

**AGREEMENT
CITY OF FRESNO, CALIFORNIA
CONSULTANT SERVICES**

THIS AGREEMENT is made and entered into effective the ____th day of ____, 2019, by and between the CITY OF FRESNO, a California municipal corporation (hereinafter referred to as "CITY"), and BSK Associates (hereinafter referred to as "CONSULTANT").

RECITALS

WHEREAS, CITY desires to obtain professional laboratory testing services for potable and non-potable water analysis, hereinafter referred to as the "Project;" and

WHEREAS, CONSULTANT is engaged in the business of furnishing technical services as an analytical laboratory facility and hereby represents that it desires to and is professionally and legally capable of performing the services called for by this Agreement; and

WHEREAS, CONSULTANT acknowledges that this Agreement is subject to the requirements of Fresno Municipal Code Section 4-107 and Administrative Order No. 6-19; and

WHEREAS, this Agreement will be administered for CITY by its Department of Public Utilities Director (hereinafter referred to as "Administrator") or his/her designee.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the covenants, conditions, and premises hereinafter contained to be kept and performed by the respective parties, it is mutually agreed as follows:

1. Scope of Services. CONSULTANT shall perform to the satisfaction of CITY the services described in **Exhibit A**, including all work incidental to, or necessary to perform, such services even though not specifically described in **Exhibit A**.

2. Term of Agreement and Time for Performance. This Agreement shall be for a period of five (5) years effective from the date first set forth above ("Effective Date") and shall continue in full force and effect through March 1, 2024, subject to any earlier termination in accordance with this Agreement. The services of CONSULTANT as described in **Exhibit A** are to commence upon the Effective Date and shall be completed in a sequence assuring expeditious completion, but in any event, all such services shall be completed prior to expiration of this Agreement and in accordance with any performance schedule set forth in **Exhibit A**. Upon expiration of the Agreement, CONSULTANT shall aid CITY in continuing, uninterrupted, the requirements of the Agreement, by continuing to perform on a temporary basis, when specifically requested to do so in writing by the Administrator prior to expiration, for a specified term not to exceed twelve months. Such continuance shall be subject to provisions set forth herein, and all other terms and conditions remaining the same as if the Agreement had been extended for such a temporary period by an amendment hereto.

3. Compensation.

(a) CONSULTANT'S sole compensation for satisfactory performance of all services required or rendered pursuant to this Agreement shall be an annual total fee not to exceed \$600,000.00 paid on the basis of the rates set forth in the schedule of fees and expenses contained in **Exhibit A**.

(b) Detailed statements shall be rendered and upon completion of each work order will be payable in the normal course of CITY business. CITY shall not be obligated to reimburse any expense for which it has not received a detailed invoice with applicable copies of representative and identifiable receipts or records substantiating such expense.

(c) The parties may modify this Agreement to increase or decrease the scope of services or provide for the rendition of services not required by this Agreement, which modification shall include an adjustment to CONSULTANT'S compensation. Any change in the scope of services must be made by written amendment to the Agreement signed by an authorized representative for each party. CONSULTANT shall not be entitled to any additional compensation if services are performed prior to a signed written amendment.

(d) The fees and rates in **Exhibit A** shall remain fixed for the first 36 months of the Agreement. Sixty days prior to the 3-year anniversary date, CONSULTANT may submit proposed fee and rate adjustments for the following 24- month period (and any extension period) to the Director. CONSULTANT must provide adequate documentation to substantiate any request for price increase. Any increase for any fee or rate shall not exceed, unless otherwise approved by the Director, the percent change for the following Consumer Price Index (CPI) as published by the Bureau of Labor Statistics: Pacific Cities and U.S. City Average: Los Angeles-Riverside-Orange Counties. The basis of the index shall be established as the last available month at the date of the 3-anniversary of the Agreement. Any new rates, mutually agreed upon by CONSULTANT and Director, shall commence no sooner than the 1st day of month 37 and shall remain in effect for the remainder of the Agreement period and any extension period.

4. Termination, Remedies and Force Majeure.

(a) This Agreement shall terminate without any liability of CITY to CONSULTANT upon the earlier of: (i) CONSULTANT'S filing for protection under the federal bankruptcy laws, or any bankruptcy petition or petition for receiver commenced by a third party against CONSULTANT; (ii) 7 calendar days prior written notice with or without cause by CITY to CONSULTANT; (iii) CITY'S non-appropriation of funds sufficient to meet its obligations hereunder during any CITY fiscal year of this Agreement, or insufficient funding for the Project; or (iv) expiration of this Agreement.

(b) Immediately upon any termination or expiration of this Agreement, CONSULTANT shall (i) immediately stop all work hereunder; (ii) immediately cause any and all of its subcontractors to cease work; and (iii) return to CITY any and all unearned payments and all properties and materials in the possession of CONSULTANT that are owned by CITY. Subject to the terms of this Agreement, CONSULTANT shall be paid compensation for services satisfactorily performed prior to the effective date of termination. CONSULTANT shall not be paid for any work or services performed or costs incurred which reasonably could have been avoided.

(c) In the event of termination due to failure of CONSULTANT to satisfactorily perform in accordance with the terms of this Agreement, CITY may withhold an amount that would otherwise be payable as an offset to, but not in excess of, CITY'S damages caused by such failure. In no event shall any payment by CITY pursuant to this Agreement constitute a waiver by CITY of any breach of this Agreement which may then exist on the part of CONSULTANT, nor shall such payment impair or prejudice any remedy available to CITY with respect to the breach.

(d) Upon any breach of this Agreement by CONSULTANT, CITY may (i) exercise any right, remedy (in contract, law or equity), or privilege which may be available to it under applicable laws of the State of California or any other applicable law; (ii) proceed by appropriate court action to enforce the terms of the Agreement; and/or (iii) recover all direct, indirect, consequential, economic and incidental damages for the breach of the Agreement. If it is determined that CITY improperly terminated this Agreement for default, such termination shall be deemed a termination for convenience.

(e) CONSULTANT shall provide CITY with adequate written assurances of future performance, upon Administrator's request, in the event CONSULTANT fails to comply with any terms or conditions of this Agreement.

(f) CONSULTANT shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of CONSULTANT and without its fault or negligence such as, acts of God or the public enemy, acts of CITY in its contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, and unusually severe weather. The parties agree that the delays of common carriers are expressly excluded from those occurrences which are beyond the reasonable control of CONSULTANT hereunder and shall not constitute an excusable delay. CONSULTANT shall notify Administrator in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, and shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to Administrator of the cessation of such occurrence.

5. Confidential Information and Ownership of Documents.

(a) Any reports, information, or other data prepared or assembled by CONSULTANT pursuant to this Agreement shall not be made available to any individual or organization by CONSULTANT without the prior written approval of the Administrator. During the term of this Agreement, and thereafter, CONSULTANT shall not, without the prior written consent of CITY, disclose to anyone any Confidential Information. The term Confidential Information for the purposes of this Agreement shall include all proprietary and confidential information of CITY, including but not limited to business plans, marketing plans, financial information, materials, compilations, documents, instruments, models, source or object codes and other information disclosed or submitted, orally, in writing, or by any other medium or media. All Confidential Information shall be and remain confidential and proprietary in CITY.

(b) Any and all writings and documents prepared or provided by CONSULTANT pursuant to this Agreement are the property of CITY at the time of preparation and shall be turned over to CITY upon expiration or termination of the Agreement. CONSULTANT shall not permit the reproduction or use thereof by any other person except as otherwise expressly provided herein.

(c) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this Section 5.

(d) This Section 5 shall survive expiration or termination of this Agreement.

6. Professional Skill. It is further mutually understood and agreed by and between the parties hereto that inasmuch as CONSULTANT represents to CITY that CONSULTANT and its subcontractors, if any, are skilled in the profession and shall perform in accordance with the standards of said profession necessary to perform the services agreed to be done by it under this Agreement, CITY relies upon the skill of CONSULTANT and any subcontractors to do and perform such services in a skillful manner and CONSULTANT agrees to thus perform the services and require the same of any subcontractors. Therefore, any acceptance of such services by CITY shall not operate as a release of CONSULTANT or any subcontractors from said professional standards.

7. Indemnification. To the furthest extent allowed by law, CONSULTANT shall indemnify, hold harmless and defend CITY and each of its officers, officials, employees, agents and volunteers from any and all loss, liability, fines, penalties, forfeitures, costs and damages (whether in contract, tort or strict liability, including but not limited to personal injury, death at any time and property damage), and from any and all claims, demands and actions in law or equity (including reasonable attorney's fees and litigation expenses) that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of CONSULTANT, its principals, officers, employees, agents or volunteers in the performance of this Agreement.

If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require each subcontractor to indemnify, hold harmless and defend CITY and each of its officers, officials, employees, agents and volunteers in accordance with the terms of the preceding paragraph.

This section shall survive termination or expiration of this Agreement.

8. Insurance.

(a) Throughout the life of this Agreement, CONSULTANT shall pay for and maintain in full force and effect all insurance as required in **Exhibit B** or as may be authorized in writing by CITY'S Risk Manager or his/her designee at any time and in his/her sole discretion.

(b) If at any time during the life of the Agreement or any extension, CONSULTANT or any of its subcontractors fail to maintain any required insurance in full force and effect, all services and work under this Agreement shall be discontinued immediately, and all payments due or that become due to CONSULTANT shall be withheld until notice is received by CITY that the required insurance has been restored to full force and effect and that the premiums therefore have been paid for a period satisfactory to CITY. Any failure to maintain the required insurance shall be sufficient cause for CITY to terminate this Agreement. No action taken by CITY pursuant to this section shall in any way relieve CONSULTANT of its responsibilities under this Agreement. The phrase "fail to maintain any required insurance" shall include, without limitation, notification received by CITY that an insurer has commenced proceedings, or has had proceedings commenced against it, indicating that the insurer is insolvent.

(c) The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The duty to indemnify CITY shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under

the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

(d) Upon request of CITY, CONSULTANT shall immediately furnish CITY with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

(e) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall require each subcontractor to provide insurance protection in favor of CITY and each of its officers, officials, employees, agents and volunteers in accordance with the terms of this section, except that any required certificates and applicable endorsements shall be on file with CONSULTANT and CITY prior to the commencement of any services by the subcontractor.

9. Conflict of Interest and Non-Solicitation.

(a) Prior to CITY'S execution of this Agreement, CONSULTANT shall complete a City of Fresno conflict of interest disclosure statement in the form as set forth in **Exhibit C**. During the term of this Agreement, CONSULTANT shall have the obligation and duty to immediately notify CITY in writing of any change to the information provided by CONSULTANT in such statement.

(b) CONSULTANT shall comply, and require its subcontractors to comply, with all applicable (i) professional canons and requirements governing avoidance of impermissible client conflicts; and (ii) federal, state and local conflict of interest laws and regulations including, without limitation, California Government Code Section 1090 et. seq., the California Political Reform Act (California Government Code Section 87100 et. seq.) and the regulations of the Fair Political Practices Commission concerning disclosure and disqualification (2 California Code of Regulations Section 18700 et. seq.). At any time, upon written request of CITY, CONSULTANT shall provide a written opinion of its legal counsel and that of any subcontractor that, after a due diligent inquiry, CONSULTANT and the respective subcontractor(s) are in full compliance with all laws and regulations. CONSULTANT shall take, and require its subcontractors to take, reasonable steps to avoid any appearance of a conflict of interest. Upon discovery of any facts giving rise to the appearance of a conflict of interest, CONSULTANT shall immediately notify CITY of these facts in writing.

(c) In performing the work or services to be provided hereunder, CONSULTANT shall not employ or retain the services of any person while such person either is employed by CITY or is a member of any CITY council, commission, board, committee, or similar CITY body. This requirement may be waived in writing by the City Manager, if no actual or potential conflict is involved.

(d) CONSULTANT represents and warrants that it has not paid or agreed to pay any compensation, contingent or otherwise, direct or indirect, to solicit or procure this Agreement or any rights/benefits hereunder.

(e) Neither CONSULTANT, nor any of CONSULTANT'S subcontractors performing any services on this Project, shall bid for, assist anyone in the preparation of a bid for, or perform any services pursuant to, any other contract in connection with this Project unless fully disclosed to and approved by the City Manager, in advance and in writing.

CONSULTANT and any of its subcontractors shall have no interest, direct or indirect, in any other contract with a third party in connection with this Project unless such interest is in accordance with all applicable law and fully disclosed to and approved by the City Manager, in advance and in writing. Notwithstanding any approval given by the City Manager under this provision, CONSULTANT shall remain responsible for complying with Section 9(b), above.

(f) If CONSULTANT should subcontract all or any portion of the work to be performed or services to be provided under this Agreement, CONSULTANT shall include the provisions of this Section 9 in each subcontract and require its subcontractors to comply therewith.

(g) This Section 9 shall survive expiration or termination of this Agreement.

10. Recycling Program. In the event CONSULTANT maintains an office or operates a facility(ies), or is required herein to maintain or operate same, within the incorporated limits of the City of Fresno, CONSULTANT at its sole cost and expense shall:

(i) Within 90 days of agreement effective days, establish and maintain a viable and ongoing recycling program, approved by CITY'S Solid Waste Management Division, for each office and facility. Literature describing CITY recycling programs is available from CITY'S Solid Waste Management Division and by calling City of Fresno Recycling Hotline at (559) 621-1111.

11. General Terms.

(a) Except as otherwise provided by law, all notices expressly required of CITY within the body of this Agreement, and not otherwise specifically provided for, shall be effective only if signed by the Administrator or his/her designee.

(b) Records of CONSULTANT'S expenses pertaining to the Project shall be kept on a generally recognized accounting basis and shall be available to CITY or its authorized representatives upon request during regular business hours throughout the life of this Agreement and for a period of five years after final payment or, if longer, for any period required by law. In addition, all books, documents, papers, and records of CONSULTANT pertaining to the Project shall be available for the purpose of making audits, examinations, excerpts, and transcriptions for the same period of time. If any litigation, claim, negotiations, audit or other action is commenced before the expiration of said time period, all records shall be retained and made available to CITY until such action is resolved, or until the end of said time period whichever shall later occur. If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this paragraph. This Section 11(b) shall survive expiration or termination of this Agreement.

(c) Prior to execution of this Agreement by CITY, CONSULTANT shall have provided evidence to CITY that CONSULTANT is licensed to perform the services called for by this Agreement (or that no license is required). If CONSULTANT should subcontract all or any portion of the work or services to be performed under this Agreement, CONSULTANT shall require each subcontractor to provide evidence to CITY that subcontractor is licensed to perform the services called for by this Agreement (or that no license is required) before beginning work.

12. Nondiscrimination. To the extent required by controlling federal, state and local law, CONSULTANT shall not employ discriminatory practices in the provision of services, employment of personnel, or in any other respect on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. Subject to the foregoing and during the performance of this Agreement, CONSULTANT agrees as follows:

(a) CONSULTANT will comply with all applicable laws and regulations providing that no person shall, on the grounds of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity made possible by or resulting from this Agreement.

(b) CONSULTANT will not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. CONSULTANT shall ensure that applicants are employed, and the employees are treated during employment, without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era. Such requirement shall apply to CONSULTANT'S employment practices including, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provision of this nondiscrimination clause.

(c) CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of CONSULTANT in pursuit hereof, state that all qualified applicants will receive consideration for employment without regard to race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, ethnicity, status as a disabled veteran or veteran of the Vietnam era.

(d) CONSULTANT will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising such labor union or workers' representatives of CONSULTANT'S commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(e) If CONSULTANT should subcontract all or any portion of the services to be performed under this Agreement, CONSULTANT shall cause each subcontractor to also comply with the requirements of this Section 12.

13. Independent Contractor.

(a) In the furnishing of the services provided for herein, CONSULTANT is acting solely as an independent contractor. Neither CONSULTANT, nor any of its officers, agents or employees shall be deemed an officer, agent, employee, joint venturer, partner or associate of CITY for any purpose. CITY shall have no right to control or supervise or direct the

manner or method by which CONSULTANT shall perform its work and functions. However, CITY shall retain the right to administer this Agreement so as to verify that CONSULTANT is performing its obligations in accordance with the terms and conditions thereof.

(b) This Agreement does not evidence a partnership or joint venture between CONSULTANT and CITY. CONSULTANT shall have no authority to bind CITY absent CITY'S express written consent. Except to the extent otherwise provided in this Agreement, CONSULTANT shall bear its own costs and expenses in pursuit thereof.

(c) Because of its status as an independent contractor, CONSULTANT and its officers, agents and employees shall have absolutely no right to employment rights and benefits available to CITY employees. CONSULTANT shall be solely liable and responsible for all payroll and tax withholding and for providing to, or on behalf of, its employees all employee benefits including, without limitation, health, welfare and retirement benefits. In addition, together with its other obligations under this Agreement, CONSULTANT shall be solely responsible, indemnify, defend and save CITY harmless from all matters relating to employment and tax withholding for and payment of CONSULTANT'S employees, including, without limitation, (i) compliance with Social Security and unemployment insurance withholding, payment of workers' compensation benefits, and all other laws and regulations governing matters of employee withholding, taxes and payment; and (ii) any claim of right or interest in CITY employment benefits, entitlements, programs and/or funds offered employees of CITY whether arising by reason of any common law, de facto, leased, or co-employee rights or other theory. It is acknowledged that during the term of this Agreement, CONSULTANT may be providing services to others unrelated to CITY or to this Agreement.

14. Notices. Any notice required or intended to be given to either party under the terms of this Agreement shall be in writing and shall be deemed to be duly given if delivered personally, transmitted by facsimile followed by telephone confirmation of receipt, or sent by United States registered or certified mail, with postage prepaid, return receipt requested, addressed to the party to which notice is to be given at the party's address set forth on the signature page of this Agreement or at such other address as the parties may from time to time designate by written notice. Notices served by United States mail in the manner above described shall be deemed sufficiently served or given at the time of the mailing thereof.

15. Binding. Subject to Section 16, below, once this Agreement is signed by all parties, it shall be binding upon, and shall inure to the benefit of, all parties, and each parties' respective heirs, successors, assigns, transferees, agents, servants, employees and representatives.

16. Assignment.

(a) This Agreement is personal to CONSULTANT and there shall be no assignment by CONSULTANT of its rights or obligations under this Agreement without the prior written approval of the City Manager or his/her designee. Any attempted assignment by CONSULTANT, its successors or assigns, shall be null and void unless approved in writing by the City Manager or his/her designee.

(b) CONSULTANT hereby agrees not to assign the payment of any monies due CONSULTANT from CITY under the terms of this Agreement to any other individual(s), corporation(s) or entity(ies). CITY retains the right to pay any and all monies due CONSULTANT directly to CONSULTANT.

17. Compliance With Law. In providing the services required under this Agreement, CONSULTANT shall at all times comply with all applicable laws of the United States, the State of California and CITY, and with all applicable regulations promulgated by federal, state, regional, or local administrative and regulatory agencies, now in force and as they may be enacted, issued, or amended during the term of this Agreement.

18. Waiver. The waiver by either party of a breach by the other of any provision of this Agreement shall not constitute a continuing waiver or a waiver of any subsequent breach of either the same or a different provision of this Agreement. No provisions of this Agreement may be waived unless in writing and signed by all parties to this Agreement. Waiver of any one provision herein shall not be deemed to be a waiver of any other provision herein.

19. Governing Law and Venue. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding, however, any conflict of laws rule which would apply the law of another jurisdiction. Venue for purposes of the filing of any action regarding the enforcement or interpretation of this Agreement and any rights and duties hereunder shall be Fresno County, California.

20. Headings. The section headings in this Agreement are for convenience and reference only and shall not be construed or held in any way to explain, modify or add to the interpretation or meaning of the provisions of this Agreement.

21. Severability. The provisions of this Agreement are severable. The invalidity, or unenforceability of any one provision in this Agreement shall not affect the other provisions.

22. Interpretation. The parties acknowledge that this Agreement in its final form is the result of the combined efforts of the parties and that, should any provision of this Agreement be found to be ambiguous in any way, such ambiguity shall not be resolved by construing this Agreement in favor of or against either party, but rather by construing the terms in accordance with their generally accepted meaning.

23. Attorney's Fees. If either party is required to commence any proceeding or legal action to enforce or interpret any term, covenant or condition of this Agreement, the prevailing party in such proceeding or action shall be entitled to recover from the other party its reasonable attorney's fees and legal expenses.

24. Exhibits. Each exhibit and attachment referenced in this Agreement is, by the reference, incorporated into and made a part of this Agreement.

25. Precedence of Documents. In the event of any conflict between the body of this Agreement and any Exhibit or Attachment hereto, the terms and conditions of the body of this Agreement shall control and take precedence over the terms and conditions expressed within the Exhibit or Attachment. Furthermore, any terms or conditions contained within any Exhibit or Attachment hereto which purport to modify the allocation of risk between the parties, provided for within the body of this Agreement, shall be null and void.

26. Cumulative Remedies. No remedy or election hereunder shall be deemed exclusive but shall, wherever possible, be cumulative with all other remedies at law or in equity.

27. No Third Party Beneficiaries. The rights, interests, duties and obligations defined within this Agreement are intended for the specific parties hereto as identified in the preamble of this Agreement. Notwithstanding anything stated to the contrary in this Agreement, it is not intended that any rights or interests in this Agreement benefit or flow to the interest of any third parties.

28. Extent of Agreement. Each party acknowledges that they have read and fully understand the contents of this Agreement. This Agreement represents the entire and integrated agreement between the parties with respect to the subject matter hereof and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be modified only by written instrument duly authorized and executed by both CITY and CONSULTANT.

IN WITNESS WHEREOF, the parties have executed this Agreement at Fresno, California, the day and year first above written.

CITY OF FRESNO,
a California municipal corporation

By: _____
Michael Carbajal, Director
Department of Public Utilities

ATTEST:
YVONNE SPENCE, CMC
City Clerk

By: _____
Deputy Date

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

By: Amanda Freeman 2/13/19
Amanda Freeman Date
Senior Deputy Attorney

Addresses:

CITY:
City of Fresno
Attention: Matt Bullis, PE
Professional Engineer
1910 E. University Ave
Fresno, CA 93703
Phone: (559) 621-1632
FAX: (559) 498-4126

Attachments:

1. Exhibit A - Scope of Services
2. Exhibit B - Insurance Requirements
3. Exhibit C - Conflict of Interest Disclosure Form

BSK Associates,
a California corporation

By: Renea Rangell
Name: Renea Rangell

Title: Vice President
(if corporation or LLC, Board
Chair, Pres. or Vice Pres.)

By: Mike Vartanian
Name: MIKE VARTANIAN

Title: CFO
(if corporation or LLC, CFO,
Treasurer, Secretary or Assistant
Secretary)

Any Applicable Professional License:
Number: 1180
Name: CA-DPH
Date of Issuance: _____

CONSULTANT:
BSK Associates
Attention:
1414 Stanislaus St.
Fresno, CA 93706
Phone: (559) 497-2888
FAX: (559) 485-6935

Exhibit A

SCOPE OF SERVICES

Consultant Service Agreement between City of Fresno ("City") and BSK Associates ("Consultant")

Laboratory Analysis of Potable and Non-Potable Water PROJECT TITLE

Management of Services

Consultant shall designate an experienced project manager to this project; such that all services called for in this Agreement will be performed under the direction of this manager. The project manager shall also serve as the key contact person for the City.

Analytical Methods

The City utilizes many test methods to ascertain the water quality provided to Fresno customers. Many of these tests are identified in Title 22 and UCMR 3; several are not, but are still necessary to the City's needs. The following is a list of most methods that can be expected from the City at any time. It should be noted that this is not a complete list nor are the specific requirements described.

Title 22 & Miscellaneous

EPA 504.1, 505, 515, 524.2, 525.2, 531.1, 547, 548, 549, 552.2, Nitrate (NO₃), TOC by method 5310C, Manganese, Fluoride, TTHM, HAA5, Bromide, Bromate, G-1 group- (General Mineral, General Physical, Inorganic), Alkalinity, Perchlorate, Gross Alpha, Radium 226, Radium 228, Uranium, MTBE, Arsenic, 1,2,3-TCP, Total Chromium, Hex Chromium, 1,4-Dioxane, Orthophosphate, Lead & Copper, Iron, Turbidity, BOD, Total Suspended Solids, DO, and Carbon Profile (ash, moisture, iodine, dust, sieve and density.)

Bacteriological

Coliform, Present/Absent by Colilert (SM 9223), Coliform Total & E. Coli by 1X10 MTF Colilert (SM 9223) or equal, and Heterotrophic Plate Count (48 hours) (SM 9215B) or equal.

UCMR 3

Methods 200.8, 218.7, 300.1, 522, 524.3, 537, & 539, or approved equal.

Estimated Quantities

As prescribed in Title 22, sample frequency varies widely depending on methods, concentrations and treatment requirements. System wide sampling of all well sites occurs every three years in the City for what is known as Triennial sampling and includes most if not all of the constituents identified in Title 22 for a large ground water system in the central valley region of California. However, there is also much sampling that happens annually, quarterly, monthly and even weekly. Because of the variety of tests and varied frequencies, only an annual average of the most common methods can be provided. These are only estimated quantities and can change at any time. Note that the majority of bacteriological samples are delivered to the City lab.

<u>Test/Method</u>	<u>Estimated Annual Quantity</u>
Coliform, Present/Absent by Colilert	3800
Coliform Total & E. Coli by 1X10 MTF Colilert	3200
Heterotrophic Plate Count	3200
EPA 504.1*	900
EPA 524.2*	500
Nitrates (NO3)	2200
G-1*	<20
EPA 525*	<20
Manganese	50
TTHM / HAA5	50

* Indicates system wide testing of these methods that adds approximately 250 additional samples every third year.

Record Retention

Consultant shall retain all test results, graphs, reports and quality control data for at least five (5) years after the final payment.

Chain of Custody

Because of the many routine sample routes the City has developed over the years, the City shall use its own pre-printed Chain of Custody forms for much of the sample work. Consultant shall be required to accept these forms. However, the City is willing to consider modifications that may ease processing by Consultant staff. Occasionally, Consultant forms may be used, especially by other City divisions who routinely submit samples on behalf of the City's' Water Division such as City's Construction Management Division. The City will complete a separate Chain of Custody for rush samples and for standard turn-around time sample so as not to delay the rush results. Consultant shall be responsible to split the report and return results as they are finalized, if there is a delay for certain sub-contracted testing methods.

Sample Containers

Consultant shall be required to supply all sample bottles for each test including those samples that are to be analyzed by a sub-consultant. The bottles shall be clean, sterile, and include labels and any preservatives appropriate for the requested analysis. For bacteriological samples, a de-chlorinating agent is required due to the City's use of sodium hypochlorite for disinfection purposes. City staff may submit Bacti samples utilizing our labels and sample bottles from our own stock of bottles supplied by IDEXX Laboratories, Inc. Due to the large volume of sample bottles that can be generated during a sample day, the use of bar-coding or other automated sample label identification is strongly encouraged. The Consultant shall maintain a sufficient quantity and variety of sample bottles to meet routine sampling requirements. The Consultant shall be notified in advance of major sample events so that preparations can be made.

Sample Custody, Transfer and Transportation

Local Laboratories

City staff will collect and submit to Consultant's local laboratories all samples that are to be analyzed. Such local laboratories in the greater Fresno area shall maintain a sample reception area. City staff will collect sample bottles from the laboratory and return samples and chain of custody to the same location. Laboratory staff will validate the samples and chain of custody for accuracy, include appropriate comments as necessary, sign off as accepted and provide city staff with a copy. To accommodate pickup and delivery, the service hours shall be Monday – Friday, 7:30 AM – 5:00 PM. In most situations, samples will be delivered before 3:30 PM. If necessary, the City shall make arrangements with the labs for samples submitted after 5:00 PM or on weekends. The primary laboratory of Consultant shall be responsible for receiving and transporting all samples to any sub-contractor(s) they may use. Sample(s) delayed so as to exceed hold time or temperature, lost or damaged in transportation to other laboratories by common carrier or other means shall be re-sampled by City staff. To offset the expense of City staff to resample, all costs for shipping and analysis of the second or more sets shall be waived of the standard laboratory fees and charges for each required method. Waived fees and charges shall appear as a credit or "No Charge" on invoices.

Out of Town Laboratories

Any out of town laboratories of Consultant or its sub-consultant shall also maintain a local presence for the purposes of warehousing sample bottles, sample receiving, chain of custody transfer and shipping and must meet the other criteria listed above for local laboratories. A sufficient variety and quantity of sample bottles, shipping containers, ice, labels, etc, shall be maintained on site. City owned equipment will not be used for shipping purposes. There shall be no separate or additional cost to the City for transport of samples to the laboratory by either a common carrier or other means. Sample(s) delayed so as to exceed hold time or temperature, lost or damaged in transportation to an out of town primary laboratory or other laboratories shall be resampled by City staff. Repeat samples shall be expedited in both transportation and analysis in order to meet as closely as possible the original timeline. To offset the expense of City staff to resample, all costs for shipping and analysis of the second or more sets shall be waived of the standard laboratory fees and charges for each required method. Waived fees and charges shall appear as a credit or "No Charge" on invoices.

Sample Storage and Disposal

Samples with remaining volume shall be stored by Consultant for a minimum of thirty (30) calendar days after the postmarked date of the final analytical report (or longer if required by the State or U.S. EPA), and then disposed of by Consultant at no extra cost. Samples are subject to chain-of custody procedures until final disposal. Bacteriological samples are exempt from this requirement.

Sample Hold Times

Hold times for samples shall begin at the time of sample collection. All required analysis shall be performed within the stated hold times of each method type. Consultant shall notify City of any samples that miss their hold times and Consultant shall issue a letter on company letterhead stating the reason the sample was missed. City staff will resample the source if possible. The City will not accept results or pay for analysis of samples outside of their hold

time. In the case of laboratory error where hold times are exceeded, repeat samples will be expedited in order to meet the original timeline and all fees and charges shall be waived. Waived fees and charges shall appear as a credit on invoices.

Turn Around Times

Result reporting requirement vary depending upon the sample type, when during the month they are collected, and whether they are routine or rush samples. One very important notification requirement is if a sample exceeds a Maximum Contaminant Level, (MCL.) As soon as a result is determined to exceed an MCL, City staff is to be notified immediately by FAX and phone, live person only, voice message is not acceptable. The only exception to this requirement is for treatment site results. It is expected that the influent and mid-treatment samples could exceed the MCL and immediate notification is not required. The effluent and most blend sample points are the compliance points and cannot exceed the MCL. Immediate notifications for these sample points are required. Same notification requirements exist for bacteriological results that are Present for P/A test, >2.2 for total coliform, >0.1 for E.coli and >500 for HPC.

Routine Sample Results. Final reports for routine sample results are to be reported to the City within 20 days but as soon as possible. Temporary exceptions may be granted on a case by case basis and it is understood that certain sub-contracted work may take longer than the 20 day period.

Treatment Site Results. Certain compliance based samples from treatment sites are collected weekly and are typically identified as an Influent, Effluent, Vessel Port, PTA or Blend sample and are made up of Nitrate, TOC, Manganese, 504.1 and 524.2 samples. Final results of any of these samples collected in a given month shall be reported to the City no later than the 7th (seventh) calendar day (earlier if the 7th is a weekend or holiday) of the following month. This requirement is necessary so that the City may complete operational reports that are submitted to the State Health Department by the 10th of each month. These samples shall not be considered Rush samples.

Rush Sample Results. Occasionally, samples will be submitted that require a quick turnaround, either 1, 2, or 5 days. In most cases, these samples are related to common tests from City treatment sites but could include any source or method. Rush samples are typically submitted on a separate chain of custody so as to not impact processing of other samples. Results for rush samples are to be faxed or phoned to key City staff.

Bacteriological Samples. The City owns and operates its own ELAP certified laboratory for the analysis of bacteriological samples. City performs the analysis for the majority of these samples but will also rely on Consultant for a portion of the work. There are two categories for bacteriological samples that are submitted for analysis; Routine and Special. Routine samples typically cover both well head and distribution sample routes or some subset of a route. Special samples are usually associated with construction or repair projects in the distribution system or wells, or special operational issues that require result notification as soon as possible. The City cannot wait for all the "final paperwork" to be complete before results are sent. The City needs notification of results as soon as they are read at the completion of incubation time. If at any time during incubation it is determined that the sample is positive, Consultant shall notify City at that time. Special samples are submitted on a chain of custody form with a large "Special Sample Instructions" box printed in the middle of the page. The instructions are self explanatory but basically list the email addresses of City staff that need to be notified of

the results and there is a check box next to their names. The sampler will check off the appropriate staff.

After Hours / Emergency Samples

On occasion, the City has needed to submit samples after normal business hours and on weekends. This is rare and can include bacteriological or Title 22 samples. The City makes every attempt to avoid these situations but when it can't, it tries to provide as much advance notice as possible. The City will need assistance from Consultant in these types of situations.

Analytical Reporting Requirements

State Reporting. As required in Title 22, Consultant shall report appropriate test results to the State of California Department of Health Services using the standard reporting tools and methods such as EDT and Write-On. The City of Fresno is a large system with frequent changes to its sources list. It is suggested that the Water Systems and Source Libraries file be updated frequently from the State's website.

City of Fresno Reporting. The City currently maintains its own in-house database called Water Quality Information System, (WQIS.) Consultant is required to provide to the City all analytical results in an Excel file format that are uploaded into the WQIS. Two different formats are used depending on sample type. The City will provide the Consultant with these formats prior to commencing work. Consultant shall also provide City three reports in the following order:

- 1- All results, EDT and non-EDT format.
- 2- A complete report including cover letter, case narrative, test results, QC data, certificate of analysis and chain of custody.
- 3- Submission Invoice.

These reports are maintained in City's file system. The City has moved to electronic data storage system using PDF Optical Character Recognition, (OCR) format. OCR allows City staff to quickly file and retrieve data and Consultant shall be required to produce these reports in PDF/OCR format. The only exception to the OCR requirement is for the chain of custody form which cannot be effectively converted to OCR because of the many hand writing styles. Email subject formats are very specific and will be shared prior to commencing work.

WaterTrax Reporting. The City is currently in the process of developing a contract with WaterTrax for handling electronic reporting from Consultants. WaterTrax is an internet based information management and reporting system that allows Consultants to upload data which is then stored on redundant servers. Contracted users are then allowed access to secure areas to review and approve data, set alarm and notification levels, and generate reports. Consultants and laboratories must be registered users to upload to WaterTrax. It is the City's intention to completely move away from its WQIS, but while in transition the Consultant will be required to report to WaterTrax and also to the City using the Excel formats. Consultant shall be responsible to upload both internal data and data generated by sub-contract labs if sub-contract labs do not already have the ability.

Internet Presence

Consultant must maintain an internet presence that allows the City password protected access to its data. City staff shall be able to access its data from any internet connected device, not just City-owned computers. Multiple staff members shall be allowed to access data using their own individual login identification. Only the City's designated Water Division Administrator shall approve and authorize Consultant to grant password access to City staff. The City shall have access to not only completed reports but the ability to track the current status of samples that are in process. Multiple search criteria shall allow City staff to query the database. Search criteria shall include at a minimum: sample date, submission number, test method, sample location, and process status.

Other Services

Upon City's request, Consultant shall research and report detections for chemicals below DLR's, retrieve and produce chromatographs of analysis, prepare special reports and provide other professional services at the hourly rates set forth in the Schedule of Fees and Expenses of Attachment A-1 to this Exhibit A.

Pricing

The fee for each sample method shall be inclusive of all costs associated with the sample to include sample container, preservatives, processing, analyzing, reporting, transportation (if necessary), storage, disposal, etc. Aside from credits and surcharges for "rush" samples there shall be no hidden costs or additional charges appearing on invoices.

Invoicing

The City will be invoiced for each chain of custody for each complete set of sample(s) submitted by City staff. Partial invoicing is not acceptable. Multiple invoices shall not be totaled together on one page. Invoices shall be individually emailed to the City as a PDF in OCR format and each invoice will become part of the submission record maintained by the City. Email subject formatting is specific and will be shared prior to commencing work. Invoices shall not be sent before the final reports are delivered. Any waived charges shall appear as a credit on invoices.

SCHEDULE OF FEES AND EXPENSES

Consultant's Schedule of Fees and Expenses are attached hereto as Attachment A-1.

Analytical Services Quotation**BSK - City of Fresno RFP 2018**

Matthew Bullis
 City of Fresno
 1910 E. University Ave.
 Fresno, CA 93703

Printed: 02/12/2019
 Effective: 03/01/2019
 Expires: 04/01/2024

Pricing Summary

Parameter	Method	Quantity	TAT (Days)	Unit Price	Extended Price
Water					
1,2,3-Trichloropropane by GC-MS SIM	SRL 524M-TCP	0	10	\$95.00	
Arsenic (Total) by ICP-MS	EPA 200.8	0	10	\$15.00	
Biochemical Oxygen Demand (BOD)	SM 5210B	0	10	\$30.00	
Bromate by Ion Chromatography	EPA 317.0	0	10	\$20.00	
Bromide by Ion Chromatography (Low Level)	EPA 300.1	0	10	\$25.00	
Carbamates by HPLC	EPA 531.1	0	10	\$75.00	
Carbon Dioxide by RSK 175		0	10	\$175.00	
Chlorinated Acid Herbicides by GC-ECD	EPA 515.4	0	10	\$75.00	
Chromium (Total) by ICP-MS	EPA 200.8	0	10	\$15.00	
Coliform, Presence/Absence by Collert	SM 9223B	0	10	\$13.00	
Coliform, Total and E.Coli by Quanti-Tray 51 Wells	SM 9223B	0	10	\$13.00	
Diquat by HPLC	EPA 549.2	0	10	\$75.00	
Dissolved Oxygen (DO) by Winkler Titration	SM 4500-O C	0	10	\$20.00	
EDB and DBCP by GC-ECD	EPA 504.1	0	10	\$40.00	
Endothall by GC-MS	EPA 548.1	0	10	\$85.00	
EXT-EPA 522 1,4-Dioxane	Subcontract	0	10	\$195.00	
Fluoride by Ion Chromatography	EPA 300.0	0	10	\$20.00	
Glyphosate by HPLC	EPA 547	0	10	\$75.00	
Gross Alpha by Co-precipitation	SM 7110C	0	10	\$45.00	
Haloacetic Acids by GC-ECD	[See Details]	0	10	\$90.00	
Heterotrophic Plate Count (48 Hour)	SM 9215B	0	10	\$13.00	
Hexavalent Chromium by Ion Chromatography	EPA 218.7	0	10	\$30.00	
Iron (Total) by ICP	EPA 200.7	0	10	\$10.00	
Lead, Copper Rule Analysis Package	[See Details]	0	10	\$25.00	
Manganese (Total) by ICP	EPA 200.7	0	10	\$10.00	
MTBE by GC-MS	EPA 524.2	0	10	\$45.00	
Nitrate (N) by Ion Chromatography	EPA 300.0	0	10	\$14.50	
Organic Carbon, Total (TOC)	SM 5310C	0	10	\$35.00	
Organohalide Pesticides and PCBs by GC-ECD	EPA 505	0	10	\$75.00	
Orthophosphate (o-PO4) by Ion Chromatography	EPA 300.0	0	10	\$20.00	
Perchlorate by Ion Chromatography (CLO4/EC)	[See Details]	0	10	\$35.00	
Radium 226-DW	EPA 9315	0	10	\$110.00	
Radium 228-DW	EPA 9320	0	10	\$110.00	

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City of Fresno
1910 E. University Ave.
Fresno, CA 93703

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Pricing Summary

Parameter	Method	Quantity	TAT (Days)	Unit Price	Extended Price
Water					
Semi-Volatile Organics by GC-MS	EPA 525.3	0	10	\$85.00	
Solids, Total Suspended (TSS)	SM 2540D	0	10	\$15.00	
Title 22 (CA SDWA) GM/IO/GP (excl. CN)	[See Details]	0	10	\$200.00	
Trihalomethanes by GC-MS	[See Details]	0	10	\$50.00	
Turbidity	SM 2130B	0	10	\$10.00	
UCMR4 AM1 (Metals, Pesticides, Alcohols, SVOCs)	[See Details]	0	15	\$600.00	
UCMR4 AM2-DS (HAAs)	[See Details]	0	15	\$150.00	
UCMR4 AM2-RW (TOC, Bromide)	[See Details]	0	15	\$65.00	
UCMR4 Cyanotoxins (EPA 545, 546)	[See Details]	0	15	\$325.00	
UCMR4, Microcystins and Nodularin by LC/MS/MS	EPA 544	0	15	\$20.00	
Uranium, Radiological by ICP-MS/Calculation	[See Details]	0	10	\$20.00	
Volatile Organics by GC-MS	[See Details]	0	10	\$70.00	
Solid					
Carbon Black Analysis Package	[See Details]	0	10	\$650.00	
				Bid Total:	\$0.00

Notes

Quotation Prepared by...

Adam Trevarrow
Project Manager

Analytical Services Quotation

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Package Analysis Details

Carbon Black Analysis Package consists of:

Abrasion (Subcontract)
Ash, Percent (ASTM E 1534-93)
Dust, Percent (Subcontract)
Iodine Number by Titration (ASTM D4607-94)
Moisture, Percent (SM 2540B)
Sieve Analysis (ASTM D-422/ C-136)

Volatile Organics by GC-MS consists of:

DO NOT USE - LOG THE PACKAGE (EPA 524.2a)
Volatile Organics by GC-MS (EPA 524.2)

Trihalomethanes by GC-MS consists of:

DO NOT USE - LOG THE PACKAGE (EPA 524.2a)
Trihalomethanes by GC-MS (EPA 524.2)

Haloacetic Acids by GC-ECD, GCMS consists of:

DO NOT USE - LOG THE PACKAGE (EPA 552.3a)
Haloacetic Acids by GC-ECD, GC-MS (EPA 552.3)

Lead, Copper Rule Analysis Package consists of:

Copper (Total) by ICP-MS (EPA 200.8)
Lead (Total) by ICP-MS (EPA 200.8)

Perchlorate by Ion Chromatography (CLO4/EC) consists of:

Electrical Conductivity (EC) (SM 2510B)
Perchlorate by Ion Chromatography (EPA 314.0)

Title 22 (CA SDWA) GM/IO/GP (excl. CN) consists of:

Aggressive Index (Reqs PH/Alk/Ca) (-)
Alkalinity (CaCO₃, HCO₃/CO₃/OH) by Titration (SM 2320B)
Aluminum (Total) by ICP (EPA 200.7)
Antimony (Total) by ICP-MS (EPA 200.8)
Arsenic (Total) by ICP-MS (EPA 200.8)
Barium (Total) by ICP (EPA 200.7)
Beryllium (Total) by ICP-MS (EPA 200.8)
Cadmium (Total) by ICP-MS (EPA 200.8)
Calcium (Total) by ICP (EPA 200.7)
Chloride by Ion Chromatography (EPA 300.0)
Chromium (Total) by ICP-MS (EPA 200.8)
Color (SM 2120B)
Copper (Total) by ICP-MS (EPA 200.8)
Electrical Conductivity (EC) (SM 2510B)
Fluoride by Ion Chromatography (EPA 300.0)
Iron (Total) by ICP (EPA 200.7)

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Title 22 (CA SDWA) GM/IO/GP (excl. CN) consists of:

Langelier Index (LI, pH/Alkalinity/TDS/Ca) by Calc (SM 2330B)
Lead (Total) by ICP-MS (EPA 200.8)
Magnesium (Total) by ICP (EPA 200.7)
Manganese (Total) by ICP (EPA 200.7)
Mercury (Total) by ICP-MS (EPA 200.8)
Nickel (Total) by ICP-MS (EPA 200.8)
Nitrate (N) and Nitrite (N) by Ion Chromatography (EPA 300.0)
Nitrate (N) by Ion Chromatography (EPA 300.0)
Nitrite (NO₂) by Ion Chromatography (EPA 300.0)
Odor (SM 2150B)
pH (SM 4500-H+ B)
Potassium (Total) by ICP (EPA 200.7)
Selenium (Total) by ICP-MS (EPA 200.8)
Silver (Total) by ICP-MS (EPA 200.8)
Sodium (Total) by ICP (EPA 200.7)
Solids, Total Dissolved (TDS) (SM 2540C)
Sulfate by Ion Chromatography (EPA 300.0)
Surfactants (MBAS) (SM 5540C)
Thallium (Total) by ICP-MS (EPA 200.8)
Turbidity (SM 2130B)
Zinc (Total) by ICP (EPA 200.7)

UCMR4 AM1 (Metals, Pesticides, Alcohols, SVOCs) consists of:

Germanium and Manganese by ICP-MS (EPA 200.8)
UCMR4, Alcohols by GC/MS (SIM) (EPA 541)
UCMR4, Organic Solvents by GC/MS (SIM) (EPA 530)
UCMR4, Pesticides by GC/MS (SIM) (EPA 525.3)

UCMR4 AM2-DS (HAAs) consists of:

UCMR4, Haloacetic Acids by GC-ECD, GCMS (EPA 552.3)

UCMR4 AM2-RW (TOC, Bromide) consists of:

UCMR4 Bromide by Ion Chromatography (EPA 300.0)
UCMR4 Organic Carbon, Total (TOC) (SM 5310C)

UCMR4 Cyanotoxins (EPA 545, 546) consists of:

UCMR4, 544 Pending EPA 546 Results (EPA 544)
UCMR4, Cylindrospermopsin and Anatoxin by LC/MS/MS (EPA 545)
UCMR4, Total Microcystin - ADDA by ELISA (EPA 546 (ELISA))

Uranium, Radiological by ICP-MS/Calculation consists of:

Uranium (Total) by ICP-MS (EPA 200.8)

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Sample Collection / Hold Time Info

General Chemistry

Matrix	Container	Preservation	Amount Required	Hold Time
Alkalinity (CaCO₃, HCO₃/CO₃/OH) by Titration (SM 2320B)				
Water	1L P / None	No preservative; Refrigerate	100mL	14 days
Ash, Percent (ASTM E 1534-93)				
Solid	Other	NA	125g	180 days
Biochemical Oxygen Demand (BOD) (SM 5210B)				
Water	1L P / None	No preservative; Refrigerate	600mL	2 days
Bromate by Ion Chromatography (EPA 317.0)				
Water	250mL P / EDA	Refrigerate	250mL	28 days
Bromide by Ion Chromatography (Low Level) (EPA 300.1)				
Water	250mL P / EDA	No preservative; Refrigerate	250mL	28 days
Chloride by Ion Chromatography (EPA 300.0)				
Water	250mL P / None	No preservative; Refrigerate	200 mL	28 days
Color (SM 2120B)				
Water	1L P / None	No preservative; Refrigerate	100mL	2 days
Dissolved Oxygen (DO) by Winkler Titration (SM 4500-O C)				
Water	300mL CG DO Bottle	Refrigerate	300mL	0.333 days
Electrical Conductivity (EC) (SM 2510B)				
Water	1L P / None	No preservative; Refrigerate	75mL	28 days
Fluoride by Ion Chromatography (EPA 300.0)				
Water	250mL P / None	No preservative; Refrigerate	200mL	28 days
Hexavalent Chromium by Ion Chromatography (EPA 218.7)				
Water	250mL P / NH ₄ OH(NH ₄) ₂ SO ₄ _DW	Refrigerate	250mL	14 days
Iodine Number by Titration (ASTM D4607-94)				
Solid	Other	None	10g	180 days
Moisture, Percent (SM 2540B)				
Solid	Other	None	125g	180 days

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Sample Collection / Hold Time Info

General Chemistry

Matrix	Container	Preservation	Amount Required	Hold Time
Nitrate (N) and Nitrite (N) by Ion Chromatography (EPA 300.0)				
Water	NA	No preservative; Refrigerate	250mL	2 days
Nitrate (N) by Ion Chromatography (EPA 300.0)				
Water	250mL P / None	No preservative; Refrigerate	250mL	2 days
Nitrite (NO2) by Ion Chromatography (EPA 300.0)				
Water	250mL P / None	No preservative; Refrigerate	250mL	2 days
Odor (SM 2150B)				
Water	500mL AG / None	No preservative; Refrigerate	500mL	1 day
Organic Carbon, Total (TOC) (SM 5310C)				
Water	40mL VOA / H3PO4	Add H3PO4 to pH <2; Refrigerate	40mL	28 days
Orthophosphate (o-PO4) by Ion Chromatography (EPA 300.0)				
Water	250mL P / None	No preservative; Refrigerate	250mL	2 days
Perchlorate by Ion Chromatography (EPA 314.0)				
Water	250mL P / None	No preservative; Store ambient	200mL	28 days
pH (SM 4500-H+ B)				
Water	1L P / None	Refrigerate	100mL	180 days
Solids, Total Dissolved (TDS) (SM 2540C)				
Water	500mL P / None	No preservative; Refrigerate	500mL	7 days
Solids, Total Suspended (TSS) (SM 2540D)				
Water	250mL P / None	No preservative; Refrigerate	250mL	7 days
Sulfate by Ion Chromatography (EPA 300.0)				
Water	250mL P / None	No preservative; Refrigerate	250mL	28 days
Surfactants (MBAS) (SM 5540C)				
Water	1L P / None	No preservative; Refrigerate	300mL	2 days
Turbidity (SM 2130B)				
Water	1L P / None	No preservative; Refrigerate	100mL	2 days
UCMR4 Bromide by Ion Chromatography (EPA 300.0)				
Water	250mL P / None	Refrigerate	250mL	28 days

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Analytical Services Quotation

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Sample Collection / Hold Time Info

General Chemistry

Matrix	Container	Preservation	Amount Required	Hold Time
UCMR4 Organic Carbon, Total (TOC) (SM 5310C)				
Water	40mL VOA / H3PO4	Add H3PO4 to pH <2; Refrigerate	40mL	28 days

Metals

Matrix	Container	Preservation	Amount Required	Hold Time
Aluminum (Total) by ICP (EPA 200.7)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Antimony (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Arsenic (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Barium (Total) by ICP (EPA 200.7)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Beryllium (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Cadmium (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Calcium (Total) by ICP (EPA 200.7)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Chromium (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Copper (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Germanium and Manganese by ICP-MS (EPA 200.8)				
Water	250mL P / HNO3	Add HNO3 to pH<2; Store ambient	250mL	28 days
Iron (Total) by ICP (EPA 200.7)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days

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Sample Collection / Hold Time Info

Metals

<i>Matrix</i>	<i>Container</i>	<i>Preservation</i>	<i>Amount Required</i>	<i>Hold Time</i>
Lead (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Magnesium (Total) by ICP (EPA 200.7)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Manganese (Total) by ICP (EPA 200.7)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Mercury (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	28 days
Nickel (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Potassium (Total) by ICP (EPA 200.7)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Selenium (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Silver (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Sodium (Total) by ICP (EPA 200.7)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Thallium (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Uranium (Total) by ICP-MS (EPA 200.8)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days
Zinc (Total) by ICP (EPA 200.7)				
Water	500mL P / HNO3	Add HNO3 to pH<2; Store ambient	500mL	180 days

Microbiology

<i>Matrix</i>	<i>Container</i>	<i>Preservation</i>	<i>Amount Required</i>	<i>Hold Time</i>
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Matthew Bullis
City of Fresno
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Fresno, CA 93703

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Expires: 04/01/2024

Sample Collection / Hold Time Info

Microbiology

Matrix	Container	Preservation	Amount Required	Hold Time
Coliform, Presence/Absence by Colilert (SM 9223B)				
Water	120mL P / Bacteria	Sodium thiosulfate; Refrigerate	120 mL	1.25 days
Coliform, Total and E.Coli by Quanti-Tray 51 Wells (SM 9223B)				
Water	120mL P / Bacteria	Sodium thiosulfate; Refrigerate	120 mL	1.25 days
Heterotrophic Plate Count (48 Hour) (SM 9215B)				
Water	120mL P / Bacteria	Sodium thiosulfate; Refrigerate	125 mL	0.333 days
UCMR4, Total Microcystin - ADDA by ELISA (EPA 546 (ELISA))				
Water	250mL AG / Na2S2O3	Frozen upon receipt at laboratory	250mL	14 days

Miscellaneous

Matrix	Container	Preservation	Amount Required	Hold Time
Radium 226-DW (EPA 9315)				
Water	1L P / HNO3	Add HNO3 to pH<2; Store ambient	1000mL	180 days
Radium 228-DW (EPA 9320)				
Water	1L P / HNO3	Add HNO3 to pH<2; Store ambient	1000mL	180 days
Sieve Analysis (ASTM D-422/ C-136)				
Solid	*** DEFAULT CONTAINER ***	*** DEFAULT PRESERVATION ***		360 days

Radio Chemistry

Matrix	Container	Preservation	Amount Required	Hold Time
Gross Alpha by Co-precipitation (SM 7110C)				
Water	1L P / HNO3	Add HNO3 to pH<2; Store ambient	1000mL	180 days

Semi-volatile Organics

Matrix	Container	Preservation	Amount Required	Hold Time
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Sample Collection / Hold Time Info

Semi-volatile Organics

Matrix	Container	Preservation	Amount Required	Hold Time
Carbamates by HPLC (EPA 531.1)				
Water	40mL VOA / MCAA + Na2S2O3	Dechlorinate; Refrigerate	250mL	28 days
Chlorinated Acid Herbicides by GC-ECD (EPA 515.4)				
Water	250mL AG / Na2SO3	Sodium Sulfite 12.5g/250ml, Refrigerate	250	14 days
Diquat by HPLC (EPA 549.2)				
Water	1L AP / Na2S2O3	Dechlorinate; Refrigerate	1000mL	7 days
EDB and DBCP by GC-ECD (EPA 504.1)				
Water	40mL VOA / Na2S2O3	Sodium thiosulfate; Refrigerate	40mL	14 days
Endothall by GC-MS (EPA 548.1)				
Water	250mL AG / Na2S2O3	Dechlorinate; Refrigerate	250mL	7 days
Glyphosate by HPLC (EPA 547)				
Water	40mL VOA / Na2S2O3	Sodium thiosulfate; Refrigerate	40mL	14 days
Haloacetic Acids by GC-ECD, GC-MS (EPA 552.3)				
Water	250mL AG / NH4CL	Dechlorinate; Refrigerate	250mL	14 days
Organohalide Pesticides and PCBs by GC-ECD (EPA 505)				
Water	40mL VOA / Na2S2O3	Sodium thiosulfate; Refrigerate	40	7 days
Semi-Volatile Organics by GC-MS (EPA 525.3)				
Water	1L AG / Ascorbic, EDTA, KH2Ct	ascorbic acid, EDTA, Pot diHydrogen Citrate, Refrigerate	1000mL	14 days
UCMR4, Alcohols by GC/MS (SIM) (EPA 541)				
Water	250mL AG / Na2SO3 + NaHSO4	Refrigerate	250mL	28 days
UCMR4, Cyindrospermopsin and Anatoxin by LC/MS/MS (EPA 545)				
Water	250mL AG / Sodium Bisulfate, Ascorbic Acid	Refrigerate	125mL	28 days
UCMR4, Haloacetic Acids by GC-ECD, GCMS (EPA 552.3)				
Water	250mL AG / NH4CL	Dechlorinate; Refrigerate	250mL	14 days
UCMR4, Microcystins and Nodularin by LC/MS/MS (EPA 544)				
Water	500mL AG / Trizma, Chloroacetamide, Ascorbic, EDTA	Refrigerate	500mL	28 days

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Sample Collection / Hold Time Info

Semi-volatile Organics

Matrix	Container	Preservation	Amount Required	Hold Time
UCMR4, Organic Solvents by GC/MS (SIM) (EPA 530)				
Water	1L AG / Trizma + Ascorbic + EDTA + Diazo Urea	Refrigerate	1000mL	14 days
UCMR4, Pesticides by GC/MS (SIM) (EPA 525.3)				
Water	1L AG / Ascorbic + EDTA + pH 3.8 Buffer	Refrigerate	1000mL	14 days

Volatile Organics

Matrix	Container	Preservation	Amount Required	Hold Time
1,2,3-Trichloropropane by GC-MS SIM (SRL 524M-TCP)				
Water	40mL AG VOA / HCL	Add HCl to pH<2; refrigerate	40mL	14 days
MTBE by GC-MS (EPA 524.2)				
Water	40mL VOA / HCL	Dechlorinate; add HCl to pH<2; Refrigerate	40mL	14 days
Trihalomethanes by GC-MS (EPA 524.2)				
Water	40mL VOA AG / Na2S2O3	Dechlorinate; Refrigerate	40mL	14 days
Volatile Organics by GC-MS (EPA 524.2)				
Water	40mL VOA / HCL	Dechlorinate; add HCl to pH<2; Refrigerate	40mL	14 days

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Analysis Details / Quality Control Limits

Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
General Chemistry							
Aggressive Index (Reqs PH/Alk/Ca) in Water (-)							
Aggressive Index	[blank]						
Alkalinity (CaCO3, HCO3/CO3/OH) by Titration in Water (SM 2320B)							
Alkalinity as CaCO3	3.0 mg/L		80 - 120	20			10
Bicarbonate as CaCO3	3.0 mg/L						10
Carbonate as CaCO3	3.0 mg/L						10
Hydroxide as CaCO3	3.0 mg/L						10
Biochemical Oxygen Demand (BOD) in Water (SM 5210B)							
Biochemical Oxygen Demand	1.0 mg/L		85 - 115	20			10
Bromate by Ion Chromatography in Water (EPA 317.0)							
Bromate	0.0010 mg/L		85 - 115	10	75 - 125	10	
Bromide by Ion Chromatography (Low Level) in Water (EPA 300.1)							
Bromide	0.0050 mg/L		85 - 115	10	75 - 125	10	
surr: Dichloroacetate		90 - 115					
Chloride by Ion Chromatography in Water (EPA 300.0)							
Chloride	1.0 mg/L		90 - 110	20	80 - 120	20	
Color in Water (SM 2120B)							
Color, Apparent	5.0 CU		80 - 120				20
Dissolved Oxygen (DO) by Winkler Titration in Water (SM 4500-O C)							
Dissolved Oxygen	0.10 mg/L						
Electrical Conductivity (EC) in Water (SM 2510B)							
Conductivity @ 25C	1.0 umhos/cm		90 - 110	20			20
Fluoride by Ion Chromatography in Water (EPA 300.0)							
Fluoride	0.10 mg/L		90 - 110	10	80 - 120	10	
Hexavalent Chromium by Ion Chromatography in Water (EPA 218.7)							
Hexavalent Chromium	0.050 ug/L		50 - 150	50	85 - 115	15	
Langelier Index (LI, pH/Alkalinity/TDS/Ca) by Calc in Water (SM 2330B)							
Langelier Index	-10 SI Units						

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Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
General Chemistry							
Nitrate (N) and Nitrite (N) by Ion Chromatography in Water (EPA 300.0)							
Nitrate + Nitrite as N	0.23 mg/L						
Nitrate (N) by Ion Chromatography in Water (EPA 300.0)							
Nitrate as N	0.23 mg/L		90 - 110	20	80 - 120	20	
Nitrite (NO2) by Ion Chromatography in Water (EPA 300.0)							
Nitrite as N	0.050 mg/L		90 - 110	20	50 - 110	20	
Odor in Water (SM 2150B)							
Threshold Odor	1.0 T.O.N.						20
Organic Carbon, Total (TOC) in Water (SM 5310C)							
Total Organic Carbon	0.20 mg/L		80 - 120	20	80 - 120	20	
Orthophosphate (o-PO4) by Ion Chromatography in Water (EPA 300.0)							
Orthophosphate as PO4	0.60 mg/L		90 - 110	20	80 - 120	20	
Perchlorate by Ion Chromatography in Water (EPA 314.0)							
Perchlorate	2.0 ug/L		85 - 115	15	80 - 120	15	
pH in Water (SM 4500-H+ B)							
pH (1)	pH Units						
pH Temperature in °C	pH Units						
Solids, Total Dissolved (TDS) in Water (SM 2540C)							
Total Dissolved Solids	5.0 mg/L		70 - 130				10
Solids, Total Suspended (TSS) in Water (SM 2540D)							
Total Suspended Solids	5.0 mg/L						10
Sulfate by Ion Chromatography in Water (EPA 300.0)							
Sulfate as SO4	1.0 mg/L		90 - 110	20	80 - 120	20	
Surfactants (MBAS) in Water (SM 5540C)							
MBAS, Calculated as LAS, mol wt 340	0.050 mg/L		82 - 112	20	80 - 112	20	
Turbidity in Water (SM 2130B)							
Turbidity	0.10 NTU		90 - 110				20

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Analysis Details / Quality Control Limits

Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
General Chemistry							
UCMR4 Bromide by Ion Chromatography in Water (EPA 300.0)							
Bromide	20 ug/L		90 - 110	10	80 - 120	10	
UCMR4 Organic Carbon, Total (TOC) in Water (SM 5310C)							
Total Organic Carbon	1000 ug/L		80 - 120	20	80 - 120	20	
Metals							
Aluminum (Total) by ICP in Water (EPA 200.7)							
Aluminum	0.050 mg/L		85 - 115	20	70 - 130	20	
Antimony (Total) by ICP-MS in Water (EPA 200.8)							
Antimony	2.0 ug/L		85 - 115	20	70 - 130	20	
Arsenic (Total) by ICP-MS in Water (EPA 200.8)							
Arsenic	2.0 ug/L		85 - 115	20	70 - 130	20	
Barium (Total) by ICP in Water (EPA 200.7)							
Barium	0.050 mg/L		85 - 115	20	70 - 130	20	
Beryllium (Total) by ICP-MS in Water (EPA 200.8)							
Beryllium	1.0 ug/L		85 - 115	20	70 - 130	20	
Cadmium (Total) by ICP-MS in Water (EPA 200.8)							
Cadmium	1.0 ug/L		85 - 115	20	70 - 130	20	
Calcium (Total) by ICP in Water (EPA 200.7)							
Calcium	0.10 mg/L		85 - 115	20	70 - 130	20	
Chromium (Total) by ICP-MS in Water (EPA 200.8)							
Chromium	10 ug/L		85 - 115	20	70 - 130	20	
Copper (Total) by ICP-MS in Water (EPA 200.8)							
Copper	5.0 ug/L		85 - 115	20	70 - 130	20	
Copper	50 ug/L		85 - 115	20	70 - 130	20	

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Analysis Details / Quality Control Limits

Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
Metals							
Germanium and Manganese by ICP-MS in Water (EPA 200.8)							
Germanium	0.30 ug/L		50 - 150		70 - 130	20	
Manganese	0.40 ug/L		50 - 150		70 - 130	20	
Yttrium	ug/L						
Iron (Total) by ICP in Water (EPA 200.7)							
Iron	0.030 mg/L		85 - 115	20	70 - 130	20	
Lead (Total) by ICP-MS in Water (EPA 200.8)							
Lead	5.0 ug/L		85 - 115	20	70 - 130	20	
Lead	1.0 ug/L		85 - 115	20	70 - 130	20	
Magnesium (Total) by ICP in Water (EPA 200.7)							
Magnesium	0.10 mg/L		85 - 115	20	70 - 130	20	
Manganese (Total) by ICP in Water (EPA 200.7)							
Manganese	0.010 mg/L		85 - 115	20	70 - 130	20	
Mercury (Total) by ICP-MS in Water (EPA 200.8)							
Mercury	0.20 ug/L		85 - 115	20	70 - 130	20	
Nickel (Total) by ICP-MS in Water (EPA 200.8)							
Nickel	10 ug/L		85 - 115	20	70 - 130	20	
Potassium (Total) by ICP in Water (EPA 200.7)							
Potassium	2.0 mg/L		85 - 115	20	70 - 130	20	
Selenium (Total) by ICP-MS in Water (EPA 200.8)							
Selenium	2.0 ug/L		85 - 115	20	70 - 130	20	
Silver (Total) by ICP-MS in Water (EPA 200.8)							
Silver	10 ug/L		75 - 125	20	70 - 130	20	
Sodium (Total) by ICP in Water (EPA 200.7)							
Sodium	1.0 mg/L		85 - 115	20	70 - 130	20	
Thallium (Total) by ICP-MS in Water (EPA 200.8)							
Thallium	1.0 ug/L		85 - 115	20	70 - 130	20	
Uranium (Total) by ICP-MS in Water (EPA 200.8)							
Uranium	1.0 ug/L		85 - 115	20	70 - 130	20	

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Analysis Details / Quality Control Limits

Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
Metals							
Zinc (Total) by ICP in Water (EPA 200.7)							
Zinc	0.050 mg/L		85 - 115	20	70 - 130	20	

Microbiology

Coliform, Presence/Absence by Colilert in Water (SM 9223B)

E. Coli	0.900 /100 mL
Total Coliform	0.900 /100 mL

Coliform, Total and E.Coli by Quanti-Tray 51 Wells in Water (SM 9223B)

E. Coli	1 MPN/100 mL
Total Coliform	1 MPN/100 mL

Heterotrophic Plate Count (48 Hour) in Water (SM 9215B)

Heterotrophic Plate Count	1.0 CFU/ml	10
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UCMR4, Total Microcystin - ADDA by ELISA in Water (EPA 546 (ELISA))

Total Microcystin	0.30 ug/L	60 - 140	40	60 - 140	40
surr: %CV (abs.)		0 - 15			

Miscellaneous

Radium 226-DW in Water (EPA 9315)

Radium-226	pCi/L
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Radium 228-DW in Water (EPA 9320)

Radium-228	pCi/L
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Radio Chemistry

Gross Alpha by Co-precipitation in Water (SM 7110C)

Gross Alpha	1.00 pCi/L	73 - 127	50	70 - 130	50
Gross Alpha 1.65 Sigma Uncertainty	1.00 pCi/L				
Gross Alpha MDA95	1.00 pCi/L				

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Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
Semi-volatile Organics							
Carbamates by HPLC in Water (EPA 531.1)							
3-Hydroxycarbofuran	3.0 ug/L		80 - 120	20	65 - 135	20	
Aldicarb	3.0 ug/L		80 - 120	20	65 - 135	20	
Aldicarb Sulfone	2.0 ug/L		80 - 120	20	65 - 135	20	
Aldicarb Sulfoxide	3.0 ug/L		80 - 120	20	65 - 135	20	
Carbaryl	5.0 ug/L		80 - 120	20	65 - 135	20	
Carbofuran	5.0 ug/L		80 - 120	20	65 - 135	20	
Methomyl	2.0 ug/L		80 - 120	20	65 - 135	20	
Oxamyl	20 ug/L		80 - 120	20	65 - 135	20	
Chlorinated Acid Herbicides by GC-ECD in Water (EPA 515.4)							
2,4,5-T	1.0 ug/L		70 - 130	20	70 - 130	30	30
2,4,5-TP (Silvex)	1.0 ug/L		70 - 130	20	70 - 130	30	30
2,4-D	10 ug/L		70 - 130	20	70 - 130	30	30
Bentazon	2.0 ug/L		70 - 130	20	70 - 130	30	30
Dalapon	10 ug/L		70 - 130	20	70 - 130	30	30
Dicamba	1.5 ug/L		70 - 130	20	70 - 130	30	30
Dinoseb	2.0 ug/L		70 - 130	20	70 - 130	30	30
Pentachlorophenol	0.20 ug/L		70 - 130	20	70 - 130	30	30
Picloram	1.0 ug/L		70 - 130	20	70 - 130	30	30
surr: DCPAA		70 - 130					
Diquat by HPLC in Water (EPA 549.2)							
Diquat	4.0 ug/L		70 - 130	30	70 - 130	30	30
DO NOT USE - LOG THE PACKAGE in Water (EPA 552.3a)							
Total Haloacetic Acids	2.0 ug/L						
EDB and DBCP by GC-ECD in Water (EPA 504.1)							
Dibromochloropropane (DBCP)	0.010 ug/L		70 - 130	20	65 - 135	20	30
Ethylene Dibromide (EDB)	0.020 ug/L		70 - 130	20	65 - 135	20	30
surr: 1-Br-2-Nitrobenzene		70 - 130					
Endothall by GC-MS in Water (EPA 548.1)							
Endothall	45 ug/L		46 - 116	30	46 - 116	30	30
Glyphosate by HPLC in Water (EPA 547)							
Glyphosate	25 ug/L		70 - 130	30	70 - 130	30	30
surr: AMPA		70 - 130	70 - 130	30	70 - 130	30	30

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Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R RPD	Matrix Spike %R RPD	Dup RPD
Semi-volatile Organics					
Haloacetic Acids by GC-ECD, GC-MS in Water (EPA 552.3)					
Dibromoacetic Acid (DBAA)	1.0 ug/L		70 - 130 30	70 - 130 30	30
Dichloroacetic Acid (DCAA)	1.0 ug/L		70 - 130 30	70 - 130 30	30
Monobromoacetic Acid (MBAA)	1.0 ug/L		70 - 130 30	70 - 130 30	30
Monochloroacetic Acid (MCAA)	2.0 ug/L		70 - 130 30	70 - 130 30	30
Trichloroacetic Acid (TCAA)	1.0 ug/L		70 - 130 30	70 - 130 30	30
surr: 2-Bromobutanoic Acid		70 - 130			
Organohalide Pesticides and PCBs by GC-ECD in Water (EPA 505)					
Aldrin	0.075 ug/L		70 - 130 20	65 - 135 20	30
Chlordane	0.10 ug/L		70 - 130 20	65 - 135 20	30
Dieldrin	0.020 ug/L		70 - 130 20	65 - 135 20	30
Endrin	0.10 ug/L		70 - 130 20	65 - 135 20	30
Heptachlor	0.010 ug/L		70 - 130 20	65 - 135 20	30
Heptachlor Epoxide	0.010 ug/L		70 - 130 20	65 - 135 20	30
Hexachlorobenzene	0.50 ug/L		70 - 130 20	65 - 135 20	30
Hexachlorocyclopentadiene	1.0 ug/L		70 - 130 20	65 - 135 20	30
Lindane	0.20 ug/L		70 - 130 20	65 - 135 20	30
Methoxychlor	10 ug/L		70 - 130 20	65 - 135 20	30
PCB Aroclor Screen	0.50 ug/L		70 - 130 20	65 - 135 20	30
Toxaphene	1.0 ug/L		70 - 130 20	65 - 135 20	30
surr: 1-Br-2-Nitrobenzene		70 - 130			

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Semi-volatile Organics							
Semi-Volatile Organics by GC-MS in Water (EPA 525.3)							
Alachlor	1.0 ug/L		70 - 130	30	70 - 130	30	30
Atrazine	0.50 ug/L		70 - 130	30	70 - 130	30	30
Benzo(a)pyrene	0.10 ug/L		70 - 130	30	70 - 130	30	30
Bis(2-ethylhexyl) adipate	3.0 ug/L		70 - 130	30	70 - 130	30	30
Bis(2-ethylhexyl) phthalate	3.0 ug/L		70 - 130	30	70 - 130	30	30
Bromacil	10 ug/L		70 - 130	30	70 - 130	30	30
Butachlor	0.38 ug/L		70 - 130	30	70 - 130	30	30
Diazinon	0.25 ug/L		70 - 130	30	70 - 130	30	30
Dimethoate	10 ug/L		70 - 130	30	70 - 130	30	30
Metolachlor	0.50 ug/L		70 - 130	30	70 - 130	30	30
Metribuzin	0.50 ug/L		70 - 130	30	70 - 130	30	30
Molinate	2.0 ug/L		70 - 130	30	70 - 130	30	30
Propachlor	0.50 ug/L		70 - 130	30	70 - 130	30	30
Simazine	1.0 ug/L		70 - 130	30	70 - 130	30	30
Thiobencarb	1.0 ug/L		70 - 130	30	70 - 130	30	30
surr: 1,3-Dimethyl-2-nitrobenzene		70 - 130					
surr: Benzo(a)pyrene-d12		70 - 130					
surr: Triphenyl Phosphate		70 - 130					
UCMR4, Alcohols by GC/MS (SIM) in Water (EPA 541)							
2-Methoxyethanol	0.40 ug/L		50 - 150		70 - 130	30	
Allyl alcohol	0.50 ug/L		50 - 150		70 - 130	30	
Chlorobenzene-d5	ug/L						
n-Butyl alcohol	2.0 ug/L		50 - 150		70 - 130	30	
surr: n-Butyl alcohol-d10		70 - 130					
UCMR4, Cylindrospermopsin and Anatoxin by LC/MS/MS in Water (EPA 545)							
Anatoxin-a	0.030 ug/L		50 - 150		70 - 130	30	
Cylindrospermopsin	0.090 ug/L		50 - 150		70 - 130	30	
L-Phenylalanine-d5	ug/L						
Uracil-d4	ug/L						

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Analysis Details / Quality Control Limits

Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
Semi-volatile Organics							
UCMR4, Haloacetic Acids by GC-ECD, GCMS in Water (EPA 552.3)							
1,2,3-Trichloropropane	ug/L						
Bromochloroacetic Acid (BCAA)	0.30 ug/L		50 - 150		70 - 130	30	
Bromodichloroacetic Acid (BDCAA)	0.50 ug/L		50 - 150		70 - 130	30	
Chlorodibromoacetic acid (CDBAA)	0.30 ug/L		50 - 150		70 - 130	30	
Dibromoacetic Acid (DBAA)	0.30 ug/L		50 - 150		70 - 130	30	
Dichloroacetic Acid (DCAA)	0.20 ug/L		50 - 150		70 - 130	30	
Monobromoacetic Acid (MBAA)	0.30 ug/L		50 - 150		70 - 130	30	
Monochloroacetic Acid (MCAA)	2.0 ug/L		50 - 150		70 - 130	30	
Tribromoacetic Acid (TBAA)	2.0 ug/L		50 - 150		70 - 130	30	
Trichloroacetic Acid (TCAA)	0.50 ug/L		50 - 150		70 - 130	30	
surr: 2-Bromobutanoic Acid		70 - 130					
UCMR4, Microcystins and Nodularin by LC/MS/MS in Water (EPA 544)							
Microcystin-LA	0.0080 ug/L		50 - 150		60 - 140	30	
Microcystin-LF	0.0060 ug/L		50 - 150		60 - 140	30	
Microcystin-LR	0.020 ug/L		50 - 150		60 - 140	30	
Microcystin-LY	0.0090 ug/L		50 - 150		60 - 140	30	
Microcystin-RR	0.0060 ug/L		50 - 150		60 - 140	30	
Microcystin-YR	0.020 ug/L		50 - 150		60 - 140	30	
Nodularin-R	0.0050 ug/L		50 - 150		60 - 140	30	
surr: Ethylated MC-LR-d5		60 - 130					
UCMR4, Organic Solvents by GC/MS (SIM) in Water (EPA 530)							
Acenaphthene-d10	ug/L						
Butylated hydroxyanisole (BHA)	0.030 ug/L		50 - 150		70 - 130	30	
o-Toluidine	0.0070 ug/L		50 - 150		50 - 130	30	
Phenanthrene-d10	ug/L						
Quinoline	0.020 ug/L		50 - 150		70 - 130	30	
surr: o-Toluidine-d9		50 - 130					
surr: Quinoline-d7		70 - 130					

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Semi-volatile Organics							
UCMR4, Pesticides by GC/MS (SIM) in Water (EPA 525.3)							
Acenaphthene-d10	ug/L						
Alpha-Hexachlorocyclohexane	0.010 ug/L		50 - 150		70 - 130	30	
Chlorpyrifos	0.030 ug/L		50 - 150		70 - 130	30	
Chrysene-d12	ug/L						
Dimethipin	0.20 ug/L		50 - 150		70 - 130	30	
Ethoprop	0.030 ug/L		50 - 150		70 - 130	30	
Oxyfluorfen	0.050 ug/L		50 - 150		70 - 130	30	
Phenanthrene-d10	ug/L						
Profenophos	0.30 ug/L		50 - 150		70 - 130	30	
Tebuconazole	0.20 ug/L		50 - 150		70 - 130	30	
Total Permethrin (cis & trans)	0.040 ug/L		50 - 150		70 - 130	30	
Tribufos (DEF)	0.070 ug/L		50 - 150		70 - 130	30	
surr: 1,3-Dimethyl-2-nitrobenzene		70 - 130					
surr: Benzo(a)pyrene-d12		70 - 130					
surr: Triphenyl Phosphate		70 - 130					

Volatile Organics

1,2,3-Trichloropropane by GC-MS SIM in Water (SRL 524M-TCP)

1,2,3-Trichloropropane	0.00070 ug/L	80 - 120	30			20
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DO NOT USE - LOG THE PACKAGE in Water (EPA 524.2a)

Total Trihalomethanes	0.50 ug/L
Total Xylenes, EPA 524.2	0.50 ug/L

MTBE by GC-MS in Water (EPA 524.2)

Methyl-t-butyl ether	0.50 ug/L	70 - 130	30	41 - 156	30
surr: 1,2-Dichlorobenzene-d4		70 - 130	70 - 130	30	30
surr: Bromofluorobenzene		70 - 130			30

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Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
Volatile Organics							
Trihalomethanes by GC-MS in Water (EPA 524.2)							
Bromodichloromethane	0.50 ug/L		70 - 130	30	47 - 151		30
Bromoform	0.50 ug/L		70 - 130	30	29 - 162		30
Chloroform	0.50 ug/L		70 - 130	30	52 - 148		30
Dibromochloromethane	0.50 ug/L		70 - 130	30	44 - 149		30
surr: 1,2-Dichlorobenzene-d4		70 - 130		30			30
surr: Bromofluorobenzene		70 - 130					30

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Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
Volatile Organics							
Volatile Organics by GC-MS in Water (EPA 524.2)							
1,1,1,2-Tetrachloroethane	0.50 ug/L		70 - 130	30	41 - 156	30	30
1,1,1-Trichloroethane	0.50 ug/L		70 - 130	30	48 - 160	30	30
1,1,2,2-Tetrachloroethane	0.50 ug/L		70 - 130	30	42 - 151	30	30
1,1,2-Trichloro-1,2,2-trifluoroethane	10 ug/L		70 - 130	30	47 - 164	30	30
1,1,2-Trichloroethane	0.50 ug/L		70 - 130	30	45 - 152	30	30
1,1-Dichloroethane	0.50 ug/L		70 - 130	30	48 - 157	30	30
1,1-Dichloroethene	0.50 ug/L		70 - 130	30	51 - 158	30	30
1,1-Dichloropropene	0.50 ug/L		70 - 130	30	46 - 162	30	30
1,2,3-Trichlorobenzene	0.50 ug/L		70 - 130	30	37 - 145	30	30
1,2,4-Trichlorobenzene	0.50 ug/L		70 - 130	30	33 - 149	30	30
1,2,4-Trimethylbenzene	0.50 ug/L		70 - 130	30	44 - 146	30	30
1,2-Dichlorobenzene	0.50 ug/L		70 - 130	30	44 - 146	30	30
1,2-Dichloroethane	0.50 ug/L		70 - 130	30	47 - 151	30	30
1,2-Dichloropropane	0.50 ug/L		70 - 130	30	47 - 155	30	30
1,3,5-Trimethylbenzene	0.50 ug/L		70 - 130	30	45 - 154	30	30
1,3-Dichlorobenzene	0.50 ug/L		70 - 130	30	44 - 146	30	30
1,3-Dichloropropane	0.50 ug/L		70 - 130	30	45 - 151	30	30
1,4-Dichlorobenzene	0.50 ug/L		70 - 130	30	43 - 146	30	30
2,2-Dichloropropane	0.50 ug/L		70 - 130	30	24 - 182	30	30
2-Butanone	5.0 ug/L		70 - 130	30	55 - 144	30	30
2-Chlorotoluene	0.50 ug/L		70 - 130	30	48 - 150	30	30
2-Hexanone	10 ug/L		70 - 130	30	40 - 159	30	30
4-Chlorotoluene	0.50 ug/L		70 - 130	30	43 - 150	30	30
4-Methyl-2-pentanone	5.0 ug/L		70 - 130	30	30 - 171	30	30
Acetone	10 ug/L		70 - 130	30	27 - 181	30	30
Benzene	0.50 ug/L		70 - 130	30	48 - 155	30	30
Bromobenzene	0.50 ug/L		70 - 130	30	43 - 151	30	30
Bromochloromethane	0.50 ug/L		70 - 130	30	48 - 161	30	30
Bromodichloromethane	0.50 ug/L		70 - 130	30	47 - 151	30	30
Bromoform	0.50 ug/L		70 - 130	30	29 - 162	30	30
Bromomethane	0.50 ug/L		70 - 130	30	10 - 200	30	30
Carbon Tetrachloride	0.50 ug/L		70 - 130	30	47 - 163	30	30
Chlorobenzene	0.50 ug/L		70 - 130	30	46 - 152	30	30
Chloroethane	0.50 ug/L		70 - 130	30	28 - 189	30	30
Chloroform	0.50 ug/L		70 - 130	30	52 - 148	30	30
Chloromethane	0.50 ug/L		70 - 130	30	53 - 159	30	30

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Analysis Details / Quality Control Limits

Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
Volatile Organics							
Volatile Organics by GC-MS in Water (EPA 524.2)							
cis-1,2-Dichloroethene	0.50 ug/L		70 - 130	30	50 - 152	30	30
cis-1,3-Dichloropropene	0.50 ug/L		70 - 130	30	34 - 156	30	30
Dibromochloromethane	0.50 ug/L		70 - 130	30	44 - 149	30	30
Dibromomethane	0.50 ug/L		70 - 130	30	46 - 150	30	30
Dichlorodifluoromethane	0.50 ug/L		70 - 130	30	33 - 170	30	30
Dichloromethane	0.50 ug/L		70 - 130	30	47 - 156	30	30
Di-isopropyl ether (DIPE)	3.0 ug/L		70 - 130	30	41 - 159	30	30
Ethyl tert-Butyl Ether (ETBE)	0.50 ug/L		70 - 130	30	32 - 160	30	30
Ethylbenzene	0.50 ug/L		70 - 130	30	40 - 157	30	30
Hexachlorobutadiene	0.50 ug/L		70 - 130	30	38 - 151	30	30
Isopropylbenzene	0.50 ug/L		70 - 130	30	41 - 156	30	30
m,p-Xylenes	0.50 ug/L		70 - 130	30	49 - 154	30	30
Methyl-t-butyl ether	0.50 ug/L		70 - 130	30	41 - 156	30	30
Naphthalene	0.50 ug/L		70 - 130	30	35 - 154	30	30
n-Butylbenzene	0.50 ug/L		70 - 130	30	31 - 153	30	30
n-Propylbenzene	0.50 ug/L		70 - 130	30	39 - 156	30	30
o-Xylene	0.50 ug/L		70 - 130	30	27 - 164	30	30
p-Isopropyltoluene	0.50 ug/L		70 - 130	30	26 - 161	30	30
sec-Butylbenzene	0.50 ug/L		70 - 130	30	39 - 154	30	30
Styrene	0.50 ug/L		70 - 130	30	10 - 200	30	30
tert-Amyl Methyl Ether (TAME)	3.0 ug/L		70 - 130	30	24 - 161	30	30
tert-Butyl alcohol (TBA)	2.0 ug/L		70 - 130	30	22 - 174	30	30
tert-Butylbenzene	0.50 ug/L		70 - 130	30	40 - 153	30	30
Tetrachloroethene (PCE)	0.50 ug/L		70 - 130	30	48 - 155	30	30
Toluene	0.50 ug/L		70 - 130	30	40 - 159	30	30
trans-1,2-Dichloroethene	0.50 ug/L		70 - 130	30	52 - 157	30	30
trans-1,3-Dichloropropene	0.50 ug/L		70 - 130	30	28 - 160	30	30
Trichloroethene (TCE)	0.50 ug/L		70 - 130	30	49 - 155	30	30
Trichlorofluoromethane	5.0 ug/L		70 - 130	30	47 - 169	30	30
Vinyl Chloride	0.50 ug/L		70 - 130	30	21 - 183	30	30
surr: 1,2-Dichlorobenzene-d4		70 - 130		30		30	30
surr: Bromofluorobenzene		70 - 130					30
Volatile Organics by GC-MS in Water (EPA 524.2a)							
Total 1,3-Dichloropropene	0.50 ug/L						

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Analyte	Reporting Limit	Surr %R	BlankSpike/LCS %R	RPD	Matrix Spike %R	RPD	Dup RPD
General Chemistry							
Ash, Percent in Solid (ASTM E 1534-93)							
Percent Ash	0.10 % by Weight						20
Iodine Number by Titration in Solid (ASTM D4607-94)							
Iodine Number	mg I2/g						20
Moisture, Percent in Solid (SM 2540B)							
Percent Moisture	0.10 % by Weight						20

Miscellaneous

Sieve Analysis in Solid (ASTM D-422/ C-136)

Boulder	0.00 %
Clay	0.00 %
Cobble	0.00 %
Fine	0.00 %
Granule	0.00 %
Granule + Pebble	0.00 %
Gravel	0.00 %
Pebble	0.00 %
Sand	0.00 %
Sand + Fine	0.00 %
Silt	0.00 %

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BSK Associates Laboratory Services Standard Terms and Conditions

1) PRICES AND TAXES

- a. Prices are exclusive of federal, state, and local taxes, fees or charges now in force or enacted in the future.

2) SHIPMENT

- a. BSK Associates (LABORATORY) will deliver completed reports by one of more of the following means: U.S. First Class mail, standard ground service carrier (i.e. UPS Ground, FedEx Ground, etc.), electronic mail (via Adobe PDF®), or post to the LABORATORY data portal. Shipping charges, where applicable, will be included with all sample prices. LABORATORY will expedite mailing of hardcopy deliverables at CLIENT's request and at CLIENT's expense.

3) TERMS OF PAYMENT

- a. Terms are net thirty (30) days. Amounts past due will be subject to a monthly charge at the rate of one and one half percent (1.5%) per month to cover the costs of servicing these accounts.
- b. Orders from customers with invoices that are sixty (60) days or more overdue (i.e., not paid within 60 days of invoice date) will be accepted only on a C.O.D., cash or credit card with order basis until credit can be re-established to LABORATORY's satisfaction. LABORATORY reserves the right to withhold reports, if currently under progress, if a CLIENT fails to pay on any invoice beyond 60 days. Unpaid invoices more than ninety (90) days overdue may be subject to collections at the sole discretion of the LABORATORY.

4) DELIVERY OF SERVICES

- a. Completion of any services purchased is subject to LABORATORY availability schedule. LABORATORY shall make every reasonable effort to meet any completion date(s) quoted or acknowledged. However, LABORATORY will not in any way be liable for damages caused by its failure to meet such date(s).
- b. Standard turnaround (TAT) for laboratory services is 10 business days. All TAT schedules may not be available for all test methods. Please contact the laboratory if you have specific turnaround requirements. Results are considered due out of the lab by closed of business on that day. Unless arranged otherwise with the laboratory, samples for 2 or less day turnaround must be received by noon for the lab to include the day received in determination of the due date.
- c. LABORATORY will use, where applicable, standard testing procedures that conform to published analytical methodologies. LABORATORY reserves the right to make changes or alter these methodologies if necessary due to composition or nature of the sample or based upon the reasonable judgment of the LABORATORY. Such deviations will be made on the basis consistent with either industry standards or according to the LABORATORY's Standard Operating Procedures.
- d. Verbal and/or preliminary results may be given in advance to the final written report of results. Such verbal or preliminary results are tentative results only and are subject to change or confirmation based upon LABORATORY quality assurance review procedures. LABORATORY shall not be liable in any way for damages incurred by CLIENT as a result of CLIENT's reliance on such verbal or preliminary results.
- e. LABORATORY reserves the right to subcontract services ordered by the CLIENT if it is in the CLIENT's best interest to do so in a manner consistent with our Subcontract Policy (see below). LABORATORY shall not be liable in any way for subcontracted services except as stated in section 4a, above, and 5a, following, unless other arrangements have been made in writing with LABORATORY prior to sample delivery.
- f. All results provided by LABORATORY are strictly for the use of the CLIENT and LABORATORY is in no way responsible for use of such results by the CLIENT or third parties. All results should be considered in their entirety and LABORATORY is not responsible for the detachment, separation or other use of any portion of the results. Unless otherwise agreed in writing, all documents and information prepared by LABORATORY or obtained by LABORATORY from any third party in connection with the performance of the Services are the property of LABORATORY.
- g. The CLIENT represents and warrants that any sample delivered to LABORATORY will be preceded by or accompanied by complete written disclosure of the existence of any Title 22 CAC listed hazardous substances known or suspected by the CLIENT. The CLIENT further warrants that any sample known to contain any hazardous substance(s) that is to be delivered to LABORATORY will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.
- h. LABORATORY will retain pertinent records relating to the services performed for a period consistent with the Laboratory's record retention policy. During this period the records will be made available to CLIENT for listed archive retrieval fees at reasonable times.
- i. LABORATORY liability is specifically limited as stated in Section 5. LABORATORY shall not be responsible nor liable in any way for the following:
 - i. The method or methods by which samples are collected or obtained, transported, labeled or delivered by CLIENT or CLIENT's agents.
 - ii. The evaluation, reporting, or use by CLIENT or any third party, or the interpretation of any data, reports or findings given by LABORATORY to CLIENT.
 - iii. The retention, return and/or preservation or disposal of any sample after the analysis is completed.

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BSK Standard Terms and Conditions continued...

5) ALLOCATION OF RISK

- a. *Limitation of Liability.* The total cumulative liability of LABORATORY, its subcontractors, and all of their respective shareholders, directors, officers, employees and agents (collectively "LABORATORY Entities") to CLIENT arising from Services under this Agreement, including attorney's fees due under this Agreement, will not exceed the gross compensation received by LABORATORY under this Agreement or \$50,000, whichever is less; provided, however, that such liability is further limited as described below. This limitation applies to all lawsuits, claims or actions that allege errors or omissions in LABORATORY's Services, whether alleged to arise in tort, contract, warranty, or other legal theory, including any claim based on the indemnification clauses below.
- b. *Indemnification*
 - i. *Indemnification of CLIENT.* Subject to all otherwise applicable statutes of limitations and repose and the provisions and limitations of this Agreement, LABORATORY agrees to indemnify and hold harmless CLIENT, its shareholders, officers, directors, employees, from and against any and all claims, suits, liabilities, damages, expenses (including reimbursement of reasonable attorney's fees and costs of defense) or other losses (collectively "Losses") to the extent caused by LABORATORY's negligent performance of its Services under this Agreement. LABORATORY's defense obligation under this indemnity paragraph includes only the reimbursement of reasonable defense costs to the extent of LABORATORY's actual Indemnity obligation hereunder.
 - ii. *Indemnification of LABORATORY.* CLIENT will indemnify and hold harmless LABORATORY Entities from and against any and all Losses to the extent caused by the negligence of CLIENT, its employees, agents and contractors. In addition, except to the extent caused by LABORATORY's sole negligence, CLIENT expressly agrees to defend, indemnify and hold harmless LABORATORY Entities from and against any and all Losses arising from or related to the existence, disposal, release, discharge, treatment or transportation of Hazardous Materials, or the exposure of any person to Hazardous Materials, or the degradation of the environment due to the presence, discharge, disposal, release of or exposure to Hazardous Material.
- c. *Consequential Damages.* Neither CLIENT nor LABORATORY will be liable to the other for any special, consequential, incidental or penal losses or damages, including but not limited to losses, damages or claims related to the unavailability of property or facilities, shutdowns or service interruptions, loss of use, profits, revenue, or inventory, or for use charges, cost of capital of the other party or its customers.
- d. *Continuing Agreement.* The indemnity obligations and the limitations of liability established under this Agreement will survive the expiration or termination of this Agreement. If LABORATORY provides Services to CLIENT that the parties do not confirm through execution of an amendment to this Agreement, the obligations of the parties to indemnify each other and the limitations on liability established under this Agreement apply to such Services as if the parties had executed an amendment.

6) EXPERT WITNESS

- a. In the event that LABORATORY personnel are required by any party to serve as expert witness with respect to any analytical work performed, the contracting party will reimburse LABORATORY for all costs associated with such testimony, including but not limited to the time involved in preparing for and in actually testifying; and the cost of any materials including photocopies, magnetic tapes, floppy diskettes, optical media, etc.

7) BANKRUPTCY

- a. If CLIENT becomes bankrupt or insolvent, or commences ending of its business, LABORATORY will be entitled by notice in writing to cancel this contract without judicial intervention or declaration of default of CLIENT.

8) ENTIRE AGREEMENT

- a. The terms and conditions set forth herein constitute the entire agreement between LABORATORY and CLIENT.
- b. This contract may not be modified, supplemented, qualified or interpreted by any trade usage or prior course of dealing not made a part of the contract.
- c. CLIENT hereby acknowledges that he has not entered into this agreement in reliance upon any warranty or representation by any person or entity except for the warranties or representation specifically set forth herein.

9) WAIVER

- a. The failure by LABORATORY to enforce at any time any of the provisions of this contract, to exercise any election or option provided herein, or to require at any time the performance by CLIENT of any of the revisions herein will not in any way be construed as a waiver of such provisions.

10) ERRORS

- a. Stenographic and clerical errors in sales made under this contract are subject to correction.

11) APPLICABLE LAW, JURISDICTION AND VENUE

- a. This contract will be governed by the laws of the State of California. The California state courts of Fresno County, California (or, if there is exclusive federal jurisdiction, the United States District Court for the Northern District of California) will have exclusive jurisdiction and venue over any dispute arising out of this agreement and sale, and CLIENT hereby consents to the jurisdiction of such courts.

12) ATTORNEYS' FEES

- a. It is agreed that the prevailing party shall be entitled to recover reasonable attorney's fees and costs incurred in connection with the enforcement or interpretation of this agreement should be filed, and a judgment be made.

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BSK Standard Terms and Conditions continued...

13) CONFIDENTIALITY POLICY

- a. It is the policy of BSK Associates to only convey analytical results to those individuals whose name or company name appear on the Chain of Custody or a preauthorized established agent. Exceptions are persons listed as "copy to", persons whom verbal permission from the CLIENT is obtained, regulatory agents who have specific information such as date sampled or submission number, and drinking water results reported to the Department of Health Services as required by law. BSK Associates will not be liable for misrepresentation or intentional fraud by individuals requesting results.

14) SUBCONTRACT POLICY

- a. BSK Associates shall analyze all samples, as requested by the CLIENT, in accordance with the Chain of Custody record. Subcontracting of samples may occur under any of the following circumstances; the analysis is not performed routinely by BSK Associates and is a well-known subcontracted test, instrument breakdown or analyst is not available, lack of instrument time, hold time or CLIENT requested turnaround time cannot be met, and method demands such as analytes or detection limits cannot be achieved. Only labs with the proper certifications will be used. BSK Associates will make a concerted effort to notify the CLIENT in writing, when samples will be subcontracted other than routinely subcontracted analysis. Results shall be reported on the subcontract laboratory's own letterhead or the subcontract lab will be identified except when state forms are required.

15) ACCEPTANCE OF TERMS AND CONDITIONS

- a. Submission of samples for analysis under Chain of Custody with authorizing signature shall be considered the acknowledgement and acceptance of these Terms and Conditions on the part of the CLIENT.

Rev. 03/18/2011

Exhibit B

INSURANCE REQUIREMENTS

Consultant Service Agreement between City of Fresno ("CITY") and BSK Associates ("CONSULTANT")

Laboratory Analysis of Potable and Non-Potable Water
PROJECT TITLE

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. The most current version of Insurance Services Office (ISO) Commercial General Liability Coverage Form CG 00 01, providing liability coverage arising out of your business operations. The Commercial General Liability policy shall be written on an occurrence form and shall provide coverage for "bodily injury," "property damage" and "personal and advertising injury" with coverage for premises and operations (including the use of owned and non-owned equipment), products and completed operations, and contractual liability (including, without limitation, indemnity obligations under the Agreement) with limits of liability not less than those set forth under "Minimum Limits of Insurance."
2. The most current version of ISO *Commercial Auto Coverage Form CA 00 01, providing liability coverage arising out of the ownership, maintenance or use of automobiles in the course of your business operations. The Automobile Policy shall be written on an occurrence form and shall provide coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Code 1- Any Auto). If personal automobile coverage is used, the CITY, its officers, officials, employees, agents, and volunteers are to be listed as additional insureds.
3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
4. Professional Liability (Errors and Omissions) insurance appropriate to CONSULTANT's profession.

MINIMUM LIMITS OF INSURANCE

CONSULTANT, or any party the CONSULTANT subcontracts with, shall maintain limits of liability of not less than those set forth below. However, insurance limits available to CITY, its officers, officials, employees, agents, and volunteers as additional insureds, shall be the greater of the minimum limits specified herein or the full limit of any insurance proceeds available to the named insured:

1. COMMERCIAL GENERAL LIABILITY:

- (i) \$1,000,000 per occurrence for bodily injury and property damage;
- (ii) \$1,000,000 per occurrence for personal and advertising injury;
- (iii) \$2,000,000 aggregate for products and completed operations; and,

- (iv) \$2,000,000 general aggregate applying separately to the work performed under the Agreement.
- 2. **COMMERCIAL AUTOMOBILE LIABILITY:**
\$1,000,000 per accident for bodily injury and property damage.
- 3. **WORKERS' COMPENSATION INSURANCE** as required by the State of California with statutory limits.
- 4. **EMPLOYER'S LIABILITY:**
 - (i) \$1,000,000 each accident for bodily injury;
 - (ii) \$1,000,000 disease each employee; and,
 - (iii) \$1,000,000 disease policy limit.
- 5. **PROFESSIONAL LIABILITY** (Errors and Omissions):
 - (i) \$1,000,000 per claim/occurrence; and,
 - (ii) \$2,000,000 policy aggregate.

UMBRELLA OR EXCESS INSURANCE

In the event CONSULTANT purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the CITY, its officers, officials, employees, agents, and volunteers.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

CONSULTANT shall be responsible for payment of any deductibles contained in any insurance policy(ies) required herein and CONSULTANT shall also be responsible for payment of any self-insured retentions. Any deductibles or self-insured retentions must be declared to on the Certificate of Insurance, and approved by, the CITY's Risk Manager or designee. At the option of the CITY's Risk Manager or designee, either:

- (i) The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, agents, and volunteers; or
- (ii) CONSULTANT shall provide a financial guarantee, satisfactory to CITY's Risk Manager or designee, guaranteeing payment of losses and related investigations, claim administration and defense expenses. At no time shall CITY be responsible for the payment of any deductibles or self-insured retentions.

OTHER INSURANCE PROVISIONS/ENDORSEMENTS

The General Liability and Automobile Liability insurance policies are to contain, or be endorsed to contain, the following provisions:

- 1. CITY, its officers, officials, employees, agents, and volunteers are to be covered as additional insureds. CONSULTANT shall establish additional insured status for the City and for all ongoing and completed operations

under the Commercial General Liability policy by use of ISO Forms or an executed manuscript insurance company endorsement providing additional insured status. The Commercial General endorsements must be as broad as that contained in ISO Forms: GC 20 10 11 85 or both CG 20 10 & CG 20 37.

2. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, officials, employees, agents, and volunteers. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the Additional Insured.
3. For any claims relating to this Agreement, CONSULTANT's insurance coverage shall be primary insurance with respect to the CITY, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, agents, and volunteers shall be excess of CONSULTANT's insurance and shall not contribute with it. CONSULTANT shall establish primary and non-contributory status by using ISO Form CG 20 01 04 13 or by an executed manuscript insurance company endorsement that provides primary and non-contributory status as broad as that contained in ISO Form CG 20 01 04 13.

The Workers' Compensation insurance policy is to contain, or be endorsed to contain, the following provision: CONSULTANT and its insurer shall waive any right of subrogation against CITY, its officers, officials, employees, agents, and volunteers.

If the Professional Liability (Errors and Omissions) insurance policy is written on a claims-made form:

1. The retroactive date must be shown, and must be before the effective date of the Agreement or the commencement of work by CONSULTANT.
2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Agreement work or termination of the Agreement, whichever occurs first, or, in the alternative, the policy shall be endorsed to provide not less than a five (5) year discovery period.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement or the commencement of work by CONSULTANT, CONSULTANT must purchase "extended reporting" coverage for a minimum of five (5) years completion of the Agreement work or termination of the Agreement, whichever occurs first.
4. A copy of the claims reporting requirements must be submitted to CITY for review.
5. These requirements shall survive expiration or termination of the Agreement.

All policies of insurance required herein shall be endorsed to provide that the coverage shall not be cancelled, non-renewed, reduced in coverage or in limits except after thirty

(30) calendar days written notice by certified mail, return receipt requested, has been given to CITY. CONSULTANT is also responsible for providing written notice to the CITY under the same terms and conditions. Upon issuance by the insurer, broker, or agent of a notice of cancellation, non-renewal, or reduction in coverage or in limits, CONSULTANT shall furnish CITY with a new certificate and applicable endorsements for such policy(ies). In the event any policy is due to expire during the work to be performed for CITY, CONSULTANT shall provide a new certificate, and applicable endorsements, evidencing renewal of such policy not less than fifteen (15) calendar days prior to the expiration date of the expiring policy.

Should any of the required policies provide that the defense costs are paid within the Limits of Liability, thereby reducing the available limits by any defense costs, then the requirement for the Limits of Liability of these policies will be twice the above stated limits.

The fact that insurance is obtained by CONSULTANT shall not be deemed to release or diminish the liability of CONSULTANT, including, without limitation, liability under the indemnity provisions of this Agreement. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of CONSULTANT, its principals, officers, agents, employees, persons under the supervision of CONSULTANT, vendors, suppliers, invitees, consultants, sub-consultants, subcontractors, or anyone employed directly or indirectly by any of them.

SUBCONTRACTORS - If CONSULTANT subcontracts any or all of the services to be performed under this Agreement, CONSULTANT shall require, at the discretion of the CITY Risk Manager or designee, subcontractor(s) to enter into a separate Side Agreement with the City to provide required indemnification and insurance protection. Any required Side Agreement(s) and associated insurance documents for the subcontractor must be reviewed and preapproved by CITY Risk Manager or designee. If no Side Agreement is required, CONSULTANT will be solely responsible for ensuring that its subcontractors maintain insurance coverage at levels no less than those required by applicable law and is customary in the relevant industry.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish CITY with all certificate(s) and **applicable endorsements** effecting coverage required hereunder. All certificates and **applicable endorsements** are to be received and approved by the CITY'S Risk Manager or his/her designee prior to CITY'S execution of the Agreement and before work commences. All non-ISO endorsements amending policy coverage shall be executed by a licensed and authorized agent or broker. Upon request of CITY, CONSULTANT shall immediately furnish City with a complete copy of any insurance policy required under this Agreement, including all endorsements, with said copy certified by the underwriter to be a true and correct copy of the original policy. This requirement shall survive expiration or termination of this Agreement.

Exhibit C

DISCLOSURE OF CONFLICT OF INTEREST

BSK - Laboratory Analysis of Potable and Non-Potable Water
PROJECT TITLE

		YES*	NO
1	Are you currently in litigation with the City of Fresno or any of its agents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Do you represent any firm, organization or person who is in litigation with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Do you currently represent or perform work for any clients who do business with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Are you or any of your principals, managers or professionals, owners or investors in a business which does business with the City of Fresno, or in a business which is in litigation with the City of Fresno?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Are you or any of your principals, managers or professionals, related by blood or marriage to any City of Fresno employee who has any significant role in the subject matter of this service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Do you or any of your subcontractors have, or expect to have, any interest, direct or indirect, in any other contract in connection with this Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
* If the answer to any question is yes, please explain in full below.			

Explanation: _____

☐ Additional page(s) attached.


Signature

01/21/2019
Date

Renea Rangell, VP
(BSK Associates)

BSK Associates

1414 Stanislaus St.

Fresno, CA 93706