mg	Sodium ppm Na	Zinc ppm Zn	Iron ppm Fe	Manganese ppm Mn	Copper ppm Cu	Boron ppm B
100547	NEWTON 11-01	0 - 36	7.2		0.30	No			332	1419	93	124					

METHOD USED:			Sat. Paste														Cation:Anion	
Lab Number	Sample ID	Sample Depth	Saturation % Sat	Soil pH	Electrical Conductivity mmho/cm	Potassium mg/L K	Sulfur mg/L S	Calcium mg/L Ca	Magnesium mg/L Mg	Sodium mg/L Na	Carbonate mg/L CO3	Bicarbonate mg/L HCO3	Chloride mg/L Cl	Boron mg/L B	Sodium Adsorption Ratio			
100547	NEWTON 11-01	0 - 36	38	7.21	1.27	36	6	56	5	120	<10	300	96	0.31	4.12	9.4 / 8.1		

FERTILIZER RECOMMENDATIONS:															POUNDS ACTUAL NUTRIENT PER ACRE										Cation Exchange Capacity					
Lab Number	Sample ID	Crop To Be Grown	Yield Goal	Lime, ECC Tons/A to raise pH to:			N	P ₂ O ₅	K ₂ O	Zn	S	Mn	Cu	MgO	B	Ca	Cl	CEC	%H	%K	%Ca	%Mg	%Na							
				6.0	6.5	7.0												9	0	9	77	8	6							
100547	NEWTON 11-01																	9	0	9	77	8	6							

SPECIAL COMMENTS AND SUGGESTIONS:

Lab Number(s): 100547
 Servi-Tech Laboratory fertilizer recommendations were not requested.

Analyses are representative of the samples submitted Samples are retained 30 days after report of analysis Explanations of soil analysis terms are available upon request

Reviewed and
 Approved By:

Hans Burken
 Agronomist

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Lab No.: 100547		SOIL ANALYSIS RESULTS		Date Reported: 09/03/2020	
Send To: 18250		OWN RESOURCES OPERATING LLC 36695 HWY 385 PO BOX 250 WRAY, CO 80758		 Hans Burken Agronomist	
Results For: Sample Identification: Sample Depth:		OWN RESOURCES NEWTON 11-01 0-36"		Invoice No.: 630690 Date Received: 08/27/2020 Field ID NEWTON 11-01	
Exchangable:					
	<u>ppm</u>	<u>%</u>			
Calcium, Ca	1419	77	Cation Exchange Capacity, CEC meq/100g		9
Magnesium, Mg	93	8	Soil pH - 1:1		7.2
Potassium, K	332	9	Soil pH - Saturated Paste		7.2
Sodium, Na	124	6	Soluble Salts, mmho/cm		0.30
Excess Lime Rating		NO	Exchangable Sodium Percent, ESP		6
Extractable (from saturated paste, based on 38% water saturation):					
		<u>mg/L</u>		<u>meq/L</u>	
Calcium (Ca)		56		2.8	
Magnesium (Mg)		5		0.4	
Sodium (Na)		120		5.2	
Sulfur (S)		6		0.4	
Boron (B)		0.31			
Potassium (K)		36		0.9	
Chloride (Cl)		96		2.7	
Bicarbonate (HCO ₃)		300		4.9	
Carbonate (CO ₃)		<10		<0.3	
Sodium Adsorption Ratio (SAR)		4.12			
Electrical Conductivity (ECe), mmho/cm		1.27			
Cation:Anion		9.4 / 8.1			
Calculated Gypsum Recommendation (from ESP and CEC)					
Soil Texture			Gypsum Rec. T/A		
COARSE	(sands, loamy sands, sandy loams)		0.0	To	0.0
MEDIUM	(loams, silt loams, clay loams)		0.0	To	0.0
FINE	(silty clay, clay loams, clays)		0.0	To	0.0
This soil is considered: NON-SALINE/NON-SODIC					

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Sample Depth:	0-36"	Field ID	NEWTON 11-01	
GYPSUM SUGGESTIONS: If soil has good internal drainage, full gypsum rate can be used to reclaim the affected area, but keep applications below 2 to 3 tons in a single year. Reclamation may not be feasible if a high water table is present, but applying 1/2 to 1 ton of gypsum every one to two years may help prevent crusting and surface "sealing".				
SOIL PERMEABILITY HAZARD (based on ESP and SAR):				
Soil texture		Potential hazard		
-----		-----		
COARSE (sands, loamy sands, sandy loams)		LOW		
MEDIUM (loams, silt loams, clay loams)		LOW		
FINE (silty clay loams, clays)		CAUTION		
SOIL SALINITY: Saline soils can be managed by choosing tolerant crops, keeping the seedbed moist until crop establishment, and/or irrigating with relatively good quality irrigation water. Good internal soil drainage is needed to reclaim saline areas, so lowering water tables may be necessary. Test soil (and water) annually to monitor changes in salinity levels.				
SOIL SALINITY HAZARD (based on extractable salts, ECe):				
Crop type		Potential hazard		
-----		-----		
SALT SENSITIVE (onions, carrots, many ornamentals, many fruit crops, etc.)		CAUTION		
MODERATELY SENSITIVE (seedling alfalfa, corn, soybeans, many vegetables, etc.)		LOW		
MODERATELY TOLERANT (wheat, wheatgrass, sudangrass, sorghum, fescue, oats, bromegrass, etc.)		LOW		
SALT TOLERANT (barley, bermudagrass, sugarbeets, cotton, etc.)		LOW		
EXTRACTABLE BORON HAZARD (based on soil extractable boron, B):				
Crop type		Potential hazard		
-----		-----		
BORON SENSITIVE (such as sunflower, barley, onions, citrus, fruit trees, grapes, etc.)		CAUTION		
MODERATELY SENSITIVE (such as potatoes, peppers, peas, radishes, etc.)		LOW		
MODERATELY TOLERANT (such as wheat, corn, oats, clover, lettuce, turnips, celery, etc.)		LOW		
BORON TOLERANT (such as alfalfa, beets, cotton, grain sorghum, tomatoes, vetch, etc.)		LOW		

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