DOCKETED	
Docket Number:	79-AFC-04C
Project Title:	Compliance - Application for Certification of DWR Bottlerock Geothermal Project
TN #:	260744
Document Title:	2023 Annual Compliance Report (Bottle Rock Power) _Part2
Description:	2023 Annual Compliance Report (Bottle Rock Power)
Filer:	John C Casteel
Organization:	Mayacma Geothermal LLC
Submitter Role:	Applicant
Submission Date:	12/19/2024 11:37:54 AM
Docketed Date:	12/19/2024

AUTHORITY TO CONSTRUCT

Permit # A/C 2005-47

Lake County Air Quality Management District

2617 S. Main Street, Lakeport, CA 95453 (707) 263-7000, Fax (707) 263-0421

By: Douglas Gearhart

Douglas G. Gearhart, APCO

Type of Issuance: Renewal *Issuance Date: 10/31/2023* *Valid through: 10/31/2024* *Category: IV*

Operations under this permit must be conducted in compliance with all specifications and data included with the application under which this permit was issued. Equipment must be properly maintained and kept in good condition at all times. Post this permit or a facsimile (with conditions) in a conspicuous location on or near the equipment.

Contact:	Ms. Susan Petty
Owner:	Bottle Rock Power, LLC
Mailing Address:	c/o AltaRock Energy, Inc. 4010 Stone Way N, Suite 400 Seattle, WA 98103

Facility:	West Coleman Padsite
Location:	West Coleman 3-6, located on Bottle Rock West Coleman Padsite (1155m So. & 134.9m W of the NE Corner Section 6, T11N, R8W, MDB&M, Lake County, N 397,334 E 1,797,546)

Name and Equipment Description: **W. Coleman 3-6 Re-Drill**

Geothermal drilling rig and accessories (NCPA Rig #1), Four electrical generators (CAT D-398TA 750 HP diesel engines PERP Registered), three air compressors (Cummins QSK19-C700 700 HP turbocharged diesel-powered air compressors PERP Registered), one down hole misting pump; hydrogen sulfide abatement system utilizing high pressure injection of NaOH and H2O2; and particulate control equipment consisting of misting down hole, constricting and non constricting venturi contactors, low pressure water spray, expanding blooie line, properly sized, smoothed, tangential wet cyclone, properly designed drop or hopper, water treatment and management systems, necessary metering and measuring devices and associated equipment.

Permit Conditions

Condition 1: Emissions

A. Bottle Rock Power, LLC (BRP) shall limit hydrogen sulfide (H2S) emissions during drilling, clean out, and testing to no more than five (5) pounds of H2S per hour and no more than twenty-four (24) pounds per day during all other phases of this project. During verifiable breakdown and for any hot-liner runs, Rule 510 and procedures shall apply. In the event of atmospheric conditions (e.g., drainage, limited mixing, fumigation, downwash, etc.) that result in complaints and concern in receptor areas from high levels of H2S, BRP agrees to reduce the H2S emission limit to two (2) pounds of H2S using abatement plan at the request of the Air Pollution Control Officer (APCO). Certain exceptions to the H2S emission limitations may be allowed by the APCO, in writing, for resource testing if such tests are 12 hours or less in duration and coincide with acceptable meteorological conditions verified by the APCO to ensure good dispersion.

B. If excessively high H2S levels are encountered during drilling, BRP will either: 1) Place into operation additional H2S abatement capacity, or 2) Cease operation and close in the well according to appropriate standards of operation. For the purposes of this permit, excessively high levels of H2S means abated emissions greater than five (5) pounds of H2S per hour or abated emission levels in excess of 500 ppmv.

C. Visible emissions shall not exceed the values listed below for more than three (3) minutes in any one (1) hour: • Ringelmann 0.5 (10% opacity) for detached plume at the cyclone; • Ringelmann 0.5 (10% opacity) for combustion emissions of engine exhaust; and • Ringelmann 1 (20% opacity) for road and pad dust emissions.

D. On commencement of air drilling in significant serpentine, the well logger shall obtain bulk samples that shall be analyzed for asbestos content using TEM, SEM or PLM (California Air Resources Board [ARB] Method 435 Procedures). For the purpose of defining a significant serpentine deposit during geothermal air drilling: "Significant Serpentine" shall mean; drill cutting samples from two consecutive ten-foot interval-drilling sections identified as having 10% or greater serpentine or other asbestos-containing rock. The Lake County Air Quality Management District (LCAQMD) shall be promptly notified by phone at 263-7000, provided samples of the drilled material, and unless otherwise agreed upon in writing, notified of the bulk asbestos analysis results within ten working days of sampling.

E. During drilling in significant serpentine visible emissions shall not exceed Ringelmann 0.25 (5% opacity) for detached plume at the cyclone. BRP shall: 1) Increase down hole misting; 2) Increase water loading at the venturi; 3) Reduce the drilling rate; 4) Use wetting agents; and/or 5) Implement additional solids filtration of working water. Such additional effort shall continue until drilling is clear of significant serpentine/asbestos.

Condition 2: Administrative

A. This permit has been issued as a modification to include cleanout, forking or deepening of the well as described in the application and permit review. This permit does not establish a precedent for the issuance of additional permits.

B. The submitted BRP (Tecton) H2S abatement plan approved by the APCO shall be implemented and followed, and is incorporated herein by reference. Logbook entries shall be made a minimum of four (4) times daily while drilling on air or in steam.

C. Diesel fuel utilized shall be California Low Sulfur Diesel containing less than 15ppmw sulfur.

D. If a vapor-dominated resource is encountered and it is determined that emissions cannot be maintained pursuant to Parts A & B of LCAQMD Rule 421; or the APCO determines that the well on stand-by (bleed) status will violate the intent of LCAQMD Rule 602 or the associated steamfield permit, then BRP shall, with approval of the APCO, install and utilize additional abatement equipment as necessary to bring emissions into compliance. This may include, but is not limited to, immediate conversion to an injector, gas capping, down-hole plugging, and/or the complete closing in of any well in violation of LCAQMD Rules and Regulations.

E. BRP shall utilize the particulate scrubbing system as substantially described in the permitting review and includes the following configuration: 1) A smooth expansion blooie line with low-pressure constricting and non-constricting interchangeable venturis with water injection for venturi contact/scrubbing. The non-constricting venturi

(Conditions 2 through 6 are continued on the back of this card)

THIS PERMIT BECOMES VOID UPON CHANGE OF OWNERSHIP OR LOCATION

located in the smallest diameter portion of the blooie line (non-constricting venturi 12"-15") for use when flow of at least 20,000 lbs/hr air/steam, and an interchangeable converging venturi scrubber when drilling in less than 20,000 lbs/hr of steam and/or pressure drop does not exceed 4 PSI across the converging to diverging section. The constricting venturi may be removed for problematic operations when concurred with by the LCAQMD, such as well plug drill out or flow testing. Venturis shall utilize a multi-port 60 GPM or greater adjustable low-pressure water injection system as described in the permit review. 2) An approximate eight foot section of rectangular ducting that is smoothed internally and matched to the cyclone inlet size to allow laminar flow into the cyclone inlet. 3) A properly sized cyclone separator with a tangential inlet flush with the top of the body and a flow trajectory that avoids striking the outlet barrel. The cyclone shall have a smoothed internal surface with all protrusions and pockets removed. An outlet barrel approximately 1.25 (preferred) to 1.45 times the inlet height with adequate cone clearance; and a 18"-21" open drop arrangement at the terminus of a full 'cone', or alternatively a drop hopper that separates liquid and gas then dropping into a water jet venturi or other recirculating pump system for cuttings removal. 4) Acceptable measurement devices to ensure flows and pressure are properly monitored. The APCO may modify the cyclone drop out requirements based upon presentation of new information and selection of alternatives proven to be effective.

F. If during drilling the subject well, significant liquid, gas or particulate carry through occurs from the cyclone separator stack as a result of unusual circumstances or equipment failure, including but not limited to unexpected large steam or gas entries or water flashing down hole, BRP shall notify the LCAQMD immediately and in no case more than one (1) hour, per Rule Section 510. Such occurrences shall be logged in the bound abatement logbook and the emission and or resulting evidence documented, to the extent possible, by photographs or video recording. BRP shall provide information on such events and forward such to the LCAQMD.

G. BRP shall comply with the requirements of the Air Toxics "Hot Spots" Information and Assessment Act (AB2588) as specified in Sections 44300 - 44394 of the California Health and Safety Code.

Condition 3: Notification

A. BRP shall notify the LCAQMD pursuant to Rule 510, upon breakdown and/or loss of emissions control from this drilling project.

B. In the event that emissions exceed the allowable limits contained in Condition 1, BRP shall notify the LCAQMD within one (1) hour and shall report: a) The cause of the exceed; b) The actions taken or proposed to minimize emissions and achieve compliance; and c) the estimate of emissions and duration of noncompliance.

C. BRP shall notify the LCAQMD at least twenty-four (24) hours prior to initiating the scheduled venting of any well or group of wells in the LCAQMD. This notice shall also apply to scheduled installation of a liner while the well continues to produce steam. Unscheduled venting, necessary to prevent well damage, shall be reported as a breakdown pursuant to Rule 510. A written report shall be submitted to the LCAQMD, within three (3) days (72 hours) documenting: a) The need for venting; b) The duration of venting; c) Estimated steam flow and emissions; d) Cyclone or other equipment utilized; e) Abatement systems utilized; and f) The likelihood or need for future occurrences.

D. BRP shall promptly notify the LCAQMD in writing should any incident of occupational concern take place where toxic air emissions occur and are allowed to disperse into the ambient air as mitigation.

E. BRP shall provide a written report of any changes of the estimated amount of serpentine and crystalline silica material expected to be drilled during the air phase as early as practical. Upon completion of drilling, BRP shall provide a final report within sixty (60) days detailing any significant quantity of serpentine (or crystalline silica) material actually encountered during drilling.

Condition 4: Modification/Additions

A. BRP shall apply for and receive an Authority to Construct (A/C) modification permit prior to the addition of different or new equipment not identified in the application, this permit or covered in the permitting review. The LCAQMD Hearing Board, at a properly noticed public hearing, may grant a variance from these conditions.

Condition 5: Monitoring and Testing

A. BRP shall perform and forward to the LCAQMD the following characterization of hot water, steam particulates and/or gases emanating from the subject well within sixty (60) days after the completion of drilling. If the well is to be abandoned, no analyses will be necessary. a) STEAM CONDENSATE/TOTAL STEAM - Ammonium, Arsenic, Asbestos, Benzene, Bicarbonate and Carbonate, Boron, Bromides, Cadmium, Chlorides, Chromium, Fluorides, Hydrogen Sulfide, Lead, Mercury, Nickel, Nitrates, pH, Silica, Selenium, Sulfates, Zinc, Total Dissolved Solids, Total Suspended Solids, Percent Non-Condensables, Steam Flow and Temperature. b) GAS PHASE - Ammonia, Benzene, Carbon Dioxide, Hydrogen Sulfide, Methane, Non-Methane Hydrocarbons, Mercury Vapor, and Radon 222 and Daughters. c) STEAM PARTICULATE*: Arsenic, Boron, Cadmium, Chromium, Lead, Nickel, Total Sulfur (mass all in μg/Kg of steam); Asbestos (fibers/Kg of steam); NESHAP and AB 2588 air pollutants as requested. Tests can be performed utilizing the bleed of the subject well. A test protocol shall be submitted to the LCAQMD at least three (3) weeks before such sample collection and analytical testing is scheduled to occur and shall be approved by the APCO prior to actual source testing. If the well is promptly closed in to a no-vent state, these tests may be delayed upon request of BRP by concurrence of the APCO until such time as the well is produced to the steamline, or placed on vent for 30 or more days, or upon written request of the APCO. *Testing of this type shall consist at a minimum of an XRF analysis of suspended and/or dissolved solids.

B. In the event source testing is deemed necessary by the APCO, BRP shall be available within ten days after written notice, to open the well for 4 to 8 hour duration.

C. If analyses performed as part of Condition 5-A suggests the need for further study, including air dispersion analysis, BRP will assist, perform, or finance such studies if deemed reasonable and necessary by the APCO.

D. BRP shall install and utilize an in-line continuous H2S monitor or other appropriate equipment to ascertain the levels of this pollutant as a function of depth of drilling. Logging data and test results shall be immediately available to LCAQMD staff upon request at the drill site.

E. Upon request of the APCO, BRP shall perform any additional analytical work necessary to characterize potential emissions from this well prior to applying for a Permit to Operate.

F. If a hot water resource is discovered during the drilling of this well, BRP shall, prior to testing to determine the extent of the resource, submit a test plan to the LCAQMD detailing expected air pollutants and mitigating measures. The LCAQMD will either approve the submitted plan or recommend additional mitigating measures necessary, in writing, prior to actual testing. Total emissions from testing shall be limited to the amount specified in Condition 1.

G. The treatment and use of mud waters for reuse in air drilling is acceptable provided: a) Oils or other hydrocarbons contaminating any reclaimed mud waters are separated prior to use in blooie line treatment during air drilling; and b) The water is analyzed for and shown free of asbestos, and the analysis results are provided to the APCO within three (3) working days of finishing mud water treatment(s).

H. If the well is placed on extended standby bleed, BRP shall test the well to determine the H2S emissions within three (3) days, and retest the well no sooner than one (1) week, and no later than two (2) weeks after the first test, and thereafter upon a 10% or greater change of flow rate. If emissions are within 90% of the allowable H2S limit, a program of additional testing may be required by the APCO. A written monthly report shall be forwarded to the LCAQMD updating the well status and the estimated emissions, upon request of the APCO.

I. BRP shall participate in or proportionately fund an air monitoring program to assist the LCAQMD in a continued determination of compliance. In the event of considerable public complaints, the LCAQMD may require additional monitoring, testing and studies to characterize said condition and possible mitigation (Section 430 and 670). Participation in a cooperative monitoring effort, such as Geysers Air Monitoring Program, approved by the APCO shall fulfill this requirement.

Condition 6: Identification and Access

A. This permit shall be posted at the project site during the time the drilling equipment is on site, and be available for BRP and LCAQMD staff upon request. If locks or unmanned gates are used to secure the project area, the LCAQMD or its representative, will be given free access of entry for the purposes of monitoring or inspecting.

B. BRP shall provide the LCAQMD, ARB, and Environmental Protection Agency staff entry and safe access to the project site/equipment for the purpose of inspection, source testing, and or air monitoring activities.

This permit is based on the equipment and process submitted by BRP and considered in the A/C assessment. The permit issuance is based on the assumption that the operation of this source, as conditioned, will not result in a violation of LCAQMD Rules and Regulations nor contribute to an exceed of any state or federal Ambient Air Quality Standard.

AUTHORITY TO CONSTRUCT

Permit # A/C 2005-45

Lake County Air Quality Management District

2617 S. Main Street, Lakeport, CA 95453 (707) 263-7000, Fax (707) 263-0421

By: Douglas Gearhart

Douglas G. Gearhart, APCO

Type of Issuance: Renewal *Issuance Date: 10/31/2023* *Valid through: 10/31/2024* *Category: IV*

Operations under this permit must be conducted in compliance with all specifications and data included with the application under which this permit was issued. Equipment must be properly maintained and kept in good condition at all times. Post this permit or a facsimile (with conditions) in a conspicuous location on or near the equipment.

Contact: Ms. Susan Petty
Owner: Bottle Rock Power, LLC
Mailing Address: c/o AltaRock Energy, Inc.
4010 Stone Way N, Suite 400
Seattle, WA 98103

Facility: West Coleman Padsite
Location: West Coleman 4-6, located on Bottle Rock West Coleman Padsite (1155m So. & 134.9m W of the NE Corner Section 6, T11N, R8W, MDB&M, Lake County, N 397,334 E 1,797,546)

Name and Equipment Description: **W. Coleman 4-6 Re-Drill**

Geothermal drilling rig and accessories (NCPA Rig #1), Four electrical generators (CAT D-398TA 750 HP diesel engines PERP Registered), three air compressors (Cummins QSK19-C700 700 HP turbocharged diesel-powered air compressors PERP Registered), one down hole misting pump; hydrogen sulfide abatement system utilizing high pressure injection of NaOH and H2O2; and particulate control equipment consisting of misting down hole, constricting and non constricting venturi contactors, low pressure water spray, expanding blooie line, properly sized, smoothed, tangential wet cyclone, properly designed drop or hopper, water treatment and management systems, necessary metering and measuring devices and associated equipment.

Permit Conditions

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B. If excessively high H2S levels are encountered during drilling, BRP will either: 1) Place into operation additional H2S abatement capacity, or 2) Cease operation and close in the well according to appropriate standards of operation. For the purposes of this permit, excessively high levels of H2S means abated emissions greater than five (5) pounds of H2S per hour or abated emission levels in excess of 500 ppmv.

C. Visible emissions shall not exceed the values listed below for more than three (3) minutes in any one (1) hour: • Ringelmann 0.5 (10% opacity) for detached plume at the cyclone; • Ringelmann 0.5 (10% opacity) for combustion emissions of engine exhaust; and • Ringelmann 1 (20% opacity) for road and pad dust emissions.

D. On commencement of air drilling in significant serpentine, the well logger shall obtain bulk samples that shall be analyzed for asbestos content using TEM, SEM or PLM (California Air Resources Board [ARB] Method 435 Procedures). For the purpose of defining a significant serpentine deposit during geothermal air drilling: "Significant Serpentine" shall mean; drill cutting samples from two consecutive ten-foot interval-drilling sections identified as having 10% or greater serpentine or other asbestos-containing rock. The Lake County Air Quality Management District (LCAQMD) shall be promptly notified by phone at 263-7000, provided samples of the drilled material, and unless otherwise agreed upon in writing, notified of the bulk asbestos analysis results within ten working days of sampling.

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Condition 2: Administrative

A. This permit has been issued as a modification to include cleanout, forking or deepening of the well as described in the application and permit review. This permit does not establish a precedent for the issuance of additional permits.

B. The submitted BRP (Tecton) H2S abatement plan approved by the APCO shall be implemented and followed, and is incorporated herein by reference. Logbook entries shall be made a minimum of four (4) times daily while drilling on air or in steam.

C. Diesel fuel utilized shall be California Low Sulfur Diesel containing less than 15ppmw sulfur.

D. If a vapor-dominated resource is encountered and it is determined that emissions cannot be maintained pursuant to Parts A & B of LCAQMD Rule 421; or the APCO determines that the well on stand-by (bleed) status will violate the intent of LCAQMD Rule 602 or the associated steamfield permit, then BRP shall, with approval of the APCO, install and utilize additional abatement equipment as necessary to bring emissions into compliance. This may include, but is not limited to, immediate conversion to an injector, gas capping, down-hole plugging, and/or the complete closing in of any well in violation of LCAQMD Rules and Regulations.

E. BRP shall utilize the particulate scrubbing system as substantially described in the permitting review and includes the following configuration: 1) A smooth expansion blooie line with low-pressure constricting and non-constricting interchangeable venturis with water injection for venturi contact/scrubbing. The non-constricting venturi

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located in the smallest diameter portion of the blooie line (non-constricting venturi 12"-15") for use when flow of at least 20,000 lbs/hr air/steam, and an interchangeable converging venturi scrubber when drilling in less than 20,000 lbs/hr of steam and/or pressure drop does not exceed 4 PSI across the converging to diverging section. The constricting venturi may be removed for problematic operations when concurred with by the LCAQMD, such as well plug drill out or flow testing. Venturis shall utilize a multi-port 60 GPM or greater adjustable low-pressure water injection system as described in the permit review. 2) An approximate eight foot section of rectangular ducting that is smoothed internally and matched to the cyclone inlet size to allow laminar flow into the cyclone inlet. 3) A properly sized cyclone separator with a tangential inlet flush with the top of the body and a flow trajectory that avoids striking the outlet barrel. The cyclone shall have a smoothed internal surface with all protrusions and pockets removed. An outlet barrel approximately 1.25 (preferred) to 1.45 times the inlet height with adequate cone clearance; and a 18"-21" open drop arrangement at the terminus of a full 'cone', or alternatively a drop hopper that separates liquid and gas then dropping into a water jet venturi or other recirculating pump system for cuttings removal. 4) Acceptable measurement devices to ensure flows and pressure are properly monitored. The APCO may modify the cyclone drop out requirements based upon presentation of new information and selection of alternatives proven to be effective.

F. If during drilling the subject well, significant liquid, gas or particulate carry through occurs from the cyclone separator stack as a result of unusual circumstances or equipment failure, including but not limited to unexpected large steam or gas entries or water flashing down hole, BRP shall notify the LCAQMD immediately and in no case more than one (1) hour, per Rule Section 510. Such occurrences shall be logged in the bound abatement logbook and the emission and or resulting evidence documented, to the extent possible, by photographs or video recording. BRP shall provide information on such events and forward such to the LCAQMD.

G. BRP shall comply with the requirements of the Air Toxics "Hot Spots" Information and Assessment Act (AB2588) as specified in Sections 44300 - 44394 of the California Health and Safety Code.

Condition 3: Notification

A. BRP shall notify the LCAQMD pursuant to Rule 510, upon breakdown and/or loss of emissions control from this drilling project.

B. In the event that emissions exceed the allowable limits contained in Condition 1, BRP shall notify the LCAQMD within one (1) hour and shall report: a) The cause of the exceed; b) The actions taken or proposed to minimize emissions and achieve compliance; and c) the estimate of emissions and duration of noncompliance.

C. BRP shall notify the LCAQMD at least twenty-four (24) hours prior to initiating the scheduled venting of any well or group of wells in the LCAQMD. This notice shall also apply to scheduled installation of a liner while the well continues to produce steam. Unscheduled venting, necessary to prevent well damage, shall be reported as a breakdown pursuant to Rule 510. A written report shall be submitted to the LCAQMD, within three (3) days (72 hours) documenting: a) The need for venting; b) The duration of venting; c) Estimated steam flow and emissions; d) Cyclone or other equipment utilized; e) Abatement systems utilized; and f) The likelihood or need for future occurrences.

D. BRP shall promptly notify the LCAQMD in writing should any incident of occupational concern take place where toxic air emissions occur and are allowed to disperse into the ambient air as mitigation.

E. BRP shall provide a written report of any changes of the estimated amount of serpentine and crystalline silica material expected to be drilled during the air phase as early as practical. Upon completion of drilling, BRP shall provide a final report within sixty (60) days detailing any significant quantity of serpentine (or crystalline silica) material actually encountered during drilling.

Condition 4: Modification/Additions

A. BRP shall apply for and receive an Authority to Construct (A/C) modification permit prior to the addition of different or new equipment not identified in the application, this permit or covered in the permitting review. The LCAQMD Hearing Board, at a properly noticed public hearing, may grant a variance from these conditions.

Condition 5: Monitoring and Testing

A. BRP shall perform and forward to the LCAQMD the following characterization of hot water, steam particulates and/or gases emanating from the subject well within sixty (60) days after the completion of drilling. If the well is to be abandoned, no analyses will be necessary. a) STEAM CONDENSATE/TOTAL STEAM - Ammonium, Arsenic, Asbestos, Benzene, Bicarbonate and Carbonate, Boron, Bromides, Cadmium, Chlorides, Chromium, Fluorides, Hydrogen Sulfide, Lead, Mercury, Nickel, Nitrates, pH, Silica, Selenium, Sulfates, Zinc, Total Dissolved Solids, Total Suspended Solids, Percent Non-Condensables, Steam Flow and Temperature. b) GAS PHASE - Ammonia, Benzene, Carbon Dioxide, Hydrogen Sulfide, Methane, Non-Methane Hydrocarbons, Mercury Vapor, and Radon 222 and Daughters. c) STEAM PARTICULATE*: Arsenic, Boron, Cadmium, Chromium, Lead, Nickel, Total Sulfur (mass all in μg/Kg of steam); Asbestos (fibers/Kg of steam); NESHAP and AB 2588 air pollutants as requested. Tests can be performed utilizing the bleed of the subject well. A test protocol shall be submitted to the LCAQMD at least three (3) weeks before such sample collection and analytical testing is scheduled to occur and shall be approved by the APCO prior to actual source testing. If the well is promptly closed in to a no-vent state, these tests may be delayed upon request of BRP by concurrence of the APCO until such time as the well is produced to the steamline, or placed on vent for 30 or more days, or upon written request of the APCO. *Testing of this type shall consist at a minimum of an XRF analysis of suspended and/or dissolved solids.

B. In the event source testing is deemed necessary by the APCO, BRP shall be available within ten days after written notice, to open the well for 4 to 8 hour duration.

C. If analyses performed as part of Condition 5-A suggests the need for further study, including air dispersion analysis, BRP will assist, perform, or finance such studies if deemed reasonable and necessary by the APCO.

D. BRP shall install and utilize an in-line continuous H2S monitor or other appropriate equipment to ascertain the levels of this pollutant as a function of depth of drilling. Logging data and test results shall be immediately available to LCAQMD staff upon request at the drill site.

E. Upon request of the APCO, BRP shall perform any additional analytical work necessary to characterize potential emissions from this well prior to applying for a Permit to Operate.

F. If a hot water resource is discovered during the drilling of this well, BRP shall, prior to testing to determine the extent of the resource, submit a test plan to the LCAQMD detailing expected air pollutants and mitigating measures. The LCAQMD will either approve the submitted plan or recommend additional mitigating measures necessary, in writing, prior to actual testing. Total emissions from testing shall be limited to the amount specified in Condition 1.

G. The treatment and use of mud waters for reuse in air drilling is acceptable provided: a) Oils or other hydrocarbons contaminating any reclaimed mud waters are separated prior to use in blooie line treatment during air drilling; and b) The water is analyzed for and shown free of asbestos, and the analysis results are provided to the APCO within three (3) working days of finishing mud water treatment(s).

H. If the well is placed on extended standby bleed, BRP shall test the well to determine the H2S emissions within three (3) days, and retest the well no sooner than one (1) week, and no later than two (2) weeks after the first test, and thereafter upon a 10% or greater change of flow rate. If emissions are within 90% of the allowable H2S limit, a program of additional testing may be required by the APCO. A written monthly report shall be forwarded to the LCAQMD updating the well status and the estimated emissions, upon request of the APCO.

I. BRP shall participate in or proportionately fund an air monitoring program to assist the LCAQMD in a continued determination of compliance. In the event of considerable public complaints, the LCAQMD may require additional monitoring, testing and studies to characterize said condition and possible mitigation (Section 430 and 670). Participation in a cooperative monitoring effort, such as Geysers Air Monitoring Program, approved by the APCO shall fulfill this requirement.

Condition 6: Identification and Access

A. This permit shall be posted at the project site during the time the drilling equipment is on site, and be available for BRP and LCAQMD staff upon request. If locks or unmanned gates are used to secure the project area, the LCAQMD or its representative, will be given free access of entry for the purposes of monitoring or inspecting.

B. BRP shall provide the LCAQMD, ARB, and Environmental Protection Agency staff entry and safe access to the project site/equipment for the purpose of inspection, source testing, and or air monitoring activities.

This permit is based on the equipment and process submitted by BRP and considered in the A/C assessment. The permit issuance is based on the assumption that the operation of this source, as conditioned, will not result in a violation of LCAQMD Rules and Regulations nor contribute to an exceed of any state or federal Ambient Air Quality Standard.

AUTHORITY TO CONSTRUCT

Permit # A/C 2005-48

Lake County Air Quality Management District

2617 S. Main Street, Lakeport, CA 95453 (707) 263-7000, Fax (707) 263-0421

By: Douglas Gearhart

Douglas G. Gearhart, APCO

Type of Issuance: Renewal *Issuance Date:* 10/31/2023 *Valid through:* 10/31/2024 *Category:* IV

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Name and Equipment Description: **W. Coleman 5-6 Re-Drill**

Geothermal drilling rig and accessories (NCPA Rig #1), Four electrical generators (CAT D-398TA 750 HP diesel engines PERP Registered), three air compressors (Cummins QSK19-C700 700 HP turbocharged diesel-powered air compressors PERP Registered), one down hole misting pump; hydrogen sulfide abatement system utilizing high pressure injection of NaOH and H2O2; and particulate control equipment consisting of misting down hole, constricting and non constricting venturi contactors, low pressure water spray, expanding blooie line, properly sized, smoothed, tangential wet cyclone, properly designed drop or hopper, water treatment and management systems, necessary metering and measuring devices and associated equipment.

Permit Conditions

Condition 1: Emissions

A. Bottle Rock Power, LLC (BRP) shall limit hydrogen sulfide (H2S) emissions during drilling, clean out, and testing to no more than five (5) pounds of H2S per hour and no more than twenty-four (24) pounds per day during all other phases of this project. During verifiable breakdown and for any hot-liner runs, Rule 510 and procedures shall apply. In the event of atmospheric conditions (e.g., drainage, limited mixing, fumigation, downwash, etc.) that result in complaints and concern in receptor areas from high levels of H2S, BRP agrees to reduce the H2S emission limit to two (2) pounds of H2S using abatement plan at the request of the Air Pollution Control Officer (APCO). Certain exceptions to the H2S emission limitations may be allowed by the APCO, in writing, for resource testing if such tests are 12 hours or less in duration and coincide with acceptable meteorological conditions verified by the APCO to ensure good dispersion.

B. If excessively high H2S levels are encountered during drilling, BRP will either: 1) Place into operation additional H2S abatement capacity, or 2) Cease operation and close in the well according to appropriate standards of operation. For the purposes of this permit, excessively high levels of H2S means abated emissions greater than five (5) pounds of H2S per hour or abated emission levels in excess of 500 ppmv.

C. Visible emissions shall not exceed the values listed below for more than three (3) minutes in any one (1) hour: • Ringelmann 0.5 (10% opacity) for detached plume at the cyclone; • Ringelmann 0.5 (10% opacity) for combustion emissions of engine exhaust; and • Ringelmann 1 (20% opacity) for road and pad dust emissions.

D. On commencement of air drilling in significant serpentine, the well logger shall obtain bulk samples that shall be analyzed for asbestos content using TEM, SEM or PLM (California Air Resources Board [ARB] Method 435 Procedures). For the purpose of defining a significant serpentine deposit during geothermal air drilling: "Significant Serpentine" shall mean; drill cutting samples from two consecutive ten-foot interval-drilling sections identified as having 10% or greater serpentine or other asbestos-containing rock. The Lake County Air Quality Management District (LCAQMD) shall be promptly notified by phone at 263-7000, provided samples of the drilled material, and unless otherwise agreed upon in writing, notified of the bulk asbestos analysis results within ten working days of sampling.

E. During drilling in significant serpentine visible emissions shall not exceed Ringelmann 0.25 (5% opacity) for detached plume at the cyclone. BRP shall: 1) Increase down hole misting; 2) Increase water loading at the venturi; 3) Reduce the drilling rate; 4) Use wetting agents; and/or 5) Implement additional solids filtration of working water. Such additional effort shall continue until drilling is clear of significant serpentine/asbestos.

Condition 2: Administrative

A. This permit has been issued as a modification to include cleanout, forking or deepening of the well as described in the application and permit review. This permit does not establish a precedent for the issuance of additional permits.

B. The submitted BRP (Tecton) H2S abatement plan approved by the APCO shall be implemented and followed, and is incorporated herein by reference. Logbook entries shall be made a minimum of four (4) times daily while drilling on air or in steam.

C. Diesel fuel utilized shall be California Low Sulfur Diesel containing less than 15ppmw sulfur.

D. If a vapor-dominated resource is encountered and it is determined that emissions cannot be maintained pursuant to Parts A & B of LCAQMD Rule 421; or the APCO determines that the well on stand-by (bleed) status will violate the intent of LCAQMD Rule 602 or the associated steamfield permit, then BRP shall, with approval of the APCO, install and utilize additional abatement equipment as necessary to bring emissions into compliance. This may include, but is not limited to, immediate conversion to an injector, gas capping, down-hole plugging, and/or the complete closing in of any well in violation of LCAQMD Rules and Regulations.

E. BRP shall utilize the particulate scrubbing system as substantially described in the permitting review and includes the following configuration: 1) A smooth expansion blooie line with low-pressure constricting and non-constricting interchangeable venturis with water injection for venturi contact/scrubbing. The non-constricting venturi

(Conditions 2 through 6 are continued on the back of this card)

THIS PERMIT BECOMES VOID UPON CHANGE OF OWNERSHIP OR LOCATION

located in the smallest diameter portion of the blooie line (non-constricting venturi 12"-15") for use when flow of at least 20,000 lbs/hr air/steam, and an interchangeable converging venturi scrubber when drilling in less than 20,000 lbs/hr of steam and/or pressure drop does not exceed 4 PSI across the converging to diverging section. The constricting venturi may be removed for problematic operations when concurred with by the LCAQMD, such as well plug drill out or flow testing. Venturis shall utilize a multi-port 60 GPM or greater adjustable low-pressure water injection system as described in the permit review. 2) An approximate eight foot section of rectangular ducting that is smoothed internally and matched to the cyclone inlet size to allow laminar flow into the cyclone inlet. 3) A properly sized cyclone separator with a tangential inlet flush with the top of the body and a flow trajectory that avoids striking the outlet barrel. The cyclone shall have a smoothed internal surface with all protrusions and pockets removed. An outlet barrel approximately 1.25 (preferred) to 1.45 times the inlet height with adequate cone clearance; and a 18"-21" open drop arrangement at the terminus of a full 'cone', or alternatively a drop hopper that separates liquid and gas then dropping into a water jet venturi or other recirculating pump system for cuttings removal. 4) Acceptable measurement devices to ensure flows and pressure are properly monitored. The APCO may modify the cyclone drop out requirements based upon presentation of new information and selection of alternatives proven to be effective.

F. If during drilling the subject well, significant liquid, gas or particulate carry through occurs from the cyclone separator stack as a result of unusual circumstances or equipment failure, including but not limited to unexpected large steam or gas entries or water flashing down hole, BRP shall notify the LCAQMD immediately and in no case more than one (1) hour, per Rule Section 510. Such occurrences shall be logged in the bound abatement logbook and the emission and or resulting evidence documented, to the extent possible, by photographs or video recording. BRP shall provide information on such events and forward such to the LCAQMD.

G. BRP shall comply with the requirements of the Air Toxics "Hot Spots" Information and Assessment Act (AB2588) as specified in Sections 44300 - 44394 of the California Health and Safety Code.

Condition 3: Notification

A. BRP shall notify the LCAQMD pursuant to Rule 510, upon breakdown and/or loss of emissions control from this drilling project.

B. In the event that emissions exceed the allowable limits contained in Condition 1, BRP shall notify the LCAQMD within one (1) hour and shall report: a) The cause of the exceed; b) The actions taken or proposed to minimize emissions and achieve compliance; and c) the estimate of emissions and duration of noncompliance.

C. BRP shall notify the LCAQMD at least twenty-four (24) hours prior to initiating the scheduled venting of any well or group of wells in the LCAQMD. This notice shall also apply to scheduled installation of a liner while the well continues to produce steam. Unscheduled venting, necessary to prevent well damage, shall be reported as a breakdown pursuant to Rule 510. A written report shall be submitted to the LCAQMD, within three (3) days (72 hours) documenting: a) The need for venting; b) The duration of venting; c) Estimated steam flow and emissions; d) Cyclone or other equipment utilized; e) Abatement systems utilized; and f) The likelihood or need for future occurrences.

D. BRP shall promptly notify the LCAQMD in writing should any incident of occupational concern take place where toxic air emissions occur and are allowed to disperse into the ambient air as mitigation.

E. BRP shall provide a written report of any changes of the estimated amount of serpentine and crystalline silica material expected to be drilled during the air phase as early as practical. Upon completion of drilling, BRP shall provide a final report within sixty (60) days detailing any significant quantity of serpentine (or crystalline silica) material actually encountered during drilling.

Condition 4: Modification/Additions

A. BRP shall apply for and receive an Authority to Construct (A/C) modification permit prior to the addition of different or new equipment not identified in the application, this permit or covered in the permitting review. The LCAQMD Hearing Board, at a properly noticed public hearing, may grant a variance from these conditions.

Condition 5: Monitoring and Testing

A. BRP shall perform and forward to the LCAQMD the following characterization of hot water, steam particulates and/or gases emanating from the subject well within sixty (60) days after the completion of drilling. If the well is to be abandoned, no analyses will be necessary. a) STEAM CONDENSATE/TOTAL STEAM - Ammonium, Arsenic, Asbestos, Benzene, Bicarbonate and Carbonate, Boron, Bromides, Cadmium, Chlorides, Chromium, Fluorides, Hydrogen Sulfide, Lead, Mercury, Nickel, Nitrates, pH, Silica, Selenium, Sulfates, Zinc, Total Dissolved Solids, Total Suspended Solids, Percent Non-Condensables, Steam Flow and Temperature. b) GAS PHASE - Ammonia, Benzene, Carbon Dioxide, Hydrogen Sulfide, Methane, Non-Methane Hydrocarbons, Mercury Vapor, and Radon 222 and Daughters. c) STEAM PARTICULATE*: Arsenic, Boron, Cadmium, Chromium, Lead, Nickel, Total Sulfur (mass all in μg/Kg of steam); Asbestos (fibers/Kg of steam); NESHAP and AB 2588 air pollutants as requested. Tests can be performed utilizing the bleed of the subject well. A test protocol shall be submitted to the LCAQMD at least three (3) weeks before such sample collection and analytical testing is scheduled to occur and shall be approved by the APCO prior to actual source testing. If the well is promptly closed in to a no-vent state, these tests may be delayed upon request of BRP by concurrence of the APCO until such time as the well is produced to the steamline, or placed on vent for 30 or more days, or upon written request of the APCO. *Testing of this type shall consist at a minimum of an XRF analysis of suspended and/or dissolved solids.

B. In the event source testing is deemed necessary by the APCO, BRP shall be available within ten days after written notice, to open the well for 4 to 8 hour duration.

C. If analyses performed as part of Condition 5-A suggests the need for further study, including air dispersion analysis, BRP will assist, perform, or finance such studies if deemed reasonable and necessary by the APCO.

D. BRP shall install and utilize an in-line continuous H2S monitor or other appropriate equipment to ascertain the levels of this pollutant as a function of depth of drilling. Logging data and test results shall be immediately available to LCAQMD staff upon request at the drill site.

E. Upon request of the APCO, BRP shall perform any additional analytical work necessary to characterize potential emissions from this well prior to applying for a Permit to Operate.

F. If a hot water resource is discovered during the drilling of this well, BRP shall, prior to testing to determine the extent of the resource, submit a test plan to the LCAQMD detailing expected air pollutants and mitigating measures. The LCAQMD will either approve the submitted plan or recommend additional mitigating measures necessary, in writing, prior to actual testing. Total emissions from testing shall be limited to the amount specified in Condition 1.

G. The treatment and use of mud waters for reuse in air drilling is acceptable provided: a) Oils or other hydrocarbons contaminating any reclaimed mud waters are separated prior to use in blooie line treatment during air drilling; and b) The water is analyzed for and shown free of asbestos, and the analysis results are provided to the APCO within three (3) working days of finishing mud water treatment(s).

H. If the well is placed on extended standby bleed, BRP shall test the well to determine the H2S emissions within three (3) days, and retest the well no sooner than one (1) week, and no later than two (2) weeks after the first test, and thereafter upon a 10% or greater change of flow rate. If emissions are within 90% of the allowable H2S limit, a program of additional testing may be required by the APCO. A written monthly report shall be forwarded to the LCAQMD updating the well status and the estimated emissions, upon request of the APCO.

I. BRP shall participate in or proportionately fund an air monitoring program to assist the LCAQMD in a continued determination of compliance. In the event of considerable public complaints, the LCAQMD may require additional monitoring, testing and studies to characterize said condition and possible mitigation (Section 430 and 670). Participation in a cooperative monitoring effort, such as Geysers Air Monitoring Program, approved by the APCO shall fulfill this requirement.

Condition 6: Identification and Access

A. This permit shall be posted at the project site during the time the drilling equipment is on site, and be available for BRP and LCAQMD staff upon request. If locks or unmanned gates are used to secure the project area, the LCAQMD or its representative, will be given free access of entry for the purposes of monitoring or inspecting.

B. BRP shall provide the LCAQMD, ARB, and Environmental Protection Agency staff entry and safe access to the project site/equipment for the purpose of inspection, source testing, and or air monitoring activities.

This permit is based on the equipment and process submitted by BRP and considered in the A/C assessment. The permit issuance is based on the assumption that the operation of this source, as conditioned, will not result in a violation of LCAQMD Rules and Regulations nor contribute to an exceed of any state or federal Ambient Air Quality Standard.

Payment out # P23032301 - 1465890

More Actions

Processed 03/24/23 — Sent 03/27/23 — Cashed 05/04/23

Check | Cleared

USD 14,214.00 check payment to GAMP VI c/o NSCAPCD created by Katie

Payment out # P23032301 - 1465890

Process date 03/24/23	Arrival date 03/30/23	Payment address GEYSERS AIR MONITORING PROGR...
Paid from City National Bank*****9530	Memo Inv #VI-22-02-- bill.com Check Num...	Total payment amount USD 14,214.00
Account Bill.com Money Out Clearing		Total vendor credits applied USD 0.00

Check # 69903037	Check date 03/27/23	Check expiration date 06/25/23

Check images

Print

Paid bills

Invoice #	Chart of account	Due Date	Cu...	Amount	Payment amount	Approvers
VI-22-02	Permits	01/01/23	US...	14,214.00	14,214.00	Approved

Appendix 3

Figure 1 - Vegetation Monitoring Map

Table 1 – Vegetation & Soil Boron Analytical Results

Vegetation & Soil Boron Analytical Reports

Figure 2 – Water Monitoring Map

Table 2 – Groundwater & Surface Water Analytical Results

Groundwater & Surface Water Analytical Reports

Bottle Rock Power, LLC - Vegetation Monitoring Locations

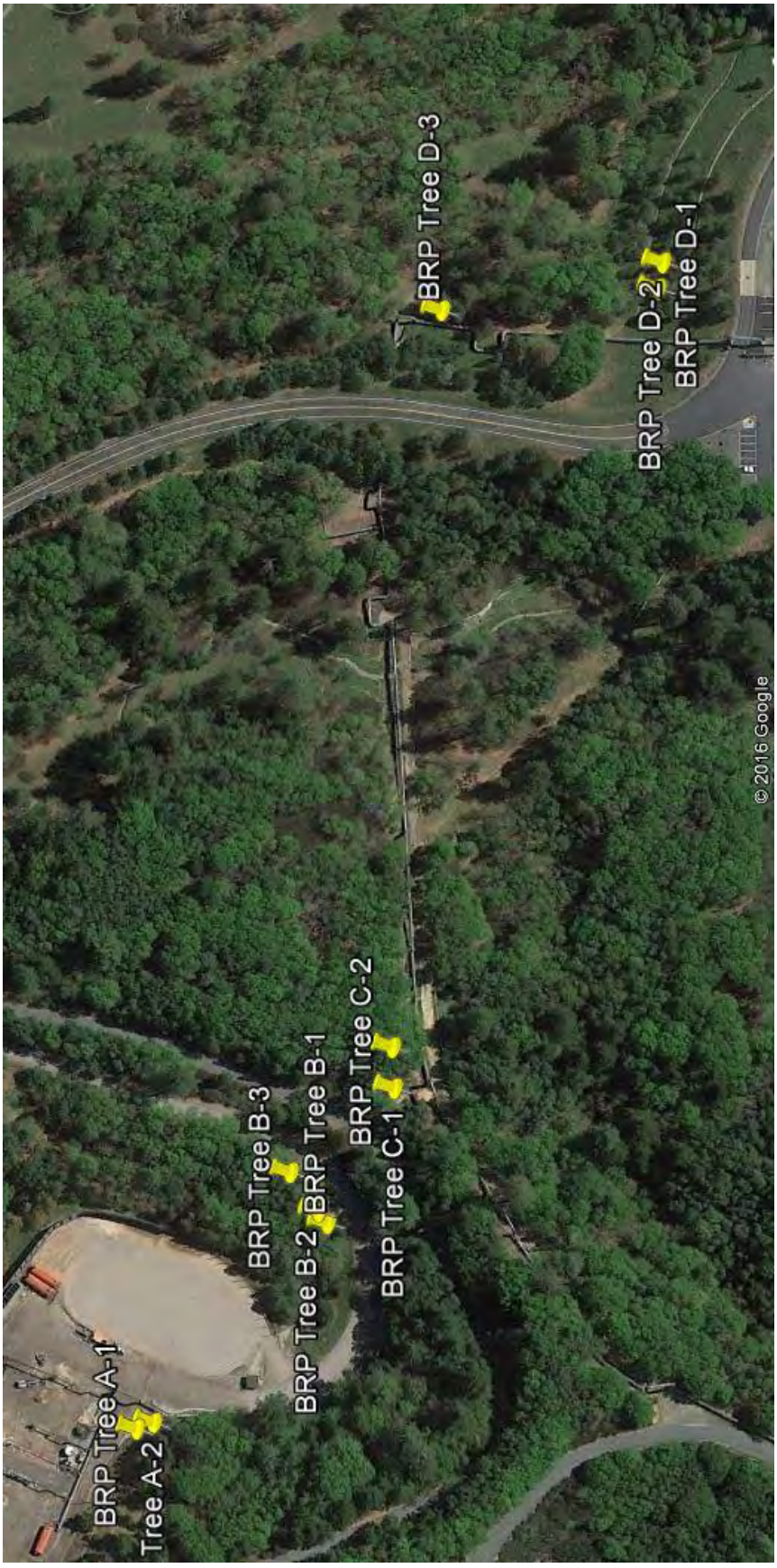

Table 1

Bottle Rock Power, LLC

2023 Vegetation Monitoring Data Needle & Soil Boron Analytical Results

Location ID	UTM Coordinates	Location Description	Sample Type	Boron (mg/kg)	Sample Type	Boron (mg/kg)
A-1	38.83734 -122.77257	Coleman Pad A3-a	Ponderosa Pine Needle	14	Base of Tree Soil	7.7
A-2	38.83729 -122.77255	Coleman Pad A3-b	Ponderosa Pine Needle	15	Base of Tree Soil	ND
B-1	38.83675 -122.77177	West Coleman/Coleman Road BB1-a	Ponderosa Pine Needle	15	Base of Tree Soil	34
B-2	38.83678 -122.77173	West Coleman/Coleman Road (previously BB1-b) now B-2	Ponderosa Pine Needle	10	Base of Tree Soil	87
B-3	38.83687 -122.77157	West Coleman/Coleman Road previously BB1-c	Ponderosa Pine Needle	5.8	Base of Tree Soil	22
C-1	38.83655 -122.77121	Access Road C-1	Ponderosa Pine Needle	17	Base of Tree Soil	16
C-2	38.83655 -122.77105	Access Road C-2	Ponderosa Pine Needle	15	Base of Tree Soil	23
D-1	38.83574 -122.76807	North of Plant Fence Line D-1	Ponderosa Pine Needle	15	Base of Tree Soil	12
D-2	38.83572 -122.76796	North of Plant Fence Line D-2 (previously D-6)	Ponderosa Pine Needle	16	Base of Tree Soil	6.8
D-3	38.8364 -122.76813	North of Plant Fence Line DD-2 (previously DD-2a & b)	Ponderosa Pine Needle	16	Base of Tree Soil	ND

ND - Not Detected

NA - Not Analyzed

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
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03 January 2024

Bottle Rock Power
Attn: M. Moore
4010 Stone Way North, Suite 400
Seattle, WA 98103
RE: Annual Needles
Work Order: 23L2841

Enclosed are the results of analyses for samples received by the laboratory on 12/19/23 13:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Annual Needles	Reported:
Seattle, WA 98103	Project Number: [none]	01/03/24 11:29

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
A-1	23L2841-01	Other (W)	12/18/23 00:00	12/19/23 13:05
A-2	23L2841-02	Other (W)	12/18/23 00:00	12/19/23 13:05
B-1	23L2841-03	Other (W)	12/18/23 00:00	12/19/23 13:05
B-2	23L2841-04	Other (W)	12/18/23 00:00	12/19/23 13:05
B-3	23L2841-05	Other (W)	12/18/23 00:00	12/19/23 13:05
C-1	23L2841-06	Other (W)	12/18/23 00:00	12/19/23 13:05
C-2	23L2841-07	Other (W)	12/18/23 00:00	12/19/23 13:05
D-1	23L2841-08	Other (W)	12/18/23 00:00	12/19/23 13:05
D-2	23L2841-09	Other (W)	12/18/23 00:00	12/19/23 13:05
D-3	23L2841-10	Other (W)	12/18/23 00:00	12/19/23 13:05

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Annual Needles	Reported:
Seattle, WA 98103	Project Number: [none]	01/03/24 11:29

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
A-1 (23L2841-01)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**14**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:18	2303	EPA 6010B	
A-2 (23L2841-02)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**15**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:21	2303	EPA 6010B	
B-1 (23L2841-03)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**15**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:24	2303	EPA 6010B	
B-2 (23L2841-04)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**10**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:27	2303	EPA 6010B	
B-3 (23L2841-05)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**5.8**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:30	2303	EPA 6010B	
C-1 (23L2841-06)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**17**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:33	2303	EPA 6010B	
C-2 (23L2841-07)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**15**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:42	2303	EPA 6010B	
D-1 (23L2841-08)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**15**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:45	2303	EPA 6010B	
D-2 (23L2841-09)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**16**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:49	2303	EPA 6010B	
D-3 (23L2841-10)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**16**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:52	2303	EPA 6010B	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Annual Needles	Reported:
Seattle, WA 98103	Project Number: [none]	01/03/24 11:29

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34576 - NB EPA 3050B										
Blank (AL34576-BLK1)				Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	ND	5.0	mg/kg							
LCS (AL34576-BS1)				Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	223	5.0	mg/kg	250		89.0	80-120			
LCS Dup (AL34576-BSD1)				Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	230	5.0	mg/kg	250		92.0	80-120	3.31	20	
Matrix Spike (AL34576-MS1)		**Source: 23L2841-01**		Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	208	5.0	mg/kg	231	13.8	84.1	75-125			
Matrix Spike (AL34576-MS2)		**Source: 23L2844-01**		Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	222	5.0	mg/kg	231	7.69	92.4	75-125			
Matrix Spike Dup (AL34576-MSD1)		**Source: 23L2841-01**		Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	211	5.0	mg/kg	238	13.8	82.8	75-125	1.25	20	
Matrix Spike Dup (AL34576-MSD2)		**Source: 23L2844-01**		Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	230	5.0	mg/kg	234	7.69	95.0	75-125	3.52	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Annual Needles	Reported:
Seattle, WA 98103	Project Number: [none]	01/03/24 11:29

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
REC	Recovery
RPD	Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

alpha
Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory (1551)
208 Mason Street, Ukiah CA 95482
707.468.0401 (phone)
707.468.5267 (fax)
clientservices@alpha-labs.com

North Bay Laboratory (2303)
737 Southpoint Blvd, Ste D, Petaluma 94954

Bay [illegible]ory (2728)
262 Rickenbacker Circle, Livermore CA 94551

Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23L2841 Pg ____ of ____

Signature below authorizes work under terms stated on reverse side.

Report to	Invoice to (if different)	Project Information
Company: Bottle Rock Power	Contact:	Project ID: Annual Pine Needles
Attn: Jay Hepper Richard Kay	Email address:	Project No:
Address: PO Box 326, Cobb, CA 95426	Address:	PO Number:
Phone/Fax: 707-529-3799	Phone/Fax:	
Email Address:		

Field Sampler - Printed Name & Signature:

TAT: Standard 10 days ○ | RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Preapproval required

TEMP °C: Ukiah | Livermore | Elk Grove | Petaluma 19.1 | Carlsbad

Sample Identification	Sampling Date	Sampling Time	Container: 40ml VOA Vial	Plastic	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Drinking Water	Wastewater	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: Boron	Field pH	Field TDS ppm	Notes / DDW Source Codes
A-1	12/18/23																1	X			
A-2																	1				
B-1																	1				
B-2																	1				
B-3																	1				
C-1																	1				
C-2																	1				
D-1																	1				
D-2																	1				
D-3																	1				

Relinquished by	Received by	Date	Time
Richard Kay	QB	12/19/23	1305

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

04 January 2024

Bottle Rock Power
Attn: Richard
4010 Stone Way North, Suite 400
Seattle, WA 98103
RE: Annual Soil
Work Order: 23L2844

Enclosed are the results of analyses for samples received by the laboratory on 12/19/23 13:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Annual Soil	Reported:
Seattle, WA 98103	Project Number: [none]	01/04/24 12:26

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
A-1	23L2844-01	Soil	12/18/23 00:00	12/19/23 13:05
A-2	23L2844-02	Other (W)	12/18/23 00:00	12/19/23 13:05
B-1	23L2844-03	Other (W)	12/18/23 00:00	12/19/23 13:05
B-2	23L2844-04	Other (W)	12/18/23 00:00	12/19/23 13:05
B-3	23L2844-05	Other (W)	12/18/23 00:00	12/19/23 13:05
C-1	23L2844-06	Other (W)	12/18/23 00:00	12/19/23 13:05
C-2	23L2844-07	Other (W)	12/18/23 00:00	12/19/23 13:05
D-1	23L2844-08	Other (W)	12/18/23 00:00	12/19/23 13:05
D-2	23L2844-09	Other (W)	12/18/23 00:00	12/19/23 13:05
D-3	23L2844-10	Other (W)	12/18/23 00:00	12/19/23 13:05

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Annual Soil	Reported:
Seattle, WA 98103	Project Number: [none]	01/04/24 12:26

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
A-1 (23L2844-01)			**Sample Type: Soil**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**7.7**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 08:55	2303	EPA 6010B	
A-2 (23L2844-02)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	ND	mg/kg	5.0	1	AL34576	12/20/23 09:42	12/22/23 08:58	2303	EPA 6010B	
B-1 (23L2844-03)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**34**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 09:01	2303	EPA 6010B	
B-2 (23L2844-04)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**87**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 09:04	2303	EPA 6010B	
B-3 (23L2844-05)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**22**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 09:07	2303	EPA 6010B	
C-1 (23L2844-06)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**16**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 09:10	2303	EPA 6010B	
C-2 (23L2844-07)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**23**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 09:19	2303	EPA 6010B	
D-1 (23L2844-08)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**12**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 09:23	2303	EPA 6010B	
D-2 (23L2844-09)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	**6.8**	**mg/kg**	**5.0**	1	AL34576	12/20/23 09:42	12/22/23 09:26	2303	EPA 6010B	
D-3 (23L2844-10)			**Sample Type: Other (W)**			**Sampled: 12/18/23 00:00**				
Metals by EPA 6000/7000 Series Methods										
Boron	ND	mg/kg	5.0	1	AL34576	12/20/23 09:42	12/22/23 09:29	2303	EPA 6010B	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Annual Soil	Reported:
Seattle, WA 98103	Project Number: [none]	01/04/24 12:26

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34576 - NB EPA 3050B										
Blank (AL34576-BLK1)				Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	ND	5.0	mg/kg							
LCS (AL34576-BS1)				Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	223	5.0	mg/kg	250		89.0	80-120			
LCS Dup (AL34576-BSD1)				Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	230	5.0	mg/kg	250		92.0	80-120	3.31	20	
Matrix Spike (AL34576-MS1)		Source: 23L2841-01		Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	208	5.0	mg/kg	231	13.8	84.1	75-125			
Matrix Spike (AL34576-MS2)		Source: 23L2844-01		Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	222	5.0	mg/kg	231	7.69	92.4	75-125			
Matrix Spike Dup (AL34576-MSD1)		Source: 23L2841-01		Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	211	5.0	mg/kg	238	13.8	82.8	75-125	1.25	20	
Matrix Spike Dup (AL34576-MSD2)		Source: 23L2844-01		Prepared: 12/20/23 Analyzed: 12/22/23						
Boron	230	5.0	mg/kg	234	7.69	95.0	75-125	3.52	20	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Annual Soil	Reported:
Seattle, WA 98103	Project Number: [none]	01/04/24 12:26

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
REC	Recovery
RPD	Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

alpha
Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory (1561)
208 Mason Street, Ukiah CA 95482
707.468.0401 (phone)
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clientservices@alpha-labs.com

North Bay Laboratory (2303)
737 Southpoint Blvd, Ste D, Petaluma 94954

Bay [illegible]atory (2728)
262 Rickenbacker Circle, Livermore CA 94551

Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23L2844 Pg ____ of ____

Report to	Invoice to (if different)	Project Information
Company: Bottle Rock Power	Contact:	Project ID: Annual Soil
Attn: ~~Jay Hepper~~ Richard Lacy	Email address:	Project No:
Address: PO Box 326, Cobb, CA 95426	Address:	PO Number:
Phone/Fax: 707-529-3799	Phone/Fax:	
Email Address:		

Signature below authorizes work under terms stated on reverse side.

TAT
- Standard 10 days ○
- RUSH: 5 days ○
- 48 hours ○
- Other: ____days ○
- Preapproval required

TEMP °C
Ukiah
Livermore
Elk Grove
Petaluma 19.1
Carlsbad

Field Sampler - Printed Name & Signature:

Sample Identification	Sampling Date	Sampling Time	Container: 40ml VOA Vial	Container: Plastic	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Drinking Water	Matrix: Wastewater	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: Boron	Field pH	Field TDS ppm	Notes / DDW Source Codes
A-1	12/18/23																1	X			
A-2	"																1	"			
B-1	"																1	"			
B-2	"																1	"			
B-3	"																1	"			
C-1	"																1	"			
C-2	"																1	"			
D-1	"																1	"			
D-2	"																1	"			
D-3	"																1	"			

Relinquished by	Received by	Date	Time
Richard Lacy	JB	121923	1305

DDW Write On EDT Transmission? ○ Yes ○ No

State **System** Number: _____

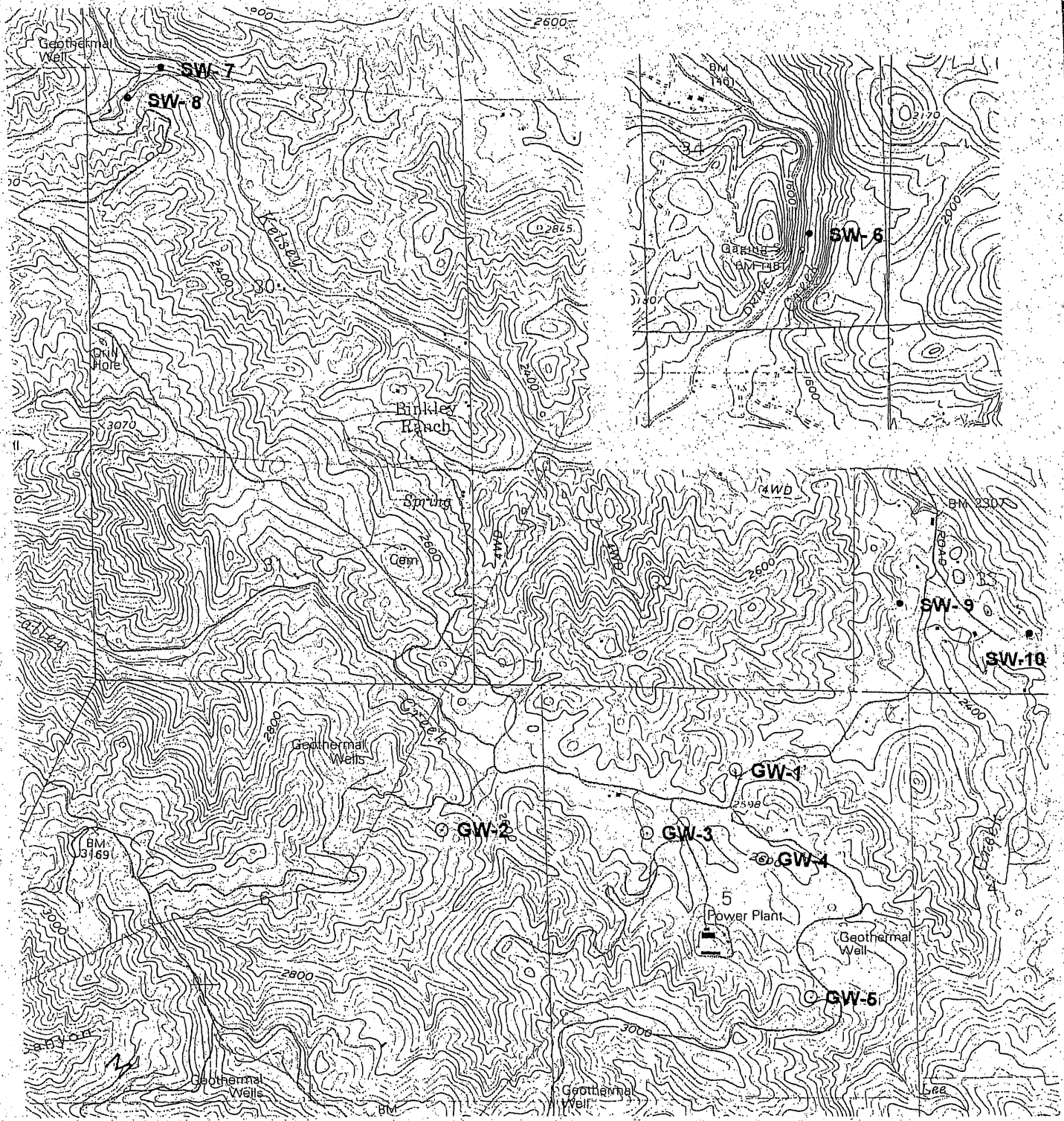
If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:



EGS INC

Bottle Rock Monitoring Program

Water Quality Sample Locations

Scale: 1inch = 2000 feet

Project No: 0068-026-02

Date: June 2003

FIG.1.1

Table 2
Bottle Rock Power, LLC
2023 Ground Water and Surface Water Monitoring
1st Quarter Analytical Results

Location ID	GPS Coordinates	Location & Description	Arsenic µg/l	Calcium mg/l	Magnesium mg/l	Hardness mg/l	Boron mg/l	Copper mg/l	Iron mg/l	Lead mg/l	Manganese mg/l	Sodium mg/l	Zinc mg/l	pH	Electrical Conductivity umhos/cm	Disolved Oxygen mg/l	Turbidity NTU	Total Alkalinity mg/l	Nitrate mg/l	Sulfate mg/l	Total Suspended Solids mg/l	Total Coliform MPN
GW-1	38 50' 27.84" N 122 45' 59.07" W	Barret Spring; Running seep at sharp turn, downslope on High Valley Road	ND	47	16	183	ND	ND	ND	ND	0.11	8.6	ND	7.45	380	NA	ND	180	ND	23	ND	NA
GW-3	38 50' 21.57" N 122 46' 17.46 W	BRP WW1; Northern most water supply well	ND	34	10	127	0.4	ND	0.32	ND	0.053	25	ND	7.56	350	NA	2.4	180	ND	6.3	ND	NA
SW-6	38 55' 33.58" N 122 50' 39.91" W	Kelsey Creek - Downstream; ~ 3 miles west of HWY 29 on Kelsey	ND	7.5	5.9	43	ND	ND	0.11	ND	ND	ND	ND	6.91	100	11	2.8	45	NA	3.7	ND	150
SW-7	38 52' 04.62" N 122 47' 43.13" W	High Valley Creek; behind Binkley Ranch House	ND	7.6	5.8	43	ND	ND	0.11	ND	ND	ND	ND	6.53	100	11	3	45	NA	3.7	ND	260
SW-8	38 52' 08.29" N 122 47' 40.01" W	Kelsey Creek - Middle; Northwest of Binkley Ranch House, upstream of confluence with High Valley Creek	ND	6.8	4.2	34	ND	ND	0.11	ND	ND	ND	ND	6.92	82	11	3.3	36	NA	2.2	5	200
SW-9	38 50' 40.18" N 122 45' 29.61" W	Alder Creek; Adjacent to High Valley Road bridge crossing Alder Creek	ND	6.5	3.9	32	ND	ND	0.12	ND	ND	ND	ND	6.88	81	11	2.8	37	NA	2.2	2	340
SW-10	38 50' 36.22" N 122 44' 57.25" W	Kelsey Creek - Upstream; ~ 0.5 miles west of High Valley Road gate on Bottle Rock Road	ND	6.6	4	33	ND	ND	0.23	ND	ND	ND	ND	6.89	81	11	3.2	36	NA	2.2	1.8	310

ND = Not Detected
NA = Not Analyzed

Table 2
Bottle Rock Power, LLC
2023 Ground Water and Surface Water Monitoring
2nd Quarter Analytical Results

Location ID	GPS Coordinates	Location & Description	Arsenic µg/l	Calcium mg/l	Magnesium mg/l	Hardness mg/l	Boron mg/l	Copper mg/l	Iron mg/l	Lead mg/l	Manganese mg/l	Sodium mg/l	Zinc mg/l	pH	Electrical Conductivity umhos/cm	Disolved Oxygen mg/l	Turbidity NTU	Total Alkalinity mg/l	Nitrate mg/l	Sulfate mg/l	Total Suspended Solids mg/l	Total Coliform MPN
GW-1	38 50' 27.84" N 122 45' 59.07" W	Barret Spring; Running seep at sharp turn, downslope on High Valley Road	ND	45	15	176	ND	ND	ND	ND	0.11	8.5	ND	7.79	380	NA	ND	180	ND	18	ND	NA
GW-3	38 50' 21.57" N 122 46' 17.46 W	BRP WW1; Northern most water supply well	ND	32	9.9	121	0.4	ND	0.15	ND	0.044	24	ND	7.79	350	NA	1	180	ND	5.4	ND	NA
SW-6	38 55' 33.58" N 122 50' 39.91" W	Kelsey Creek - Downstream; ~ 3 miles west of HWY 29 on Kelsey Creek	ND	6	3.7	30	ND	ND	ND	ND	ND	ND	ND	7.2	88	9.6	ND	40	NA	1.6	ND	980
SW-7	38 52' 04.62" N 122 47' 43.13" W	High Valley Creek; behind Binkley Ranch House	ND	28	12	118	0.35	ND	ND	ND	0.057	19	ND	7.33	320	9.7	ND	150	NA	14	ND	2000
SW-8	38 52' 08.29" N 122 47' 40.01" W	Kelsey Creek - Middle; Northwest of Binkley Ranch House, upstream of confluence with High Valley Creek	ND	5.9	3.7	30	ND	ND	ND	ND	ND	ND	ND	7.32	91	9.7	ND	40	NA	1.6	ND	520
SW-9	38 50' 40.18" N 122 45' 29.61" W	Alder Creek; Adjacent to High Valley Road bridge crossing Alder Creek	ND	5.9	3.7	30	ND	ND	ND	ND	ND	ND	ND	9.7	88	9.7	ND	41	NA	1.7	ND	2400
SW-10	38 50' 36.22" N 122 44' 57.25" W	Kelsey Creek - Upstream; ~ 0.5 miles west of High Valley Road gate on Bottle Rock Road	ND	6	3.7	30	ND	ND	ND	ND	ND	ND	ND	7.33	89	9.7	1.2	43	NA	1.6	3.3	1600

ND = Not Detected
NA = Not Analyzed

Table 2
Bottle Rock Power, LLC
2023 Ground Water and Surface Water Monitoring
3rd Quarter Analytical Results

Location ID	GPS Coordinates	Location & Description	Arsenic µg/l	Calcium mg/l	Magnesium mg/l	Hardness mg/l	Boron mg/l	Copper mg/l	Iron mg/l	Lead mg/l	Manganese mg/l	Sodium mg/l	Zinc mg/l	pH	Electrical Conductivity umhos/cn	Disolved Oxygen mg/l	Turbidity NTU	Total Alkalinity mg/l	Nitrate mg/l	Sulfate mg/l	Total Suspended Solids mg/l	Total Coliform MPN
GW-1	38 50' 27.84" N 122 45' 59.07" W	Barret Spring; Running seep at sharp turn, downslope on High Valley Road	MND	40	13	155	ND	ND	ND	ND	0.099	7.5	ND	7.99	390	NA	ND	180	ND	21	ND	NA
GW-3	38 50' 21.57" N 122 46' 17.46 W	BRP WW1; Northern most water supply well	ND	28	8.7	105	0.35	ND	0.44	ND	0.044	21	ND	7.96	360	NA	3.6	170	ND	6.4	ND	NA
SW-6	38 55' 33.58" N 122 50' 39.91" W	Kelsey Creek - Downstream; ~ 3 miles west of HWY 29 on Kelsey Creek	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	7.48	77	9.2	ND	34	NA	1.2	1.2	>2419.6
SW-7	38 52' 04.62" N 122 47' 43.13" W	High Valley Creek; behind Binkley Ranch House	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	7.56	96	9.1	ND	34	NA	1.2	ND	1000
SW-8	38 52' 08.29" N 122 47' 40.01" W	Kelsey Creek - Middle; Northwest of Binkley Ranch House, upstream of confluence with High Valley Creek	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	7.47	76	9	ND	34	NA	1.2	1.7	1000
SW-9	38 50' 40.18" N 122 45' 29.61" W	Alder Creek; Adjacent to High Valley Road bridge crossing Alder Creek	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	7.51	78	9.3	ND	34	NA	1.2	ND	>2419.6
SW-10	38 50' 36.22" N 122 44' 57.25" W	Kelsey Creek - Upstream; ~ 0.5 miles west of High Valley Road gate on Bottle Rock Road	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	7.44	77	9.2	ND	45	ND	1.2	1.5	>2419.6

ND = Not Detected
NA = Not Analyzed

Table 2
Bottle Rock Power, LLC
2023 Ground Water and Surface Water Monitoring
4th Quarter Analytical Results

Location ID	GPS Coordinates	Location & Description	Arsenic µg/l	Calcium mg/l	Magnesium mg/l	Hardness mg/l	Boron mg/l	Copper mg/l	Iron mg/l	Lead mg/l	Manganese mg/l	Sodium mg/l	Zinc mg/l	pH	Electrical Conductivity umhos/cm	Disolved Oxygen mg/l	Turbidity NTU	Total Alkalinity mg/l	Nitrate mg/l	Sulfate mg/l	Total Suspended Solids mg/l	Total Coliform MPN
GW-1	38 50' 27.84" N 122 45' 59.07" W	Barret Spring; Running seep at sharp turn, downslope on High Valley Road	ND	50	16	190	ND	ND	ND	ND	0.11	8.3	ND	7.62	420	NA	ND	170	ND	47	ND	NA
GW-3	38 50' 21.57" N 122 46' 17.46 W	BRP WW1; Northern most water supply well	ND	34	10	127	0.4	ND	0.4	ND	0.06	26	0.3	7.72	370	NA	2.6	180	ND	5.9	1.4	NA
SW-6	38 55' 33.58" N 122 50' 39.91" W	Kelsey Creek - Downstream; ~ 3 miles west of HWY 29 on Kelsey Creek	ND	6.4	11	62	ND	ND	2.5	ND	0.07	ND	ND	7.54	120	10.0	24	60	NA	2.8	29	>2419.6
SW-7	38 52' 04.62" N 122 47' 43.13" W	High Valley Creek; behind Binkley Ranch House	ND	7.4	7.5	50	ND	ND	1.1	ND	0.03	ND	ND	7.49	110	10	20	48	NA	3.5	13	>2419.6
SW-8	38 52' 08.29" N 122 47' 40.01" W	Kelsey Creek - Middle; Northwest of Binkley Ranch House, upstream of confluence with High Valley Creek	ND	5	5.7	36	ND	ND	1.30	ND	0.04	ND	ND	7.35	84	10	19	42	NA	2	24	690
SW-9	38 50' 40.18" N 122 45' 29.61" W	Alder Creek; Adjacent to High Valley Road bridge crossing Alder Creek	ND	6.6	4.3	34	ND	ND	0.89	ND	0.03	ND	ND	7.65	78	11	15	38	NA	2.3	14	>2419.6
SW-10	38 50' 36.22" N 122 44' 57.25" W	Kelsey Creek - Upstream; ~ 0.5 miles west of High Valley Road gate on Bottle Rock Road	ND	ND	5.8	35	ND	ND	1.7	ND	0.07	ND	ND	7.36	85	10	19.0	37	NA	1.7	38	>2419.6

ND = Not Detected
NA = Not Analyzed

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

13 April 2023

Bottle Rock Power
Attn: M. Moore
4010 Stone Way North, Suite 400
Seattle, WA 98103
RE: Groundwater
Work Order: 23C4057

Enclosed are the results of analyses for samples received by the laboratory on 03/24/23 13:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:10

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-3	23C4057-01	Water	03/24/23 09:00	03/24/23 13:20
GW-1	23C4057-02	Water	03/24/23 09:35	03/24/23 13:20

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:10

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-3 (23C4057-01)			**Sample Type: Water**			**Sampled: 03/24/23 09:00**				
Metals by EPA 200 Series Methods										
Arsenic	ND	ug/L	2.0	1	AC35642	03/27/23 07:10	03/29/23 09:39	2303*	EPA 200.5	
Boron	**0.40**	**mg/L**	**0.10**	1	AC35643	03/27/23 07:33	03/27/23 09:10	2303	EPA 200.7	
Calcium	**34**	**mg/L**	**5.0**	1	AC35643	03/27/23 07:33	03/27/23 09:10	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC35643	03/27/23 07:33	03/27/23 09:10	2303	EPA 200.7	
Iron	**0.32**	**mg/L**	**0.10**	1	AC35643	03/27/23 07:33	03/27/23 09:10	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC35643	03/27/23 07:33	03/27/23 09:10	2303	EPA 200.7	
Magnesium	**10**	**mg/L**	**0.60**	1	AC35643	03/27/23 07:33	03/27/23 09:10	2303	EPA 200.7	
Manganese	**0.053**	**mg/L**	**0.020**	1	AC35643	03/27/23 07:33	03/27/23 09:10	2303	EPA 200.7	
Sodium	**25**	**mg/L**	**6.0**	1	AC35643	03/27/23 07:33	03/27/23 09:10	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC35643	03/27/23 07:33	03/27/23 09:10	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	**7.56**	**pH Units**	**1.00**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**350**	**umhos/cm**	**10**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM2510B	
Total Alkalinity as CaCO3	**180**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AC35744	03/28/23 13:15	03/29/23 11:15	1551	SM2540D	
Turbidity	**2.4**	**NTU**	**1.0**	1	AC33823	03/24/23 14:00	03/24/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**170**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hardness, Total	**127**	**mg/L**	**1**	1	AC35643	03/27/23 07:33	03/27/23 09:10	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AC35553	03/24/23 14:01	03/24/23 17:22	2303	EPA 300.0	
Sulfate as SO4	**6.3**	**mg/L**	**0.50**	1	AC35553	03/24/23 14:01	03/24/23 17:22	2303	EPA 300.0	
GW-1 (23C4057-02)			**Sample Type: Water**			**Sampled: 03/24/23 09:35**				
Metals by EPA 200 Series Methods										
Arsenic	ND	ug/L	2.0	1	AC35642	03/27/23 07:10	03/29/23 09:46	2303*	EPA 200.5	
Boron	ND	mg/L	0.10	1	AC35643	03/27/23 07:33	03/27/23 09:13	2303	EPA 200.7	
Calcium	**47**	**mg/L**	**5.0**	1	AC35643	03/27/23 07:33	03/27/23 09:13	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC35643	03/27/23 07:33	03/27/23 09:13	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AC35643	03/27/23 07:33	03/27/23 09:13	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC35643	03/27/23 07:33	03/27/23 09:13	2303	EPA 200.7	
Magnesium	**16**	**mg/L**	**0.60**	1	AC35643	03/27/23 07:33	03/27/23 09:13	2303	EPA 200.7	
Manganese	**0.11**	**mg/L**	**0.020**	1	AC35643	03/27/23 07:33	03/27/23 09:13	2303	EPA 200.7	
Sodium	**8.6**	**mg/L**	**6.0**	1	AC35643	03/27/23 07:33	03/27/23 09:13	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC35643	03/27/23 07:33	03/27/23 09:13	2303	EPA 200.7	

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Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:10

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-1 (23C4057-02)			**Sample Type: Water**			**Sampled: 03/24/23 09:35**				
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	**7.45**	**pH Units**	**1.00**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**380**	**umhos/cm**	**10**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM2510B	
Total Alkalinity as CaCO3	**180**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AC35744	03/28/23 13:15	03/29/23 11:15	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AC33823	03/24/23 14:00	03/24/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**180**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hardness, Total	**183**	**mg/L**	**1**	1	AC35643	03/27/23 07:33	03/27/23 09:13	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AC35553	03/24/23 14:01	03/24/23 17:34	2303	EPA 300.0	
Sulfate as SO4	**23**	**mg/L**	**0.50**	1	AC35553	03/24/23 14:01	03/24/23 17:34	2303	EPA 300.0	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:10

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35642 - NB EPA 200 series										
Blank (AC35642-BLK1)				Prepared: 03/27/23 Analyzed: 03/29/23						
Arsenic	ND	2.0	ug/L							
LCS (AC35642-BS1)				Prepared: 03/27/23 Analyzed: 03/29/23						
Arsenic	10.3	2.0	ug/L	10.0		103	85-115			
LCS Dup (AC35642-BSD1)				Prepared: 03/27/23 Analyzed: 03/29/23						
Arsenic	10.5	2.0	ug/L	10.0		105	85-115	1.77	20	
Duplicate (AC35642-DUP1)		**Source: 23C4061-02**		Prepared: 03/27/23 Analyzed: 03/29/23						
Arsenic	3.92	2.0	ug/L		4.26			8.32	20	
MRL Check (AC35642-MRL1)				Prepared: 03/27/23 Analyzed: 03/29/23						
Arsenic	2.38	2.0	ug/L	2.00		119	0-200			
Matrix Spike (AC35642-MS1)		**Source: 23C4068-01**		Prepared: 03/27/23 Analyzed: 03/29/23						
Arsenic	10.8	2.0	ug/L	10.0	ND	108	70-130			
Batch AC35643 - NB EPA 200 series DA										
Blank (AC35643-BLK1)				Prepared & Analyzed: 03/27/23						
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Zinc	ND	0.30	mg/L							

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:10

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35643 - NB EPA 200 series DA										
LCS (AC35643-BS1)				Prepared & Analyzed: 03/27/23						
Boron	0.489	0.10	mg/L	0.500		97.7	85-115			
Calcium	24.7	5.0	mg/L	25.5		96.9	85-115			
Copper	0.481	0.050	mg/L	0.500		96.2	85-115			
Iron	0.513	0.10	mg/L	0.500		103	85-115			
Lead	0.475	0.020	mg/L	0.500		95.1	85-115			
Magnesium	26.0	0.60	mg/L	25.5		102	85-115			
Manganese	0.507	0.020	mg/L	0.500		101	85-115			
Sodium	26.0	6.0	mg/L	25.5		102	85-115			
Zinc	0.499	0.30	mg/L	0.500		99.9	85-115			
LCS Dup (AC35643-BSD1)				Prepared & Analyzed: 03/27/23						
Boron	0.486	0.10	mg/L	0.500		97.3	85-115	0.451	20	
Calcium	24.4	5.0	mg/L	25.5		95.6	85-115	1.35	20	
Copper	0.478	0.050	mg/L	0.500		95.6	85-115	0.646	20	
Iron	0.510	0.10	mg/L	0.500		102	85-115	0.684	20	
Lead	0.471	0.020	mg/L	0.500		94.1	85-115	1.01	20	
Magnesium	25.7	0.60	mg/L	25.5		101	85-115	1.16	20	
Manganese	0.503	0.020	mg/L	0.500		101	85-115	0.653	20	
Sodium	25.6	6.0	mg/L	25.5		100	85-115	1.42	20	
Zinc	0.499	0.30	mg/L	0.500		99.7	85-115	0.160	20	
Duplicate (AC35643-DUP1)		**Source: 23C4057-01**		Prepared & Analyzed: 03/27/23						
Boron	0.403	0.10	mg/L		0.399			0.922	20	
Calcium	34.0	5.0	mg/L		33.5			1.30	20	
Copper	ND	0.050	mg/L		ND				20	
Iron	0.325	0.10	mg/L		0.319			1.80	20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	10.6	0.60	mg/L		10.4			1.65	20	
Manganese	0.0533	0.020	mg/L		0.0531			0.376	20	
Sodium	25.2	6.0	mg/L		24.9			1.21	20	
Zinc	ND	0.30	mg/L		ND				20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:10

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35643 - NB EPA 200 series DA										
MRL Check (AC35643-MRL1)				Prepared & Analyzed: 03/27/23						
Boron	0.0991	0.10	mg/L	0.100		99.1	0-200			
Calcium	4.79	5.0	mg/L	5.00		95.7	0-200			
Copper	0.0952	0.050	mg/L	0.100		95.2	0-200			
Iron	0.102	0.10	mg/L	0.100		102	0-200			
Lead	0.0183	0.020	mg/L	0.0200		91.5	0-200			
Magnesium	0.495	0.60	mg/L	0.500		99.1	0-200			
Manganese	0.0207	0.020	mg/L	0.0200		104	0-200			
Sodium	5.12	6.0	mg/L	5.00		102	0-200			
Zinc	0.368	0.30	mg/L	0.350		105	0-200			
Matrix Spike (AC35643-MS1)		**Source: 23C4057-02**		Prepared & Analyzed: 03/27/23						
Boron	0.581	0.10	mg/L	0.500	ND	97.4	70-130			
Copper	0.487	0.050	mg/L	0.500	ND	97.4	70-130			
Iron	0.549	0.10	mg/L	0.500	ND	110	70-130			
Lead	0.473	0.020	mg/L	0.500	ND	94.7	70-130			
Manganese	0.599	0.020	mg/L	0.500	0.107	98.5	70-130			
Sodium	33.5	6.0	mg/L	25.5	8.62	97.8	70-130			
Zinc	0.505	0.30	mg/L	0.500	ND	101	70-130			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:10

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35344 - NB General Prep										
Duplicate (AC35344-DUP1)		**Source: 23C3597-01**		Prepared & Analyzed: 03/23/23						
Specific Conductance (EC)	371	10	umhos/cm		370			0.270	5	
pH	7.71	1.00	pH Units		7.68			0.390	20	
Batch AC35643 - NB EPA 200 series DA										
Blank (AC35643-BLK1)				Prepared & Analyzed: 03/27/23						
Hardness, Total	ND	1	mg/L							
Duplicate (AC35643-DUP1)		**Source: 23C4057-01**		Prepared & Analyzed: 03/27/23						
Hardness, Total	128	1	mg/L		127			1.42	20	
Batch AC35744 - General Preparation										
Blank (AC35744-BLK1)				Prepared: 03/28/23 Analyzed: 03/29/23						
Total Suspended Solids	ND	1.0	mg/L							
Duplicate (AC35744-DUP1)		**Source: 23C4078-01**		Prepared: 03/28/23 Analyzed: 03/29/23						
Total Suspended Solids	58.0	1.0	mg/L		68.0			15.9	30	
Duplicate (AC35744-DUP2)		**Source: 23C4081-01**		Prepared: 03/28/23 Analyzed: 03/29/23						
Total Suspended Solids	927	1.0	mg/L		907			2.18	30	
Batch AC35802 - NB General Prep										
Blank (AC35802-BLK1)				Prepared & Analyzed: 03/28/23						
Total Alkalinity as CaCO3	ND	5.0	mg/L							
Bicarbonate Alkalinity as CaCO3	ND	5.0	mg/L							
Carbonate Alkalinity as CaCO3	ND	5.0	mg/L							
Hydroxide Alkalinity as CaCO3	ND	5.0	mg/L							

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:10

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35802 - NB General Prep										
LCS (AC35802-BS1)				Prepared & Analyzed: 03/28/23						
Total Alkalinity as CaCO3	984	5.0	mg/L	1000		98.4	80-120			
Duplicate (AC35802-DUP1)		**Source: 23C4057-02**		Prepared & Analyzed: 03/28/23						
Total Alkalinity as CaCO3	181	5.0	mg/L		180			0.277	20	
Bicarbonate Alkalinity as CaCO3	180	5.0	mg/L		180			0.277	20	
Carbonate Alkalinity as CaCO3	ND	5.0	mg/L		ND				20	
Hydroxide Alkalinity as CaCO3	ND	5.0	mg/L		ND				20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:10

Anions by EPA Method 300.0 - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35553 - NB General Prep										
Blank (AC35553-BLK1)				Prepared & Analyzed: 03/24/23						
Sulfate as SO4	ND	0.50	mg/L							
Nitrate as N	ND	0.40	mg/L							
LCS (AC35553-BS1)				Prepared: 03/24/23 Analyzed: 03/27/23						
Sulfate as SO4	8.17	0.50	mg/L	8.00		102	90-110			
Nitrate as N	1.83	0.40	mg/L	1.80		101	90-110			
Duplicate (AC35553-DUP1)	**Source: 23C4052-01**			Prepared & Analyzed: 03/24/23						
Sulfate as SO4	3.72	0.50	mg/L		3.73			0.199	20	
Nitrate as N	ND	0.40	mg/L		ND			5.04	20	
Matrix Spike (AC35553-MS1)	**Source: 23C4052-02**			Prepared & Analyzed: 03/24/23						
Nitrate as N	1.75	0.40	mg/L	1.80	ND	93.5	80-120			
Sulfate as SO4	9.85	0.50	mg/L	8.00	2.21	95.5	80-120			
Matrix Spike (AC35553-MS2)	**Source: 23C4061-01**			Prepared & Analyzed: 03/24/23						
Sulfate as SO4	14.8	0.50	mg/L	8.00	5.88	112	80-120			
Nitrate as N	1.86	0.40	mg/L	1.80	ND	99.1	80-120			
Matrix Spike Dup (AC35553-MSD1)	**Source: 23C4052-02**			Prepared & Analyzed: 03/24/23						
Sulfate as SO4	9.35	0.50	mg/L	8.00	2.21	89.3	80-120	5.17	20	
Nitrate as N	1.67	0.40	mg/L	1.80	ND	88.6	80-120	5.17	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:10

Notes and Definitions

T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.

ND Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

REC Recovery

RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

alpha
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www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

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Bay Area Laboratory (2728)
262 Rickenbacker Circle, Livermore CA 94551

Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23C4057 Pg ____ of ____

Report to	Invoice to (if different)	Project Information
Company: Bottle Rock Power	Contact:	Project ID: Bottle Rock Monitoring-GW
Attn: ~~Jay Hepper~~ Richard Lacy	Email address:	Project No:
Address: PO Box 326, Cobb, CA 95426	Address:	PO Number:
Phone/Fax: 707-529-3799	Phone/Fax:	
Email Address:		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: Richard Lacy

Sample Identification	Sampling Date	Sampling Time	Container: 40ml VOA Vial	Container: Plastic	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Drinking Water	Matrix: Wastewater	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: ALK, Ph, ec	Turbidity & TSS	Hardness, SO4	B, Cu, Fe & Pb	Mn, Na & Zn	As & NO3			Field pH	Field TDS ppm	
GW-3	3/24/23	9:00		X													3	X	X	X	X	X	X					
GW-1	3/24/23	9:35		X													3	X	X	X	X	X	X					

TAT: Standard 10 days (X) | RUSH: 5 days ( ) 48 hours ( ) Other: ___days ( ) Preapproval required

TEMP °C: Ukiah | Livermore | Elk Grove | Petaluma 13 | Carlsbad

Notes / DDW Source Codes

Relinquished by	Received by	Date	Time
Richard Lacy	[signature]	3/24/23	1320

DDW Write On EDT Transmission? ( ) Yes ( ) No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

4.2

wko_NBtoUK_COC.rpt

WORK ORDER

Printed: 3/24/2023 1:43:36PM

23C4057

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Bottle Rock Power	**Client Code:** NB_BOTTLEROCK	**Bid:** Master Bid
Project: Groundwater	**Project Number:** [none]	**PO #:**

Date Due: 04/07/23 15:00 (10 day TAT)
Received By: Alfredo C. Lorenzo
Logged In By: Alfredo C. Lorenzo
Date Received: 03/24/23 13:20
Date Logged 03/24/23 13:38

Samples Received at: _____ deg C All containers received and intact: YES NO

Analysis	Department	Expires	Comments
23C4057-01 GW-3 [Water] Sampled 03/24/23 09:00			
Solids, TSS-SM2540D	Wet Chem	03/31/23 23:59	
23C4057-02 GW-1 [Water] Sampled 03/24/23 09:35			
Solids, TSS-SM2540D	Wet Chem	03/31/23 23:59	

Containers Supplied:
1L Poly - Unpres (C)
1L Poly - Unpres (C)

Relinquished By	3/27/23	Time	Received By	3/27/23	1200
Relinquished By	3/27/23	1515	Received By	3.27.23	1515

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

13 April 2023

Bottle Rock Power
Attn: M. Moore
4010 Stone Way North, Suite 400
Seattle, WA 98103
RE: Surface Water
Work Order: 23C4052

Enclosed are the results of analyses for samples received by the laboratory on 03/24/23 13:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-7	23C4052-01	Water	03/24/23 09:20	03/24/23 13:20
SW-9	23C4052-02	Water	03/24/23 09:50	03/24/23 13:20
SW-10	23C4052-03	Water	03/24/23 10:15	03/24/23 13:20
SW-8	23C4052-04	Water	03/24/23 10:50	03/24/23 13:20
SW-6	23C4052-05	Water	03/24/23 12:15	03/24/23 13:20

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (23C4052-01)			**Sample Type: Water**			**Sampled: 03/24/23 09:20**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Calcium	**7.6**	**mg/L**	**5.0**	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Iron	**0.11**	**mg/L**	**0.10**	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Magnesium	**5.8**	**mg/L**	**0.60**	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AC35879	03/29/23 07:06	03/29/23 13:57	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**11**	**mg/L**	**0.10**	1	AC35914	03/27/23 16:00	03/27/23 17:00	1551	SM4500-O G	T-14
pH	**6.53**	**pH Units**	**1.00**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**100**	**umhos/cm**	**10**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM2510B	
Total Alkalinity as CaCO3	**45**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AC35744	03/28/23 13:15	03/29/23 11:15	1551	SM2540D	
Turbidity	**3.0**	**NTU**	**1.0**	1	AC33823	03/24/23 14:00	03/24/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**45**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hardness, Total	**43**	**mg/L**	**1**	1	AC35639	03/27/23 06:41	03/28/23 08:27	2303	SM2340B	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (23C4052-01)			**Sample Type: Water**			**Sampled: 03/24/23 09:20**				
Anions by EPA Method 300.0										
Sulfate as SO4	**3.7**	**mg/L**	**0.50**	1	AC35553	03/24/23 14:01	03/24/23 17:46	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**260**	**MPN/100mL**	**1.0**	1	AC35559	03/24/23 14:47	03/25/23 17:15	2303	SM9223B	
E. Coli	**1.0**	**MPN/100mL**	**1.0**	1	AC35559	03/24/23 14:47	03/25/23 17:15	2303	SM9223B	
SW-9 (23C4052-02)			**Sample Type: Water**			**Sampled: 03/24/23 09:50**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Calcium	**6.5**	**mg/L**	**5.0**	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Iron	**0.12**	**mg/L**	**0.10**	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Magnesium	**3.9**	**mg/L**	**0.60**	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AC35879	03/29/23 07:06	03/29/23 14:07	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-9 (23C4052-02)			**Sample Type: Water**			**Sampled: 03/24/23 09:50**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**11**	**mg/L**	**0.10**	1	AC35914	03/27/23 16:00	03/27/23 17:00	1551	SM4500-O G	T-14
pH	**6.88**	**pH Units**	**1.00**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**81**	**umhos/cm**	**10**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM2510B	
Total Alkalinity as CaCO3	**37**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Total Suspended Solids	**2.0**	**mg/L**	**1.0**	1	AC35744	03/28/23 13:15	03/29/23 11:15	1551	SM2540D	
Turbidity	**2.8**	**NTU**	**1.0**	1	AC33823	03/24/23 14:00	03/24/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**37**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hardness, Total	**32**	**mg/L**	**1**	1	AC35639	03/27/23 06:41	03/28/23 08:30	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**2.2**	**mg/L**	**0.50**	1	AC35553	03/24/23 14:01	03/24/23 17:57	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**340**	**MPN/100mL**	**1.0**	1	AC35559	03/24/23 14:47	03/25/23 17:15	2303	SM9223B	
E. Coli	**2.0**	**MPN/100mL**	**1.0**	1	AC35559	03/24/23 14:47	03/25/23 17:15	2303	SM9223B	
SW-10 (23C4052-03)			**Sample Type: Water**			**Sampled: 03/24/23 10:15**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Calcium	**6.6**	**mg/L**	**5.0**	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Iron	**0.23**	**mg/L**	**0.10**	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Magnesium	**4.0**	**mg/L**	**0.60**	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AC35879	03/29/23 07:06	03/29/23 14:10	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-10 (23C4052-03)			**Sample Type: Water**			**Sampled: 03/24/23 10:15**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**11**	**mg/L**	**0.10**	1	AC35914	03/27/23 16:00	03/27/23 17:00	1551	SM4500-O G	T-14
pH	**6.89**	**pH Units**	**1.00**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**81**	**umhos/cm**	**10**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM2510B	
Total Alkalinity as CaCO3	**36**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Total Suspended Solids	**1.8**	**mg/L**	**1.0**	1	AC35744	03/28/23 13:15	03/29/23 11:15	1551	SM2540D	
Turbidity	**3.2**	**NTU**	**1.0**	1	AC33823	03/24/23 14:00	03/24/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**36**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hardness, Total	**33**	**mg/L**	**1**	1	AC35639	03/27/23 06:41	03/28/23 08:33	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**2.2**	**mg/L**	**0.50**	1	AC35553	03/24/23 14:01	03/24/23 18:09	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**310**	**MPN/100mL**	**1.0**	1	AC35559	03/24/23 14:47	03/25/23 17:15	2303	SM9223B	
E. Coli	ND	MPN/100mL	1.0	1	AC35559	03/24/23 14:47	03/25/23 17:15	2303	SM9223B	
SW-8 (23C4052-04)			**Sample Type: Water**			**Sampled: 03/24/23 10:50**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Calcium	**6.8**	**mg/L**	**5.0**	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Iron	**0.11**	**mg/L**	**0.10**	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Magnesium	**4.2**	**mg/L**	**0.60**	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AC35879	03/29/23 07:06	03/29/23 14:16	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-8 (23C4052-04)			**Sample Type: Water**			**Sampled: 03/24/23 10:50**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**11**	**mg/L**	**0.10**	1	AC35914	03/27/23 16:00	03/27/23 17:00	1551	SM4500-O G	T-14
pH	**6.92**	**pH Units**	**1.00**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**82**	**umhos/cm**	**10**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM2510B	
Total Alkalinity as CaCO3	**36**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Total Suspended Solids	**5.0**	**mg/L**	**1.0**	1	AC35744	03/28/23 13:15	03/29/23 11:15	1551	SM2540D	
Turbidity	**3.3**	**NTU**	**1.0**	1	AC33823	03/24/23 14:00	03/24/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**36**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hardness, Total	**34**	**mg/L**	**1**	1	AC35639	03/27/23 06:41	03/28/23 08:36	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**2.2**	**mg/L**	**0.50**	1	AC35553	03/24/23 14:01	03/24/23 18:34	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**200**	**MPN/100mL**	**1.0**	1	AC35559	03/24/23 14:47	03/25/23 17:15	2303	SM9223B	
E. Coli	**3.1**	**MPN/100mL**	**1.0**	1	AC35559	03/24/23 14:47	03/25/23 17:15	2303	SM9223B	
SW-6 (23C4052-05)			**Sample Type: Water**			**Sampled: 03/24/23 12:15**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Calcium	**7.5**	**mg/L**	**5.0**	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Iron	**0.11**	**mg/L**	**0.10**	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Magnesium	**5.9**	**mg/L**	**0.60**	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AC35879	03/29/23 07:06	03/29/23 14:19	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (23C4052-05)			**Sample Type: Water**			**Sampled: 03/24/23 12:15**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**11**	**mg/L**	**0.10**	1	AC35914	03/27/23 16:00	03/27/23 17:00	1551	SM4500-O G	T-14
pH	**6.91**	**pH Units**	**1.00**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**100**	**umhos/cm**	**10**	1	AC35344	03/24/23 14:00	03/24/23 16:20	2303	SM2510B	
Total Alkalinity as CaCO3	**45**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AC35744	03/28/23 13:15	03/29/23 11:15	1551	SM2540D	
Turbidity	**2.8**	**NTU**	**1.0**	1	AC33823	03/24/23 14:00	03/24/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**45**	**mg/L**	**5.0**	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AC35802	03/28/23 08:00	03/28/23 12:00	2303	SM2320B	
Hardness, Total	**43**	**mg/L**	**1**	1	AC35639	03/27/23 06:41	03/28/23 08:39	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**3.7**	**mg/L**	**0.50**	1	AC35553	03/24/23 14:01	03/24/23 18:46	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**150**	**MPN/100mL**	**1.0**	1	AC35559	03/24/23 14:47	03/25/23 17:15	2303	SM9223B	
E. Coli	ND	MPN/100mL	1.0	1	AC35559	03/24/23 14:47	03/25/23 17:15	2303	SM9223B	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35639 - NB EPA 200 series										
Blank (AC35639-BLK1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Arsenic	ND	0.020	mg/L							
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Chromium	ND	0.010	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Vanadium	ND	0.020	mg/L							
Zinc	ND	0.30	mg/L							
LCS (AC35639-BS1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Arsenic	0.502	0.020	mg/L	0.500		100	85-115			
Boron	0.473	0.10	mg/L	0.500		94.6	85-115			
Calcium	23.8	5.0	mg/L	25.5		93.4	85-115			
Chromium	0.479	0.010	mg/L	0.500		95.9	85-115			
Copper	0.468	0.050	mg/L	0.500		93.5	85-115			
Iron	0.497	0.10	mg/L	0.500		99.4	85-115			
Lead	0.463	0.020	mg/L	0.500		92.6	85-115			
Magnesium	24.7	0.60	mg/L	25.5		96.9	85-115			
Manganese	0.489	0.020	mg/L	0.500		97.8	85-115			
Sodium	24.7	6.0	mg/L	25.5		96.7	85-115			
Vanadium	0.495	0.020	mg/L	0.500		99.0	85-115			
Zinc	0.492	0.30	mg/L	0.500		98.3	85-115			
LCS Dup (AC35639-BSD1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Arsenic	0.519	0.020	mg/L	0.500		104	85-115	3.29	20	
Boron	0.481	0.10	mg/L	0.500		96.1	85-115	1.66	20	
Calcium	24.1	5.0	mg/L	25.5		94.5	85-115	1.22	20	
Chromium	0.486	0.010	mg/L	0.500		97.1	85-115	1.31	20	
Copper	0.475	0.050	mg/L	0.500		94.9	85-115	1.49	20	
Iron	0.504	0.10	mg/L	0.500		101	85-115	1.30	20	
Lead	0.470	0.020	mg/L	0.500		94.0	85-115	1.46	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35639 - NB EPA 200 series										
LCS Dup (AC35639-BSD1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Magnesium	25.0	0.60	mg/L	25.5		98.0	85-115	1.15	20	
Manganese	0.496	0.020	mg/L	0.500		99.1	85-115	1.36	20	
Sodium	25.0	6.0	mg/L	25.5		98.0	85-115	1.29	20	
Vanadium	0.502	0.020	mg/L	0.500		100	85-115	1.30	20	
Zinc	0.499	0.30	mg/L	0.500		99.8	85-115	1.49	20	
Duplicate (AC35639-DUP1)		**Source: 23C4052-04**		Prepared: 03/27/23 Analyzed: 03/28/23						
Arsenic	ND	0.020	mg/L		ND				20	
Boron	ND	0.10	mg/L		ND			0.216	20	
Calcium	6.71	5.0	mg/L		6.76			0.843	20	
Chromium	ND	0.010	mg/L		ND				20	
Copper	ND	0.050	mg/L		ND				20	
Iron	0.108	0.10	mg/L		0.112			4.08	20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	4.21	0.60	mg/L		4.22			0.221	20	
Manganese	ND	0.020	mg/L		ND				20	
Sodium	ND	6.0	mg/L		ND			0.0316	20	
Vanadium	ND	0.020	mg/L		ND				20	
Zinc	ND	0.30	mg/L		ND				20	
MRL Check (AC35639-MRL1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Arsenic	0.0289	0.020	mg/L	0.0200		144	0-200			
Boron	0.0988	0.10	mg/L	0.100		98.8	0-200			
Calcium	4.80	5.0	mg/L	5.00		96.1	0-200			
Chromium	0.0100	0.010	mg/L	0.0100		100	0-200			
Copper	0.0926	0.050	mg/L	0.100		92.6	0-200			
Iron	0.105	0.10	mg/L	0.100		105	0-200			
Lead	0.0194	0.020	mg/L	0.0200		97.0	0-200			
Magnesium	0.492	0.60	mg/L	0.500		98.4	0-200			
Manganese	0.0204	0.020	mg/L	0.0200		102	0-200			
Sodium	5.00	6.0	mg/L	5.00		100	0-200			
Vanadium	0.0191	0.020	mg/L	0.0200		95.5	0-200			
Zinc	0.365	0.30	mg/L	0.350		104	0-200			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35639 - NB EPA 200 series										
Matrix Spike (AC35639-MS1)		**Source: 23C4052-05**		Prepared: 03/27/23 Analyzed: 03/28/23						
Arsenic	0.503	0.020	mg/L	0.500	ND	101	70-130			
Boron	0.543	0.10	mg/L	0.500	ND	94.2	70-130			
Chromium	0.473	0.010	mg/L	0.500	ND	94.6	70-130			
Copper	0.467	0.050	mg/L	0.500	ND	93.3	70-130			
Iron	0.610	0.10	mg/L	0.500	0.113	99.3	70-130			
Lead	0.457	0.020	mg/L	0.500	ND	91.4	70-130			
Manganese	0.482	0.020	mg/L	0.500	ND	96.3	70-130			
Sodium	29.6	6.0	mg/L	25.5	ND	101	70-130			
Vanadium	0.490	0.020	mg/L	0.500	ND	97.9	70-130			
Zinc	0.489	0.30	mg/L	0.500	ND	97.7	70-130			
Batch AC35879 - Hg Digest										
Blank (AC35879-BLK1)				Prepared & Analyzed: 03/29/23						
Mercury	ND	0.20	ug/L							
LCS (AC35879-BS1)				Prepared & Analyzed: 03/29/23						
Mercury	2.51	0.20	ug/L	2.50		100	85-115			
Duplicate (AC35879-DUP1)		**Source: 23C3852-01**		Prepared & Analyzed: 03/29/23						
Mercury	ND	0.20	ug/L		ND				20	
Matrix Spike (AC35879-MS1)		**Source: 23C3852-01**		Prepared & Analyzed: 03/29/23						
Mercury	2.59	0.20	ug/L	2.50	ND	104	70-130			
Matrix Spike (AC35879-MS2)		**Source: 23C4052-01**		Prepared & Analyzed: 03/29/23						
Mercury	2.56	0.20	ug/L	2.50	ND	102	70-130			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35879 - Hg Digest										
Matrix Spike Dup (AC35879-MSD1)	**Source: 23C3852-01**			Prepared & Analyzed: 03/29/23						
Mercury	2.47	0.20	ug/L	2.50	ND	98.8	70-130	4.71	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35344 - NB General Prep										
Duplicate (AC35344-DUP1)		**Source: 23C3597-01**		Prepared & Analyzed: 03/23/23						
Specific Conductance (EC)	371	10	umhos/cm		370			0.270	5	
pH	7.71	1.00	pH Units		7.68			0.390	20	
Batch AC35639 - NB EPA 200 series										
Blank (AC35639-BLK1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Hardness, Total	ND	1	mg/L							
Duplicate (AC35639-DUP1)		**Source: 23C4052-04**		Prepared: 03/27/23 Analyzed: 03/28/23						
Hardness, Total	34	1	mg/L		34			0.527	20	
Batch AC35744 - General Preparation										
Blank (AC35744-BLK1)				Prepared: 03/28/23 Analyzed: 03/29/23						
Total Suspended Solids	ND	1.0	mg/L							
Duplicate (AC35744-DUP1)		**Source: 23C4078-01**		Prepared: 03/28/23 Analyzed: 03/29/23						
Total Suspended Solids	58.0	1.0	mg/L		68.0			15.9	30	
Duplicate (AC35744-DUP2)		**Source: 23C4081-01**		Prepared: 03/28/23 Analyzed: 03/29/23						
Total Suspended Solids	927	1.0	mg/L		907			2.18	30	
Batch AC35802 - NB General Prep										
Blank (AC35802-BLK1)				Prepared & Analyzed: 03/28/23						
Total Alkalinity as CaCO3	ND	5.0	mg/L							
Bicarbonate Alkalinity as CaCO3	ND	5.0	mg/L							
Carbonate Alkalinity as CaCO3	ND	5.0	mg/L							
Hydroxide Alkalinity as CaCO3	ND	5.0	mg/L							

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35802 - NB General Prep										
LCS (AC35802-BS1)				Prepared & Analyzed: 03/28/23						
Total Alkalinity as CaCO3	984	5.0	mg/L	1000		98.4	80-120			
Duplicate (AC35802-DUP1)		**Source: 23C4057-02**		Prepared & Analyzed: 03/28/23						
Total Alkalinity as CaCO3	181	5.0	mg/L		180			0.277	20	
Bicarbonate Alkalinity as CaCO3	180	5.0	mg/L		180			0.277	20	
Carbonate Alkalinity as CaCO3	ND	5.0	mg/L		ND				20	
Hydroxide Alkalinity as CaCO3	ND	5.0	mg/L		ND				20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

Anions by EPA Method 300.0 - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC35553 - NB General Prep										
Blank (AC35553-BLK1)				Prepared & Analyzed: 03/24/23						
Sulfate as SO4	ND	0.50	mg/L							
LCS (AC35553-BS1)				Prepared: 03/24/23 Analyzed: 03/27/23						
Sulfate as SO4	8.17	0.50	mg/L	8.00		102	90-110			
Duplicate (AC35553-DUP1)		**Source: 23C4052-01**		Prepared & Analyzed: 03/24/23						
Sulfate as SO4	3.72	0.50	mg/L		3.73			0.199	20	
Matrix Spike (AC35553-MS1)		**Source: 23C4052-02**		Prepared & Analyzed: 03/24/23						
Sulfate as SO4	9.85	0.50	mg/L	8.00	2.21	95.5	80-120			
Matrix Spike (AC35553-MS2)		**Source: 23C4061-01**		Prepared & Analyzed: 03/24/23						
Sulfate as SO4	14.8	0.50	mg/L	8.00	5.88	112	80-120			
Matrix Spike Dup (AC35553-MSD1)		**Source: 23C4052-02**		Prepared & Analyzed: 03/24/23						
Sulfate as SO4	9.35	0.50	mg/L	8.00	2.21	89.3	80-120	5.17	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	04/13/23 15:16

Notes and Definitions

T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.

ND Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

REC Recovery

RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

alpha
Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

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Bay Area Laboratory (2728)
262 Rickenbacker Circle, Livermore CA 94551

Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23C4052 Pg ____ of ____

Signature below authorizes work under terms stated on reverse side.

Report to	Invoice to (if different)	Project Information
Company: Bottle Rock Power	Contact:	Project ID: Bottle Rock Monitoring-SW
Attn: ~~Jay Hopper~~ Richard Lacy	Email address:	Project No:
Address: PO Box 326, Cobb, CA 95426	Address:	PO Number:
Phone/Fax: 707-529-3799	Phone/Fax:	
Email Address:		

Field Sampler - Printed Name & Signature: Richard Lacy

TAT: Standard 10 days (X) | RUSH: 5 days ( ) 48 hours ( ) Other: ___days ( ) Preapproval required

TEMP °C: Ukiah | Livermore | Elk Grove | Petaluma 13.1 | Carlsbad

Sample Identification	Sampling Date	Sampling Time	Container: 40ml VOA Vial	Plastic	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Drinking Water	Wastewater	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: ALK, Ph, ec	Turbidity & TSS	Hardness, SO4	B, Cu, Fe & Pb	Mn, Na & Zn	Diss. Oxygen	Bac-T	As, Cr, V, Hg	Field pH	Field TDS ppm	Notes / DDW Source Codes
SW-7	3/24/23	9:20		X	X												6	X	X	X	X	X	X	X	X	X	X	
SW-9	3/24/23	9:50		X	X												6	X	X	X	X	X	X	X	X	X	X	
SW-10	3/24/23	10:15		X	X												6	X	X	X	X	X	X	X	X	X	X	
SW-8	3/24/23	10:50		X	X												6	X	X	X	X	X	X	X	X	X	X	
SW-6	3/24/23	12:15		X	X												6	X	X	X	X	X	X	X	X	X	X	

Relinquished by	Received by	Date	Time
Richard Lacy	[illegible]	3/24/23	1320

DDW Write On EDT Transmission? ( ) Yes ( ) No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ( ) Yes ( ) No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

4.2

wko_NBtoUK_COC.rpt

WORK ORDER

Printed: 3/24/2023 1:43:43PM

23C4052

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Bottle Rock Power	**Client Code:** NB_BOTTLEROCK	**Bid:** Master Bid
Project: Surface Water	**Project Number:** [none]	**PO #:**

Date Due: 04/07/23 15:00 (10 day TAT)
Received By: Alfredo C. Lorenzo — Date Received: 03/24/23 13:20
Logged In By: Alfredo C. Lorenzo — Date Logged 03/24/23 13:27

Samples Received at: _____ deg C — All containers received and intact: YES NO

Analysis	Department	Expires	Comments
23C4052-01 SW-7 [Water] Sampled 03/24/23 09:20			
Diss Oxygen SM4500	Wet Chem	03/24/23 09:34	
Hg CVAA Total 245.1	Metals	04/21/23 23:59	
Solids, TSS-SM2540D	Wet Chem	03/31/23 23:59	
23C4052-02 SW-9 [Water] Sampled 03/24/23 09:50			
Diss Oxygen SM4500	Wet Chem	03/24/23 10:04	
Hg CVAA Total 245.1	Metals	04/21/23 23:59	
Solids, TSS-SM2540D	Wet Chem	03/31/23 23:59	
23C4052-03 SW-10 [Water] Sampled 03/24/23 10:15			
Diss Oxygen SM4500	Wet Chem	03/24/23 10:29	
Hg CVAA Total 245.1	Metals	04/21/23 23:59	
Solids, TSS-SM2540D	Wet Chem	03/31/23 23:59	
23C4052-04 SW-8 [Water] Sampled 03/24/23 10:50			
Diss Oxygen SM4500	Wet Chem	03/24/23 11:04	
Hg CVAA Total 245.1	Metals	04/21/23 23:59	
Solids, TSS-SM2540D	Wet Chem	03/31/23 23:59	
23C4052-05 SW-6 [Water] Sampled 03/24/23 12:15			
Diss Oxygen SM4500	Wet Chem	03/24/23 12:29	
Hg CVAA Total 245.1	Metals	04/21/23 23:59	
Solids, TSS-SM2540D	Wet Chem	03/31/23 23:59	

Relinquished By	3/27/23		Received By	3/27/23	1200
Relinquished By	3/27/23	1515	Received By	3.27.23	1515

4.2

WORK ORDER

23C4052

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Bottle Rock Power	**Client Code:** NB_BOTTLEROCK	**Bid:** Master Bid
Project: Surface Water	**Project Number:** [none]	**PO #:**

Containers Supplied:

1L Poly - Unpres (F)
1L Poly - Unpres (F)
1L Poly - Unpres (F)
1L Poly - Unpres (F)
1L Poly - Unpres (F)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)

Relinquished By	3/27/23		Received By	3/27/23	1200
	Date	Time		Date	Time
Relinquished By	3/27/23	1515	Received By	3.27.23	1515
	Date	Time		Date	Time

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10 July 2023

Bottle Rock Power
Attn: M. Moore
4010 Stone Way North, Suite 400
Seattle, WA 98103
RE: Groundwater
Work Order: 23F3272

Enclosed are the results of analyses for samples received by the laboratory on 06/23/23 11:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 11:33

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-3	23F3272-01	Water	06/23/23 07:00	06/23/23 11:50
GW-1	23F3272-02	Water	06/23/23 07:40	06/23/23 11:50

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 11:33

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-3 (23F3272-01)			**Sample Type: Water**			**Sampled: 06/23/23 07:00**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	EPA 200.7	
Boron	**0.40**	**mg/L**	**0.10**	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	EPA 200.7	
Calcium	**32**	**mg/L**	**5.0**	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	EPA 200.7	
Iron	**0.15**	**mg/L**	**0.10**	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	EPA 200.7	
Magnesium	**9.9**	**mg/L**	**0.60**	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	EPA 200.7	
Manganese	**0.044**	**mg/L**	**0.020**	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	EPA 200.7	
Sodium	**24**	**mg/L**	**6.0**	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	**7.79**	**pH Units**	**1.00**	1	AF34635	06/27/23 12:05	06/27/23 12:38	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**350**	**umhos/cm@25°**	**10**	1	AF34636	06/29/23 17:00	06/29/23 17:02	2303	SM2510B	
Total Alkalinity as CaCO3	**180**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AF34667	06/27/23 13:30	06/28/23 12:00	1551	SM2540D	
Turbidity	**1.0**	**NTU**	**1.0**	1	AF34468	06/23/23 12:23	06/23/23 13:10	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**180**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hardness, Total	**121**	**mg/L**	**3**	1	AF34543	06/26/23 07:04	06/26/23 10:23	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AF34469	06/23/23 12:29	06/23/23 14:14	2303	EPA 300.0	
Sulfate as SO4	**5.4**	**mg/L**	**0.50**	1	AF34469	06/23/23 12:29	06/23/23 14:14	2303	EPA 300.0	
GW-1 (23F3272-02)			**Sample Type: Water**			**Sampled: 06/23/23 07:40**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	EPA 200.7	
Calcium	**45**	**mg/L**	**5.0**	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	EPA 200.7	
Magnesium	**15**	**mg/L**	**0.60**	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	EPA 200.7	
Manganese	**0.11**	**mg/L**	**0.020**	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	EPA 200.7	
Sodium	**8.5**	**mg/L**	**6.0**	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 11:33

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-1 (23F3272-02)			**Sample Type: Water**			**Sampled: 06/23/23 07:40**				
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	**7.79**	**pH Units**	**1.00**	1	AF34635	06/27/23 12:05	06/27/23 12:38	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**380**	**umhos/cm@25°**	**10**	1	AF34636	06/29/23 17:00	06/29/23 17:02	2303	SM2510B	
Total Alkalinity as CaCO3	**180**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AF34667	06/27/23 13:30	06/28/23 12:00	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AF34468	06/23/23 12:23	06/23/23 13:10	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**180**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hardness, Total	**176**	**mg/L**	**3**	1	AF34543	06/26/23 07:04	06/26/23 10:27	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AF34469	06/23/23 12:29	06/23/23 14:26	2303	EPA 300.0	
Sulfate as SO4	**18**	**mg/L**	**0.50**	1	AF34469	06/23/23 12:29	06/23/23 14:26	2303	EPA 300.0	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 11:33

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34543 - NB EPA 200 series DA										
Blank (AF34543-BLK1)				Prepared & Analyzed: 06/26/23						
Arsenic	ND	0.020	mg/L							
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Zinc	ND	0.30	mg/L							
LCS (AF34543-BS1)				Prepared & Analyzed: 06/26/23						
Arsenic	0.511	0.020	mg/L	0.500		102	85-115			
Boron	0.493	0.10	mg/L	0.500		98.6	85-115			
Calcium	24.6	5.0	mg/L	25.5		96.6	85-115			
Copper	0.486	0.050	mg/L	0.500		97.2	85-115			
Iron	0.516	0.10	mg/L	0.500		103	85-115			
Lead	0.472	0.020	mg/L	0.500		94.5	85-115			
Magnesium	26.0	0.60	mg/L	25.5		102	85-115			
Manganese	0.506	0.020	mg/L	0.500		101	85-115			
Sodium	25.9	6.0	mg/L	25.5		102	85-115			
Zinc	0.497	0.30	mg/L	0.500		99.4	85-115			
LCS Dup (AF34543-BSD1)				Prepared & Analyzed: 06/26/23						
Arsenic	0.515	0.020	mg/L	0.500		103	85-115	0.702	20	
Boron	0.491	0.10	mg/L	0.500		98.3	85-115	0.305	20	
Calcium	24.6	5.0	mg/L	25.5		96.5	85-115	0.142	20	
Copper	0.487	0.050	mg/L	0.500		97.3	85-115	0.144	20	
Iron	0.516	0.10	mg/L	0.500		103	85-115	0.0194	20	
Lead	0.475	0.020	mg/L	0.500		95.0	85-115	0.486	20	
Magnesium	25.9	0.60	mg/L	25.5		102	85-115	0.559	20	
Manganese	0.505	0.020	mg/L	0.500		101	85-115	0.316	20	
Sodium	25.8	6.0	mg/L	25.5		101	85-115	0.586	20	
Zinc	0.498	0.30	mg/L	0.500		99.7	85-115	0.261	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 11:33

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34543 - NB EPA 200 series DA										
Duplicate (AF34543-DUP1)	**Source: 23F3272-01**			Prepared & Analyzed: 06/26/23						
Arsenic	ND	0.020	mg/L		ND				20	
Boron	0.384	0.10	mg/L		0.398			3.43	20	
Calcium	31.1	5.0	mg/L		32.3			3.68	20	
Copper	ND	0.050	mg/L		ND				20	
Iron	0.141	0.10	mg/L		0.146			3.35	20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	9.57	0.60	mg/L		9.92			3.58	20	
Manganese	0.0425	0.020	mg/L		0.0441			3.70	20	
Sodium	23.1	6.0	mg/L		24.0			3.71	20	
Zinc	ND	0.30	mg/L		ND				20	
MRL Check (AF34543-MRL1)				Prepared & Analyzed: 06/26/23						
Arsenic	0.0210	0.020	mg/L	0.0200		105	0-200			
Boron	0.104	0.10	mg/L	0.100		104	0-200			
Calcium	4.41	5.0	mg/L	5.00		88.2	0-200			
Copper	0.0860	0.050	mg/L	0.100		86.0	0-200			
Iron	0.107	0.10	mg/L	0.100		107	0-200			
Lead	0.0198	0.020	mg/L	0.0200		99.0	0-200			
Magnesium	0.418	0.60	mg/L	0.500		83.7	0-200			
Manganese	0.0219	0.020	mg/L	0.0200		110	0-200			
Sodium	5.24	6.0	mg/L	5.00		105	0-200			
Zinc	0.372	0.30	mg/L	0.350		106	0-200			
Matrix Spike (AF34543-MS1)	**Source: 23F3272-02**			Prepared & Analyzed: 06/26/23						
Arsenic	0.532	0.020	mg/L	0.500	ND	106	70-130			
Boron	0.599	0.10	mg/L	0.500	ND	101	70-130			
Copper	0.501	0.050	mg/L	0.500	ND	100	70-130			
Iron	0.554	0.10	mg/L	0.500	ND	111	70-130			
Lead	0.474	0.020	mg/L	0.500	ND	94.7	70-130			
Manganese	0.602	0.020	mg/L	0.500	0.109	98.7	70-130			
Sodium	34.8	6.0	mg/L	25.5	8.50	103	70-130			
Zinc	0.499	0.30	mg/L	0.500	ND	99.8	70-130			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 11:33

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34468 - NB General Prep										
Blank (AF34468-BLK1)				Prepared & Analyzed: 06/23/23						
Turbidity	ND	1.0	NTU							
Duplicate (AF34468-DUP1)		**Source: 23F3272-01**		Prepared & Analyzed: 06/23/23						
Turbidity	1.00	1.0	NTU		1.00			0.00	20	
MRL Check (AF34468-MRL1)				Prepared & Analyzed: 06/23/23						
Turbidity	0.950	1.0	NTU	1.00		95.0	0-200			
Batch AF34543 - NB EPA 200 series DA										
Blank (AF34543-BLK1)				Prepared & Analyzed: 06/26/23						
Hardness, Total	ND	3	mg/L							
Duplicate (AF34543-DUP1)		**Source: 23F3272-01**		Prepared & Analyzed: 06/26/23						
Hardness, Total	117	3	mg/L		121			3.64	20	
Batch AF34635 - NB General Prep										
Duplicate (AF34635-DUP1)		**Source: 23F3272-01**		Prepared & Analyzed: 06/27/23						
pH	7.80	1.00	pH Units		7.79			0.128	20	
Batch AF34636 - NB General Prep										
Duplicate (AF34636-DUP1)		**Source: 23F3272-01**		Prepared & Analyzed: 06/29/23						
Specific Conductance (EC)	349	10	umhos/cm@25°C		346			0.863	5	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 11:33

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34637 - NB General Prep										
LCS (AF34637-BS1)				Prepared & Analyzed: 06/27/23						
Total Alkalinity as CaCO3	996	5.0	mg/L	1000		99.6	80-120			
Duplicate (AF34637-DUP1)		**Source: 23F3272-01**		Prepared & Analyzed: 06/27/23						
Total Alkalinity as CaCO3	176	5.0	mg/L		178			0.565	20	
Bicarbonate Alkalinity as CaCO3	176	5.0	mg/L		178			0.565	20	
Carbonate Alkalinity as CaCO3	ND	5.0	mg/L		ND				20	
Hydroxide Alkalinity as CaCO3	ND	5.0	mg/L		ND				20	
Batch AF34667 - General Preparation										
Blank (AF34667-BLK1)				Prepared: 06/27/23 Analyzed: 06/28/23						
Total Suspended Solids	ND	1.0	mg/L							
LCS (AF34667-BS1)				Prepared: 06/27/23 Analyzed: 06/28/23						
Total Suspended Solids	96.8	1.0	mg/L	100		96.8	90-110			
Duplicate (AF34667-DUP1)		**Source: 23F3208-03**		Prepared: 06/27/23 Analyzed: 06/28/23						
Total Suspended Solids	169	1.0	mg/L		172			1.76	30	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 11:33

Anions by EPA Method 300.0 - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34469 - NB General Prep										
Blank (AF34469-BLK1)				Prepared & Analyzed: 06/23/23						
Sulfate as SO4	ND	0.50	mg/L							
Nitrate as N	ND	0.40	mg/L							
LCS (AF34469-BS1)				Prepared & Analyzed: 06/23/23						
Sulfate as SO4	7.45	0.50	mg/L	8.00		93.1	90-110			
Nitrate as N	1.67	0.40	mg/L	1.80		92.4	90-110			
Duplicate (AF34469-DUP1)		**Source: 23F3272-01**		Prepared & Analyzed: 06/23/23						
Sulfate as SO4	5.40	0.50	mg/L		5.45			0.882	20	
Nitrate as N	ND	0.40	mg/L		ND			8.99	20	
MRL Check (AF34469-MRL1)				Prepared & Analyzed: 06/23/23						
Nitrate as N	0.305	0.40	mg/L	0.361		84.5	60-140			
Sulfate as SO4	1.39	0.50	mg/L	1.60		86.6	60-140			
Matrix Spike (AF34469-MS1)		**Source: 23F3272-02**		Prepared & Analyzed: 06/23/23						
Sulfate as SO4	23.8	0.50	mg/L	8.00	17.6	77.7	80-120			QM-02
Nitrate as N	1.63	0.40	mg/L	1.80	ND	80.9	80-120			
Matrix Spike Dup (AF34469-MSD1)		**Source: 23F3272-02**		Prepared & Analyzed: 06/23/23						
Sulfate as SO4	23.8	0.50	mg/L	8.00	17.6	77.4	80-120	0.0815	20	QM-02
Nitrate as N	1.63	0.40	mg/L	1.80	ND	80.9	80-120	0.0184	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 11:33

Notes and Definitions

QM-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
T-14	Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
REC	Recovery
RPD	Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

Corporate Laboratory (1551)
208 Mason Street, Ukiah CA 95482
707.468.0401 (phone)
707.468.5267 (fax)
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North Bay Laboratory (2303)
737 Southpoint Blvd, Ste D, Petaluma 94954

Bay Area Laboratory (2728)
262 Rickenbacker Circle, Livermore CA 94551

Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23F3272 Pg ____ of ____

Report to	Invoice to (if different)	Project Information
Company: Bottle Rock Power	Contact:	Project ID: Bottle Rock Monitoring-GW
Attn: ~~Jay Hepper~~ Richard Lacy	Email address:	Project No:
Address: PO Box 326, Cobb, CA 95426	Address:	PO Number:
Phone/Fax: 707-529-3799	Phone/Fax:	
Email Address:		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: Richard Lacy

TAT: Standard 10 days ○ | RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Preapproval required

TEMP °C: Ukiah | Livermore | Elk Grove | Petaluma 5.4 | Carlsbad

Sample Identification	Sampling Date	Sampling Time	Container: 40ml VOA Vial	Plastic	Glass	Sleeve	Other	Preservative: HCl	HNO3	H2SO4	Other	None	Matrix: Drinking Water	Wastewater	Soil	Other	Total Number of Containers per Sample ID	Analysis Request: ALK, Ph, ec	Turbidity & TSS	Hardness, SO4	B, Cu, Fe & Pb	Mn, Na & Zn	As & NO3	Field pH	Field TDS ppm	Notes / DDW Source Codes
GW-3	6/23/20	7:00		X													3	X	X	X	X	X	X			
GW-1	6/23/20	7:40		X													3	X	X	X	X	X	X			

Relinquished by	Received by	Date	Time
Richard Lacy	LS	6/23/20	1150

DDW Write On EDT Transmission? ○ Yes ○ No

State **System** Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

4.9

wko_NBtoUK_COC.rpt

WORK ORDER

Printed: 6/23/2023 11:56:51AM

23F3272

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client:	**Bottle Rock Power**	**Client Code:**	**NB_BOTTLEROCK**	**Bid:**	**Master Bid**
Project:	**Groundwater**	**Project Number:**	**[none]**	**PO #:**	

Date Due:	07/11/23 15:00 (10 day TAT)		
Received By:	Alfredo C. Lorenzo	Date Received:	06/23/23 11:50
Logged In By:	Alfredo C. Lorenzo	Date Logged	06/23/23 11:52

Samples Received at: _____ deg C All containers received and intact: YES NO

Analysis	Department	Expires	Comments
23F3272-01 GW-3 [Water] Sampled 06/23/23 07:00			
Solids, TSS-SM2540D	Wet Chem	06/30/23 23:59	
23F3272-02 GW-1 [Water] Sampled 06/23/23 07:40			
Solids, TSS-SM2540D	Wet Chem	06/30/23 23:59	

Containers Supplied:

1L Poly - Unpres (C)

1L Poly - Unpres (C)

Relinquished By	6/23/23 Date	Received By	6/23/23 1220 Date Tim
Relinquished By	6/23/23 1515 Date	Received By	6-23-23 1515 Date Tim

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10 July 2023

Bottle Rock Power
Attn: M. Moore
4010 Stone Way North, Suite 400
Seattle, WA 98103
RE: Surface Water
Work Order: 23F3273

Enclosed are the results of analyses for samples received by the laboratory on 06/23/23 11:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-7	23F3273-01	Water	06/23/23 07:25	06/23/23 11:50
SW-9	23F3273-02	Water	06/23/23 07:55	06/23/23 11:50
SW-10	23F3273-03	Water	06/23/23 08:15	06/23/23 11:50
SW-8	23F3273-04	Water	06/23/23 08:45	06/23/23 11:50
SW-6	23F3273-05	Water	06/23/23 09:55	06/23/23 11:50

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (23F3273-01)			**Sample Type: Water**			**Sampled: 06/23/23 07:25**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Boron	**0.35**	**mg/L**	**0.10**	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Calcium	**28**	**mg/L**	**5.0**	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Magnesium	**12**	**mg/L**	**0.60**	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Manganese	**0.057**	**mg/L**	**0.020**	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AF34812	06/29/23 05:52	06/30/23 13:50	1551	EPA 245.1	
Sodium	**19**	**mg/L**	**6.0**	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**9.7**	**mg/L**	**0.10**	1	AF34556	06/23/23 16:00	06/23/23 17:00	1551	SM4500-O G	T-14
pH	**7.33**	**pH Units**	**1.00**	1	AF34635	06/27/23 12:05	06/27/23 12:38	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**320**	**umhos/cm@25°**	**10**	1	AF34636	06/29/23 17:00	06/29/23 17:02	2303	SM2510B	
Total Alkalinity as CaCO3	**150**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AF34667	06/27/23 13:30	06/28/23 12:00	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AF34468	06/23/23 12:23	06/23/23 13:10	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**150**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hardness, Total	**118**	**mg/L**	**3**	1	AF34543	06/26/23 07:04	06/26/23 10:30	2303	SM2340B	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (23F3273-01)			**Sample Type: Water**			**Sampled: 06/23/23 07:25**				
Anions by EPA Method 300.0										
Sulfate as SO4	**14**	**mg/L**	**0.50**	1	AF34469	06/23/23 12:29	06/23/23 14:38	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**2000**	**MPN/100mL**	**1.0**	1	AF34480	06/23/23 15:23	06/24/23 17:50	2303	SM9223B	
E. Coli	**32**	**MPN/100mL**	**1.0**	1	AF34480	06/23/23 15:23	06/24/23 17:50	2303	SM9223B	
SW-9 (23F3273-02)			**Sample Type: Water**			**Sampled: 06/23/23 07:55**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Calcium	**5.9**	**mg/L**	**5.0**	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Magnesium	**3.7**	**mg/L**	**0.60**	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AF34812	06/29/23 05:52	06/30/23 13:53	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-9 (23F3273-02)			**Sample Type: Water**			**Sampled: 06/23/23 07:55**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**9.7**	**mg/L**	**0.10**	1	AF34556	06/23/23 16:00	06/23/23 17:00	1551	SM4500-O G	T-14
pH	**7.39**	**pH Units**	**1.00**	1	AF34635	06/27/23 12:05	06/27/23 12:38	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**88**	**umhos/cm@25°**	**10**	1	AF34636	06/29/23 17:00	06/29/23 17:02	2303	SM2510B	
Total Alkalinity as CaCO3	**41**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AF34667	06/27/23 13:30	06/28/23 12:00	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AF34468	06/23/23 12:23	06/23/23 13:10	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**41**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hardness, Total	**30**	**mg/L**	**3**	1	AF34543	06/26/23 07:04	06/26/23 10:42	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**1.7**	**mg/L**	**0.50**	1	AF34469	06/23/23 12:29	06/23/23 14:50	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**2400**	**MPN/100mL**	**1.0**	1	AF34480	06/23/23 15:23	06/24/23 17:50	2303	SM9223B	
E. Coli	**73**	**MPN/100mL**	**1.0**	1	AF34480	06/23/23 15:23	06/24/23 17:50	2303	SM9223B	
SW-10 (23F3273-03)			**Sample Type: Water**			**Sampled: 06/23/23 08:15**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Calcium	**6.0**	**mg/L**	**5.0**	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Magnesium	**3.7**	**mg/L**	**0.60**	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AF34812	06/29/23 05:52	06/30/23 13:55	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-10 (23F3273-03)			**Sample Type: Water**			**Sampled: 06/23/23 08:15**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**9.7**	**mg/L**	**0.10**	1	AF34556	06/23/23 16:00	06/23/23 17:00	1551	SM4500-O G	T-14
pH	**7.33**	**pH Units**	**1.00**	1	AF34635	06/27/23 12:05	06/27/23 12:38	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**89**	**umhos/cm@25°**	**10**	1	AF34636	06/29/23 17:00	06/29/23 17:02	2303	SM2510B	
Total Alkalinity as CaCO3	**43**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Total Suspended Solids	**3.3**	**mg/L**	**1.0**	1	AF34667	06/27/23 13:30	06/28/23 12:00	1551	SM2540D	
Turbidity	**1.2**	**NTU**	**1.0**	1	AF34468	06/23/23 12:23	06/23/23 13:10	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**43**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hardness, Total	**30**	**mg/L**	**3**	1	AF34543	06/26/23 07:04	06/26/23 10:45	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**1.6**	**mg/L**	**0.50**	1	AF34469	06/23/23 12:29	06/23/23 15:02	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**1600**	**MPN/100mL**	**1.0**	1	AF34480	06/23/23 15:23	06/24/23 17:50	2303	SM9223B	
E. Coli	**110**	**MPN/100mL**	**1.0**	1	AF34480	06/23/23 15:23	06/24/23 17:50	2303	SM9223B	
SW-8 (23F3273-04)			**Sample Type: Water**			**Sampled: 06/23/23 08:45**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Calcium	**5.9**	**mg/L**	**5.0**	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Magnesium	**3.7**	**mg/L**	**0.60**	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AF34812	06/29/23 05:52	06/30/23 13:58	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-8 (23F3273-04)			**Sample Type: Water**			**Sampled: 06/23/23 08:45**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**9.7**	**mg/L**	**0.10**	1	AF34556	06/23/23 16:00	06/23/23 17:00	1551	SM4500-O G	T-14
pH	**7.32**	**pH Units**	**1.00**	1	AF34635	06/27/23 12:05	06/27/23 12:38	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**91**	**umhos/cm@25°**	**10**	1	AF34636	06/29/23 17:00	06/29/23 17:02	2303	SM2510B	
Total Alkalinity as CaCO3	**40**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AF34667	06/27/23 13:30	06/28/23 12:00	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AF34468	06/23/23 12:23	06/23/23 13:10	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**40**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hardness, Total	**30**	**mg/L**	**3**	1	AF34543	06/26/23 07:04	06/26/23 10:48	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**1.6**	**mg/L**	**0.50**	1	AF34469	06/23/23 12:29	06/23/23 15:14	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**520**	**MPN/100mL**	**1.0**	1	AF34480	06/23/23 15:23	06/24/23 17:50	2303	SM9223B	
E. Coli	**88**	**MPN/100mL**	**1.0**	1	AF34480	06/23/23 15:23	06/24/23 17:50	2303	SM9223B	
SW-6 (23F3273-05)			**Sample Type: Water**			**Sampled: 06/23/23 09:55**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Calcium	**6.0**	**mg/L**	**5.0**	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Magnesium	**3.7**	**mg/L**	**0.60**	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AF34812	06/29/23 05:52	06/30/23 14:00	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (23F3273-05)			**Sample Type: Water**			**Sampled: 06/23/23 09:55**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**9.6**	**mg/L**	**0.10**	1	AF34556	06/23/23 16:00	06/23/23 17:00	1551	SM4500-O G	T-14
pH	**7.20**	**pH Units**	**1.00**	1	AF34635	06/27/23 12:05	06/27/23 12:38	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**88**	**umhos/cm@25°**	**10**	1	AF34636	06/29/23 17:00	06/29/23 17:02	2303	SM2510B	
Total Alkalinity as CaCO3	**40**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AF34667	06/27/23 13:30	06/28/23 12:00	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AF34468	06/23/23 12:23	06/23/23 13:10	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**40**	**mg/L**	**5.0**	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AF34637	06/27/23 17:00	06/27/23 18:00	2303	SM2320B	
Hardness, Total	**30**	**mg/L**	**3**	1	AF34543	06/26/23 07:04	06/26/23 10:51	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**1.6**	**mg/L**	**0.50**	1	AF34469	06/23/23 12:29	06/23/23 15:26	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**980**	**MPN/100mL**	**1.0**	1	AF34480	06/23/23 15:23	06/24/23 17:50	2303	SM9223B	
E. Coli	**100**	**MPN/100mL**	**1.0**	1	AF34480	06/23/23 15:23	06/24/23 17:50	2303	SM9223B	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34543 - NB EPA 200 series DA										
Blank (AF34543-BLK1)				Prepared & Analyzed: 06/26/23						
Arsenic	ND	0.020	mg/L							
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Chromium	ND	0.010	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Vanadium	ND	0.020	mg/L							
Zinc	ND	0.30	mg/L							
LCS (AF34543-BS1)				Prepared & Analyzed: 06/26/23						
Arsenic	0.511	0.020	mg/L	0.500		102	85-115			
Boron	0.493	0.10	mg/L	0.500		98.6	85-115			
Calcium	24.6	5.0	mg/L	25.5		96.6	85-115			
Chromium	0.500	0.010	mg/L	0.500		100	85-115			
Copper	0.486	0.050	mg/L	0.500		97.2	85-115			
Iron	0.516	0.10	mg/L	0.500		103	85-115			
Lead	0.472	0.020	mg/L	0.500		94.5	85-115			
Magnesium	26.0	0.60	mg/L	25.5		102	85-115			
Manganese	0.506	0.020	mg/L	0.500		101	85-115			
Sodium	25.9	6.0	mg/L	25.5		102	85-115			
Vanadium	0.497	0.020	mg/L	0.500		99.5	85-115			
Zinc	0.497	0.30	mg/L	0.500		99.4	85-115			
LCS Dup (AF34543-BSD1)				Prepared & Analyzed: 06/26/23						
Arsenic	0.515	0.020	mg/L	0.500		103	85-115	0.702	20	
Boron	0.491	0.10	mg/L	0.500		98.3	85-115	0.305	20	
Calcium	24.6	5.0	mg/L	25.5		96.5	85-115	0.142	20	
Chromium	0.499	0.010	mg/L	0.500		99.8	85-115	0.260	20	
Copper	0.487	0.050	mg/L	0.500		97.3	85-115	0.144	20	
Iron	0.516	0.10	mg/L	0.500		103	85-115	0.0194	20	
Lead	0.475	0.020	mg/L	0.500		95.0	85-115	0.486	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34543 - NB EPA 200 series DA										
LCS Dup (AF34543-BSD1)				Prepared & Analyzed: 06/26/23						
Magnesium	25.9	0.60	mg/L	25.5		102	85-115	0.559	20	
Manganese	0.505	0.020	mg/L	0.500		101	85-115	0.316	20	
Sodium	25.8	6.0	mg/L	25.5		101	85-115	0.586	20	
Vanadium	0.496	0.020	mg/L	0.500		99.2	85-115	0.262	20	
Zinc	0.498	0.30	mg/L	0.500		99.7	85-115	0.261	20	
Duplicate (AF34543-DUP1)		**Source: 23F3272-01**		Prepared & Analyzed: 06/26/23						
Arsenic	ND	0.020	mg/L		ND				20	
Boron	0.384	0.10	mg/L		0.398			3.43	20	
Calcium	31.1	5.0	mg/L		32.3			3.68	20	
Chromium	ND	0.010	mg/L		ND				20	
Copper	ND	0.050	mg/L		ND				20	
Iron	0.141	0.10	mg/L		0.146			3.35	20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	9.57	0.60	mg/L		9.92			3.58	20	
Manganese	0.0425	0.020	mg/L		0.0441			3.70	20	
Sodium	23.1	6.0	mg/L		24.0			3.71	20	
Vanadium	ND	0.020	mg/L		ND				20	
Zinc	ND	0.30	mg/L		ND				20	
MRL Check (AF34543-MRL1)				Prepared & Analyzed: 06/26/23						
Arsenic	0.0210	0.020	mg/L	0.0200		105	0-200			
Boron	0.104	0.10	mg/L	0.100		104	0-200			
Calcium	4.41	5.0	mg/L	5.00		88.2	0-200			
Chromium	0.0102	0.010	mg/L	0.0100		102	0-200			
Copper	0.0860	0.050	mg/L	0.100		86.0	0-200			
Iron	0.107	0.10	mg/L	0.100		107	0-200			
Lead	0.0198	0.020	mg/L	0.0200		99.0	0-200			
Magnesium	0.418	0.60	mg/L	0.500		83.7	0-200			
Manganese	0.0219	0.020	mg/L	0.0200		110	0-200			
Sodium	5.24	6.0	mg/L	5.00		105	0-200			
Vanadium	0.0183	0.020	mg/L	0.0200		91.5	0-200			
Zinc	0.372	0.30	mg/L	0.350		106	0-200			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34543 - NB EPA 200 series DA										
Matrix Spike (AF34543-MS1)		**Source: 23F3272-02**		Prepared & Analyzed: 06/26/23						
Arsenic	0.532	0.020	mg/L	0.500	ND	106	70-130			
Boron	0.599	0.10	mg/L	0.500	ND	101	70-130			
Chromium	0.498	0.010	mg/L	0.500	ND	99.7	70-130			
Copper	0.501	0.050	mg/L	0.500	ND	100	70-130			
Iron	0.554	0.10	mg/L	0.500	ND	111	70-130			
Lead	0.474	0.020	mg/L	0.500	ND	94.7	70-130			
Manganese	0.602	0.020	mg/L	0.500	0.109	98.7	70-130			
Sodium	34.8	6.0	mg/L	25.5	8.50	103	70-130			
Vanadium	0.501	0.020	mg/L	0.500	ND	100	70-130			
Zinc	0.499	0.30	mg/L	0.500	ND	99.8	70-130			
Batch AF34812 - Hg Digest										
Blank (AF34812-BLK1)				Prepared: 06/29/23 Analyzed: 06/30/23						
Mercury	ND	0.20	ug/L							
LCS (AF34812-BS1)				Prepared: 06/29/23 Analyzed: 06/30/23						
Mercury	2.37	0.20	ug/L	2.50		95.0	85-115			
Duplicate (AF34812-DUP1)		**Source: 23F3648-01**		Prepared: 06/29/23 Analyzed: 06/30/23						
Mercury	ND	0.20	ug/L		ND				20	
Matrix Spike (AF34812-MS1)		**Source: 23F3648-01**		Prepared: 06/29/23 Analyzed: 06/30/23						
Mercury	2.43	0.20	ug/L	2.50	ND	97.2	70-130			
Matrix Spike (AF34812-MS2)		**Source: 23F3648-02**		Prepared: 06/29/23 Analyzed: 06/30/23						
Mercury	2.43	0.20	ug/L	2.50	ND	97.1	70-130			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34812 - Hg Digest										
Matrix Spike Dup (AF34812-MSD1)	**Source: 23F3648-01**			Prepared: 06/29/23 Analyzed: 06/30/23						
Mercury	2.43	0.20	ug/L	2.50	ND	97.1	70-130	0.123	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34468 - NB General Prep										
Blank (AF34468-BLK1)				Prepared & Analyzed: 06/23/23						
Turbidity	ND	1.0	NTU							
Duplicate (AF34468-DUP1)		Source: 23F3272-01		Prepared & Analyzed: 06/23/23						
Turbidity	1.00	1.0	NTU		1.00			0.00	20	
MRL Check (AF34468-MRL1)				Prepared & Analyzed: 06/23/23						
Turbidity	0.950	1.0	NTU	1.00		95.0	0-200			
Batch AF34543 - NB EPA 200 series DA										
Blank (AF34543-BLK1)				Prepared & Analyzed: 06/26/23						
Hardness, Total	ND	3	mg/L							
Duplicate (AF34543-DUP1)		Source: 23F3272-01		Prepared & Analyzed: 06/26/23						
Hardness, Total	117	3	mg/L		121			3.64	20	
Batch AF34556 - General Preparation										
Duplicate (AF34556-DUP1)		Source: 23F3273-02		Prepared & Analyzed: 06/23/23						
Dissolved Oxygen	9.72	0.10	mg/L		9.73			0.103	20	T-14
Batch AF34635 - NB General Prep										
Duplicate (AF34635-DUP1)		Source: 23F3272-01		Prepared & Analyzed: 06/27/23						
pH	7.80	1.00	pH Units		7.79			0.128	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34636 - NB General Prep										
Duplicate (AF34636-DUP1)		**Source: 23F3272-01**		Prepared & Analyzed: 06/29/23						
Specific Conductance (EC)	349	10	umhos/cm@25°C		346			0.863	5	
Batch AF34637 - NB General Prep										
LCS (AF34637-BS1)				Prepared & Analyzed: 06/27/23						
Total Alkalinity as CaCO3	996	5.0	mg/L	1000		99.6	80-120			
Duplicate (AF34637-DUP1)		**Source: 23F3272-01**		Prepared & Analyzed: 06/27/23						
Total Alkalinity as CaCO3	176	5.0	mg/L		178			0.565	20	
Bicarbonate Alkalinity as CaCO3	176	5.0	mg/L		178			0.565	20	
Carbonate Alkalinity as CaCO3	ND	5.0	mg/L		ND				20	
Hydroxide Alkalinity as CaCO3	ND	5.0	mg/L		ND				20	
Batch AF34667 - General Preparation										
Blank (AF34667-BLK1)				Prepared: 06/27/23 Analyzed: 06/28/23						
Total Suspended Solids	ND	1.0	mg/L							
LCS (AF34667-BS1)				Prepared: 06/27/23 Analyzed: 06/28/23						
Total Suspended Solids	96.8	1.0	mg/L	100		96.8	90-110			
Duplicate (AF34667-DUP1)		**Source: 23F3208-03**		Prepared: 06/27/23 Analyzed: 06/28/23						
Total Suspended Solids	169	1.0	mg/L		172			1.76	30	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

Anions by EPA Method 300.0 - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AF34469 - NB General Prep										
Blank (AF34469-BLK1)				Prepared & Analyzed: 06/23/23						
Sulfate as SO4	ND	0.50	mg/L							
LCS (AF34469-BS1)				Prepared & Analyzed: 06/23/23						
Sulfate as SO4	7.45	0.50	mg/L	8.00		93.1	90-110			
Duplicate (AF34469-DUP1)		**Source: 23F3272-01**		Prepared & Analyzed: 06/23/23						
Sulfate as SO4	5.40	0.50	mg/L		5.45			0.882	20	
MRL Check (AF34469-MRL1)				Prepared & Analyzed: 06/23/23						
Sulfate as SO4	1.39	0.50	mg/L	1.60		86.6	60-140			
Matrix Spike (AF34469-MS1)		**Source: 23F3272-02**		Prepared & Analyzed: 06/23/23						
Sulfate as SO4	23.8	0.50	mg/L	8.00	17.6	77.7	80-120			QM-02
Matrix Spike Dup (AF34469-MSD1)		**Source: 23F3272-02**		Prepared & Analyzed: 06/23/23						
Sulfate as SO4	23.8	0.50	mg/L	8.00	17.6	77.4	80-120	0.0815	20	QM-02

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: [none]	07/10/23 12:02

Notes and Definitions

QM-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
T-14	Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
REC	Recovery
RPD	Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

alpha
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WATERS, SEDIMENTS, SOLIDS

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Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23F3273 Pg ____ of ____

Signature below authorizes work under terms stated on reverse side.

Report to	Invoice to (if different)	Project Information
Company: Bottle Rock Power	Contact:	Project ID: Bottle Rock Monitoring-SW
Attn: ~~Jay Hepper~~ Richard Lacy	Email address:	Project No:
Address: PO Box 326, Cobb, CA 95426	Address:	PO Number:
Phone/Fax: 707-529-3799	Phone/Fax:	
Email Address:		

Field Sampler - Printed Name & Signature: Richard Lacy

TAT: Standard 10 days ○ | RUSH: 5 days ○ 48 hours ○ Other: ___days ○ Preapproval required

TEMP °C: Ukiah | Livermore | Elk Grove | Petaluma 5.8 | Carlsbad

Sample Identification	Sampling Date	Sampling Time	Container: 40ml VOA Vial	Container: Plastic	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Drinking Water	Matrix: Wastewater	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: ALK, Ph, ec	Turbidity & TSS	Hardness, SO4	B, Cu, Fe & Pb	Mn, Na & Zn	Diss. Oxygen	Bac-T	As, Cr, V, Hg	Notes / DDW Source Codes
SW-7	6/23/23	7:25		X	X											X	5	X	X	X	X	X	X	X	X	
SW-9	6/23/23	7:55		X	X											X	5	X	X	X	X	X	X	X	X	
SW-10	6/23/23	8:15		X	X											X	5	X	X	X	X	X	X	X	X	
SW-8	6/23/23	8:45		X	X											X	5	X	X	X	X	X	X	X	X	
SW-6	6/23/23	9:55		X	X											X	5	X	X	X	X	X	X	X	X	

Relinquished by	Received by	Date	Time
Richard Lacy	LS	6/24/23	1150

DDW Write On EDT Transmission? ○ Yes ○ No

State **System** Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

wko_NBtoUK_COC.rpt

WORK ORDER 4.9

23F3273

Printed: 6/23/2023 12:18:11PM

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Bottle Rock Power	**Client Code:** NB_BOTTLEROCK	**Bid:** Master Bid
Project: Surface Water	**Project Number:** [none]	**PO #:**

Date Due: 07/11/23 15:00 (10 day TAT)
Received By: Luke Andrew Smith — Date Received: 06/23/23 11:50
Logged In By: Luke Andrew Smith — Date Logged 06/23/23 11:53

Samples Received at: _____ deg C — All containers received and intact: YES NO

Analysis	Department	Expires	Comments
23F3273-01 SW-7 [Water] Sampled 06/23/23 07:25			
Diss Oxygen SM4500	Wet Chem	06/23/23 07:39	
Hg CVAA Total 245.1	Metals	07/21/23 23:59	
Solids, TSS-SM2540D	Wet Chem	06/30/23 23:59	
23F3273-02 SW-9 [Water] Sampled 06/23/23 07:55			
Diss Oxygen SM4500	Wet Chem	06/23/23 08:09	
Hg CVAA Total 245.1	Metals	07/21/23 23:59	
Solids, TSS-SM2540D	Wet Chem	06/30/23 23:59	
23F3273-03 SW-10 [Water] Sampled 06/23/23 08:15			
Diss Oxygen SM4500	Wet Chem	06/23/23 08:29	
Hg CVAA Total 245.1	Metals	07/21/23 23:59	
Solids, TSS-SM2540D	Wet Chem	06/30/23 23:59	
23F3273-04 SW-8 [Water] Sampled 06/23/23 08:45			
Diss Oxygen SM4500	Wet Chem	06/23/23 08:59	
Hg CVAA Total 245.1	Metals	07/21/23 23:59	
Solids, TSS-SM2540D	Wet Chem	06/30/23 23:59	
23F3273-05 SW-6 [Water] Sampled 06/23/23 09:55			
Diss Oxygen SM4500	Wet Chem	06/23/23 10:09	
Hg CVAA Total 245.1	Metals	07/21/23 23:59	
Solids, TSS-SM2540D	Wet Chem	06/30/23 23:59	

LS — 6/23/23 1220
Relinquished By — Date — Time

Received By — 6/23/23 1220
Date — Time

Relinquished By — 6/23/23 1515
Date — Time

Received By — 6/23/23 1515
Date — Time

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

06 October 2023

Bottle Rock Power
Attn: M. Moore
4010 Stone Way North, Suite 400
Seattle, WA 98103
RE: Groundwater
Work Order: 23I3415

Enclosed are the results of analyses for samples received by the laboratory on 09/26/23 11:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

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Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-3	23I3415-01	Water	09/26/23 07:00	09/26/23 11:35
GW-1	23I3415-02	Water	09/26/23 07:45	09/26/23 11:35

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-3 (23I3415-01)			**Sample Type: Water**			**Sampled: 09/26/23 07:00**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	EPA 200.7	
Boron	**0.35**	**mg/L**	**0.10**	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	EPA 200.7	
Calcium	**28**	**mg/L**	**5.0**	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	EPA 200.7	
Iron	**0.44**	**mg/L**	**0.10**	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	EPA 200.7	
Magnesium	**8.7**	**mg/L**	**0.60**	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	EPA 200.7	
Manganese	**0.044**	**mg/L**	**0.020**	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	EPA 200.7	
Sodium	**21**	**mg/L**	**6.0**	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	**7.96**	**pH Units**	**1.68**	1	AJ33293	10/03/23 10:08	10/03/23 15:40	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**360**	**umhos/cm@25°**	**10**	1	AJ33291	10/03/23 10:09	10/04/23 14:58	2303	SM2510B	
Total Alkalinity as CaCO3	**170**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AI34728	09/28/23 09:30	09/28/23 16:45	1551	SM2540D	
Turbidity	**3.6**	**NTU**	**1.0**	1	AI34661	09/27/23 09:44	09/27/23 10:37	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**170**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hardness, Total	**105**	**mg/L**	**15**	1	AI34639	09/27/23 06:14	09/27/23 13:38	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AI34621	09/26/23 15:28	09/26/23 20:09	2303	EPA 300.0	
Sulfate as SO4	**6.4**	**mg/L**	**0.50**	1	AI34621	09/26/23 15:28	09/26/23 20:09	2303	EPA 300.0	
GW-1 (23I3415-02)			**Sample Type: Water**			**Sampled: 09/26/23 07:45**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	EPA 200.7	
Calcium	**40**	**mg/L**	**5.0**	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	EPA 200.7	
Magnesium	**13**	**mg/L**	**0.60**	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	EPA 200.7	
Manganese	**0.099**	**mg/L**	**0.020**	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	EPA 200.7	
Sodium	**7.5**	**mg/L**	**6.0**	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-1 (23I3415-02)		**Sample Type: Water**				**Sampled: 09/26/23 07:45**				
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	**7.99**	**pH Units**	**1.68**	1	AJ33293	10/03/23 10:08	10/03/23 15:40	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**390**	**umhos/cm@25°**	**10**	1	AJ33291	10/03/23 10:09	10/04/23 14:58	2303	SM2510B	
Total Alkalinity as CaCO3	**180**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AI34728	09/28/23 09:30	09/28/23 16:45	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AI34661	09/27/23 09:44	09/27/23 10:37	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**180**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hardness, Total	**155**	**mg/L**	**15**	1	AI34644	09/27/23 07:43	09/27/23 09:51	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AI34621	09/26/23 15:28	09/26/23 20:22	2303	EPA 300.0	
Sulfate as SO4	**21**	**mg/L**	**0.50**	1	AI34621	09/26/23 15:28	09/26/23 20:22	2303	EPA 300.0	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34639 - NB EPA 200 series										
Blank (AI34639-BLK1)				Prepared & Analyzed: 09/27/23						
Arsenic	ND	0.020	mg/L							
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Zinc	ND	0.30	mg/L							
LCS (AI34639-BS1)				Prepared & Analyzed: 09/27/23						
Arsenic	0.511	0.020	mg/L	0.500		102	85-115			
Boron	0.463	0.10	mg/L	0.500		92.6	85-115			
Calcium	21.3	5.0	mg/L	25.5		83.4	85-115			
Copper	0.461	0.050	mg/L	0.500		92.2	85-115			
Iron	0.481	0.10	mg/L	0.500		96.2	85-115			
Lead	0.470	0.020	mg/L	0.500		94.1	85-115			
Magnesium	23.4	0.60	mg/L	25.5		91.7	85-115			
Manganese	0.473	0.020	mg/L	0.500		94.7	85-115			
Sodium	24.0	6.0	mg/L	25.5		94.0	85-115			
Zinc	0.474	0.30	mg/L	0.500		94.8	85-115			
LCS Dup (AI34639-BSD1)				Prepared & Analyzed: 09/27/23						
Arsenic	0.546	0.020	mg/L	0.500		109	85-115	6.61	20	
Boron	0.487	0.10	mg/L	0.500		97.4	85-115	5.03	20	
Calcium	22.4	5.0	mg/L	25.5		87.9	85-115	5.19	20	
Copper	0.485	0.050	mg/L	0.500		97.1	85-115	5.16	20	
Iron	0.496	0.10	mg/L	0.500		99.2	85-115	3.03	20	
Lead	0.495	0.020	mg/L	0.500		98.9	85-115	5.04	20	
Magnesium	24.6	0.60	mg/L	25.5		96.6	85-115	5.24	20	
Manganese	0.500	0.020	mg/L	0.500		99.9	85-115	5.41	20	
Sodium	25.2	6.0	mg/L	25.5		98.8	85-115	4.90	20	
Zinc	0.484	0.30	mg/L	0.500		96.7	85-115	2.01	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34639 - NB EPA 200 series										
Duplicate (AI34639-DUP1)	**Source: 23I3415-01**			Prepared & Analyzed: 09/27/23						
Arsenic	ND	0.020	mg/L		ND				20	
Boron	0.360	0.10	mg/L		0.353			1.93	20	
Calcium	28.3	5.0	mg/L		27.6			2.64	20	
Copper	ND	0.050	mg/L		ND				20	
Iron	0.448	0.10	mg/L		0.440			1.83	20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	8.95	0.60	mg/L		8.75			2.32	20	
Manganese	0.0453	0.020	mg/L		0.0443			2.23	20	
Sodium	21.4	6.0	mg/L		20.9			2.30	20	
Zinc	ND	0.30	mg/L		ND				20	
MRL Check (AI34639-MRL1)				Prepared & Analyzed: 09/27/23						
Arsenic	0.0208	0.020	mg/L	0.0200		104	0-200			
Boron	0.0845	0.10	mg/L	0.100		84.5	0-200			
Calcium	ND	5.0	mg/L	5.00			0-200			
Copper	0.0905	0.050	mg/L	0.100		90.5	0-200			
Iron	0.0852	0.10	mg/L	0.100		85.2	0-200			
Lead	0.0166	0.020	mg/L	0.0200		83.0	0-200			
Magnesium	0.438	0.60	mg/L	0.500		87.5	0-200			
Manganese	0.0176	0.020	mg/L	0.0200		88.0	0-200			
Sodium	4.79	6.0	mg/L	5.00		95.7	0-200			
Zinc	0.305	0.30	mg/L	0.350		87.3	0-200			
Matrix Spike (AI34639-MS1)	**Source: 23I3415-01**			Prepared & Analyzed: 09/27/23						
Arsenic	0.516	0.020	mg/L	0.500	ND	103	70-130			
Boron	0.856	0.10	mg/L	0.500	0.353	101	70-130			
Copper	0.470	0.050	mg/L	0.500	ND	94.0	70-130			
Iron	0.952	0.10	mg/L	0.500	0.440	103	70-130			
Lead	0.466	0.020	mg/L	0.500	ND	93.2	70-130			
Manganese	0.519	0.020	mg/L	0.500	0.0443	94.9	70-130			
Sodium	45.5	6.0	mg/L	25.5	20.9	96.5	70-130			
Zinc	0.462	0.30	mg/L	0.500	ND	92.3	70-130			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34644 - NB EPA 200 series DA										
Blank (AI34644-BLK1)				Prepared & Analyzed: 09/27/23						
Arsenic	ND	0.020	mg/L							
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Zinc	ND	0.30	mg/L							
LCS (AI34644-BS1)				Prepared & Analyzed: 09/27/23						
Arsenic	0.524	0.020	mg/L	0.500		105	85-115			
Boron	0.484	0.10	mg/L	0.500		96.8	85-115			
Calcium	21.8	5.0	mg/L	25.5		85.4	85-115			
Copper	0.481	0.050	mg/L	0.500		96.2	85-115			
Iron	0.504	0.10	mg/L	0.500		101	85-115			
Lead	0.486	0.020	mg/L	0.500		97.3	85-115			
Magnesium	24.2	0.60	mg/L	25.5		95.0	85-115			
Manganese	0.500	0.020	mg/L	0.500		99.9	85-115			
Sodium	25.0	6.0	mg/L	25.5		97.9	85-115			
Zinc	0.451	0.30	mg/L	0.500		90.2	85-115			
LCS Dup (AI34644-BSD1)				Prepared & Analyzed: 09/27/23						
Arsenic	0.523	0.020	mg/L	0.500		105	85-115	0.286	20	
Boron	0.483	0.10	mg/L	0.500		96.5	85-115	0.248	20	
Calcium	21.9	5.0	mg/L	25.5		86.0	85-115	0.694	20	
Copper	0.484	0.050	mg/L	0.500		96.7	85-115	0.498	20	
Iron	0.505	0.10	mg/L	0.500		101	85-115	0.317	20	
Lead	0.488	0.020	mg/L	0.500		97.5	85-115	0.267	20	
Magnesium	24.2	0.60	mg/L	25.5		95.1	85-115	0.0776	20	
Manganese	0.500	0.020	mg/L	0.500		100	85-115	0.120	20	
Sodium	25.0	6.0	mg/L	25.5		98.2	85-115	0.367	20	
Zinc	0.453	0.30	mg/L	0.500		90.6	85-115	0.443	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34644 - NB EPA 200 series DA										
Duplicate (AI34644-DUP1)	**Source: 23I3414-05**			Prepared & Analyzed: 09/27/23						
Arsenic	ND	0.020	mg/L		ND			200	20	
Boron	ND	0.10	mg/L		ND			0.695	20	
Calcium	ND	5.0	mg/L		ND				20	
Copper	ND	0.050	mg/L		ND				20	
Iron	ND	0.10	mg/L		ND			4.09	20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	2.30	0.60	mg/L		2.38			3.41	20	
Manganese	ND	0.020	mg/L		ND				20	
Sodium	ND	6.0	mg/L		ND			3.17	20	
Zinc	ND	0.30	mg/L		ND				20	
MRL Check (AI34644-MRL1)				Prepared & Analyzed: 09/27/23						
Arsenic	0.0232	0.020	mg/L	0.0200		116	0-200			
Boron	0.0895	0.10	mg/L	0.100		89.5	0-200			
Calcium	ND	5.0	mg/L	5.00			0-200			
Copper	0.0925	0.050	mg/L	0.100		92.5	0-200			
Iron	0.0925	0.10	mg/L	0.100		92.5	0-200			
Lead	0.0189	0.020	mg/L	0.0200		94.5	0-200			
Magnesium	0.450	0.60	mg/L	0.500		90.1	0-200			
Manganese	0.0185	0.020	mg/L	0.0200		92.5	0-200			
Sodium	4.98	6.0	mg/L	5.00		99.7	0-200			
Zinc	0.301	0.30	mg/L	0.350		85.9	0-200			
Matrix Spike (AI34644-MS1)	**Source: 23I3415-02**			Prepared & Analyzed: 09/27/23						
Arsenic	0.539	0.020	mg/L	0.500	ND	108	70-130			
Boron	0.577	0.10	mg/L	0.500	ND	99.0	70-130			
Copper	0.490	0.050	mg/L	0.500	ND	98.0	70-130			
Iron	0.547	0.10	mg/L	0.500	ND	109	70-130			
Lead	0.489	0.020	mg/L	0.500	ND	97.8	70-130			
Manganese	0.595	0.020	mg/L	0.500	0.0990	99.2	70-130			
Sodium	32.5	6.0	mg/L	25.5	7.46	98.0	70-130			
Zinc	0.460	0.30	mg/L	0.500	ND	92.0	70-130			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34639 - NB EPA 200 series										
Blank (AI34639-BLK1)				Prepared & Analyzed: 09/27/23						
Hardness, Total	ND	15	mg/L							
Duplicate (AI34639-DUP1)		**Source: 23I3415-01**		Prepared & Analyzed: 09/27/23						
Hardness, Total	108	15	mg/L		105			2.53	20	
Batch AI34644 - NB EPA 200 series DA										
Blank (AI34644-BLK1)				Prepared & Analyzed: 09/27/23						
Hardness, Total	ND	15	mg/L							
Duplicate (AI34644-DUP1)		**Source: 23I3414-05**		Prepared & Analyzed: 09/27/23						
Hardness, Total	ND	15	mg/L		ND			6.93	20	
Batch AI34661 - NB General Prep										
Blank (AI34661-BLK1)				Prepared & Analyzed: 09/27/23						
Turbidity	ND	1.0	NTU							
Duplicate (AI34661-DUP1)		**Source: 23I3414-01**		Prepared & Analyzed: 09/27/23						
Turbidity	ND	1.0	NTU		ND			1.50	20	
MRL Check (AI34661-MRL1)				Prepared & Analyzed: 09/27/23						
Turbidity	0.990	1.0	NTU	10.0		9.90	0-200			
Batch AI34728 - General Preparation										
Blank (AI34728-BLK1)				Prepared & Analyzed: 09/28/23						
Total Suspended Solids	ND	1.0	mg/L							

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34728 - General Preparation										
LCS (AI34728-BS1)				Prepared & Analyzed: 09/28/23						
Total Suspended Solids	96.6	1.0	mg/L	100		96.6	90-110			
Duplicate (AI34728-DUP1)		**Source: 23I3485-03**		Prepared & Analyzed: 09/28/23						
Total Suspended Solids	107	1.0	mg/L		107			0.00	30	
Batch AI34800 - NB General Prep										
LCS (AI34800-BS1)				Prepared: 09/28/23 Analyzed: 09/29/23						
Total Alkalinity as CaCO3	994	20	mg/L	1000		99.4	80-120			
Duplicate (AI34800-DUP1)		**Source: 23I3778-01**		Prepared: 09/28/23 Analyzed: 09/29/23						
Total Alkalinity as CaCO3	59.0	20	mg/L		57.7			2.23	20	
Bicarbonate Alkalinity as CaCO3	59.0	20	mg/L		57.7			2.23	20	
Carbonate Alkalinity as CaCO3	ND	20	mg/L		ND				20	
Hydroxide Alkalinity as CaCO3	ND	20	mg/L		ND				20	
Batch AJ33291 - NB General Prep										
Duplicate (AJ33291-DUP1)		**Source: 23J0104-01**		Prepared: 10/03/23 Analyzed: 10/04/23						
Specific Conductance (EC)	765	10	umhos/cm@25°C		771			0.781	5	
Batch AJ33293 - NB General Prep										
Duplicate (AJ33293-DUP1)		**Source: 23J0104-01**		Prepared & Analyzed: 10/03/23						
pH	7.89	1.68	pH Units		7.90			0.127	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

Anions by EPA Method 300.0 - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34621 - NB General Prep										
Blank (AI34621-BLK1)				Prepared & Analyzed: 09/26/23						
Sulfate as SO4	ND	0.50	mg/L							
Nitrate as N	ND	0.40	mg/L							
LCS (AI34621-BS1)				Prepared & Analyzed: 09/26/23						
Sulfate as SO4	8.61	0.50	mg/L	8.00		108	90-110			
Nitrate as N	1.90	0.40	mg/L	1.80		105	90-110			
Duplicate (AI34621-DUP1)	**Source: 23I3414-02**			Prepared & Analyzed: 09/26/23						
Nitrate as N	ND	0.40	mg/L		ND			0.338	20	
Sulfate as SO4	1.22	0.50	mg/L		1.22			0.181	20	
MRL Check (AI34621-MRL1)				Prepared & Analyzed: 09/26/23						
Nitrate as N	0.378	0.40	mg/L	0.361		105	60-140			
Sulfate as SO4	1.74	0.50	mg/L	1.60		109	60-140			
Matrix Spike (AI34621-MS1)	**Source: 23I3414-01**			Prepared & Analyzed: 09/26/23						
Nitrate as N	1.92	0.40	mg/L	1.80	ND	107	80-120			
Sulfate as SO4	9.94	0.50	mg/L	8.00	1.21	109	80-120			
Matrix Spike (AI34621-MS2)	**Source: 23I3471-01**			Prepared & Analyzed: 09/26/23						
Nitrate as N	0.696	0.40	mg/L	1.80	ND	25.4	80-120			QM-01
Sulfate as SO4	17.8	0.50	mg/L	8.00	9.72	101	80-120			
Matrix Spike Dup (AI34621-MSD1)	**Source: 23I3414-01**			Prepared & Analyzed: 09/26/23						
Nitrate as N	1.92	0.40	mg/L	1.80	ND	106	80-120	0.307	20	
Sulfate as SO4	9.98	0.50	mg/L	8.00	1.21	110	80-120	0.319	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	10/06/23 06:04

Notes and Definitions

QM-01 The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.

T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.

ND Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

REC Recovery

RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

alpha
Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

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North Bay Laboratory (2303)
737 Southpoint Blvd, Ste D, Petaluma 94954

Bay Area Laboratory (2728)
262 Rickenbacker Circle, Livermore CA 94551

Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23I3415 Pg ____ of ____

Report to	Invoice to (if different)	Project Information
Company: Bottle Rock Power	Contact:	Project ID: Bottle Rock Monitoring-GW
Attn: ~~Jay Hepper~~ Richard Lacy	Email address:	Project No:
Address: PO Box 326 Cobb, CA 95426	Address:	PO Number:
Phone/Fax: 707-529-3799	Phone/Fax:	
Email Address:		

Signature below authorizes work under terms stated on reverse side.

TAT: Standard 10 days ○ | RUSH: 5 days ○ / 48 hours ○ / Other: ___days ○ / Preapproval required

TEMP °C: Ukiah | Livermore | Elk Grove | Petaluma 3.8 | Carlsbad

Field Sampler - Printed Name & Signature: Richard Lacy

Sample Identification	Sampling Date	Sampling Time	Container: 40ml VOA Vial	Container: Plastic	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Drinking Water	Matrix: Wastewater	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: ALK, Ph, ec	Turbidity & TSS	Hardness, SO4	B, Cu, Fe & Pb	Mn, Na & Zn	As & NO3			Field pH	Field TDS ppm		Notes / DDW Source Codes
GW-3	9/26/23	7:00		X													3	X	X	X	X	X	X						
GW-1	9/26/23	7:45		X													3	X	X	X	X	X	X						

Relinquished by	Received by	Date	Time
Richard Lacy	CS	9/26/23	1135

DDW Write On EDT Transmission? ○ Yes ○ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

WORK ORDER

Printed: 9/26/2023 12:22:56PM

2313415

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client:	**Bottle Rock Power**	**Client Code:**	**NB_BOTTLEROCK**	**Bid:**	**Master Bid**
Project:	**Groundwater**	**Project Number:**	**Bottle Rock Monitoring - GW**	**PO #:**	

Date Due:	10/10/23 15:00 (10 day TAT)		
Received By:	Luke Andrew Smith	Date Received:	09/26/23 11:35
Logged In By:	Luke Andrew Smith	Date Logged	09/26/23 12:17

temp 5.0

Samples Received at: _____ deg C All containers received and intact: YES NO

Analysis	Department	Expires	Comments
2313415-01 GW-3 [Water] Sampled 09/26/23 07:00			
Solids, TSS-SM2540D	Wet Chem	10/03/23 23:59	
2313415-02 GW-1 [Water] Sampled 09/26/23 07:45			
Solids, TSS-SM2540D	Wet Chem	10/03/23 23:59	

Containers Supplied:

1L Poly - Unpres (C)

1L Poly - Unpres (C)

5.0

US	9/26/23		9/26/23
Relinquished By	Date	Received By	Date Tim
	9/26/23		9-26-23 1530
Relinquished By	Date	Received By	Date Tim

1530

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Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

06 October 2023

Bottle Rock Power
Attn: M. Moore
4010 Stone Way North, Suite 400
Seattle, WA 98103
RE: Surface Water
Work Order: 23I3414

Enclosed are the results of analyses for samples received by the laboratory on 09/26/23 11:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-7	23I3414-01	Water	09/26/23 07:26	09/26/23 11:35
SW-9	23I3414-02	Water	09/26/23 08:00	09/26/23 11:35
SW-10	23I3414-03	Water	09/26/23 08:25	09/26/23 11:35
SW-8	23I3414-04	Water	09/26/23 08:55	09/26/23 11:35
SW-6	23I3414-05	Water	09/26/23 10:00	09/26/23 11:35

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (23I3414-01)			**Sample Type: Water**			**Sampled: 09/26/23 07:26**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Calcium	ND	mg/L	5.0	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Magnesium	**2.5**	**mg/L**	**0.60**	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AI34638	09/27/23 06:11	09/27/23 13:41	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**9.1**	**mg/L**	**0.10**	1	AI34662	09/26/23 16:00	09/26/23 17:00	1551	SM4500-O G	T-14
pH	**7.56**	**pH Units**	**1.68**	1	AJ33293	10/03/23 10:08	10/03/23 15:40	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**96**	**umhos/cm@25°**	**10**	1	AJ33291	10/03/23 10:09	10/04/23 14:58	2303	SM2510B	
Total Alkalinity as CaCO3	**34**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AI34728	09/28/23 09:30	09/28/23 16:45	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AI34661	09/27/23 09:44	09/27/23 10:37	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**34**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hardness, Total	ND	mg/L	15	1	AI34644	09/27/23 07:43	09/27/23 09:35	2303	SM2340B	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (23I3414-01)			**Sample Type: Water**			**Sampled: 09/26/23 07:26**				
Anions by EPA Method 300.0										
Sulfate as SO4	**1.2**	**mg/L**	**0.50**	1	AI34621	09/26/23 15:28	09/26/23 18:51	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**1000**	**MPN/100mL**	**1.0**	1	AI34617	09/26/23 15:30	09/27/23 16:20	2303	SM9223B	
E. Coli	**27**	**MPN/100mL**	**1.0**	1	AI34617	09/26/23 15:30	09/27/23 16:20	2303	SM9223B	
SW-9 (23I3414-02)			**Sample Type: Water**			**Sampled: 09/26/23 08:00**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Calcium	ND	mg/L	5.0	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Magnesium	**2.4**	**mg/L**	**0.60**	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AI34638	09/27/23 06:11	09/27/23 13:44	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-9 (23I3414-02)			**Sample Type: Water**			**Sampled: 09/26/23 08:00**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**9.3**	**mg/L**	**0.10**	1	AI34662	09/26/23 16:00	09/26/23 17:00	1551	SM4500-O G	T-14
pH	**7.51**	**pH Units**	**1.68**	1	AJ33293	10/03/23 10:08	10/03/23 15:40	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**78**	**umhos/cm@25°**	**10**	1	AJ33291	10/03/23 10:09	10/04/23 14:58	2303	SM2510B	
Total Alkalinity as CaCO3	**34**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AI34728	09/28/23 09:30	09/28/23 16:45	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AI34661	09/27/23 09:44	09/27/23 10:37	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**34**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hardness, Total	ND	mg/L	15	1	AI34644	09/27/23 07:43	09/27/23 09:39	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**1.2**	**mg/L**	**0.50**	1	AI34621	09/26/23 15:28	09/26/23 19:04	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AI34617	09/26/23 15:30	09/27/23 16:20	2303	SM9223B	
E. Coli	**23**	**MPN/100mL**	**1.0**	1	AI34617	09/26/23 15:30	09/27/23 16:20	2303	SM9223B	
SW-10 (23I3414-03)			**Sample Type: Water**			**Sampled: 09/26/23 08:25**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Calcium	ND	mg/L	5.0	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Magnesium	**2.5**	**mg/L**	**0.60**	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AI34638	09/27/23 06:11	09/27/23 13:47	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-10 (23I3414-03)			**Sample Type: Water**			**Sampled: 09/26/23 08:25**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**9.2**	**mg/L**	**0.10**	1	AI34662	09/26/23 16:00	09/26/23 17:00	1551	SM4500-O G	T-14
pH	**7.44**	**pH Units**	**1.68**	1	AJ33293	10/03/23 10:08	10/03/23 15:40	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**77**	**umhos/cm@25°**	**10**	1	AJ33291	10/03/23 10:09	10/04/23 14:58	2303	SM2510B	
Total Alkalinity as CaCO3	**45**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Total Suspended Solids	**1.5**	**mg/L**	**1.0**	1	AI34728	09/28/23 09:30	09/28/23 16:45	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AI34661	09/27/23 09:44	09/27/23 10:37	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**45**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hardness, Total	ND	mg/L	15	1	AI34644	09/27/23 07:43	09/27/23 09:42	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**1.2**	**mg/L**	**0.50**	1	AI34621	09/26/23 15:28	09/26/23 19:17	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AI34617	09/26/23 15:30	09/27/23 16:20	2303	SM9223B	
E. Coli	**19**	**MPN/100mL**	**1.0**	1	AI34617	09/26/23 15:30	09/27/23 16:20	2303	SM9223B	
SW-8 (23I3414-04)			**Sample Type: Water**			**Sampled: 09/26/23 08:55**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Calcium	ND	mg/L	5.0	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Magnesium	**2.4**	**mg/L**	**0.60**	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AI34638	09/27/23 06:11	09/27/23 13:49	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-8 (23I3414-04)			**Sample Type: Water**			**Sampled: 09/26/23 08:55**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**9.0**	**mg/L**	**0.10**	1	AI34662	09/26/23 16:00	09/26/23 17:00	1551	SM4500-O G	T-14
pH	**7.47**	**pH Units**	**1.68**	1	AJ33293	10/03/23 10:08	10/03/23 15:40	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**76**	**umhos/cm@25°**	**10**	1	AJ33291	10/03/23 10:09	10/04/23 14:58	2303	SM2510B	
Total Alkalinity as CaCO3	**34**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Total Suspended Solids	**1.7**	**mg/L**	**1.0**	1	AI34728	09/28/23 09:30	09/28/23 16:45	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AI34661	09/27/23 09:44	09/27/23 10:37	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**34**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hardness, Total	ND	mg/L	15	1	AI34644	09/27/23 07:43	09/27/23 09:45	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**1.2**	**mg/L**	**0.50**	1	AI34621	09/26/23 15:28	09/26/23 19:43	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**1000**	**MPN/100mL**	**1.0**	1	AI34617	09/26/23 15:30	09/27/23 16:20	2303	SM9223B	
E. Coli	**31**	**MPN/100mL**	**1.0**	1	AI34617	09/26/23 15:30	09/27/23 16:20	2303	SM9223B	
SW-6 (23I3414-05)			**Sample Type: Water**			**Sampled: 09/26/23 10:00**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Calcium	ND	mg/L	5.0	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Magnesium	**2.4**	**mg/L**	**0.60**	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AI34638	09/27/23 06:11	09/27/23 13:52	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (23I3414-05)			**Sample Type: Water**			**Sampled: 09/26/23 10:00**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**9.2**	**mg/L**	**0.10**	1	AI34662	09/26/23 16:00	09/26/23 17:00	1551	SM4500-O G	T-14
pH	**7.48**	**pH Units**	**1.68**	1	AJ33293	10/03/23 10:08	10/03/23 15:40	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	**77**	**umhos/cm@25°**	**10**	1	AJ33291	10/03/23 10:09	10/04/23 14:58	2303	SM2510B	
Total Alkalinity as CaCO3	**34**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Total Suspended Solids	**1.2**	**mg/L**	**1.0**	1	AI34728	09/28/23 09:30	09/28/23 16:45	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AI34661	09/27/23 09:44	09/27/23 10:37	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**34**	**mg/L**	**20**	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	20	1	AI34800	09/28/23 17:24	09/29/23 13:02	2303	SM2320B	
Hardness, Total	ND	mg/L	15	1	AI34644	09/27/23 07:43	09/27/23 09:48	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**1.2**	**mg/L**	**0.50**	1	AI34621	09/26/23 15:28	09/26/23 19:56	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AI34617	09/26/23 15:30	09/27/23 16:20	2303	SM9223B	
E. Coli	**36**	**MPN/100mL**	**1.0**	1	AI34617	09/26/23 15:30	09/27/23 16:20	2303	SM9223B	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34638 - Hg Digest										
Blank (AI34638-BLK1)				Prepared & Analyzed: 09/27/23						
Mercury	ND	0.20	ug/L							
LCS (AI34638-BS1)				Prepared & Analyzed: 09/27/23						
Mercury	2.47	0.20	ug/L	2.50		98.7	85-115			
Duplicate (AI34638-DUP1)		**Source: 23I3234-01**		Prepared & Analyzed: 09/27/23						
Mercury	ND	0.20	ug/L		ND				20	
Matrix Spike (AI34638-MS1)		**Source: 23I3234-01**		Prepared & Analyzed: 09/27/23						
Mercury	2.48	0.20	ug/L	2.50	ND	99.2	70-130			
Matrix Spike (AI34638-MS2)		**Source: 23I3234-02**		Prepared & Analyzed: 09/27/23						
Mercury	2.43	0.20	ug/L	2.50	ND	97.2	70-130			
Matrix Spike Dup (AI34638-MSD1)		**Source: 23I3234-01**		Prepared & Analyzed: 09/27/23						
Mercury	2.47	0.20	ug/L	2.50	ND	98.7	70-130	0.485	20	
Batch AI34644 - NB EPA 200 series DA										
Blank (AI34644-BLK1)				Prepared & Analyzed: 09/27/23						
Arsenic	ND	0.020	mg/L							
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Chromium	ND	0.010	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Vanadium	ND	0.020	mg/L							
Zinc	ND	0.30	mg/L							

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34644 - NB EPA 200 series DA										
LCS (AI34644-BS1)				Prepared & Analyzed: 09/27/23						
Arsenic	0.524	0.020	mg/L	0.500		105	85-115			
Boron	0.484	0.10	mg/L	0.500		96.8	85-115			
Calcium	21.8	5.0	mg/L	25.5		85.4	85-115			
Chromium	0.486	0.010	mg/L	0.500		97.3	85-115			
Copper	0.481	0.050	mg/L	0.500		96.2	85-115			
Iron	0.504	0.10	mg/L	0.500		101	85-115			
Lead	0.486	0.020	mg/L	0.500		97.3	85-115			
Magnesium	24.2	0.60	mg/L	25.5		95.0	85-115			
Manganese	0.500	0.020	mg/L	0.500		99.9	85-115			
Sodium	25.0	6.0	mg/L	25.5		97.9	85-115			
Vanadium	0.509	0.020	mg/L	0.500		102	85-115			
Zinc	0.451	0.30	mg/L	0.500		90.2	85-115			
LCS Dup (AI34644-BSD1)				Prepared & Analyzed: 09/27/23						
Arsenic	0.523	0.020	mg/L	0.500		105	85-115	0.286	20	
Boron	0.483	0.10	mg/L	0.500		96.5	85-115	0.248	20	
Calcium	21.9	5.0	mg/L	25.5		86.0	85-115	0.694	20	
Chromium	0.486	0.010	mg/L	0.500		97.3	85-115	0.0206	20	
Copper	0.484	0.050	mg/L	0.500		96.7	85-115	0.498	20	
Iron	0.505	0.10	mg/L	0.500		101	85-115	0.317	20	
Lead	0.488	0.020	mg/L	0.500		97.5	85-115	0.267	20	
Magnesium	24.2	0.60	mg/L	25.5		95.1	85-115	0.0776	20	
Manganese	0.500	0.020	mg/L	0.500		100	85-115	0.120	20	
Sodium	25.0	6.0	mg/L	25.5		98.2	85-115	0.367	20	
Vanadium	0.508	0.020	mg/L	0.500		102	85-115	0.138	20	
Zinc	0.453	0.30	mg/L	0.500		90.6	85-115	0.443	20	
Duplicate (AI34644-DUP1)		**Source: 23I3414-05**		Prepared & Analyzed: 09/27/23						
Arsenic	ND	0.020	mg/L		ND			200	20	
Boron	ND	0.10	mg/L		ND			0.695	20	
Calcium	ND	5.0	mg/L		ND				20	
Chromium	ND	0.010	mg/L		ND				20	
Copper	ND	0.050	mg/L		ND				20	
Iron	ND	0.10	mg/L		ND			4.09	20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	2.30	0.60	mg/L		2.38			3.41	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34644 - NB EPA 200 series DA										
Duplicate (AI34644-DUP1)	**Source: 23I3414-05**			Prepared & Analyzed: 09/27/23						
Manganese	ND	0.020	mg/L		ND				20	
Sodium	ND	6.0	mg/L		ND			3.17	20	
Vanadium	ND	0.020	mg/L		ND				20	
Zinc	ND	0.30	mg/L		ND				20	
MRL Check (AI34644-MRL1)				Prepared & Analyzed: 09/27/23						
Arsenic	0.0232	0.020	mg/L	0.0200		116	0-200			
Boron	0.0895	0.10	mg/L	0.100		89.5	0-200			
Calcium	ND	5.0	mg/L	5.00			0-200			
Chromium	0.00970	0.010	mg/L	0.0100		97.0	0-200			
Copper	0.0925	0.050	mg/L	0.100		92.5	0-200			
Iron	0.0925	0.10	mg/L	0.100		92.5	0-200			
Lead	0.0189	0.020	mg/L	0.0200		94.5	0-200			
Magnesium	0.450	0.60	mg/L	0.500		90.1	0-200			
Manganese	0.0185	0.020	mg/L	0.0200		92.5	0-200			
Sodium	4.98	6.0	mg/L	5.00		99.7	0-200			
Vanadium	0.0203	0.020	mg/L	0.0200		102	0-200			
Zinc	0.301	0.30	mg/L	0.350		85.9	0-200			
Matrix Spike (AI34644-MS1)	**Source: 23I3415-02**			Prepared & Analyzed: 09/27/23						
Arsenic	0.539	0.020	mg/L	0.500	ND	108	70-130			
Boron	0.577	0.10	mg/L	0.500	ND	99.0	70-130			
Chromium	0.486	0.010	mg/L	0.500	ND	97.2	70-130			
Copper	0.490	0.050	mg/L	0.500	ND	98.0	70-130			
Iron	0.547	0.10	mg/L	0.500	ND	109	70-130			
Lead	0.489	0.020	mg/L	0.500	ND	97.8	70-130			
Manganese	0.595	0.020	mg/L	0.500	0.0990	99.2	70-130			
Sodium	32.5	6.0	mg/L	25.5	7.46	98.0	70-130			
Vanadium	0.512	0.020	mg/L	0.500	ND	102	70-130			
Zinc	0.460	0.30	mg/L	0.500	ND	92.0	70-130			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34644 - NB EPA 200 series DA										
Blank (AI34644-BLK1)				Prepared & Analyzed: 09/27/23						
Hardness, Total	ND	15	mg/L							
Duplicate (AI34644-DUP1)		**Source: 23I3414-05**		Prepared & Analyzed: 09/27/23						
Hardness, Total	ND	15	mg/L		ND			6.93	20	
Batch AI34661 - NB General Prep										
Blank (AI34661-BLK1)				Prepared & Analyzed: 09/27/23						
Turbidity	ND	1.0	NTU							
Duplicate (AI34661-DUP1)		**Source: 23I3414-01**		Prepared & Analyzed: 09/27/23						
Turbidity	ND	1.0	NTU		ND			1.50	20	
MRL Check (AI34661-MRL1)				Prepared & Analyzed: 09/27/23						
Turbidity	0.990	1.0	NTU	10.0		9.90	0-200			
Batch AI34662 - General Preparation										
Duplicate (AI34662-DUP1)		**Source: 23I3455-01**		Prepared & Analyzed: 09/26/23						
Dissolved Oxygen	6.89	0.10	mg/L		6.89			0.00	20	
Batch AI34728 - General Preparation										
Blank (AI34728-BLK1)				Prepared & Analyzed: 09/28/23						
Total Suspended Solids	ND	1.0	mg/L							

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34728 - General Preparation										
LCS (AI34728-BS1)				Prepared & Analyzed: 09/28/23						
Total Suspended Solids	96.6	1.0	mg/L	100		96.6	90-110			
Duplicate (AI34728-DUP1)		**Source: 23I3485-03**		Prepared & Analyzed: 09/28/23						
Total Suspended Solids	107	1.0	mg/L		107			0.00	30	
Batch AI34800 - NB General Prep										
LCS (AI34800-BS1)				Prepared: 09/28/23 Analyzed: 09/29/23						
Total Alkalinity as CaCO3	994	20	mg/L	1000		99.4	80-120			
Duplicate (AI34800-DUP1)		**Source: 23I3778-01**		Prepared: 09/28/23 Analyzed: 09/29/23						
Total Alkalinity as CaCO3	59.0	20	mg/L		57.7			2.23	20	
Bicarbonate Alkalinity as CaCO3	59.0	20	mg/L		57.7			2.23	20	
Carbonate Alkalinity as CaCO3	ND	20	mg/L		ND				20	
Hydroxide Alkalinity as CaCO3	ND	20	mg/L		ND				20	
Batch AJ33291 - NB General Prep										
Duplicate (AJ33291-DUP1)		**Source: 23J0104-01**		Prepared: 10/03/23 Analyzed: 10/04/23						
Specific Conductance (EC)	765	10	umhos/cm@25°C		771			0.781	5	
Batch AJ33293 - NB General Prep										
Duplicate (AJ33293-DUP1)		**Source: 23J0104-01**		Prepared & Analyzed: 10/03/23						
pH	7.89	1.68	pH Units		7.90			0.127	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

Anions by EPA Method 300.0 - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AI34621 - NB General Prep										
Blank (AI34621-BLK1)				Prepared & Analyzed: 09/26/23						
Sulfate as SO4	ND	0.50	mg/L							
LCS (AI34621-BS1)				Prepared & Analyzed: 09/26/23						
Sulfate as SO4	8.61	0.50	mg/L	8.00		108	90-110			
Duplicate (AI34621-DUP1)		**Source: 23I3414-02**		Prepared & Analyzed: 09/26/23						
Sulfate as SO4	1.22	0.50	mg/L		1.22			0.181	20	
MRL Check (AI34621-MRL1)				Prepared & Analyzed: 09/26/23						
Sulfate as SO4	1.74	0.50	mg/L	1.60		109	60-140			
Matrix Spike (AI34621-MS1)		**Source: 23I3414-01**		Prepared & Analyzed: 09/26/23						
Sulfate as SO4	9.94	0.50	mg/L	8.00	1.21	109	80-120			
Matrix Spike (AI34621-MS2)		**Source: 23I3471-01**		Prepared & Analyzed: 09/26/23						
Sulfate as SO4	17.8	0.50	mg/L	8.00	9.72	101	80-120			
Matrix Spike Dup (AI34621-MSD1)		**Source: 23I3414-01**		Prepared & Analyzed: 09/26/23						
Sulfate as SO4	9.98	0.50	mg/L	8.00	1.21	110	80-120	0.319	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	10/06/23 05:59

Notes and Definitions

>2419.6 >2419.6

T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.

ND Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

REC Recovery

RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

alpha
Alpha Analytical Laboratories Inc.
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WATERS, SEDIMENTS, SOLIDS

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North Bay Laboratory (2303)
737 Southpoint Blvd, Ste D, Petaluma 94954

Bay Area Laboratory (2728)
262 Rickenbacker Circle, Livermore CA 94551

Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23I3414 Pg ____ of ____

Signature below authorizes work under terms stated on reverse side.

Report to	Invoice to (if different)	Project Information
Company: Bottle Rock Power	Contact:	Project ID: Bottle Rock Monitoring-SW
Attn: ~~Jay Hepper~~ Richard Lacy	Email address:	Project No:
Address: PO Box 326, Cobb, CA 95426	Address:	PO Number:
Phone/Fax: 707-529-3799	Phone/Fax:	
Email Address:		

Field Sampler - Printed Name & Signature: Richard Lacy / Richard Lacy

Sample Identification	Sampling Date	Sampling Time	Container: 40ml VOA Vial	Container: Plastic	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Drinking Water	Matrix: Wastewater	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	ALK, Ph, ec	Turbidity & TSS	Hardness, SO4	B, Cu, Fe & Pb	Mn, Na & Zn	Diss. Oxygen	Bac-T	As, Cr, V, Hg	Notes / DDW Source Codes
SW-7	9/26/23	7:26		X	X												6	X	X	X	X	X	X	X	X	
SW-9	9/26/23	8:00		X	X												6	X	X	X	X	X	X	X	X	
SW-10	9/26/23	8:25		X	X												6	X	X	X	X	X	X	X	X	
SW-8	9/26/23	8:55		X	X												6	X	X	X	X	X	X	X	X	
SW-6	9/26/23	10:00		X	X												6	X	X	X	X	X	X	X	X	

TAT
- Standard 10 days ◯
- RUSH: 5 days ◯ / 48 hours ◯ / Other: ____days ◯
- Preapproval required

TEMP °C
- Ukiah
- Livermore
- Elk Grove
- Petaluma 3.8
- Carlsbad

Relinquished by	Received by	Date	Time
Richard Lacy	LS	9/26/23	1:55

DDW Write On EDT Transmission? ◯ Yes ◯ No

State System Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ◯ Yes ◯ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies:

23I3414

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client:	**Bottle Rock Power**	**Client Code:**	**NB_BOTTLEROCK**	**Bid:**	**Master Bid**
Project:	**Surface Water**	**Project Number:**	**Bottle Rock Monitoring - SW**	**PO #:**	

Date Due:	10/10/23 15:00 (10 day TAT)		
Received By:	Luke Andrew Smith	Date Received:	09/26/23 11:35
Logged In By:	Luke Andrew Smith	Date Logged	09/26/23 12:07

temp 5.2°

Samples Received at: _____ deg C All containers received and intact: YES NO

Analysis	Department	Expires	Comments
23I3414-01 SW-7 [Water] Sampled 09/26/23 07:26			
Diss Oxygen SM4500	Wet Chem	09/26/23 07:40	
Hg CVAA Total 245.1	Metals	10/24/23 23:59	
Solids, TSS-SM2540D	Wet Chem	10/03/23 23:59	
23I3414-02 SW-9 [Water] Sampled 09/26/23 08:00			
Diss Oxygen SM4500	Wet Chem	09/26/23 08:14	
Hg CVAA Total 245.1	Metals	10/24/23 23:59	
Solids, TSS-SM2540D	Wet Chem	10/03/23 23:59	
23I3414-03 SW-10 [Water] Sampled 09/26/23 08:25			
Diss Oxygen SM4500	Wet Chem	09/26/23 08:39	
Hg CVAA Total 245.1	Metals	10/24/23 23:59	
Solids, TSS-SM2540D	Wet Chem	10/03/23 23:59	
23I3414-04 SW-8 [Water] Sampled 09/26/23 08:55			
Diss Oxygen SM4500	Wet Chem	09/26/23 09:09	
Hg CVAA Total 245.1	Metals	10/24/23 23:59	
Solids, TSS-SM2540D	Wet Chem	10/03/23 23:59	
23I3414-05 SW-6 [Water] Sampled 09/26/23 10:00			
Diss Oxygen SM4500	Wet Chem	09/26/23 10:14	
Hg CVAA Total 245.1	Metals	10/24/23 23:59	
Solids, TSS-SM2540D	Wet Chem	10/03/23 23:59	

LS	9/26/23		9/26/23
Relinquished By	Date	Received By	Date Tim
	9/26/23		9-26-23 1530
Relinquished By	Date	Received By	Date Tim

1530

2313414

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client:	**Bottle Rock Power**	**Client Code:**	**NB_BOTTLEROCK**	**Bid:**	**Master Bid**
Project:	**Surface Water**	**Project Number:**	**Bottle Rock Monitoring - SW**	**PO #:**	

Containers Supplied:

1L Poly - Unpres (F)
1L Poly - Unpres (F)
1L Poly - Unpres (F)
1L Poly - Unpres (F)
1L Poly - Unpres (F)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)

5.0

LS 9/26/23
Relinquished By Date

9/26/23
Received By Date Tim

9/26/23
Relinquished By Date

1530
Received By

9-26-23 1530
Date Tim

1530

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05 January 2024

Bottle Rock Power
Attn: M. Moore
4010 Stone Way North, Suite 400
Seattle, WA 98103
RE: Groundwater
Work Order: 23L2853

Enclosed are the results of analyses for samples received by the laboratory on 12/19/23 13:03. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	01/05/24 09:55

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-3	23L2853-01	Water	12/19/23 08:07	12/19/23 13:03
GW-1	23L2853-02	Water	12/19/23 08:20	12/19/23 13:03

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	01/05/24 09:55

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-3 (23L2853-01)			**Sample Type: Water**			**Sampled: 12/19/23 08:07**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	EPA 200.7	
Boron	**0.40**	**mg/L**	**0.10**	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	EPA 200.7	
Calcium	**34**	**mg/L**	**5.0**	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	EPA 200.7	
Iron	**0.40**	**mg/L**	**0.10**	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	EPA 200.7	
Magnesium	**10**	**mg/L**	**0.60**	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	EPA 200.7	
Manganese	**0.056**	**mg/L**	**0.020**	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	EPA 200.7	
Sodium	**26**	**mg/L**	**6.0**	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	**7.72**	**pH Units**	**1.68**	1	AL34725	12/22/23 10:52	12/22/23 15:27	2303	EPA 9045C	T-14
Specific Conductance (EC)	**370**	**umhos/cm@25°**	**10**	1	AL34727	12/22/23 10:54	12/22/23 15:19	2303	SM2510B	
Total Alkalinity as CaCO3	**180**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Total Suspended Solids	**1.4**	**mg/L**	**1.0**	1	AL34648	12/22/23 09:15	12/22/23 16:30	1551	SM2540D	
Turbidity	**2.6**	**NTU**	**1.0**	1	AL34615	12/20/23 11:57	12/20/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**180**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hardness, Total	**127**	**mg/L**	**15**	1	AL34564	12/20/23 07:20	12/20/23 09:23	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AL34497	12/19/23 13:05	12/19/23 19:11	2303	EPA 300.0	
Sulfate as SO4	**5.9**	**mg/L**	**0.50**	1	AL34497	12/19/23 13:05	12/19/23 19:11	2303	EPA 300.0	
GW-1 (23L2853-02)			**Sample Type: Water**			**Sampled: 12/19/23 08:20**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	EPA 200.7	
Calcium	**50**	**mg/L**	**5.0**	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	EPA 200.7	
Magnesium	**16**	**mg/L**	**0.60**	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	EPA 200.7	
Manganese	**0.11**	**mg/L**	**0.020**	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	EPA 200.7	
Sodium	**8.3**	**mg/L**	**6.0**	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	01/05/24 09:55

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-1 (23L2853-02)			**Sample Type: Water**			**Sampled: 12/19/23 08:20**				
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	**7.62**	**pH Units**	**1.68**	1	AL34725	12/22/23 10:52	12/22/23 15:27	2303	EPA 9045C	T-14
Specific Conductance (EC)	**420**	**umhos/cm@25°**	**10**	1	AL34727	12/22/23 10:54	12/22/23 15:19	2303	SM2510B	
Total Alkalinity as CaCO3	**170**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AL34648	12/22/23 09:15	12/22/23 16:30	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AL34615	12/20/23 11:57	12/20/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**170**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hardness, Total	**190**	**mg/L**	**15**	1	AL34564	12/20/23 07:20	12/20/23 09:26	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AL34497	12/19/23 13:05	12/19/23 19:24	2303	EPA 300.0	
Sulfate as SO4	**47**	**mg/L**	**1.0**	2	AL34497	12/19/23 13:05	12/20/23 11:11	2303	EPA 300.0	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	01/05/24 09:55

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34564 - NB EPA 200 series DA										
Blank (AL34564-BLK1)				Prepared & Analyzed: 12/20/23						
Arsenic	ND	0.020	mg/L							
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Zinc	ND	0.30	mg/L							
LCS (AL34564-BS1)				Prepared & Analyzed: 12/20/23						
Arsenic	0.511	0.020	mg/L	0.500		102	85-115			
Boron	0.482	0.10	mg/L	0.500		96.4	85-115			
Calcium	24.6	5.0	mg/L	25.5		96.4	85-115			
Copper	0.479	0.050	mg/L	0.500		95.8	85-115			
Iron	0.514	0.10	mg/L	0.500		103	85-115			
Lead	0.474	0.020	mg/L	0.500		94.8	85-115			
Magnesium	26.3	0.60	mg/L	25.5		103	85-115			
Manganese	0.496	0.020	mg/L	0.500		99.3	85-115			
Sodium	26.8	6.0	mg/L	25.5		105	85-115			
Zinc	0.488	0.30	mg/L	0.500		97.6	85-115			
LCS Dup (AL34564-BSD1)				Prepared & Analyzed: 12/20/23						
Arsenic	0.513	0.020	mg/L	0.500		103	85-115	0.293	20	
Boron	0.484	0.10	mg/L	0.500		96.7	85-115	0.331	20	
Calcium	24.7	5.0	mg/L	25.5		96.8	85-115	0.427	20	
Copper	0.480	0.050	mg/L	0.500		96.1	85-115	0.271	20	
Iron	0.515	0.10	mg/L	0.500		103	85-115	0.175	20	
Lead	0.476	0.020	mg/L	0.500		95.2	85-115	0.442	20	
Magnesium	26.5	0.60	mg/L	25.5		104	85-115	0.561	20	
Manganese	0.497	0.020	mg/L	0.500		99.5	85-115	0.221	20	
Sodium	26.7	6.0	mg/L	25.5		105	85-115	0.134	20	
Zinc	0.491	0.30	mg/L	0.500		98.1	85-115	0.531	20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	01/05/24 09:55

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34564 - NB EPA 200 series DA										
Duplicate (AL34564-DUP1)	**Source: 23L2853-01**			Prepared & Analyzed: 12/20/23						
Arsenic	ND	0.020	mg/L		ND				20	
Boron	0.408	0.10	mg/L		0.404			1.01	20	
Calcium	33.6	5.0	mg/L		33.6			0.261	20	
Copper	ND	0.050	mg/L		ND				20	
Iron	0.405	0.10	mg/L		0.402			0.744	20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	10.5	0.60	mg/L		10.5			0.249	20	
Manganese	0.0560	0.020	mg/L		0.0560			0.00	20	
Sodium	25.6	6.0	mg/L		25.8			0.730	20	
Zinc	ND	0.30	mg/L		ND				20	
MRL Check (AL34564-MRL1)				Prepared & Analyzed: 12/20/23						
Arsenic	0.0242	0.020	mg/L	0.0200		121	0-200			
Boron	0.106	0.10	mg/L	0.100		106	0-200			
Calcium	4.72	5.0	mg/L	5.00		94.3	0-200			
Copper	0.0967	0.050	mg/L	0.100		96.7	0-200			
Iron	0.106	0.10	mg/L	0.100		106	0-200			
Lead	0.0206	0.020	mg/L	0.0200		103	0-200			
Magnesium	0.526	0.60	mg/L	0.500		105	0-200			
Manganese	0.0212	0.020	mg/L	0.0200		106	0-200			
Sodium	5.25	6.0	mg/L	5.00		105	0-200			
Zinc	0.364	0.30	mg/L	0.350		104	0-200			
Matrix Spike (AL34564-MS1)	**Source: 23L2853-02**			Prepared & Analyzed: 12/20/23						
Arsenic	0.528	0.020	mg/L	0.500	ND	106	70-130			
Boron	0.574	0.10	mg/L	0.500	ND	99.9	70-130			
Calcium	72.6	5.0	mg/L	25.5	49.7	89.6	70-130			
Copper	0.494	0.050	mg/L	0.500	ND	98.8	70-130			
Iron	0.577	0.10	mg/L	0.500	ND	104	70-130			
Lead	0.481	0.020	mg/L	0.500	ND	96.2	70-130			
Magnesium	41.2	0.60	mg/L	25.5	16.1	98.5	70-130			
Manganese	0.596	0.020	mg/L	0.500	0.108	97.5	70-130			
Sodium	34.5	6.0	mg/L	25.5	8.25	103	70-130			
Zinc	0.493	0.30	mg/L	0.500	ND	98.6	70-130			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	01/05/24 09:55

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34564 - NB EPA 200 series DA										
Blank (AL34564-BLK1)				Prepared & Analyzed: 12/20/23						
Hardness, Total	ND	15	mg/L							
Duplicate (AL34564-DUP1)	**Source: 23L2853-01**			Prepared & Analyzed: 12/20/23						
Hardness, Total	127	15	mg/L		127			0.257	20	
Batch AL34615 - NB General Prep										
Blank (AL34615-BLK1)				Prepared & Analyzed: 12/20/23						
Turbidity	ND	1.0	NTU							
Calibration Check (AL34615-CCV1)				Prepared & Analyzed: 12/20/23						
Turbidity	9.27	1.0	NTU				0-200			
Duplicate (AL34615-DUP1)	**Source: 23L2853-01**			Prepared & Analyzed: 12/20/23						
Turbidity	2.50	1.0	NTU		2.64			5.45	20	
MRL Check (AL34615-MRL1)				Prepared & Analyzed: 12/20/23						
Turbidity	0.820	1.0	NTU	10.0		8.20	0-200			
Batch AL34648 - General Preparation										
Blank (AL34648-BLK1)				Prepared & Analyzed: 12/22/23						
Total Suspended Solids	ND	1.0	mg/L							
LCS (AL34648-BS1)				Prepared & Analyzed: 12/22/23						
Total Suspended Solids	98.0	1.0	mg/L	100		98.0	90-110			

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	01/05/24 09:55

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34648 - General Preparation										
Duplicate (AL34648-DUP1)		**Source: 23L2947-02**		Prepared & Analyzed: 12/22/23						
Total Suspended Solids	312	1.0	mg/L		322			3.15	30	
Batch AL34725 - NB General Prep										
Duplicate (AL34725-DUP1)		**Source: 23L2850-01**		Prepared & Analyzed: 12/22/23						
pH	7.53	1.68	pH Units		7.49			0.533	20	
Batch AL34727 - NB General Prep										
Duplicate (AL34727-DUP1)		**Source: 23L2850-01**		Prepared & Analyzed: 12/22/23						
Specific Conductance (EC)	105	10	umhos/cm@25°C		105			0.285	5	
Batch AL34729 - NB General Prep										
LCS (AL34729-BS1)				Prepared & Analyzed: 12/22/23						
Total Alkalinity as CaCO3	1070	30	mg/L	1000		107	80-120			
Duplicate (AL34729-DUP1)		**Source: 23L2850-01**		Prepared & Analyzed: 12/22/23						
Total Alkalinity as CaCO3	47.4	30	mg/L		48.2			1.67	20	
Bicarbonate Alkalinity as CaCO3	47.4	30	mg/L		48.2			1.67	20	
Carbonate Alkalinity as CaCO3	ND	30	mg/L		ND				20	
Hydroxide Alkalinity as CaCO3	ND	30	mg/L		ND				20	

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	01/05/24 09:55

Anions by EPA Method 300.0 - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34497 - NB General Prep										
Blank (AL34497-BLK1)				Prepared & Analyzed: 12/19/23						
Nitrate as N	ND	0.40	mg/L							
Sulfate as SO4	ND	0.50	mg/L							
LCS (AL34497-BS1)				Prepared & Analyzed: 12/19/23						
Nitrate as N	1.85	0.40	mg/L	1.80		102	90-110			
Sulfate as SO4	8.40	0.50	mg/L	8.00		105	90-110			
Duplicate (AL34497-DUP1)		**Source: 23L2828-04**		Prepared & Analyzed: 12/19/23						
Nitrate as N	ND	0.40	mg/L		ND			3.69	20	
Sulfate as SO4	7.39	0.50	mg/L		7.32			0.938	20	
MRL Check (AL34497-MRL1)				Prepared & Analyzed: 12/19/23						
Nitrate as N	0.365	0.40	mg/L	0.361		101	60-140			
Sulfate as SO4	1.66	0.50	mg/L	1.60		104	60-140			
Matrix Spike (AL34497-MS1)		**Source: 23L2828-03**		Prepared & Analyzed: 12/19/23						
Nitrate as N	1.92	0.40	mg/L	1.80	ND	91.1	80-120			
Sulfate as SO4	65.2	0.50	mg/L	8.00	68.5	NR	80-120			QM-02
Matrix Spike (AL34497-MS2)		**Source: 23L2850-01**		Prepared & Analyzed: 12/19/23						
Nitrate as N	2.11	0.40	mg/L	1.80	ND	102	80-120			
Sulfate as SO4	12.0	0.50	mg/L	8.00	3.51	106	80-120			
Matrix Spike Dup (AL34497-MSD1)		**Source: 23L2828-03**		Prepared & Analyzed: 12/19/23						
Nitrate as N	1.96	0.40	mg/L	1.80	ND	93.1	80-120	1.83	20	
Sulfate as SO4	65.1	0.50	mg/L	8.00	68.5	NR	80-120	0.187	20	QM-02

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Bottle Rock Power	Project Manager: M. Moore	
4010 Stone Way North, Suite 400	Project: Groundwater	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - GW	01/05/24 09:55

Notes and Definitions

QM-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
T-14	Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
REC	Recovery
RPD	Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

alpha
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WATERS, SEDIMENTS, SOLIDS

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North Bay Laboratory (2303)
737 Southpoint Blvd, Ste D, Petaluma 94954

Bay Area Laboratory (2728)
262 Rickenbacker Circle, Livermore CA 94551

Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23L2853 Pg _____ of _____

Report to	Invoice to (if different)	Project Information
Company: Bottle Rock Power	Contact:	Project ID: Bottle Rock Monitoring-GW
Attn: [redacted] Richard Lacy	Email address:	Project No:
Address: PO Box 326, Cobb, CA 95426	Address:	PO Number:
Phone/Fax: 707-529-3799	Phone/Fax:	
Email Address:		

Signature below authorizes work under terms stated on reverse side.

Field Sampler - Printed Name & Signature: Richard Lacy

Sample Identification	Sampling Date	Sampling Time	Container: 40ml VOA Vial	Container: Plastic	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Drinking Water	Matrix: Wastewater	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	ALK, Ph, ec	Turbidity & TSS	Hardness, SO4	B, Cu, Fe & Pb	Mn, Na & Zn	As & NO3			Field pH	Field TDS ppm		Notes / DDW Source Codes
GW-3	12/19/2	8:07		X													3	X	X	X	X	X	X						
GW-1	12/19/	8:[illegible]		X													3	X	X	X	X	X	X						

TAT
Standard 10 days ○
RUSH: 5 days ○ 48 hours ○ Other: ___days ○
Preapproval required

TEMP °C
Ukiah
Livermore
Elk Grove
Petaluma 11.8
Carlsbad

Relinquished by	Received by	Date	Time
Richard Lacy	CB	121923	1303

DDW Write On EDT Transmission? ○ Yes ○ No

State **System** Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time:	Mileage:	Misc. Supplies:

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03 January 2024

Bottle Rock Power
Attn: Richard
4010 Stone Way North, Suite 400
Seattle, WA 98103
RE: Surface Water
Work Order: 23L2850

Enclosed are the results of analyses for samples received by the laboratory on 12/19/23 13:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D| Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-7	23L2850-01	Water	12/19/23 08:45	12/19/23 13:05
SW-9	23L2850-02	Water	12/19/23 08:55	12/19/23 13:05
SW-10	23L2850-03	Water	12/19/23 09:05	12/19/23 13:05
SW-8	23L2850-04	Water	12/19/23 09:15	12/19/23 13:05
SW-6	23L2850-05	Water	12/19/23 09:50	12/19/23 13:05

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (23L2850-01)			**Sample Type: Water**			**Sampled: 12/19/23 08:45**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Calcium	**7.4**	**mg/L**	**5.0**	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Iron	**1.1**	**mg/L**	**0.10**	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Magnesium	**7.5**	**mg/L**	**0.60**	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Manganese	**0.027**	**mg/L**	**0.020**	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AL34996	12/26/23 06:38	12/26/23 13:34	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**10**	**mg/L**	**0.10**	1	AL35067	12/21/23 17:00	12/21/23 17:00	1551	SM4500-O G	T-14
pH	**7.49**	**pH Units**	**1.68**	1	AL34725	12/22/23 10:52	12/22/23 15:27	2303	EPA 9045C	T-14
Specific Conductance (EC)	**110**	**umhos/cm@25°**	**10**	1	AL34727	12/22/23 10:54	12/22/23 15:19	2303	SM2510B	
Total Alkalinity as CaCO3	**48**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Total Suspended Solids	**13**	**mg/L**	**1.0**	1	AL34648	12/22/23 09:15	12/22/23 16:30	1551	SM2540D	
Turbidity	**20**	**NTU**	**1.0**	1	AL34615	12/20/23 11:57	12/20/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**48**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hardness, Total	**50**	**mg/L**	**15**	1	AL34557	12/20/23 06:54	12/20/23 13:18	2303	SM2340B	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (23L2850-01)			**Sample Type: Water**			**Sampled: 12/19/23 08:45**				
Anions by EPA Method 300.0										
Sulfate as SO4	**3.5**	**mg/L**	**0.50**	1	AL34497	12/19/23 13:05	12/19/23 17:41	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AL34516	12/19/23 15:35	12/20/23 16:20	2303	SM9223B	
E. Coli	**550**	**MPN/100mL**	**1.0**	1	AL34516	12/19/23 15:35	12/20/23 16:20	2303	SM9223B	
SW-9 (23L2850-02)			**Sample Type: Water**			**Sampled: 12/19/23 08:55**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Calcium	**6.6**	**mg/L**	**5.0**	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Iron	**0.89**	**mg/L**	**0.10**	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Magnesium	**4.3**	**mg/L**	**0.60**	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Manganese	**0.027**	**mg/L**	**0.020**	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AL34996	12/26/23 06:38	12/26/23 13:37	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-9 (23L2850-02)			**Sample Type: Water**			**Sampled: 12/19/23 08:55**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**11**	**mg/L**	**0.10**	1	AL35067	12/21/23 17:00	12/21/23 17:00	1551	SM4500-O G	T-14
pH	**7.65**	**pH Units**	**1.68**	1	AL34725	12/22/23 10:52	12/22/23 15:27	2303	EPA 9045C	T-14
Specific Conductance (EC)	**78**	**umhos/cm@25°**	**10**	1	AL34727	12/22/23 10:54	12/22/23 15:19	2303	SM2510B	
Total Alkalinity as CaCO3	**38**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Total Suspended Solids	**14**	**mg/L**	**1.0**	1	AL34648	12/22/23 09:15	12/22/23 16:30	1551	SM2540D	
Turbidity	**15**	**NTU**	**1.0**	1	AL34615	12/20/23 11:57	12/20/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**38**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hardness, Total	**34**	**mg/L**	**15**	1	AL34557	12/20/23 06:54	12/20/23 13:21	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**2.3**	**mg/L**	**0.50**	1	AL34497	12/19/23 13:05	12/19/23 17:53	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AL34516	12/19/23 15:35	12/20/23 16:20	2303	SM9223B	
E. Coli	**180**	**MPN/100mL**	**1.0**	1	AL34516	12/19/23 15:35	12/20/23 16:20	2303	SM9223B	
SW-10 (23L2850-03)			**Sample Type: Water**			**Sampled: 12/19/23 09:05**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Calcium	ND	mg/L	5.0	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Iron	**1.7**	**mg/L**	**0.10**	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Magnesium	**5.8**	**mg/L**	**0.60**	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Manganese	**0.073**	**mg/L**	**0.020**	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AL34996	12/26/23 06:38	12/26/23 13:39	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-10 (23L2850-03)			**Sample Type: Water**			**Sampled: 12/19/23 09:05**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**10**	**mg/L**	**0.10**	1	AL35067	12/21/23 17:00	12/21/23 17:00	1551	SM4500-O G	T-14
pH	**7.36**	**pH Units**	**1.68**	1	AL34725	12/22/23 10:52	12/22/23 15:27	2303	EPA 9045C	T-14
Specific Conductance (EC)	**85**	**umhos/cm@25°**	**10**	1	AL34727	12/22/23 10:54	12/22/23 15:19	2303	SM2510B	
Total Alkalinity as CaCO3	**37**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Total Suspended Solids	**38**	**mg/L**	**1.0**	1	AL34648	12/22/23 09:15	12/22/23 16:30	1551	SM2540D	
Turbidity	**19**	**NTU**	**1.0**	1	AL34615	12/20/23 11:57	12/20/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**37**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hardness, Total	**35**	**mg/L**	**15**	1	AL34557	12/20/23 06:54	12/20/23 13:24	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**1.7**	**mg/L**	**0.50**	1	AL34497	12/19/23 13:05	12/19/23 18:06	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AL34516	12/19/23 15:35	12/20/23 16:20	2303	SM9223B	
E. Coli	**770**	**MPN/100mL**	**1.0**	1	AL34516	12/19/23 15:35	12/20/23 16:20	2303	SM9223B	
SW-8 (23L2850-04)			**Sample Type: Water**			**Sampled: 12/19/23 09:15**				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Calcium	**5.0**	**mg/L**	**5.0**	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Iron	**1.3**	**mg/L**	**0.10**	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Magnesium	**5.7**	**mg/L**	**0.60**	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Manganese	**0.042**	**mg/L**	**0.020**	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AL34996	12/26/23 06:38	12/26/23 13:42	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-8 (23L2850-04)			**Sample Type: Water**				**Sampled: 12/19/23 09:15**			
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**10**	**mg/L**	**0.10**	1	AL35067	12/21/23 17:00	12/21/23 17:00	1551	SM4500-O G	T-14
pH	**7.35**	**pH Units**	**1.68**	1	AL34725	12/22/23 10:52	12/22/23 15:27	2303	EPA 9045C	T-14
Specific Conductance (EC)	**84**	**umhos/cm@25°**	**10**	1	AL34727	12/22/23 10:54	12/22/23 15:19	2303	SM2510B	
Total Alkalinity as CaCO3	**42**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Total Suspended Solids	**24**	**mg/L**	**1.0**	1	AL34648	12/22/23 09:15	12/22/23 16:30	1551	SM2540D	
Turbidity	**19**	**NTU**	**1.0**	1	AL34615	12/20/23 11:57	12/20/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**42**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hardness, Total	**36**	**mg/L**	**15**	1	AL34557	12/20/23 06:54	12/20/23 13:28	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**2.0**	**mg/L**	**0.50**	1	AL34497	12/19/23 13:05	12/19/23 18:45	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	**690**	**MPN/100mL**	**1.0**	1	AL34516	12/19/23 15:35	12/20/23 16:20	2303	SM9223B	
E. Coli	**460**	**MPN/100mL**	**1.0**	1	AL34516	12/19/23 15:35	12/20/23 16:20	2303	SM9223B	
SW-6 (23L2850-05)			**Sample Type: Water**				**Sampled: 12/19/23 09:50**			
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Calcium	**6.4**	**mg/L**	**5.0**	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Chromium	**0.017**	**mg/L**	**0.010**	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Iron	**2.5**	**mg/L**	**0.10**	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Magnesium	**11**	**mg/L**	**0.60**	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Manganese	**0.072**	**mg/L**	**0.020**	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AL34996	12/26/23 06:38	12/26/23 13:45	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	EPA 200.7	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (23L2850-05)			**Sample Type: Water**			**Sampled: 12/19/23 09:50**				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	**10**	**mg/L**	**0.10**	1	AL35067	12/21/23 17:00	12/21/23 17:00	1551	SM4500-O G	T-14
pH	**7.54**	**pH Units**	**1.68**	1	AL34725	12/22/23 10:52	12/22/23 15:27	2303	EPA 9045C	T-14
Specific Conductance (EC)	**120**	**umhos/cm@25°**	**10**	1	AL34727	12/22/23 10:54	12/22/23 15:19	2303	SM2510B	
Total Alkalinity as CaCO3	**60**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Total Suspended Solids	**29**	**mg/L**	**1.0**	1	AL34648	12/22/23 09:15	12/22/23 16:30	1551	SM2540D	
Turbidity	**24**	**NTU**	**1.0**	1	AL34615	12/20/23 11:57	12/20/23 16:00	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	**60**	**mg/L**	**30**	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AL34729	12/22/23 11:00	12/22/23 11:30	2303	SM2320B	
Hardness, Total	**62**	**mg/L**	**15**	1	AL34557	12/20/23 06:54	12/20/23 13:31	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	**2.8**	**mg/L**	**0.50**	1	AL34497	12/19/23 13:05	12/19/23 18:58	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AL34516	12/19/23 15:35	12/20/23 16:20	2303	SM9223B	
E. Coli	**370**	**MPN/100mL**	**1.0**	1	AL34516	12/19/23 15:35	12/20/23 16:20	2303	SM9223B	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34557 - NB EPA 200 series										
Blank (AL34557-BLK1)				Prepared & Analyzed: 12/20/23						
Arsenic	ND	0.020	mg/L							
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Chromium	ND	0.010	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Vanadium	ND	0.020	mg/L							
Zinc	ND	0.30	mg/L							
LCS (AL34557-BS1)				Prepared & Analyzed: 12/20/23						
Arsenic	0.504	0.020	mg/L	0.500		101	85-115			
Boron	0.481	0.10	mg/L	0.500		96.1	85-115			
Calcium	23.8	5.0	mg/L	25.5		93.3	85-115			
Chromium	0.459	0.010	mg/L	0.500		91.7	85-115			
Copper	0.471	0.050	mg/L	0.500		94.2	85-115			
Iron	0.502	0.10	mg/L	0.500		100	85-115			
Lead	0.476	0.020	mg/L	0.500		95.3	85-115			
Magnesium	25.2	0.60	mg/L	25.5		98.8	85-115			
Manganese	0.478	0.020	mg/L	0.500		95.6	85-115			
Sodium	25.9	6.0	mg/L	25.5		101	85-115			
Vanadium	0.476	0.020	mg/L	0.500		95.2	85-115			
Zinc	0.509	0.30	mg/L	0.500		102	85-115			
LCS Dup (AL34557-BSD1)				Prepared & Analyzed: 12/20/23						
Arsenic	0.524	0.020	mg/L	0.500		105	85-115	3.79	20	
Boron	0.496	0.10	mg/L	0.500		99.2	85-115	3.17	20	
Calcium	24.6	5.0	mg/L	25.5		96.4	85-115	3.22	20	
Chromium	0.474	0.010	mg/L	0.500		94.9	85-115	3.39	20	
Copper	0.485	0.050	mg/L	0.500		96.9	85-115	2.89	20	
Iron	0.516	0.10	mg/L	0.500		103	85-115	2.71	20	
Lead	0.491	0.020	mg/L	0.500		98.2	85-115	3.04	20	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34557 - NB EPA 200 series										
LCS Dup (AL34557-BSD1)				Prepared & Analyzed: 12/20/23						
Magnesium	26.1	0.60	mg/L	25.5		102	85-115	3.48	20	
Manganese	0.496	0.020	mg/L	0.500		99.3	85-115	3.76	20	
Sodium	26.7	6.0	mg/L	25.5		105	85-115	3.10	20	
Vanadium	0.494	0.020	mg/L	0.500		98.7	85-115	3.65	20	
Zinc	0.515	0.30	mg/L	0.500		103	85-115	1.17	20	
Duplicate (AL34557-DUP1)		**Source: 23L2850-01**		Prepared & Analyzed: 12/20/23						
Arsenic	ND	0.020	mg/L		ND				20	
Boron	ND	0.10	mg/L		ND			0.738	20	
Calcium	7.46	5.0	mg/L		7.41			0.654	20	
Chromium	ND	0.010	mg/L		ND			0.00	20	
Copper	ND	0.050	mg/L		ND				20	
Iron	1.15	0.10	mg/L		1.15			0.453	20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	7.57	0.60	mg/L		7.55			0.291	20	
Manganese	0.0266	0.020	mg/L		0.0266			0.00	20	
Sodium	ND	6.0	mg/L		ND				20	
Vanadium	ND	0.020	mg/L		ND			3.28	20	
Zinc	ND	0.30	mg/L		ND				20	
MRL Check (AL34557-MRL1)				Prepared & Analyzed: 12/20/23						
Arsenic	0.0191	0.020	mg/L	0.0200		95.5	0-200			
Boron	0.0840	0.10	mg/L	0.100		84.0	0-200			
Calcium	4.56	5.0	mg/L	5.00		91.1	0-200			
Chromium	0.00850	0.010	mg/L	0.0100		85.0	0-200			
Copper	0.0907	0.050	mg/L	0.100		90.7	0-200			
Iron	0.100	0.10	mg/L	0.100		100	0-200			
Lead	0.0177	0.020	mg/L	0.0200		88.5	0-200			
Magnesium	0.520	0.60	mg/L	0.500		104	0-200			
Manganese	0.0198	0.020	mg/L	0.0200		99.0	0-200			
Sodium	5.34	6.0	mg/L	5.00		107	0-200			
Vanadium	0.0186	0.020	mg/L	0.0200		93.0	0-200			
Zinc	0.362	0.30	mg/L	0.350		104	0-200			

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Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34557 - NB EPA 200 series										
Matrix Spike (AL34557-MS1)	**Source: 23L2850-02**			Prepared & Analyzed: 12/20/23						
Arsenic	0.501	0.020	mg/L	0.500	ND	100	70-130			
Boron	0.530	0.10	mg/L	0.500	ND	97.7	70-130			
Calcium	30.6	5.0	mg/L	25.5	6.61	94.2	70-130			
Chromium	0.462	0.010	mg/L	0.500	ND	92.4	70-130			
Copper	0.474	0.050	mg/L	0.500	ND	94.9	70-130			
Iron	1.51	0.10	mg/L	0.500	0.892	124	70-130			
Lead	0.473	0.020	mg/L	0.500	ND	94.6	70-130			
Magnesium	29.7	0.60	mg/L	25.5	4.31	99.5	70-130			
Manganese	0.505	0.020	mg/L	0.500	0.0269	95.7	70-130			
Sodium	28.3	6.0	mg/L	25.5	ND	111	70-130			
Vanadium	0.478	0.020	mg/L	0.500	ND	95.7	70-130			
Zinc	0.513	0.30	mg/L	0.500	ND	103	70-130			
Batch AL34996 - Hg Digest										
Blank (AL34996-BLK1)				Prepared & Analyzed: 12/26/23						
Mercury	ND	0.20	ug/L							
LCS (AL34996-BS1)				Prepared & Analyzed: 12/26/23						
Mercury	2.50	0.20	ug/L	2.50		100	85-115			
Duplicate (AL34996-DUP1)	**Source: 23L2795-01**			Prepared & Analyzed: 12/26/23						
Mercury	ND	0.20	ug/L		ND				20	
Matrix Spike (AL34996-MS1)	**Source: 23L2795-01**			Prepared & Analyzed: 12/26/23						
Mercury	2.48	0.20	ug/L	2.50	ND	99.4	70-130			

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34996 - Hg Digest										
Matrix Spike (AL34996-MS2)		**Source: 23L2795-02**		Prepared & Analyzed: 12/26/23						
Mercury	2.41	0.20	ug/L	2.50	ND	96.4	70-130			
Matrix Spike Dup (AL34996-MSD1)		**Source: 23L2795-01**		Prepared & Analyzed: 12/26/23						
Mercury	2.50	0.20	ug/L	2.50	ND	100	70-130	0.602	20	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34557 - NB EPA 200 series										
Blank (AL34557-BLK1)				Prepared & Analyzed: 12/20/23						
Hardness, Total	ND	15	mg/L							
Duplicate (AL34557-DUP1)		**Source: 23L2850-01**		Prepared & Analyzed: 12/20/23						
Hardness, Total	50	15	mg/L		50			0.427	20	
Batch AL34615 - NB General Prep										
Blank (AL34615-BLK1)				Prepared & Analyzed: 12/20/23						
Turbidity	ND	1.0	NTU							
Calibration Check (AL34615-CCV1)				Prepared & Analyzed: 12/20/23						
Turbidity	9.27	1.0	NTU				0-200			
Duplicate (AL34615-DUP1)		**Source: 23L2853-01**		Prepared & Analyzed: 12/20/23						
Turbidity	2.50	1.0	NTU		2.64			5.45	20	
MRL Check (AL34615-MRL1)				Prepared & Analyzed: 12/20/23						
Turbidity	0.820	1.0	NTU	10.0		8.20	0-200			
Batch AL34648 - General Preparation										
Blank (AL34648-BLK1)				Prepared & Analyzed: 12/22/23						
Total Suspended Solids	ND	1.0	mg/L							
LCS (AL34648-BS1)				Prepared & Analyzed: 12/22/23						
Total Suspended Solids	98.0	1.0	mg/L	100		98.0	90-110			

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34648 - General Preparation										
Duplicate (AL34648-DUP1)		**Source: 23L2947-02**		Prepared & Analyzed: 12/22/23						
Total Suspended Solids	312	1.0	mg/L		322			3.15	30	
Batch AL34725 - NB General Prep										
Duplicate (AL34725-DUP1)		**Source: 23L2850-01**		Prepared & Analyzed: 12/22/23						
pH	7.53	1.68	pH Units		7.49			0.533	20	
Batch AL34727 - NB General Prep										
Duplicate (AL34727-DUP1)		**Source: 23L2850-01**		Prepared & Analyzed: 12/22/23						
Specific Conductance (EC)	105	10	umhos/cm@25°C		105			0.285	5	
Batch AL34729 - NB General Prep										
LCS (AL34729-BS1)				Prepared & Analyzed: 12/22/23						
Total Alkalinity as CaCO3	1070	30	mg/L	1000		107	80-120			
Duplicate (AL34729-DUP1)		**Source: 23L2850-01**		Prepared & Analyzed: 12/22/23						
Total Alkalinity as CaCO3	47.4	30	mg/L		48.2			1.67	20	
Bicarbonate Alkalinity as CaCO3	47.4	30	mg/L		48.2			1.67	20	
Carbonate Alkalinity as CaCO3	ND	30	mg/L		ND				20	
Hydroxide Alkalinity as CaCO3	ND	30	mg/L		ND				20	
Batch AL35067 - General Preparation										
Duplicate (AL35067-DUP1)		**Source: 23L2850-04**		Prepared & Analyzed: 12/21/23						
Dissolved Oxygen	10.4	0.10	mg/L		10.4			0.385	20	

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

Anions by EPA Method 300.0 - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AL34497 - NB General Prep										
Blank (AL34497-BLK1)				Prepared & Analyzed: 12/19/23						
Sulfate as SO4	ND	0.50	mg/L							
LCS (AL34497-BS1)				Prepared & Analyzed: 12/19/23						
Sulfate as SO4	8.40	0.50	mg/L	8.00		105	90-110			
Duplicate (AL34497-DUP1)	**Source: 23L2828-04**			Prepared & Analyzed: 12/19/23						
Sulfate as SO4	7.39	0.50	mg/L		7.32			0.938	20	
MRL Check (AL34497-MRL1)				Prepared & Analyzed: 12/19/23						
Sulfate as SO4	1.66	0.50	mg/L	1.60		104	60-140			
Matrix Spike (AL34497-MS1)	**Source: 23L2828-03**			Prepared & Analyzed: 12/19/23						
Sulfate as SO4	65.2	0.50	mg/L	8.00	68.5	NR	80-120			QM-02
Matrix Spike (AL34497-MS2)	**Source: 23L2850-01**			Prepared & Analyzed: 12/19/23						
Sulfate as SO4	12.0	0.50	mg/L	8.00	3.51	106	80-120			
Matrix Spike Dup (AL34497-MSD1)	**Source: 23L2828-03**			Prepared & Analyzed: 12/19/23						
Sulfate as SO4	65.1	0.50	mg/L	8.00	68.5	NR	80-120	0.187	20	QM-02

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Bottle Rock Power	Project Manager: Richard	
4010 Stone Way North, Suite 400	Project: Surface Water	Reported:
Seattle, WA 98103	Project Number: Bottle Rock Monitoring - SW	01/03/24 11:39

Notes and Definitions

>2419.6 >2419.6

QM-02 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.

ND Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

REC Recovery

RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

alpha
Alpha Analytical Laboratories Inc.
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WATERS, SEDIMENTS, SOLIDS

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Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23L2850 Pg ____ of ____

Signature below authorizes work under terms stated on reverse side.

Report to	Invoice to (if different)	Project Information
Company: Bottle Rock Power	Contact:	Project ID: Bottle Rock Monitoring-SW
Attn: [redacted] Richard Lacy	Email address:	Project No:
Address: PO Box 326, Cobb, CA 95426	Address:	PO Number:
Phone/Fax: 707-529-3799	Phone/Fax:	
Email Address:		

Field Sampler - Printed Name & Signature: Richard Lacy

TAT
- Standard 10 days ○
- RUSH: 5 days ○
- 48 hours ○
- Other: ____days ○
- Preapproval required

TEMP °C
- Ukiah
- Livermore
- Elk Grove
- Petaluma 11.8
- Carlsbad

Sample Identification	Sampling Date	Sampling Time	Container: 40ml VOA Vial	Container: Plastic	Container: Glass	Container: Sleeve	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: H2SO4	Preservative: Other	Preservative: None	Matrix: Drinking Water	Matrix: Wastewater	Matrix: Soil	Matrix: Other	Total Number of Containers per Sample ID	Analysis Request: ALK, Ph, ec	Turbidity & TSS	Hardness, SO4	B, Cu, Fe & Pb	Mn, Na & Zn	Diss. Oxygen	Bac-T	As, Cr, V, Hg	Notes / DDW Source Codes
SW-7	12/19/23	8:45		X	X												6	X	X	X	X	X	X	X	X	
SW-9	12/19/23	8:55		X	X												6	X	X	X	X	X	X	X	X	
SW-10	12/19/23	9:05		X	X												6	X	X	X	X	X	X	X	X	
SW-8	12/19/23	9:15		X	X												6	X	X	X	X	X	X	X	X	
SW-6	12/19/23	9:50		X	X												6	X	X	X	X	X	X	X	X	

Relinquished by	Received by	Date	Time
Richard Lacy	CB	121823	1305

DDW Write On EDT Transmission? ○ Yes ○ No

State **System** Number: _____

If "Y" please enter the Source Number(s) in the column above

CA Geotracker EDF Report? ○ Yes ○ No

Global ID: Sampling Company Log Code:

EDF to (Email Address):

Travel and Site Time: | Mileage: | Misc. Supplies: