

Natural Soda, LLC

Project ID: NS002490

Sample ID: AG-1

ACZ Sample ID: **L65942-04**

Date Sampled: 05/18/21 15:18

Date Received: 05/20/21

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								05/21/21 13:00	mlh
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								06/08/21 15:31	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/07/21 13:45	emh

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	10	<0.5	U	*	mg/L	0.5	2.5	05/27/21 13:55	jlw
Arsenic, dissolved	M200.8 ICP-MS	10	<0.002	U	*	mg/L	0.002	0.01	05/26/21 13:08	enb
Barium, dissolved	M200.7 ICP	10	0.163	B	*	mg/L	0.07	0.35	05/26/21 16:26	kja
Beryllium, dissolved	M200.7 ICP	10	<0.1	U	*	mg/L	0.1	0.5	05/26/21 16:26	kja
Boron, dissolved	M200.7 ICP	10	0.746	B	*	mg/L	0.3	1	05/26/21 16:26	kja
Cadmium, dissolved	M200.7 ICP	10	<0.08	U	*	mg/L	0.08	0.25	05/26/21 16:26	kja
Calcium, dissolved	M200.7 ICP	10	12.2			mg/L	1	5	05/26/21 16:26	kja
Chromium, dissolved	M200.7 ICP	10	<0.2	U	*	mg/L	0.2	0.5	05/26/21 16:26	kja
Copper, dissolved	M200.7 ICP	10	<0.1	U	*	mg/L	0.1	0.5	05/26/21 16:26	kja
Iron, dissolved	M200.7 ICP	10	<0.6	U	*	mg/L	0.6	1.5	05/26/21 16:26	kja
Lead, dissolved	M200.7 ICP	10	<0.3	U	*	mg/L	0.3	1.5	05/26/21 16:26	kja
Lithium, dissolved	M200.7 ICP	10	0.156	B	*	mg/L	0.08	0.4	05/26/21 16:26	kja
Magnesium, dissolved	M200.7 ICP	10	7.04	B	*	mg/L	2	10	05/26/21 16:26	kja
Manganese, dissolved	M200.7 ICP	10	<0.1	U	*	mg/L	0.1	0.5	05/26/21 16:26	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	05/24/21 13:45	mlh
Molybdenum, dissolved	M200.7 ICP	10	<0.2	U	*	mg/L	0.2	1	05/26/21 16:26	kja
Nickel, dissolved	M200.7 ICP	10	<0.08	U	*	mg/L	0.08	0.4	05/26/21 16:26	kja
Potassium, dissolved	M200.7 ICP	10	2.78	B	*	mg/L	2	10	05/26/21 16:26	kja
Selenium, dissolved	M200.8 ICP-MS	10	0.0134		*	mg/L	0.001	0.0025	05/26/21 13:08	enb
Silica, dissolved	M200.7 ICP	10	12		*	mg/L	2	10	05/26/21 16:26	kja
Sodium, dissolved	M200.7 ICP	10	650			mg/L	2	10	05/26/21 16:26	kja
Strontium, dissolved	M200.7 ICP	10	0.779			mg/L	0.09	0.45	05/26/21 16:26	kja
Vanadium, dissolved	M200.7 ICP	10	<0.1	U	*	mg/L	0.1	0.25	05/27/21 11:13	kja
Zinc, dissolved	M200.7 ICP	10	0.608			mg/L	0.2	0.5	05/26/21 16:26	kja

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Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	1000			mg/L	2	20	06/01/21 0:00	jck
Carbonate as CaCO ₃		1	223			mg/L	2	20	06/01/21 0:00	jck
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/01/21 0:00	jck
Total Alkalinity		1	1230			mg/L	2	20	06/01/21 0:00	jck
Bromide	M300.0 - Ion Chromatography	5	<0.25	U	*	mg/L	0.25	1.25	05/26/21 21:58	krh
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.2			%			06/14/21 0:00	calc
Sum of Anions			32			meq/L			06/14/21 0:00	calc
Sum of Cations			30.0			meq/L			06/14/21 0:00	calc
Chemical Oxygen Demand	M410.4	1	21			mg/L	10	20	05/27/21 15:27	jck
Chloride	M300.0 - Ion Chromatography	5	227		*	mg/L	2	10	05/26/21 21:58	krh
Conductivity @25C	SM2510B	1	3000			umhos/cm	1	10	06/01/21 13:38	emk
Fluoride	M300.0 - Ion Chromatography	5	17.0			mg/L	0.25	1.25	05/26/21 21:58	krh
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		60			mg/L	2	50	06/14/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							05/21/21 11:14	cgm
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		<0.02	UH		mg/L	0.02	0.1	06/14/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	05/22/21 1:59	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	05/22/21 1:59	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	0.901		*	mg/L	0.05	0.2	06/10/21 14:35	syw
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH ₃		0.249	B		mg/L	0.2	0.5	06/14/21 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	1.15		*	mg/L	0.2	0.5	06/08/21 23:42	pjb
pH (lab)	SM4500H+ B									
pH		1	9.0	H		units	0.1	0.1	06/01/21 0:00	emk
pH measured at		1	22.6			C	0.1	0.1	06/01/21 0:00	emk
Phosphate, total	Calculation based on total Phosphorus		0.67			mg/L	0.03	0.2	06/14/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.217		*	mg/L	0.01	0.05	06/09/21 1:35	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	1760			mg/L	40	80	05/24/21 16:47	jck
Sodium Adsorption Ratio in Water	USGS - I1738-78		37						06/14/21 0:00	calc
Sulfate	M300.0 - Ion Chromatography	5	28.1			mg/L	2	10	05/26/21 21:58	krh
Sulfide as S	SM4500S2-D	15	5.12			mg/L	0.3	1.5	05/24/21 13:46	jck
TDS (calculated)	Calculation		1710			mg/L			06/14/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.03						06/14/21 0:00	calc