

### Natural Soda, LLC

Project ID: NS002490

Sample ID: BG-4

ACZ Sample ID: **L65167-07**

Date Sampled: 04/06/21 15:58

Date Received: 04/08/21

Sample Matrix: Groundwater

#### Inorganic Prep

| Parameter                               | EPA Method         | Dilution | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------------------------------------|--------------------|----------|--------|------|----|-------|-----|-----|----------------|---------|
| Lab Filtration (0.45um) & Acidification | M200.7/200.8/3005A |          |        |      |    |       |     |     | 04/09/21 11:18 | kja     |

#### Metals Analysis

| Parameter            | EPA Method | Dilution | Result | Qual | XQ | Units | MDL   | PQL   | Date           | Analyst |
|----------------------|------------|----------|--------|------|----|-------|-------|-------|----------------|---------|
| Boron, dissolved     | M200.7 ICP | 1        | 0.838  |      |    | mg/L  | 0.03  | 0.1   | 04/13/21 10:50 | kja     |
| Calcium, dissolved   | M200.7 ICP | 1        | 3.04   |      |    | mg/L  | 0.1   | 0.5   | 04/13/21 10:50 | kja     |
| Magnesium, dissolved | M200.7 ICP | 1        | 2.16   |      |    | mg/L  | 0.2   | 1     | 04/13/21 10:50 | kja     |
| Potassium, dissolved | M200.7 ICP | 1        | 1.12   |      |    | mg/L  | 0.2   | 1     | 04/13/21 10:50 | kja     |
| Silica, dissolved    | M200.7 ICP | 1        | 15.6   |      |    | mg/L  | 0.2   | 1     | 04/13/21 10:50 | kja     |
| Sodium, dissolved    | M200.7 ICP | 1        | 421    |      | *  | mg/L  | 0.2   | 1     | 04/13/21 10:50 | kja     |
| Strontium, dissolved | M200.7 ICP | 1        | 0.838  |      |    | mg/L  | 0.009 | 0.045 | 04/13/21 10:50 | kja     |

#### Wet Chemistry

| Parameter                         | EPA Method                  | Dilution | Result | Qual | XQ | Units    | MDL | PQL | Date           | Analyst |
|-----------------------------------|-----------------------------|----------|--------|------|----|----------|-----|-----|----------------|---------|
| Alkalinity as CaCO3               | SM2320B - Titration         |          |        |      |    |          |     |     |                |         |
| Bicarbonate as CaCO3              |                             | 1        | 785    |      | *  | mg/L     | 2   | 20  | 04/13/21 0:00  | emk     |
| Carbonate as CaCO3                |                             | 1        | 73.5   |      | *  | mg/L     | 2   | 20  | 04/13/21 0:00  | emk     |
| Hydroxide as CaCO3                |                             | 1        | <2     | U    | *  | mg/L     | 2   | 20  | 04/13/21 0:00  | emk     |
| Total Alkalinity                  |                             | 1        | 859    |      | *  | mg/L     | 2   | 20  | 04/13/21 0:00  | emk     |
| Cation-Anion Balance              | Calculation                 |          |        |      |    |          |     |     |                |         |
| Cation-Anion Balance              |                             |          | -5.0   |      |    | %        |     |     | 05/03/21 0:00  | calc    |
| Sum of Anions                     |                             |          | 21     |      |    | meq/L    |     |     | 05/03/21 0:00  | calc    |
| Sum of Cations                    |                             |          | 19     |      |    | meq/L    |     |     | 05/03/21 0:00  | calc    |
| Chloride                          | M300.0 - Ion Chromatography | 10       | 82.5   |      | *  | mg/L     | 4   | 20  | 04/14/21 19:07 | krh     |
| Conductivity @25C                 | SM2510B                     | 1        | 1750   |      | *  | umhos/cm | 1   | 10  | 04/13/21 22:47 | emk     |
| Fluoride                          | M300.0 - Ion Chromatography | 10       | 21.4   |      | *  | mg/L     | 0.5 | 2.5 | 04/14/21 19:07 | krh     |
| Hardness as CaCO3 (dissolved)     | SM2340B - Calculation       |          | 17     |      |    | mg/L     | 0.2 | 5   | 05/03/21 0:00  | calc    |
| Lab Filtration (0.45um filter)    | SOPWC050                    | 1        |        |      |    |          |     |     | 04/12/21 14:30 | emk     |
| pH (lab)                          | SM4500H+ B                  |          |        |      |    |          |     |     |                |         |
| pH                                |                             | 1        | 8.7    | H    | *  | units    | 0.1 | 0.1 | 04/13/21 0:00  | emk     |
| pH measured at                    |                             | 1        | 22.0   |      | *  | C        | 0.1 | 0.1 | 04/13/21 0:00  | emk     |
| Residue, Filterable (TDS) @180C   | SM2540C                     | 2        | 1080   |      | *  | mg/L     | 40  | 80  | 04/08/21 16:25 | emk     |
| Sodium Adsorption Ratio in Water  | USGS - I1738-78             |          | 46     |      |    |          |     |     | 05/03/21 0:00  | calc    |
| Sulfate                           | M300.0 - Ion Chromatography | 10       | <4     | U    | *  | mg/L     | 4   | 20  | 04/14/21 19:07 | krh     |
| TDS (calculated)                  | Calculation                 |          | 1070   |      |    | mg/L     |     |     | 05/03/21 0:00  | calc    |
| TDS (ratio - measured/calculated) | Calculation                 |          | 1.01   |      |    |          |     |     | 05/03/21 0:00  | calc    |

### Natural Soda, LLC

Project ID: NS002490

Sample ID: BG-6

ACZ Sample ID: **L65167-08**

Date Sampled: 04/07/21 10:53

Date Received: 04/08/21

Sample Matrix: Groundwater

#### Inorganic Prep

| Parameter                               | EPA Method         | Dilution | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------------------------------------|--------------------|----------|--------|------|----|-------|-----|-----|----------------|---------|
| Lab Filtration (0.45um) & Acidification | M200.7/200.8/3005A |          |        |      |    |       |     |     | 04/09/21 11:18 | kja     |

#### Metals Analysis

| Parameter            | EPA Method | Dilution | Result | Qual | XQ | Units | MDL   | PQL   | Date           | Analyst |
|----------------------|------------|----------|--------|------|----|-------|-------|-------|----------------|---------|
| Boron, dissolved     | M200.7 ICP | 1        | 0.772  |      |    | mg/L  | 0.03  | 0.1   | 04/13/21 10:53 | kja     |
| Calcium, dissolved   | M200.7 ICP | 1        | 2.36   |      |    | mg/L  | 0.1   | 0.5   | 04/13/21 10:53 | kja     |
| Magnesium, dissolved | M200.7 ICP | 1        | 1.42   |      |    | mg/L  | 0.2   | 1     | 04/13/21 10:53 | kja     |
| Potassium, dissolved | M200.7 ICP | 1        | 0.82   | B    |    | mg/L  | 0.2   | 1     | 04/13/21 10:53 | kja     |
| Silica, dissolved    | M200.7 ICP | 1        | 16.0   |      |    | mg/L  | 0.2   | 1     | 04/13/21 10:53 | kja     |
| Sodium, dissolved    | M200.7 ICP | 1        | 355    |      | *  | mg/L  | 0.2   | 1     | 04/13/21 10:53 | kja     |
| Strontium, dissolved | M200.7 ICP | 1        | 0.719  |      |    | mg/L  | 0.009 | 0.045 | 04/13/21 10:53 | kja     |

#### Wet Chemistry

| Parameter                         | EPA Method                  | Dilution | Result | Qual | XQ | Units    | MDL | PQL | Date           | Analyst |
|-----------------------------------|-----------------------------|----------|--------|------|----|----------|-----|-----|----------------|---------|
| Alkalinity as CaCO3               | SM2320B - Titration         |          |        |      |    |          |     |     |                |         |
| Bicarbonate as CaCO3              |                             | 1        | 739    |      | *  | mg/L     | 2   | 20  | 04/13/21 0:00  | emk     |
| Carbonate as CaCO3                |                             | 1        | 60.0   |      | *  | mg/L     | 2   | 20  | 04/13/21 0:00  | emk     |
| Hydroxide as CaCO3                |                             | 1        | <2     | U    | *  | mg/L     | 2   | 20  | 04/13/21 0:00  | emk     |
| Total Alkalinity                  |                             | 1        | 799    |      | *  | mg/L     | 2   | 20  | 04/13/21 0:00  | emk     |
| Cation-Anion Balance              | Calculation                 |          |        |      |    |          |     |     |                |         |
| Cation-Anion Balance              |                             |          | -5.9   |      |    | %        |     |     | 05/03/21 0:00  | calc    |
| Sum of Anions                     |                             |          | 18     |      |    | meq/L    |     |     | 05/03/21 0:00  | calc    |
| Sum of Cations                    |                             |          | 16     |      |    | meq/L    |     |     | 05/03/21 0:00  | calc    |
| Chloride                          | M300.0 - Ion Chromatography | 10       | 15.7   | B    | *  | mg/L     | 4   | 20  | 04/14/21 19:25 | krh     |
| Conductivity @25C                 | SM2510B                     | 1        | 1440   |      | *  | umhos/cm | 1   | 10  | 04/13/21 23:01 | emk     |
| Fluoride                          | M300.0 - Ion Chromatography | 10       | 22.0   |      | *  | mg/L     | 0.5 | 2.5 | 04/14/21 19:25 | krh     |
| Hardness as CaCO3 (dissolved)     | SM2340B - Calculation       |          | 12     |      |    | mg/L     | 0.2 | 5   | 05/03/21 0:00  | calc    |
| Lab Filtration (0.45um filter)    | SOPWC050                    | 1        |        |      |    |          |     |     | 04/12/21 14:33 | emk     |
| pH (lab)                          | SM4500H+ B                  |          |        |      |    |          |     |     |                |         |
| pH                                |                             | 1        | 8.6    | H    | *  | units    | 0.1 | 0.1 | 04/13/21 0:00  | emk     |
| pH measured at                    |                             | 1        | 21.9   |      | *  | C        | 0.1 | 0.1 | 04/13/21 0:00  | emk     |
| Residue, Filterable (TDS) @180C   | SM2540C                     | 2        | 868    |      | *  | mg/L     | 40  | 80  | 04/08/21 16:27 | emk     |
| Sodium Adsorption Ratio in Water  | USGS - I1738-78             |          | 46     |      |    |          |     |     | 05/03/21 0:00  | calc    |
| Sulfate                           | M300.0 - Ion Chromatography | 10       | <4     | U    | *  | mg/L     | 4   | 20  | 04/14/21 19:25 | krh     |
| TDS (calculated)                  | Calculation                 |          | 905    |      |    | mg/L     |     |     | 05/03/21 0:00  | calc    |
| TDS (ratio - measured/calculated) | Calculation                 |          | 0.96   |      |    |          |     |     | 05/03/21 0:00  | calc    |

**Natural Soda, LLC**

Project ID: NS002490

Sample ID: BG-11

ACZ Sample ID: **L65167-02**

Date Sampled: 04/05/21 13:53

Date Received: 04/08/21

Sample Matrix: Groundwater

Inorganic Prep

| Parameter                               | EPA Method         | Dilution | Result | Qual | XQ | Units | MDL | PQL | Date           | Analyst |
|-----------------------------------------|--------------------|----------|--------|------|----|-------|-----|-----|----------------|---------|
| Lab Filtration (0.45um) & Acidification | M200.7/200.8/3005A |          |        |      |    |       |     |     | 04/09/21 11:18 | kja     |

Metals Analysis

| Parameter            | EPA Method | Dilution | Result | Qual | XQ | Units | MDL   | PQL   | Date           | Analyst |
|----------------------|------------|----------|--------|------|----|-------|-------|-------|----------------|---------|
| Boron, dissolved     | M200.7 ICP | 1        | 0.859  |      |    | mg/L  | 0.03  | 0.1   | 04/13/21 10:22 | kja     |
| Calcium, dissolved   | M200.7 ICP | 1        | 2.75   |      |    | mg/L  | 0.1   | 0.5   | 04/13/21 10:22 | kja     |
| Magnesium, dissolved | M200.7 ICP | 1        | 1.79   |      |    | mg/L  | 0.2   | 1     | 04/13/21 10:22 | kja     |
| Potassium, dissolved | M200.7 ICP | 1        | 0.90   | B    |    | mg/L  | 0.2   | 1     | 04/13/21 10:22 | kja     |
| Silica, dissolved    | M200.7 ICP | 1        | 15.4   |      |    | mg/L  | 0.2   | 1     | 04/13/21 10:22 | kja     |
| Sodium, dissolved    | M200.7 ICP | 1        | 422    |      | *  | mg/L  | 0.2   | 1     | 04/13/21 10:22 | kja     |
| Strontium, dissolved | M200.7 ICP | 1        | 0.761  |      |    | mg/L  | 0.009 | 0.045 | 04/13/21 10:22 | kja     |

Wet Chemistry

| Parameter                         | EPA Method                  | Dilution | Result | Qual | XQ | Units    | MDL  | PQL  | Date           | Analyst |
|-----------------------------------|-----------------------------|----------|--------|------|----|----------|------|------|----------------|---------|
| Alkalinity as CaCO3               | SM2320B - Titration         |          |        |      |    |          |      |      |                |         |
| Bicarbonate as CaCO3              |                             | 1        | 822    |      | *  | mg/L     | 2    | 20   | 04/13/21 0:00  | emk     |
| Carbonate as CaCO3                |                             | 1        | 63.7   |      | *  | mg/L     | 2    | 20   | 04/13/21 0:00  | emk     |
| Hydroxide as CaCO3                |                             | 1        | <2     | U    | *  | mg/L     | 2    | 20   | 04/13/21 0:00  | emk     |
| Total Alkalinity                  |                             | 1        | 885    |      | *  | mg/L     | 2    | 20   | 04/13/21 0:00  | emk     |
| Cation-Anion Balance              | Calculation                 |          |        |      |    |          |      |      |                |         |
| Cation-Anion Balance              |                             |          | -2.6   |      |    | %        |      |      | 05/03/21 0:00  | calc    |
| Sum of Anions                     |                             |          | 20     |      |    | meq/L    |      |      | 05/03/21 0:00  | calc    |
| Sum of Cations                    |                             |          | 19     |      |    | meq/L    |      |      | 05/03/21 0:00  | calc    |
| Chloride                          | M300.0 - Ion Chromatography | 5        | 45.4   |      | *  | mg/L     | 2    | 10   | 04/16/21 13:08 | krh     |
| Conductivity @25C                 | SM2510B                     | 1        | 1700   |      | *  | umhos/cm | 1    | 10   | 04/13/21 22:33 | emk     |
| Fluoride                          | M300.0 - Ion Chromatography | 5        | 20.6   |      | *  | mg/L     | 0.25 | 1.25 | 04/16/21 13:08 | krh     |
| Hardness as CaCO3 (dissolved)     | SM2340B - Calculation       |          | 14     |      |    | mg/L     | 0.2  | 5    | 05/03/21 0:00  | calc    |
| Lab Filtration (0.45um filter)    | SOPWC050                    | 1        |        |      |    |          |      |      | 04/12/21 14:11 | emk     |
| pH (lab)                          | SM4500H+ B                  |          |        |      |    |          |      |      |                |         |
| pH                                |                             | 1        | 8.6    | H    | *  | units    | 0.1  | 0.1  | 04/13/21 0:00  | emk     |
| pH measured at                    |                             | 1        | 22.1   |      | *  | C        | 0.1  | 0.1  | 04/13/21 0:00  | emk     |
| Residue, Filterable (TDS) @180C   | SM2540C                     | 2        | 988    |      | *  | mg/L     | 40   | 80   | 04/08/21 16:16 | emk     |
| Sodium Adsorption Ratio in Water  | USGS - I1738-78             |          | 49     |      |    |          |      |      | 05/03/21 0:00  | calc    |
| Sulfate                           | M300.0 - Ion Chromatography | 10       | <4     | U    | *  | mg/L     | 4    | 20   | 04/14/21 17:01 | krh     |
| TDS (calculated)                  | Calculation                 |          | 1050   |      |    | mg/L     |      |      | 05/03/21 0:00  | calc    |
| TDS (ratio - measured/calculated) | Calculation                 |          | 0.94   |      |    |          |      |      | 05/03/21 0:00  | calc    |