

Natural Soda, LLC

Project ID: NS002490

Sample ID: BG-11

ACZ Sample ID: **L64812-01**

Date Sampled: 03/16/21 12:07

Date Received: 03/18/21

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								03/22/21 15:08	cbj
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								03/26/21 13:21	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								03/23/21 14:03	md

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	03/24/21 16:06	kja
Arsenic, dissolved	M200.8 ICP-MS	1	0.00278			mg/L	0.0002	0.001	03/24/21 16:15	mfm
Barium, dissolved	M200.7 ICP	1	0.367			mg/L	0.007	0.035	03/24/21 16:06	kja
Beryllium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/24/21 16:06	kja
Boron, dissolved	M200.7 ICP	1	0.829			mg/L	0.02	0.1	03/25/21 13:30	kja
Cadmium, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.025	03/24/21 16:06	kja
Calcium, dissolved	M200.7 ICP	1	2.81			mg/L	0.1	0.5	03/24/21 16:06	kja
Chromium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/25/21 13:30	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	03/24/21 16:06	kja
Iron, dissolved	M200.7 ICP	1	0.937			mg/L	0.06	0.15	03/24/21 16:06	kja
Lead, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.15	03/29/21 11:45	jlw
Lithium, dissolved	M200.7 ICP	1	0.163			mg/L	0.008	0.04	03/24/21 16:06	kja
Magnesium, dissolved	M200.7 ICP	1	1.79			mg/L	0.2	1	03/24/21 16:06	kja
Manganese, dissolved	M200.7 ICP	1	0.015	B		mg/L	0.01	0.05	03/24/21 16:06	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	03/29/21 15:15	mlh
Molybdenum, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.1	03/24/21 16:06	kja
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	03/24/21 16:06	kja
Potassium, dissolved	M200.7 ICP	1	1.14			mg/L	0.2	1	03/24/21 16:06	kja
Selenium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	03/24/21 16:15	mfm
Silica, dissolved	M200.7 ICP	1	14.7			mg/L	0.2	1	03/24/21 16:06	kja
Sodium, dissolved	M200.7 ICP	1	402			mg/L	0.2	1	03/24/21 16:06	kja
Strontium, dissolved	M200.7 ICP	1	0.726			mg/L	0.009	0.045	03/24/21 16:06	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	03/26/21 12:57	jlw
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	03/24/21 16:06	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	783			mg/L	2	20	03/19/21 0:00	eep
Carbonate as CaCO ₃		1	62.9			mg/L	2	20	03/19/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	03/19/21 0:00	eep
Total Alkalinity		1	846			mg/L	2	20	03/19/21 0:00	eep
Bromide	M300.0 - Ion Chromatography	10	<0.5	U	*	mg/L	0.5	2.5	03/26/21 18:31	krh
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.7			%			03/31/21 0:00	calc
Sum of Anions			19			meq/L			03/31/21 0:00	calc
Sum of Cations			18			meq/L			03/31/21 0:00	calc
Chemical Oxygen Demand	M410.4	1	12	B	*	mg/L	10	20	03/26/21 14:14	sdc
Chloride	M300.0 - Ion Chromatography	10	43.0		*	mg/L	4	20	03/26/21 18:31	krh
Conductivity @25C	SM2510B	1	1700			umhos/cm	1	10	03/19/21 23:06	eep
Fluoride	M300.0 - Ion Chromatography	10	22.8		*	mg/L	0.5	2.5	03/26/21 18:31	krh
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		14			mg/L	0.2	5	03/31/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							03/25/21 18:42	jck
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		<0.02	UH		mg/L	0.02	0.1	03/31/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	03/19/21 23:36	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	03/19/21 23:36	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	0.992		*	mg/L	0.05	0.2	03/22/21 22:32	syw/wtc
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH ₃		<0.2	U		mg/L	0.2	0.5	03/31/21 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.96		*	mg/L	0.2	0.5	03/27/21 1:33	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H		units	0.1	0.1	03/19/21 0:00	eep
pH measured at		1	21.8			C	0.1	0.1	03/19/21 0:00	eep
Phosphate, total	Calculation based on total Phosphorus		0.15	B		mg/L	0.03	0.2	03/31/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.049	B	*	mg/L	0.01	0.05	03/23/21 23:22	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	1040		*	mg/L	40	80	03/19/21 19:00	jck
Sodium Adsorption Ratio in Water	USGS - I1738-78		47						03/31/21 0:00	calc
Sulfate	M300.0 - Ion Chromatography	10	<4	U	*	mg/L	4	20	03/26/21 18:31	krh
Sulfide as S	SM4500S2-D	1	<0.02	U	*	mg/L	0.02	0.1	03/19/21 14:52	eep
TDS (calculated)	Calculation		1010			mg/L			03/31/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.03						03/31/21 0:00	calc