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|  |  |  |  |                                  |  |
|--|--|--|--|----------------------------------|--|
| <b>Lab No.:</b> 105525   |  | <b>SOIL ANALYSIS RESULTS</b>   |  | <b>Date Reported:</b> 05/06/2022 |  |
| <b>Send To:</b><br>18250   |  | OWN RESOURCES OPERATING LLC<br>36695 HWY 385<br>PO BOX 250<br>WRAY, CO 80758                     |  | <br>Hans Burken<br>Lab Manager   |  |
| <b>Results For:</b> OWN RESOURCES<br><b>Sample Identification:</b> 1<br><b>Sample Depth:</b> 0-36" |  | <b>Invoice No.:</b> 639498<br><b>Date Received:</b> 04/28/2022<br><b>Field ID</b> J BROPHY 03-27 |  |                                  |  |

|                     |            |          |  |  |      |
|---------------------|------------|----------|--|--|------|
| <b>Exchangable:</b> |            |          |  |  |      |
|                     | <u>ppm</u> | <u>%</u> |  |  |      |
| Calcium, Ca         | 915        | 74       | Cation Exchange Capacity, CEC meq/100g |  | 6    |
| Magnesium, Mg       | 33         | 4        | Soil pH - 1:1                          |  | 8.3  |
| Potassium, K        | 456        | 19       | Soil pH - Saturated Paste              |  | 8.3  |
| Sodium, Na          | 39         | 3        | Soluble Salts, mmho/cm                 |  | 0.11 |
| Excess Lime Rating  |            | NO       | Exchangable Sodium Percent, ESP        |  | 3    |

|   |             |              |  |  |  |
|---|-------------|--------------|--|--|--|
| <b>Extractable (from saturated paste, based on 32% water saturation):</b> |             |              |  |  |  |
|   | <b>mg/L</b> | <b>meq/L</b> |  |  |  |
| Calcium (Ca)  | 13          | 0.6          |  |  |  |
| Magnesium (Mg)  | 1           | <0.1         |  |  |  |
| Sodium (Na)   | 26          | 1.1          |  |  |  |
| Sulfur (S)  | 2           | 0.1          |  |  |  |
| Boron (B)   | 0.24        |              |  |  |  |
| Potassium (K)   | 49          | 1.3          |  |  |  |
| Chloride (Cl)   | 12          | 0.3          |  |  |  |
| Bicarbonate (HCO <sub>3</sub> )   | 160         | 2.6          |  |  |  |
| Carbonate (CO <sub>3</sub> )  | <10         | <0.3         |  |  |  |

|  |           |
|--|-----------|
| Sodium Adsorption Ratio (SAR)          | 1.87      |
| Electrical Conductivity (ECe), mmho/cm | 0.39      |
| Cation:Anion                           | 3.1 / 3.5 |

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|   |                                   |                 |        |
|---|-----------------------------------|-----------------|--------|
| 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 |

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This soil is considered: NON-SALINE/NON-SODIC

The reported analytical results apply only to the sample as it was supplied.

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| <b>Results For:</b><br><b>Sample Identification:</b><br><b>Sample Depth:</b>                            |  | OWN RESOURCES<br>1<br>0-36"  |  | <b>Invoice No.:</b> 639498<br><b>Date Received:</b> 04/28/2022<br><b>Field ID</b> J BROPY 03-27                   |  |
| 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)  |  | LOW  |  |   |  |
| SOIL SALINITY HAZARD (based on extractable salts, ECe):   |  |  |  |   |  |
| Crop type   |  | Potential hazard   |  |   |  |
| -----   |  | -----  |  |   |  |
| SALT SENSITIVE (onions, carrots, many ornamentals, many fruit crops, etc.) . . . . .                    |  | LOW  |  |   |  |
| MODERATELY SENSITIVE (seedling alfalfa, corn, soybeans, many vegetables, etc.) . . . . .                |  | LOW  |  |   |  |
| MODERATELY TOLERANT (wheat, wheatgrass, sudangrass, sorghum, fescue, oats, brome grass, 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.) . . . . .        |  | LOW  |  |   |  |
| 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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| <b>Lab No.:</b> 105526   |  | <b>SOIL ANALYSIS RESULTS</b>   |  | <b>Date Reported:</b> 05/06/2022 |  |
| <b>Send To:</b><br>18250   | OWN RESOURCES OPERATING LLC<br>36695 HWY 385<br>PO BOX 250<br>WRAY, CO 80758 |  |  | <br>Hans Burken<br>Lab Manager   |  |
| <b>Results For:</b> OWN RESOURCES<br><b>Sample Identification:</b> 2<br><b>Sample Depth:</b> 0-36" |  | <b>Invoice No.:</b> 639498<br><b>Date Received:</b> 04/28/2022<br><b>Field ID</b> J BROPHY 03-27 |  |                                  |  |

|                     |            |          |  |  |      |
|---------------------|------------|----------|--|--|------|
| <b>Exchangable:</b> |            |          |  |  |      |
|                     | <u>ppm</u> | <u>%</u> |  |  |      |
| Calcium, Ca         | 1125       | 88       | Cation Exchange Capacity, CEC meq/100g |  | 6    |
| Magnesium, Mg       | 44         | 6        | Soil pH - 1:1                          |  | 7.9  |
| Potassium, K        | 82         | 3        | Soil pH - Saturated Paste              |  | 8.2  |
| Sodium, Na          | 41         | 3        | Soluble Salts, mmho/cm                 |  | 0.10 |
| Excess Lime Rating  |            | NO       | Exchangable Sodium Percent, ESP        |  | 3    |

|   |             |              |  |  |  |
|---|-------------|--------------|--|--|--|
| <b>Extractable (from saturated paste, based on 32% water saturation):</b> |             |              |  |  |  |
|   | <u>mg/L</u> | <u>meq/L</u> |  |  |  |
| Calcium (Ca)  | 27          | 1.3          |  |  |  |
| Magnesium (Mg)  | 2           | 0.2          |  |  |  |
| Sodium (Na)   | 33          | 1.4          |  |  |  |
| Sulfur (S)  | <1          | <0.1         |  |  |  |
| Boron (B)   | 0.17        |              |  |  |  |
| Potassium (K)   | 4           | 0.1          |  |  |  |
| Chloride (Cl)   | 12          | 0.3          |  |  |  |
| Bicarbonate (HCO <sub>3</sub> )   | 150         | 2.5          |  |  |  |
| Carbonate (CO <sub>3</sub> )  | <10         | <0.3         |  |  |  |

|  |           |
|--|-----------|
| Sodium Adsorption Ratio (SAR)          | 1.65      |
| Electrical Conductivity (ECe), mmho/cm | 0.28      |
| Cation:Anion                           | 3.1 / 3.2 |

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|   |                                   |                 |        |
|---|-----------------------------------|-----------------|--------|
| 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 |

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This soil is considered: NON-SALINE/NON-SODIC

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| <b>Results For:</b><br><b>Sample Identification:</b><br><b>Sample Depth:</b>                            |  | OWN RESOURCES<br>2<br>0-36"  |  | <b>Invoice No.:</b> 639498<br><b>Date Received:</b> 04/28/2022<br><b>Field ID</b> J BROPY 03-27                   |  |
| 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)  |  | LOW  |  |   |  |
| SOIL SALINITY HAZARD (based on extractable salts, ECe):   |  |  |  |   |  |
| Crop type   |  | Potential hazard   |  |   |  |
| -----   |  | -----  |  |   |  |
| SALT SENSITIVE (onions, carrots, many ornamentals, many fruit crops, etc.) . . . . .                    |  | LOW  |  |   |  |
| MODERATELY SENSITIVE (seedling alfalfa, corn, soybeans, many vegetables, etc.) . . . . .                |  | LOW  |  |   |  |
| MODERATELY TOLERANT (wheat, wheatgrass, sudangrass, sorghum, fescue, oats, brome grass, 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.) . . . . .        |  | LOW  |  |   |  |
| 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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| <b>Results For:</b> OWN RESOURCES<br><b>Sample Identification:</b> BACKGROUND<br><b>Sample Depth:</b> 0-36" |  | <b>Invoice No.:</b> 639498<br><b>Date Received:</b> 04/28/2022<br><b>Field ID</b> J BROPHY 03-27 |  |                                  |  |

|                     |            |          |  |  |      |
|---------------------|------------|----------|--|--|------|
| <b>Exchangable:</b> |            |          |  |  |      |
|                     | <u>ppm</u> | <u>%</u> |  |  |      |
| Calcium, Ca         | 1056       | 82       | Cation Exchange Capacity, CEC meq/100g |  | 6    |
| Magnesium, Mg       | 77         | 10       | Soil pH - 1:1                          |  | 6.9  |
| Potassium, K        | 172        | 7        | Soil pH - Saturated Paste              |  | 7.0  |
| Sodium, Na          | 11         | 1        | Soluble Salts, mmho/cm                 |  | 0.11 |
| Excess Lime Rating  |            | NO       | Exchangable Sodium Percent, ESP        |  | 1    |

|   |             |              |  |  |  |
|---|-------------|--------------|--|--|--|
| <b>Extractable (from saturated paste, based on 36% water saturation):</b> |             |              |  |  |  |
|   | <u>mg/L</u> | <u>meq/L</u> |  |  |  |
| Calcium (Ca)  | 45          | 2.2          |  |  |  |
| Magnesium (Mg)  | 5           | 0.4          |  |  |  |
| Sodium (Na)   | 2           | <0.1         |  |  |  |
| Sulfur (S)  | 4           | 0.2          |  |  |  |
| Boron (B)   | 0.13        |              |  |  |  |
| Potassium (K)   | 17          | 0.4          |  |  |  |
| Chloride (Cl)   | 13          | 0.4          |  |  |  |
| Bicarbonate (HCO <sub>3</sub> )   | 120         | 2.0          |  |  |  |
| Carbonate (CO <sub>3</sub> )  | <10         | <0.3         |  |  |  |

|  |           |
|--|-----------|
| Sodium Adsorption Ratio (SAR)          | <0.10     |
| Electrical Conductivity (ECe), mmho/cm | 0.30      |
| Cation:Anion                           | 3.2 / 3.0 |

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|   |                                   |                 |        |
|---|-----------------------------------|-----------------|--------|
| 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 |

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This soil is considered: NON-SALINE/NON-SODIC

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| <b>Results For:</b><br><b>Sample Identification:</b><br><b>Sample Depth:</b>                            |  | OWN RESOURCES<br>BACKGROUND<br>0-36"   |  | <b>Invoice No.:</b> 639498<br><b>Date Received:</b> 04/28/2022<br><b>Field ID</b> J BROPY 03-27                   |  |
| 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)  |  | LOW  |  |   |  |
| SOIL SALINITY HAZARD (based on extractable salts, ECe):   |  |  |  |   |  |
| Crop type   |  | Potential hazard   |  |   |  |
| -----   |  | -----  |  |   |  |
| SALT SENSITIVE (onions, carrots, many ornamentals, many fruit crops, etc.) . . . . .                    |  | LOW  |  |   |  |
| MODERATELY SENSITIVE (seedling alfalfa, corn, soybeans, many vegetables, etc.) . . . . .                |  | LOW  |  |   |  |
| MODERATELY TOLERANT (wheat, wheatgrass, sudangrass, sorghum, fescue, oats, brome grass, 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.) . . . . .        |  | LOW  |  |   |  |
| 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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