



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Quotation  
 23 - Laboratory

Proc Folder: 715432

Doc Description: Inorganic Analysis of Water and Soil

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2020-05-01	2020-05-20 13:30:00	CRFQ 0313 DEP2000000035	1

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

RECEIVED

2020 MAY 20 AM 10:36

WV PURCHASING  
 DIVISION

**VENDOR**

Vendor Name, Address and Telephone Number:

ALS Environmental  
 ALS Group USA, Corp  
 1740 Union Carbide Drive  
 South Charleston, WV 25303  
 304-356-3168

**FOR INFORMATION CONTACT THE BUYER**

Guy Nisbet  
 (304) 558-2596  
 guy.l.nisbet@wv.gov

Signature X *Rebecca Kiser*

FEIN # 06-0606679

DATE 05.20.20

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Department of Environmental Protection to establish an open-end contract for Inorganic Analysis of Water and Soil Samples per the terms and conditions and specifications as attached.

INVOICE TO		SHIP TO	
ENVIRONMENTAL PROTECTION OFFICE OF ADMINISTRATION 601 57TH ST SE CHARLESTON WV25304 US		ENVIRONMENTAL PROTECTION 601 57TH ST CHARLESTON WV 25304 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Analysis of Soil and Water Samples	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #
81102600			

**Extended Description :**

Analysis of Soil and Water Samples as outlined on the attached bid sheet.

DEP2000000035	<b>Document Phase</b> Final	<b>Document Description</b> Inorganic Analysis of Water and Soil	<b>Page 3</b> of 3
---------------	--------------------------------	---	-----------------------

**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Quotation  
 23 - Laboratory

Proc Folder: 715432

Doc Description: Inorganic Analysis of Water and Soil

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2020-05-01	2020-05-20 13:30:00	CRFQ 0313 DEP2000000035	1

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

**Vendor Name, Address and Telephone Number:**

ALS Environmental  
 ALS Group USA, Corp  
 1740 Union Carbide Drive  
 South Charleston, WV 25303  
 304-356-3168

**FOR INFORMATION CONTACT THE BUYER**

Guy Nisbet  
 (304) 558-2596  
 guy.l.nisbet@wv.gov

Signature X *Rebecca Kiser*

FEIN # 76-0606679

DATE 05.20.20

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Department of Environmental Protection to establish an open-end contract for Inorganic Analysis of Water and Soil Samples per the terms and conditions and specifications as attached.

INVOICE TO		SHIP TO	
ENVIRONMENTAL PROTECTION OFFICE OF ADMINISTRATION 601 57TH ST SE CHARLESTON WV25304 US		ENVIRONMENTAL PROTECTION 601 57TH ST CHARLESTON WV 25304 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Analysis of Soil and Water Samples	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #
81102600			

**Extended Description :**

Analysis of Soil and Water Samples as outlined on the attached bid sheet.

## INSTRUCTIONS TO VENDORS SUBMITTING BIDS

**1. REVIEW DOCUMENTS THOROUGHLY:** The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

**2. MANDATORY TERMS:** The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

**3. PREBID MEETING:** The item identified below shall apply to this Solicitation.

A pre-bid meeting will not be held prior to bid opening

A **MANDATORY PRE-BID** meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one individual is permitted to represent more than one vendor at the pre-bid meeting. Any individual that does attempt to represent two or more vendors will be required to select one vendor to which the individual's attendance will be attributed. The vendors not selected will be deemed to have not attended the pre-bid meeting unless another individual attended on their behalf.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing.

Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting  
Revised 01/09/2020

are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

**4. VENDOR QUESTION DEADLINE:** Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

Submitted e-mails should have solicitation number in the subject line.

Question Submission Deadline: **May 13, 2020 at 9:00 AM (EST)**

Submit Questions to: **Guy Nisbet**  
2019 Washington Street, East  
Charleston, WV 25305  
Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission)  
Email: [Guy.L.Nisbet@wv.gov](mailto:Guy.L.Nisbet@wv.gov)

**5. VERBAL COMMUNICATION:** Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

**6. BID SUBMISSION:** All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile.

The bid delivery address is:  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

A bid that is not submitted electronically through wvOASIS should contain the information listed below on the face of the envelope or the bid may be rejected by the Purchasing Division.:

SEALED BID: Inorganic Analysis of Water and Soil Samples  
BUYER: Guy Nisbet  
SOLICITATION NO.: CRFQ DEP2000000035  
BID OPENING DATE: 05/20/2020  
BID OPENING TIME: 1:30 PM (EDT)  
FAX NUMBER: (304)558-3970

Revised 01/09/2020

The Purchasing Division may prohibit the submission of bids electronically through wvOASIS at its sole discretion. Such a prohibition will be contained and communicated in the wvOASIS system resulting in the Vendor's inability to submit bids through wvOASIS. Submission of a response to an Expression or Interest or Request for Proposal is not permitted in wvOASIS.

**For Request For Proposal ("RFP") Responses Only:** In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus \_\_\_\_\_ convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

**BID TYPE:** (This only applies to CRFP)

Technical

Cost

**7. BID OPENING:** Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

**Bid Opening Date and Time:** May 20, 2020 at 1:30 PM (EDT)

**Bid Opening Location:** Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

**8. ADDENDUM ACKNOWLEDGEMENT:** Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

**9. BID FORMATTING:** Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

**10. ALTERNATE MODEL OR BRAND:** Unless the box below is checked, any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the



equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

This Solicitation is based upon a standardized commodity established under W. Va. Code § 5A-3-61. Vendors are expected to bid the standardized commodity identified. Failure to bid the standardized commodity will result in your firm's bid being rejected.

**11. EXCEPTIONS AND CLARIFICATIONS:** The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

**12. COMMUNICATION LIMITATIONS:** In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

**13. REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, if applicable.

**14. UNIT PRICE:** Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

**15. PREFERENCE:** Vendor Preference may be requested in purchases of motor vehicles or construction and maintenance equipment and machinery used in highway and other infrastructure projects. Any request for preference must be submitted in writing with the bid, must specifically identify the preference requested with reference to the applicable subsection of West Virginia Code § 5A-3-37, and must include with the bid any information necessary to evaluate and confirm the applicability of the requested preference. A request form to help facilitate the request can be found at:

<http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf>.

**15A. RECIPROCAL PREFERENCE:** The State of West Virginia applies a reciprocal preference to all solicitations for commodities and printing in accordance with W. Va. Code § 5A-3-37(b). In effect, non-resident vendors receiving a preference in their home states, will see that same preference granted to West Virginia resident vendors bidding against them in West Virginia. Any request for reciprocal preference must include with the bid any information necessary to evaluate and confirm the applicability of the preference. A request form to help facilitate the request can be found at: <http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf>.

**16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:** For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or

minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

**17. WAIVER OF MINOR IRREGULARITIES:** The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

**18. ELECTRONIC FILE ACCESS RESTRICTIONS:** Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

**19. NON-RESPONSIBLE:** The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform, or lacks the integrity and reliability to assure good-faith performance.”

**20. ACCEPTANCE/REJECTION:** The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.5. and § 148-1-6.4.b.”

**21. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor’s entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled “confidential,” “proprietary,” “trade secret,” “private,” or labeled with any other claim against public disclosure of the documents, to include any “trade secrets” as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

**22. INTERESTED PARTY DISCLOSURE:** West Virginia Code § 6D-1-2 requires that the vendor submit to the Purchasing Division a disclosure of interested parties to the contract for all contracts with an actual or estimated value of at least \$1 Million. That disclosure must occur on the form prescribed and approved by the WV Ethics Commission prior to contract award. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

**23. WITH THE BID REQUIREMENTS:** In instances where these specifications require documentation or other information with the bid, and a vendor fails to provide it with the bid, the Director of the Purchasing Division reserves the right to request those items after bid opening and prior to contract award pursuant to the authority to waive minor irregularities in bids or specifications under W. Va. CSR § 148-1-4.6. This authority does not apply to instances where state law mandates receipt with the bid.

## GENERAL TERMS AND CONDITIONS:

**1. CONTRACTUAL AGREEMENT:** Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

**2. DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

**2.1. "Agency" or "Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

**2.2. "Bid" or "Proposal"** means the vendors submitted response to this solicitation.

**2.3. "Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

**2.4. "Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.

**2.5. "Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.

**2.6. "Award Document"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

**2.7. "Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

**2.8. "State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

**2.9. "Vendor" or "Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

**3. CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

**Term Contract**

**Initial Contract Term:** This Contract becomes effective on award \_\_\_\_\_ and extends for a period of six (6) months year(s).

**Renewal Term:** This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to one (1) successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

**Alternate Renewal Term** – This contract may be renewed for \_\_\_\_\_ successive \_\_\_\_\_ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

**Delivery Order Limitations:** In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

**Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within \_\_\_\_\_ days.

**Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within \_\_\_\_\_ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that maintenance, monitoring, or warranty services will be provided for \_\_\_\_\_ year(s) thereafter.

**One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

**Other:** See attached.

**4. NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.

**5. QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

**Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

**Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

**Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

**One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

**6. EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute a breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

**7. REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

**BID BOND (Construction Only):** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

**PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of 100% of the contract. The performance bond must be received by the Purchasing Division prior to Contract award.

**LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.

**MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

**LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

**8. INSURANCE:** The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below and must include the State as an additional insured on each policy prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed in this section.

Vendor must maintain:

- Commercial General Liability Insurance** in at least an amount of: \$1,000,000.00 per occurrence.
- Automobile Liability Insurance** in at least an amount of: \$1,000,000.00 per occurrence.
- Professional/Malpractice/Errors and Omission Insurance** in at least an amount of: \_\_\_\_\_ per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.
- Commercial Crime and Third Party Fidelity Insurance** in an amount of: \_\_\_\_\_ per occurrence.
- Cyber Liability Insurance** in an amount of: \_\_\_\_\_ per occurrence.
- Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.
- Pollution Insurance** in an amount of: \_\_\_\_\_ per occurrence.
- Aircraft Liability** in an amount of: \_\_\_\_\_ per occurrence.
- 
- 
- 
-



Notwithstanding anything contained in this section to the contrary, the Director of the Purchasing Division reserves the right to waive the requirement that the State be named as an additional insured on one or more of the Vendor's insurance policies if the Director finds that doing so is in the State's best interest.

**9. WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

**10. [Reserved]**

**11. LIQUIDATED DAMAGES:** This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

\_\_\_\_\_ for \_\_\_\_\_

Liquidated Damages Contained in the Specifications

**12. ACCEPTANCE:** Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

**13. PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

**14. PAYMENT IN ARREARS:** Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.

**15. PAYMENT METHODS:** Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

**16. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

**17. ADDITIONAL FEES:** Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

**18. FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

**19. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

**20. TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.

**21. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.

**22. COMPLIANCE WITH LAWS:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

**23. ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

**24. MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

**25. WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

**26. SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

**27. ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

**28. WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

**29. STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

**30. PRIVACY, SECURITY, AND CONFIDENTIALITY:** The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.

**31. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

**32. LICENSING:** In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

**33. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

**34. VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

**35. VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

**36. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

**37. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State, Vendors are required to sign, notarize, and submit the Purchasing Affidavit to the Purchasing Division affirming under oath that it is not in default on any monetary obligation owed to the state or a political subdivision of the state.

**38. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts (“Other Government Entities”), provided that both the Other Government Entity and the Vendor agree. Any extension of this Contract to the aforementioned Other Government Entities must be on the same prices, terms, and conditions as those offered and agreed to in this Contract, provided that such extension is in compliance with the applicable laws, rules, and ordinances of the Other Government Entity. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

**39. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

**40. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at [purchasing.requisitions@wv.gov](mailto:purchasing.requisitions@wv.gov).

**41. BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider’s employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Revised 01/09/2020

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

**42. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
- c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
- d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

**43. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a

“substantial labor surplus area”, as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

**44. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE:** W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the vendor must submit to the Agency a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-award interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

**45. PROHIBITION AGAINST USED OR REFURBISHED:** Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.



**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Rebecca Kiser, Laboratory Supervisor  
(Name, Title)  
Rebecca Kiser, Laboratory Supervisor  
(Printed Name and Title)  
1740 Union Carbide Dr, South Charleston, WV 25303  
(Address)  
304-356-3168  
(Phone Number) / (Fax Number)  
rebecca.kiser@alsglobal.com  
(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

ALS Group USA, Corp dba ALS Environmental  
(Company)

Rebecca Kiser  
(Authorized Signature) (Representative Name, Title)

Rebecca Kiser, Laboratory Supervisor  
(Printed Name and Title of Authorized Representative)

05.20.20  
(Date)

304-356-3168  
(Phone Number) (Fax Number)

REQUEST FOR QUOTATION  
Inorganic Analysis of Water and Soil Samples

---

SPECIFICATIONS

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Department of Environmental Protection to establish an open-end contract for Inorganic Analysis of Water and Soil Samples.

**Previous Solicitation:** was CRFQ DEP 1600000011 that opened on: 11/12/2015. Vendors may view previous solicitation responses on the West Virginia Purchasing Bid Opening: <http://www.state.wv.us/admin/purchase/Bids/FY2016/BO20151112.html>. Vendors are encouraged to review requirements carefully as current requirements may be different than previously bid solicitation CRFQ DEP1600000011.

It is the intent of the Agency to combine Inorganic and Organic Analysis into one contract to be solicited later this year (2020). This solicitation for Inorganic Analysis will be for a six (6) month period in order to bring the expiration dates of the two contracts in unison.

2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
  - 2.1 **“Contract Item”** or **“Contract Items”** means the list of items identified in **Section 3.1** below and on the **Exhibit A Pricing Pages**.
  - 2.2 **“Pricing Pages”** means the schedule of prices, estimated order quantity, and totals contained in wvOASIS or attached hereto as **Exhibit A**, and used to evaluate the Solicitation responses.
  - 2.3 **“Solicitation”** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
  - 2.4 **“WV DEP”** means the West Virginia Department of Environmental Protection.
  - 2.5 **“EDD”** means Electronic Data Deliverable which is an electronic report that includes results of analytical tests performed.
  - 2.6 **“MDL”** means Method Detection Limit which is a concentration limit set for sample testing as specified during award of contract.
  - 2.7 **“PQL”** means Practical Quantitation Limit which is a concentration limit set for sample testing as specified during award of contract.
  - 2.8 **“Shewhart Quality Control Charts”** are graphical and analytic tools for monitoring process variation.

REQUEST FOR QUOTATION  
Inorganic Analysis of Water and Soil Samples

---

**3. GENERAL REQUIREMENTS:**

**3.1 Contract Items and Mandatory Requirements:** Vendor shall provide Agency with the Contract Items listed below on an open-end and continuing basis. Contract Items must meet or exceed the mandatory requirements as shown below.

**3.1.1 Inorganic Analysis of Water and Soil Samples**

**3.1.1.1** The laboratory must be certified by the WV DEP Water Resources Quality Assurance Program. This includes any laboratories to which analyses are subcontracted. WV DEP will verify certification prior to award of contract.

**3.1.1.2** Must be accessible by telephone: twenty-four **(24) hours per day, seven (7) days per week.**

**3.1.1.3** Must be capable of attending and providing expert testimony in legal proceedings upon request

**3.1.1.4** The vendor must follow the Quality Control and Analytical Procedures outlined in **Attachment A.**

**3.1.1.5** The vendors, who are awarded a contract, when performing work under the terms and conditions of this contract, are solely responsible for the satisfactory completion of the work. The vendor shall be responsible for ensuring that any subcontractor has all the necessary permits, certifications (including WV State Laboratory certifications), experience and insurance to perform the work. All subcontractors must be approved by WV DEP before subcontractor initiates work. The vendor shall supply resumes and/or other documents to prove subcontractor's qualifications to complete the work, if requested. All work performed by a subcontractor must be appropriately annotated on any submitted documentation (report or EDD). WV DEP will consider the vendor to be the sole point of contact with regard to authorized work under the contract; however, this provision does not prohibit the WV DEP from directly contacting subcontractors.

**3.1.1.6** The vendor agrees that any and all data, analyses, materials, reports or other information, oral or written, prepared by the vendor with respect to this contract shall, except for information which has been publicly available, be treated as confidential and shall not be utilized, released, published, or disclosed by the vendor at any time for any purpose whatsoever other than to provide consultation or other service to the DEP.

REQUEST FOR QUOTATION  
Inorganic Analysis of Water and Soil Samples

---

- 3.1.1.7 The vendor shall provide sample containers (such as (1) liter cubitainers) and field preservatives (such as Nitric Acid in plastic 8ml vials and Sulfuric Acid in (8) ml glass or plastic vials) to the DEP at no charge, if requested by the DEP.
- 3.1.1.8 The DEP may, at their discretion, choose to deliver samples to the vendor's establishment rather than having them picked up by or delivered to the vendor.
- 3.1.1.9 All unit pricing quoted must be based on standard turn-around time (not to exceed fourteen (14) calendar days).
- 3.1.1.10 Upon awarding the contract, the vendor shall provide one copy of the method detection limits (MDLs) for all analytes for which the contract is awarded. Any updates to the MDLs during the life of this contract shall be provided to the DEP in writing within one week of the update(s) completion.
- 3.1.1.11 The vendor shall provide at no additional cost, any requested quality control/calibration information associated with a particular sample. Quality control/calibration includes, but is not limited to, values of standards used in calibration, date of last calibration, correlation coefficients of calibration curves, instrument blank values, check standard values, spike/recovery values, duplicate values, dilution volumes, bench sheets, calculations and Shewhart quality control charts.
- 3.1.1.12 Notice of any changes to the vendor's certification status with regard to any of the parameters that the vendor is certified to analyze for, must be submitted to the DEP, in writing, within ten (10) days of the time of status change.
- 3.1.1.13 The laboratory will provide DEP approved blank water (such as distilled, ionized, Type I water as long as there are no contaminants present in the water at detectable levels that would cause lab and field blanks to fail) to the DEP, at no charge, upon request.

**4. CONTRACT AWARD:**

- 4.1 **Contract Award:** The Contract is intended to provide the Agency with a purchase price on all Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest overall **TOTAL BID AMOUNT** as shown on the Pricing Pages.

REQUEST FOR QUOTATION  
**Inorganic Analysis of Water and Soil Samples**

---

Award may be split if it is in the best interest of the WVDEP. Selection of the vendor will be based on the lowest to highest bid, with the closest lowest bidder providing the service.

- 4.2 Pricing Pages:** Exhibit A Pricing Page was created as MS Excel document. Vendor should complete the **Exhibit A Pricing Pages** by filling in the “**Unit Price**” box with the price per unit. The “**Extended Amount**” box is calculated by multiplying the “**Unit Price**” by the “**Est. Quantity.**” Vendor should include “Method #” (identifier), “Method Detection Limit (MDL),” “Practical Quantitation Limit (PQL),” and “Unit Price” for each parameter. If Vendor is certified for more than one method per parameter, they should include method number, MDL, PQL and price for any additional method per parameter in the “Alt. Method” space on the bid sheet. Bids must be submitted exactly as per attached bid sheet. Vendor should complete the Pricing Pages in their entirety as failure to do so may result in Vendor’s bids being disqualified.

The Pricing Pages contain a list of the Contract Items and estimated yearly purchase volume. The estimated purchase volume for each item represents the approximate volume of anticipated purchases only. No future use of the Contract or any individual item is guaranteed or implied.

Vendor should electronically enter the information into the Pricing Pages through wvOASIS, if available, or as an electronic document. In most cases, the Vendor can download an electronic copy of the Pricing Pages

**5. ORDERING AND PAYMENT:**

- 5.1 Ordering:** Vendor shall accept orders through wvOASIS, regular mail, facsimile, e-mail, or any other written form of communication. Vendor may, but is not required to, accept on-line orders through a secure internet ordering portal/website. If Vendor has the ability to accept on-line orders, it should include in its response a brief description of how Agencies may utilize the on-line ordering system. Vendor shall ensure that its on-line ordering system is properly secured prior to processing Agency orders on-line.

**5.1.1** Agency will issue an Agency Delivery Order (ADO) for sampling. Agency must use the lowest bid Vendor closest to sample location. Agency must document in the ADO how selected Vendor was established and used.

- 5.2 Payment:** Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

**6. DELIVERY AND RETURN:**

- 6.1 Delivery Time:** Vendor shall deliver standard orders within ten (10) calendar days after orders are received. Vendor shall deliver emergency orders within one (1)

REQUEST FOR QUOTATION  
**Inorganic Analysis of Water and Soil Samples**

---

calendar day after orders are received. Vendor shall ship all orders in accordance with the above schedule and shall not hold orders until a minimum delivery quantity is met.

- 6.2 Late Delivery:** The Agency placing the order under this Contract must be notified in writing if orders will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the delayed order, and/or obtaining the items ordered from a third party.

Any Agency seeking to obtain items from a third party under this provision must first obtain approval of the Purchasing Division.

- 6.3 Delivery Payment/Risk of Loss:** Standard order delivery shall be F.O.B. destination to the Agency's location. Vendor shall include the cost of standard order delivery charges in its bid pricing/discount and is not permitted to charge the Agency separately for such delivery. The Agency will pay delivery charges on all emergency orders provided that Vendor invoices those delivery costs as a separate charge with the original freight bill attached to the invoice.

- 6.4 Return of Unacceptable Items:** If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable, or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

- 6.5 Return Due to Agency Error:** Items ordered in error by the Agency will be returned for credit within 30 days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

**7. VENDOR DEFAULT:**

- 7.1** The following shall be considered a vendor default under this Contract.

REQUEST FOR QUOTATION  
**Inorganic Analysis of Water and Soil Samples**

---

- 7.1.1 Failure to provide Contract Items in accordance with the requirements contained herein.
- 7.1.2 Failure to comply with other specifications and requirements contained herein.
- 7.1.3 Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.
- 7.1.4 Failure to remedy deficient performance upon request.
- 7.2 The following remedies shall be available to Agency upon default.
  - 7.2.1 Immediate cancellation of the Contract.
  - 7.2.2 Immediate cancellation of one or more release orders issued under this Contract.
  - 7.2.3 Any other remedies available in law or equity.

**8. MISCELLANEOUS:**

- 8.1 **No Substitutions:** Vendor shall supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- 8.2 **Vendor Supply:** Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained in its bid response.
- 8.3 **Reports:** Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items, and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.
- 8.4 **Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

**Contract Manager:** Rebecca Kiser

**REQUEST FOR QUOTATION**  
**Inorganic Analysis of Water and Soil Samples**

---

**Telephone Number:** 304-356-3168 or 304-989-2643

**Fax Number:** None

**Email Address:** rebecca.kiser@alsglobal.com



## Attachment A

In administering and enforcing most of the pollution control laws of the state, the importance of quality control cannot be overstated. Quality control measures must be strictly adhered to in all phases of sample collection, preservation, transportation, and analysis. The quality control and analytical processes, as they relate to the vendor's responsibility, are divided into four (4) major steps:

- Step 1** – Collection of sample from specified office.
- Step 2** – Conduct specified analysis on samples in a timely and professional manner.
- Step 3** - Establishment of continuing program to ensure the reliability of analytical data.
- Step 4** – Legal Testimony

### **Step 1 – Collection of Samples from Specified Office**

The sampling for the DEP shall be conducted by Department personnel. The vendor shall be notified of the date sampling occurs /is to occur and from which DEP office or other location the sample can be obtained. The vendor shall be notified when the sample was taken (time/date) and the person who collected the sample, The vendor shall be responsible for obtaining the sample from the specified office and delivery of sample to the laboratory within 24 hours from the time of sampling. The vendor shall indicate the time the sample was obtained from the pickup location and its condition and the time the sample was delivered to the laboratory. The vendor shall be responsible for adhering to holding times, checking the adequacy of, and maintaining preserved samples, and the internal chain of custody from the time the vendor obtained the sample until the time the analysis is accepted by the Department. The vendor shall also maintain records of the results of analysis for a minimum of five (5) years.

### **Step 2 - Conduct Specified Analysis on Samples**

The methods used by the laboratory for the analysis shall be either 1) Methods described in 40 CFR-136 or 2) Test Methods for Evaluating Solid Waste - Physical/Chemical Methods (SW-846) Third Edition, with updates. The sampler shall be responsible for specifying either 1 or 2 above. In the event the method is not specified, the laboratory shall contact the sampler for verification of the method to be used.

Vendors must include the analysis method number on the bid sheet. A single analytical method for some parameters is not adequate, for example, a sample of discharge water from a sewage treatment plant need not have the same detection limit as a sample from relatively clean oligotrophic waters. If the vendor submits bids for an alternate method, the analysis method number, MDL and PQL must be included on the bid sheet. If vendors are certified for more than 2 methods for a parameter, the vendor can provide bids and associated information on a separate page if necessary.

Results of analytical tests must be submitted as both an analysis report and as an Electronic Data Deliverable (EDD). Acceptable analysis report formats include either a paper

## Attachment A

hardcopy or electronic version of the report (e.g., pdf). All EDDs should be submitted in a Microsoft Excel (or compatible) format and conform the DEP program approved template. Where provided, the vendor must include all appropriate data fields from the original COC that documents the identity of the sample with the data submitted. This electronic data submittal requirement may be waived in some circumstances where the number of samples and/or number of analytical tests requested is low. Waiver must be requested prior to data submittal.

Analysis of samples is not deemed completed until the data has been submitted to and accepted by DEP. Should the DEP not provide notice of acceptance within four weeks of the date results were mailed, the vendor may consider the data to be acceptable by the Department. The vendor shall be responsible for maintaining preservation of the samples until the holding time is exceeded. Any samples with a sheen, discoloration or odor shall be maintained by the vendor until DEP's notification that the sample can be properly disposed of. DEP will advise the vendor which samples fall into this category. The vendor shall be responsible for the proper disposal of all samples submitted to them by the DEP unless otherwise notified. The vendor shall dispose of the sample no earlier than four weeks after DEP accepts the results. The results of the analysis shall be submitted to the DEP no more that two (2) weeks after receipt of samples.

### Step 3 - Quality Control

Three programs are to be utilized to assure reliable laboratory data: (1) the use and documentation of standard analytical methods, (2) analysis of duplicate and spiked (where the concept applies) samples at regular intervals each day to check analytical precision and accuracy, and (3) analysis of reference samples a 6 (six) month intervals. These analyses shall be conducted under the vendor's performance test number through an EPS-approved PT provider. Regardless of which analytical methods are used in a laboratory, the methodology must be carefully documented. Analytical methods which have been modified or entirely replaced because of recent advances in the state of art may only be used when it has been given approval in the Federal Register. Documentation of procedures must be clear, honest, and adequately referenced; and the procedures shall be applied exactly as documented. The responsibility for legally-defensible results obtained from these procedures rests with the analyst and supervisor, both as representatives of the laboratory.

To check the laboratory analytical precision, duplicate analysis of samples shall be performed at regular intervals. Duplicate samples must be carried through the complete analytical process. For all analyses, the interval shall be every tenth (10th) sample. When less than ten (10) samples are tested in an analytical batch, at least one duplicate sample shall be analyzed, and that sample must be a DEP sample. The difference between the replicates for each analysis is to be plotted on Shewhart precision quality control charts. If the Shewhart chart indicates the samples are not in control, the analyses are to be repeated and appropriate steps shall be taken to locate and remedy the error. Quality control limits used by the laboratory to assess method compliance

## Attachment A

cannot be broader than those specified by the analytical method of 47CSR32 where applicable.

To check the laboratory analytical accuracy, samples containing a known addition of the target analyte (spike) shall be analyzed at regular intervals. Spiked samples must be carried through the complete analytical process. For all analyses, the interval shall be every tenth (10th) sample. Where less than ten samples are tested in an analytical batch, at least one spiked sample shall be analyzed, and that sample must be a DEP sample. The percent recovery must be plotted out on Shewhart accuracy quality control charts. If the Shewhart chart indicates the samples are not in control, the analyses are to be repeated and appropriate steps taken to locate and remedy the source of error. Quality control limits used by the laboratory to assess the method compliance cannot be broader than those specified by the analytical method or 47CSR32 where applicable.

If the analyte of interest is detected in the laboratory Method Blank (MB) or Continuing Calibration Blank (CCB) above the Method Detection Limit (MDL), corrective action is to be taken to identify and alleviate the laboratory contamination and sample analysis is to be repeated. If sample analysis cannot be repeated for any reason including, but not limited to, inadequate remaining sample volume, expired holding time or equipment failure, and the laboratory chooses to report the original analytical data, all sample results associated with the contaminated MB and/or CCB must be qualified in the final report.

If the percent recovery of a known laboratory control standard such as a Laboratory Control Sample (LCS) or Continuing Calibration Verification (CCV) is outside of method-defined control limits (or those defined in 47CSR32 where appropriate) corrective action is to be taken to identify and alleviate the issue and sample analysis is to be repeated. If sample analysis cannot be repeated for any reason including inadequate remaining sample volume, expired holding time of equipment failure and the laboratory chooses to report the analytical data, all sample results associated with the failing quality control must be qualified in the final report.

In addition to the above requirements, all applicable requirements of the analytical methods, 40CFR136, 47CFR32 and the West Virginia DEP's Laboratory Certification program must be adhered to. In the event that any of these requirements are not met, all affected data must be appropriately qualified by the laboratory in the final report. It is the responsibility of the laboratory to provide all necessary information so data usability can be determined by the DEP.

All samples submitted to the laboratory are to be handed, prepared and analyzed in the same manner consistent with the method. Corrective action is to be initiated when a QC check exceeds acceptance limits.

The DEP reserves the right to conduct unannounced examinations of the laboratory's records.

Periodic submission of samples with known composition will occur. No notice of this activity will be provided unless results indicate an anomaly.

## Attachment A

### **Step 4 - Legal Testimony**

The selected vendor or vendors may be requested by the DEP to testify concerning the validity of the laboratory analysis. The vendor will only be required to testify to the following areas:

1. Time of notification by Department of sampling and by whom.
2. When and where samples were received by the laboratory's courier and/or by the laboratory's facility.
3. Condition of sample upon receipt by the laboratory.
4. How sample preservation was maintained by the laboratory.
5. Date and time(s) of analysis and by whom.
6. Chain of Custody procedures within the laboratory
7. Methods used.
8. Results of analysis.

At no time will the firm respond to questions concerning interpretation of results. The Department shall reimburse the vendor for the costs of any such testimony. The vendor must provide a detailed invoice of actual costs incurred.

Attachment A

**PROGRAM SPECIFIC PROVISIONS**

**Watershed Assessment Branch of DEP - Electronic Data Deliverable Requirements**

Field	Data Type	Description	Notes
AnalyticalLab	Text	The name of the lab providing analysis of the given analyte	Any subcontracted analysis would indicate the subcontracting lab name here
LabNumber	Text	Internal Sample Identifier	e.g., From lab's LIM System
WQ ID	Text	WQ Sample ID from COC	
SampleDateTime	Date/Time	The Date/Time of the sampling event from the COC	
ProjectName	Text	Project Name from the COC	
SiteName	Text	Stream Name from COC	
ANCODE	Text	ANCODE from COC	
MilePoint	Text	Mile Point from COC	This number is in brackets { } following the ANCode on the COC
RandomNumber	Text	Random # from COC	This is only populated if project is designated as RANDOM
Fraction	Text	Fraction of the Analyte	e.g., Total or Dissolved
Analyte	Text	Analyte Name	Report the speciation of the analyte if necessary (e.g., Sulfate as SO4 or Nitrate + Nitrite as N)
Qualifier	Text	Flag Code about the analyte results or analysis	e.g., J flag for result that falls between MDL and PQL; < for result below MDL (i.e., Non-Detect); > for results greater than the result value.
Notes	Text	Notes about the analyte results or analysis (e.g., analyzed out of holding time, estimated results, subcontracted analysis)	
Result	Number, Decimal, 18, 6	The result of the analysis	If the result is a non-detect, report the value of the MDL with a Qualifier of "<"
MDL	Number, Decimal, 18, 6	The Method Detection Limit of the analysis	
PQL	Number, Decimal, 18, 6	The Practical Quantification Limit of the analysis	
Units	Text	The units of the result analysis.	All units should be in mg/L except for Organics, which are reported in ug/L
Method	Text	The analysis methodology	Standard Methods or EPA Methods. Include full context of method (e.g., EPA200.7Rev4.4-1994)
AnalysisDateTime	Date/Time	The Date/Time of Analysis	

## Attachment A

Agency desired MDLs				
Item #	Description	Method	Detection Limit*	
1	pH		N/A	
2	Hot Acidity		5 mg/l	
3	Alkalinity		5 mg/L	
4	Hardness		1 mg/L	
5	Specific Conductance		3 uS/cm <sup>2</sup>	
6	Sulfate		5 mg/L	
7	Sulfide		1 mg/L	
8	Turbidity		1 NTU (higher OK if highly turbid)	
9	Bromide		0.05 mg/L	
10	Chloride		1 mg/L	
11	Fluoride		0.2 mg/L	
12	Fecal Coliform (MF)		4 col/100 mL	
13	Fecal Coliform (MPN)		4 col/100 mL	
15	Total Solids		1 mg/L	
16	Dissolved Solids (TDS)		5 mg/L	
17	Suspended Solids (TSS)		3 mg/L	
19	Volatile Solids		1 mg/L	
20	Percent Solids		1%	
21	Kjeldahl Nitrogen		0.05 mg/L	
22	Ammonia Nitrogen		0.02 mg/L	
23	Organic Nitrogen		0.5 mg/L	
24	Nitrate-Nitrogen		0.01 mg/L	
25	Nitrite-Nitrogen		0.01 mg/L	
26	Nitrite-Nitrate		0.01 mg/L	
27	Total Phosphorus		0.003 mg/L	
28	Orthophosphate		0.01 mg/L	
29	Total Phosphate		0.01 mg/L	
30	BOD		1 mg/L	
31	BOD-carbonaceous		1 mg/L	
32	COD		0.5 mg/L	
33	TOC		1 mg/L	
34	MBAS		0.05 mg/L	
35	Phenolics		0.01 mg/L	
36	Total Cyanide		0.005 mg/L	
37	Hexavalent Chromium		0.005 mg/L	
37A	Hexavalent Chromium (Alt)		0.000043 mg/L	
37B	Hexavalent Chromium (Solid)		0.017 mg/kg	
38	Oil-Grease		2 mg/L	
39	Chlorophyll A		0.5 mg/L	
40	Color (APHA)		5 color units	
41	Color (ADMI)		10 ADMI value	

Attachment A

42	Cyanide, Amenable	0.005 mg/L		
43	Cyanide, Free (ASTM)	0.005 mg/L		
44	Mineral Acidity	1 mg/L		
45	Total Acidity	1 mg/L		
46	Tot Petroleum Hydrocarbons GRO/DRO (8015)	0.5 mg/L		
47	Fecal Streptococci	4 col/100 mL		
48	Escherichia Coli (Numeric Result)	1 col/100 mL		
52	Bicarbonate (Standard Methods)	1 mg/L		
53	Ferrous Iron (Standard Methods)	0.05 mg/L		
54	Dissolved Organic Carbon	1 mg/L		
55	Aluminum	0.005 mg/L		
56	Antimony	0.005 mg/L		
<b>Item #</b>	<b>Description</b>	<b>Method</b>	<b>Detection Limit*</b>	
57	Arsenic	0.005 mg/L		
58	Barium	0.005 mg/L		
59	Beryllium	0.001 mg/L		
60	Boron	0.03 mg/L		
61	Cadmium	0.00009 mg/L		
62	Calcium	0.2 mg/L		
63	Chromium	0.001 mg/L		
64	Cobalt	0.001 mg/L		
65	Copper	0.001 mg/L		
66	Iron	0.01 mg/L		
67	Lead	0.00054 mg/L		
68	Magnesium	0.2 mg/L		
69	Manganese	0.005 mg/L		
70	Mercury	0.0001 mg/L		
71	Molybdenum	0.005 mg/L		
72	Nickel	0.005 mg/L		
73	Potassium	0.5 mg/L		
74	Selenium	0.001 mg/L		
75	Silver	0.0002 mg/L		
76	Sodium	0.5 mg/L		
77	Strontium	0.001 mg/L		
78	Thallium	0.001 mg/L		
79	Tin	0.02 mg/L		
80	Vanadium	0.005 mg/L		
80A	Vanadium (Alt)	0.001 mg/L		
81	Zinc	0.002 mg/L		
70A	Mercury / Method 1631E	0.5 ng/L		
9A	Bromide Alt. Method	0.1 mg/L		

**Exhibit A**  
**WV DEP INORGANIC ANALYSIS OF WATER AND SOIL**  
**Pricing Pages**

Liquid Samples & Solids							
Item #	Yearly Est. Quantity	Description	Method #	Method Detection Limit*	Practical Quantitation Limit	Unit Price	Extended Amount
1	4000	pH	SM4500H B-11	N/A	0.02SU	\$5.00	\$20,000.00
1A	10	pH (Solid)	SW9045D	N/A	0.02SU	\$6.00	\$60.00
2	4000	Hot Acidity					\$0.00
2A	1000	Hot Acidity Alt. Method					\$0.00
3	4000	Alkalinity	SM2320B-11	8.37mg/L	10mg/L	\$6.00	\$24,000.00
3A	1000	Alkalinity Alt. Method					\$0.00
4	500	Hardness	SM2340C	2.17mg/L	5mg/L	\$12.00	\$6,000.00
4A	100	Hardness Alt. Method					\$0.00
4B	10	Hardness (Solid)					\$0.00
5	1000	Specific Conductance	SM2510B-11	N/A	5umhos/cm	\$5.00	\$5,000.00
5A	500	Specific Conductance Alt. Method	SW9050A	N/A	5umhos/cm	\$5.00	\$2,500.00
6	4000	Sulfate	EPA300.0	0.057mg/L	1mg/L	\$7.00	\$28,000.00
6A	1000	Sulfate Alt. Method	SM4500SO4 E-11	0.71mg/L	1mg/L	\$7.00	\$7,000.00
6B	10	Sulfate (Solid)	SW9056A	0.57mg/kg	10mg/kg	\$11.00	\$110.00
7	20	Sulfide	SM4500S F-11	0.42mg/L	1mg/L	\$15.00	\$300.00
7A	10	Sulfide Alt. Method	SW9034	0.42mg/L	1mg/L	\$15.00	\$150.00
8	20	Turbidity	EPA180.1	0.036mg/L	0.65mg/L	\$10.00	\$200.00
8A	10	Turbidity Alt. Method	SM2130B-11	0.1mg/L	1mg/L	\$10.00	\$100.00
9	25	Bromide	EPA300.0	0.032mg/L	0.2mg/L	\$10.00	\$250.00
9A	10	Bromide Alt. Method	SW9056A	0.32mg/L	0.2mg/L	\$10.00	\$100.00
9B	10	Bromide (Solid)	SW9056A	0.32mg/kg	2mg/kg	\$14.00	\$140.00
10	3000	Chloride	EPA300.0	0.31mg/L	1mg/L	\$8.00	\$24,000.00
10A	100	Chloride Alt. Method	SM4500Cl E-11	0.46mg/L	1mg/L	\$11.00	\$1,100.00
10B	10	Chloride (Solid)	SW9056A	3.1mg/kg	10mg/kg	\$11.00	\$110.00
11	25	Fluoride	EPA300.0	0.07mg/L	0.1mg/L	\$10.00	\$250.00
11A	10	Fluoride Alt. Method					\$0.00
11B	10	Fluoride (Solid)	SW9056A	0.67mg/kg	1mg/kg	\$14.00	\$140.00
12	4000	Fecal Coliform (MF)	SM9222D-06	3.33cfu/100ml	3.33cfu/100ml	\$18.00	\$72,000.00
12A	1000	Fecal Coliform (MF) Alt. Method					\$0.00



**Exhibit A**  
**WV DEP INORGANIC ANALYSIS OF WATER AND SOIL**  
**Pricing Pages**

13	100	Fecal Coliform (MPN)	SM9221E-06	1.8cfu/100ml	108cfu/100ml	\$25.00	\$2,500.00
13A	50	Fecal Coliform (MPN) Alt. Method					\$0.00
14	20	Total Coliform	SM9222B-06	3.33cfu/100ml	3.33cfu/100ml	\$18.00	\$360.00
15	25	Total Solids	SM2540B-11	17mg/L	17mg/L	\$8.00	\$200.00
15A	10	Total Solids Alt. Method					\$0.00
15B	10	Total Solids (Solid)	SM2540G-11	0.03%	0.05%	\$8.00	\$80.00
16	3000	Dissolved Solids (TDS)	SM2540C-11	11mg/L	15mg/L	\$8.00	\$24,000.00
16A	1000	Dissolved Solids (TDS) Alt. Method					\$0.00
17	4000	Suspended Solids (TSS)	SM2540D-11	0.38mg/L	0.6mg/L	\$8.00	\$32,000.00
17A	1000	Suspended Solids (TSS) Alt. Method					\$0.00
18	25	Settleable Solids	SM2540F-11	0.2ml/L/Hr	0.2ml/L/Hr	\$9.00	\$225.00
18A	10	Settleable Solids Alt. Method					\$0.00
19	25	Volatile Solids	SM2540E-11	6mg/L	6mg/L	\$9.00	\$225.00
19A	10	Volatile Solids Alt. Method	EPA160.4	6mg/L	6mg/L	\$9.00	\$90.00
19B	10	Volatile Solids (Solid)	SM2540G-11	0.03%	0.05%	\$9.00	\$90.00

Item #	Est. Quantity	Description	Method #	Method Detection Limit*	Practical Quantitation Limit	Unit Price	Extended Amount
20	25	Percent Solids	SM2540B-1	0%	0%	\$8.00	\$200.00
20A	10	Percent Solids Alt. Method					\$0.00
20B	10	Percent Solids (Solid)	SM2540G-11	0.03%	0.05%	\$8.00	\$80.00
21	400	Kjeldahl Nitrogen	SM4500NH3 G-11	0.87mg/L	1mg/L	\$14.00	\$5,600.00
21A	100	Kjeldahl Nitrogen Alt. Method					\$0.00
21B	10	Kjeldahl Nitrogen (Solid)	SM4500NH3 G-11	30.6mg/kg	100mg/kg	\$20.00	\$200.00
21C	10	Kjeldahl Nitrogen Alt. Method (Solid)					\$0.00
22	50	Ammonia Nitrogen	SM4500NH3 G-11	0.01mg/L	0.02mg/L	\$12.00	\$600.00
22A	10	Ammonia Nitrogen Alt. Method	EPA350.1	0.005mg/L	0.02mg/L	\$12.00	\$120.00
22B	10	Ammonia Nitrogen (Solid)	SM4500NH3 G-11	3.95mg/kg	15mg/kg	\$14.00	\$140.00
22C	10	Ammonia Nitrogen Alt. Method (Solid)					\$0.00
23	50	Organic Nitrogen	Calculation			\$28.00	\$1,400.00
23A	10	Organic Nitrogen Alt. Method					\$0.00
24	50	Nitrate-Nitrogen	EPA353.2	0.012mg/L	0.02mg/L	\$11.00	\$550.00

**Exhibit A**  
**WV DEP INORGANIC ANALYSIS OF WATER AND SOIL**  
**Pricing Pages**

24A	10	Nitrate-Nitrogen Alt. Method	EPA300.0	0.046mg/L	0.1mg/L	\$11.00	\$110.00
25	50	Nitrite-Nitrogen	SM4500NO2 B-11	0.012mg/L	0.05mg/L	\$11.00	\$550.00
25A	10	Nitrite-Nitrogen Alt. Method	EPA300.0	0.017mg/L	0.1mg/L	\$11.00	\$110.00
25B	10	Nitrite-Nitrogen (Solid)	SW9056A	0.17mg/kg	1mg/kg	\$13.00	\$130.00
25C	10	Nitrite-Nitrogen Alt. Method (Solid)					\$0.00
26	400	Nitrite-Nitrate	EPA353.2	0.012mg/L	0.02mg/L	\$10.00	\$4,000.00
26A	100	Nitrite-Nitrate Alt. Method	EPA300.0	0.017mg/L	0.1mg/L	\$15.00	\$1,500.00
26B	10	Nitrite-Nitrate (Solid)	SW9056A	0.17mg/kg	1mg/kg	\$15.00	\$150.00
26C	10	Nitrite-Nitrate Alt. Method (Solid)					\$0.00
27	400	Total Phosphorus	EPA365.1	0.032mg/L	0.05mg/L	\$10.00	\$4,000.00
27A	100	Total Phosphorus Alt. Method					\$0.00
27B	10	Total Phosphorus (Solid)	EPA365.1	0.92mg/kg	5mg/kg	\$11.00	\$110.00
27C	10	Total Phosphorus Alt. Method (Solid)					\$0.00
28	50	Orthophosphate	EPA365.1	0.015mg/L	0.05mg/L	\$10.00	\$500.00
28A	10	Orthophosphate Alt. Method	SM4500P E-11	0.47mg/kg	1mg/kg	\$10.00	\$100.00
29	50	Total Phosphate					\$0.00
29A	10	Total Phosphate Alt. Method					\$0.00
29B	10	Total Phosphate (Solid)					\$0.00
29C	10	Total Phosphate Alt. Method (Solid)					\$0.00
30	25	BOD	SM5210B-11	N/A	2mg/L	\$16.00	\$400.00
30A	10	BOD Alt. Method					\$0.00
<b>Item #</b>	<b>Est. Quantity</b>	<b>Description</b>	<b>Method #</b>	<b>Method Detection Limit*</b>	<b>Practical Quantitation Limit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
31	25	BOD-carbonaceous	SM5210B-11	N/A	2mg/L	\$16.00	\$400.00
31A	10	BOD-carbonaceous Alt. Method					\$0.00
32	25	COD	EPA410.4	2.95mg/L	5mg/L	\$15.00	\$375.00
32A	10	COD Alt. Method					\$0.00
33	25	TOC	SM5310C-11	0.14mg/L	0.5mg/L	\$19.00	\$475.00
33A	10	TOC Alt. Method					\$0.00
34	25	MBAS	SM5540C-11	0.12mg/L	0.4mg/L	\$23.00	\$575.00
34A	10	MBAS Alt. Method					\$0.00

**Exhibit A**  
**WV DEP INORGANIC ANALYSIS OF WATER AND SOIL**  
**Pricing Pages**

35	25	Phenolics	EWPA420.4	0.0025mg/L	0.01mg/L	\$21.00	\$525.00
35A	10	Phenolics Alt. Method	SW9066	0.0025mg/L	0.01mg/L	\$21.00	\$210.00
35B	10	Phenolics (Solid)	SW9066	0.38mg/L	0.5mg/L	\$36.00	\$360.00
36	25	Total Cyanide	Kelada-01	0.0012mg/L	0.005mg/L	\$16.00	\$400.00
36A	10	Total Cyanide Alt. Method	SM4500CN E-11	0.0017mg/L	0.005mg/L	\$22.00	\$220.00
36B	10	Total Cyanide (Solid)	SW9012B	0.013mg/kg	0.03mg/kg	\$22.00	\$220.00
37	200	Hexavalent Chromium	EPA218.6	0.047ug/L	0.25ug/L	\$35.00	\$7,000.00
37A	10	Hexavalent Chromium Alt. Method	SW7196A	0.0029mg/L	0.005mg/L	\$30.00	\$300.00
37B	10	Hexavalent Chromium (Solid)	SW7196A	0.85mg/kg	1mg/kg	\$30.00	\$300.00
38	25	Oil-Grease	EPA1664A	0.97mg/L	5mg/L	\$28.00	\$700.00
38A	10	Oil-Grease Alt. Method					\$0.00
38B	10	Oil-Grease (Solid)	SW9071B	95.4mg/kg	180mg/kg	\$40.00	\$400.00
39	100	Chlorophyll A					\$0.00
39A	20	Chlorophyll A Alt. Method					\$0.00
40	25	Color (APHA)	SM2120B-11	N/A	1pcu	\$10.00	\$250.00
40A	10	Color (APHA) Alt. Method					\$0.00
41	25	Color (ADMI)					\$0.00
41A	10	Color Alt. Method					\$0.00
42	25	Cyanide, Amenable	SM4500CN E-11	0.0017mg/L	0.005mg/L	\$28.00	\$700.00
42A	10	Cyanide, Amenable Alt. Method					\$0.00
43	25	Cyanide, Free (ASTM)					\$0.00
43A	10	Cyanide, Free Alt. Method	OIA 1677	0.91ug/L	2ug/L	\$34.00	\$340.00
44	25	Mineral Acidity					\$0.00
44A	10	Mineral Acidity Alt. Method					\$0.00
45	25	Total Acidity	SM2310B-11	10mg/L	12mg/L	\$9.00	\$225.00
45A	10	Total Acidity Alt. Method					\$0.00
46	25	Tot Petroleum Hydrocarbons GRO/DRO (8015)	SW8015D	6ug/L / 0.04mg	200ug/L / 0.1mg/L	\$68.00	\$1,700.00
46A	10	Tot Petroleum Hydrocarbons GRO/DRO (8015) Alt. Method					\$0.00
46B	10	Tot Petroleum Hydrocarbons GRO/DRO (8015) (Solid)	SW8015D	2.1mg/kg/2.9mg/kg	5.0mg/kg/10mg/kg	\$68.00	\$680.00
<b>Item #</b>	<b>Est. Quantity</b>	<b>Description</b>	<b>Method #</b>	<b>Method Detection Limit*</b>	<b>Practical Quantitation Limit</b>	<b>Unit Price</b>	<b>Extended Amount</b>

**Exhibit A**  
**WV DEP INORGANIC ANALYSIS OF WATER AND SOIL**  
**Pricing Pages**

47	25	Fecal Streptococci					\$0.00
47A	10	Fecal Streptococci Alt. Method					\$0.00
47B	10	Fecal Streptococci (Solid)					\$0.00
48	25	Escherichia Coli (Numeric Result)	HACH10029	3.33cfu/100ml	3.33cfu/100ml	\$20.00	\$500.00
48A	10	E. Coli (Numeric Result) Alt. Method					\$0.00
49	100	Enterococci					\$0.00
50	20	Iron Bacteria					\$0.00
51	20	Sulfate Reducing Bacteria					\$0.00
52	25	Bicarbonate (Standard Methods)					\$0.00
52A	10	Bicarbonate Alt. Method					\$0.00
53	25	Ferrous Iron (Standard Methods)					\$0.00
53A	10	Ferrous Iron Alt. Method					\$0.00
54	25	Dissolved Organic Carbon					\$0.00
54A	10	Dissolved Organic Carbon Alt. Method					\$0.00
55	4000	Aluminum	EPA200.8	0.008mg/L	0.01mg/L	\$6.00	\$24,000.00
55A	100	Aluminum - Alt. method	EPA200.7	0.01mg/L	0.01mg/L	\$4.00	\$400.00
55B	10	Aluminum (Solid)	EPA6020B	1.6mg/kg	2mg/kg	\$6.00	\$60.00
56	20	Antimony	EPA200.8	0.00013mg/L	0.005mg/L	\$6.00	\$120.00
56A	10	Antimony Alt. Method	EPA200.7	0.0018mg/L	0.005mg/L	\$4.00	\$40.00
56B	10	Antimony (Solid)	EPA6020B	0.067mg/kg	0.25mg/kg	\$6.00	\$60.00
57	20	Arsenic	EPA200.8	0.00019mg/L	0.005mg/L	\$6.00	\$120.00
57A	10	Arsenic Alt. Method	EPA200.7	0.0016mg/L	0.005mg/L	\$4.00	\$40.00
57B	10	Arsenic (Solid)	EPA6020B	0.03mg/kg	0.25mg/kg	\$6.00	\$60.00
58	20	Barium	EPA200.8	0.00057mg/L	0.005mg/L	\$6.00	\$120.00
58A	10	Barium Alt. Method	EPA200.7	0.0043mg/L	0.005mg/L	\$4.00	\$40.00
58B	10	Barium (Solid)	EPA6020B	0.23mg/kg	0.25mg/kg	\$6.00	\$60.00
59	20	Beryllium	EPA200.8	0.00013mg/L	0.002mg/L	\$6.00	\$120.00
59A	10	Beryllium Alt. Method	EPA200.7	0.00022mg/L	0.002mg/L	\$4.00	\$40.00
59B	10	Beryllium (Solid)	EPA6020B	0.017mg/kg	0.1mg/kg	\$6.00	\$60.00
60	20	Boron	EPA200.8	0.0154mg/L	0.02mg/L	\$6.00	\$120.00
60A	10	Boron Alt. Method	EPA200.7	0.0041mg/L	0.02mg/L	\$4.00	\$40.00

**Exhibit A**  
**WV DEP INORGANIC ANALYSIS OF WATER AND SOIL**  
**Pricing Pages**

60B	10	Boron (Solid)	EPA6020B	0.94mg/kg	1mg/kg	\$6.00	\$60.00
61	200	Cadmium	EPA200.8	0.00005mg/L	0.0002mg/L	\$6.00	\$1,200.00
61A	20	Cadmium Alt. Method	EPA200.7	0.00078mg/L	0.01mg/L	\$4.00	\$80.00
61B	10	Cadmium (Solid)	EPA6020B	0.015mg/kg	0.1mg/kg	\$6.00	\$60.00
62	500	Calcium	EPA200.8	0.22mg/L	0.5mg/L	\$6.00	\$3,000.00
62A	20	Calcium Alt. Method	EPA200.7	0.39mg/L	0.5mg/L	\$4.00	\$80.00
62B	10	Calcium (Solid)	EPA6020B	12mg/kg	25mg/kg	\$6.00	\$60.00
63	20	Chromium	EPA200.8	0.00061mg/L	0.005mg/L	\$6.00	\$120.00
63A	10	Chromium Alt. Method	EPA200.7	0.00093mg/L	0.005mg/L	\$4.00	\$40.00
63B	10	Chromium (Solid)	EPA6020B	0.11mg/kg	0.25mg/kg	\$6.00	\$60.00
64	20	Cobalt	EPA200.8	0.00027mg/L	0.005mg/L	\$6.00	\$120.00
64A	10	Cobalt Alt. Method	EPA200.7	0.00042mg/L	0.005mg/L	\$4.00	\$40.00
64B	10	Cobalt (Solid)	EPA6020B	0.041mg/kg	0.25mg/kg	\$6.00	\$60.00
<b>Item #</b>	<b>Est. Quantity</b>	<b>Description</b>	<b>Method #</b>	<b>Method Detection Limit*</b>	<b>Practical Quantitation Limit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
65	200	Copper	EPA200.8	0.0013mg/L	0.005mg/L	\$6.00	\$1,200.00
65A	20	Copper Alt. Method	EPA200.7	0.0046mg/L	0.01mg/L	\$4.00	\$80.00
65B	10	Copper (Solid)	EPA6020B	0.25mg/kg	0.25mg/kg	\$6.00	\$60.00
66	3000	Iron	EPA200.8	0.047mg/L	0.08mg/L	\$6.00	\$18,000.00
66A	100	Iron Alt. Method	EPA200.7	0.079mg/L	0.08mg/L	\$4.00	\$400.00
66B	10	Iron (Solid)	EPA6020B	8mg/kg	10mg/kg	\$6.00	\$60.00
67	200	Lead	EPA200.8	0.00022mg/L	0.005mg/L	\$6.00	\$1,200.00
67A	10	Lead Alt. Method	EPA200.7	0.0013mg/L	0.005mg/L	\$4.00	\$40.00
67B	10	Lead (Solid)	EPA6020B	0.12mg/kg	0.25mg/kg	\$6.00	\$60.00
68	500	Magnesium	EPA200.8	0.037mg/L	0.2mg/L	\$6.00	\$3,000.00
68A	20	Magnesium Alt. Method	EPA200.7	0.09mg/L	0.2mg/L	\$4.00	\$80.00
68B	10	Magnesium (Solid)	EPA6020B	7mg/kg	10.mg/kg	\$6.00	\$60.00
69	3000	Manganese	EPA200.8	0.0025mg/L	0.005mg/L	\$6.00	\$18,000.00
69A	100	Manganese Alt. Method	EPA200.7	0.0023mg/L	0.005mg/L	\$4.00	\$400.00
69B	10	Manganese (Solid)	EPA6020B	0.21mg/kg	0.25mg/kg	\$6.00	\$60.00
70	200	Mercury	EPA245.1	0.00016mg/L	0.0002mg/L	\$18.00	\$3,600.00

**Exhibit A**  
**WV DEP INORGANIC ANALYSIS OF WATER AND SOIL**  
**Pricing Pages**

70A	200	Mercury / Method 1631E	EPA1631E	0.2ng/L	0.5ng/L	\$45.00	\$9,000.00
70B	10	Mercury (Solid)	SW7471A	0.014mg/kg	0.02mg/kg	\$18.00	\$180.00
71	20	Molybdenum	EPA200.8	0.00033mg/L	0.005mg/L	\$6.00	\$120.00
71A	10	Molybdenum Alt. Method	EPA200.7	0.00036mg/L	0.005mg/L	\$4.00	\$40.00
71B	10	Molybdenum (Solid)	EPA6020B	0.049mg/kg	0.25mg/kg	\$6.00	\$60.00
72	200	Nickel	EPA200.8	0.0019mg/L	0.005mg/L	\$6.00	\$1,200.00
72A	20	Nickel Alt. Method	EPA200.7	0.00072mg/L	0.005mg/L	\$4.00	\$80.00
72B	10	Nickel (Solid)	EPA6020B	0.13mg/kg	0.25mg/kg	\$6.00	\$60.00
73	500	Potassium	EPA200.8	0.034mg/L	0.2mg/L	\$6.00	\$3,000.00
73A	20	Potassium Alt. Method	EPA200.7	0.16mg/L	0.2mg/L	\$4.00	\$80.00
73B	10	Potassium (Solid)	EPA6020B	4.2mg/kg	10mg/kg	\$6.00	\$60.00
74	500	Selenium	EPA200.8	0.00048mg/L	0.005mg/L	\$6.00	\$3,000.00
74A	20	Selenium Alt. Method	EPA200.7	0.0032mg/L	0.01mg/L	\$4.00	\$80.00
74B	10	Selenium (Solid)	EPA6020B	0.23mg/kg	0.25mg/kg	\$6.00	\$60.00
75	200	Silver	EPA200.8	0.00026mg/L	0.005mg/L	\$6.00	\$1,200.00
75A	20	Silver Alt. Method	EPA200.7	0.0025mg/L	0.005mg/L	\$4.00	\$80.00
75B	10	Silver	EPA6020B	0.033mg/kg	0.25mg/kg	\$6.00	\$60.00
76	500	Sodium	EPA200.8	0.168mg/L	0.2mg/L	\$6.00	\$3,000.00
76A	20	Sodium Alt. Method	EPA200.7	0.26mg/L	0.5mg/L	\$4.00	\$80.00
76B	10	Sodium (Solid)	EPA6020B	13.4mg/kg	15mg/kg	\$6.00	\$60.00
77	200	Strontium	EPA200.8	0.00039mg/L	0.005mg/L	\$6.00	\$1,200.00
77A	20	Strontium Alt. Method	EPA200.7	0.0012mg/L	0.005mg/L	\$4.00	\$80.00
78	20	Thallium	EPA200.8	0.00015mg/L	0.005mg/L	\$6.00	\$120.00
78A	10	Thallium Alt. Method	EPA200.7	0.0026mg/L	0.01mg/L	\$4.00	\$40.00
78B	10	Thallium (Solid)	EPA6020B	0.039mg/kg	0.25mg/kg	\$6.00	\$60.00
79	20	Tin	EPA200.8	0.0022mg/L	0.005mg/L	\$6.00	\$120.00
79A	10	Tin Alt. Method	EPA200.7	0.01mg/L	0.01mg/L	\$4.00	\$40.00
79B	10	Tin (Solid)	EPA6020B	0.059mg/kg	0.1mg/kg	\$6.00	\$60.00
80	20	Vanadium	EPA200.8	0.0007mg/L	0.005mg/L	\$6.00	\$120.00
80A	10	Vanadium Alt. Method	EPA200.7	0.00094mg/L	0.005mg/L	\$4.00	\$40.00
80B	10	Vanadium (Solid)	EPA6020B	0.064mg/kg	0.25mg/kg	\$6.00	\$60.00

**Exhibit A**  
**WV DEP INORGANIC ANALYSIS OF WATER AND SOIL**  
**Pricing Pages**

81	200	Zinc	EPA200.8	0.0047mg/L	0.01mg/L	\$7.00	\$1,400.00
81A	20	Zinc Alt. Method	EPA200.7	0.0062mg/L	0.01mg/L	\$4.00	\$80.00
81B	10	Zinc (Solid)	EPA6020B	0.49mg/kg	0.5mg/kg	\$6.00	\$60.00
82	200	Metals Prep Cost				\$8.00	\$1,600.00
82A	10	Metals Prep Cost (Solid)				\$8.00	\$80.00
<b>Item #</b>	<b>Est. Quantity</b>	<b>Description</b>	<b>Method #</b>	<b>Method Detection Limit*</b>	<b>Practical Quantitation Limit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
83	20	Gross Alpha					\$0.00
83A	10	Gross Alpha (Solid)					\$0.00
84	20	Gross Beta					\$0.00
84A	10	Gross Beta (Solid)					\$0.00
85	20	Ra-226					\$0.00
85A	10	Ra-226 (Solid)					\$0.00
86	20	Ra-228					\$0.00
86A	10	Ra-228 (Solid)					\$0.00
87	20	Total Uranium					\$0.00
87A	10	Total Uranium (Solid)					\$0.00
88	20	Sr-89					\$0.00
88A	10	Sr-89 (Solid)					\$0.00
89	20	Sr-90					\$0.00
89A	10	Sr-90 (Solid)					\$0.00
90	20	Tritium (H3)					\$0.00
90A	10	Tritium (H3) (Solid)					\$0.00
91	20	Gamma (Cs-137)					\$0.00
91A	10	Gamma (Cs-137) (Solid)					\$0.00
92	20	Radon					\$0.00
92A	10	Radon (Solid)					\$0.00

**Toxicity Testing - Freshwater Organisms**

<b>Item #</b>	<b>Est. Quantity</b>	<b>Description</b>	<b>Method #</b>	<b>Unit Price</b>	<b>Extended Amount</b>
		<b>Acute:</b>			
93	25	Ceriodaphnia	EPA2002.0	\$195.00	\$4,875.00

**Exhibit A**  
**WV DEP INORGANIC ANALYSIS OF WATER AND SOIL**  
**Pricing Pages**

94	10	Daphnia Pulex / D. magna			\$0.00
95	25	Pimephales promelas	EPA2000.0	\$210.00	\$5,250.00
<b>Chronic:</b>					
96	25	Ceroidaphnia	EPA1002.0	\$800.00	\$20,000.00
97	25	Pimephales promelas (Survival & Growth)	EPA1000.0	\$875.00	\$21,875.00

<b>Collection of samples - costs associated with sample pickup from the following locations:</b>					
98	24	Bridgeport Office, 101 Cambridge Place, Bridgeport, WV 26330		\$63.50	\$1,524.00
99	24	Charleston Office, 601 57th Street S.E., Charleston, WV 25304		\$0.00	\$0.00
100	24	Fairmont Office, 2031 Pleasant Valley Rd., Fairmont, WV 26554		\$71.50	\$1,716.00
102	24	Logan Office, 1101 George Kostas Dr., Logan, 25601		\$53.00	\$1,272.00
103	24	Fayetteville Office, 1159 Nick Rahall Greenway, Fayetteville, WV 25840		\$53.00	\$1,272.00
104	24	Parkersburg Office, 2311 Ohio Ave., Parkersburg, WV 26010		\$40.00	\$960.00
105	24	Philippi Office, 47 School Street, Philippi, WV 26416		\$69.50	\$1,668.00
106	24	Romney Office, 22288 Northwestern Pike, Romney, WV 26757		\$114.50	\$2,748.00
109	24	Wheeling Office, 131A Peninsula St., Wheeling, WV 26003		\$0.00	\$0.00
110	5000	Other locations as Cost Per Mile to pickup site		\$0.58	\$2,900.00
111	10	24 Hour Turn-Around Rush Order fee, per sample			\$0.00
112	10	48 Hour Turn-Around Rush Order fee, per sample			\$0.00
113	10	72 Hour Turn-Around Rush Order fee, per sample			\$0.00
<b>TOTAL BID AMOUNT</b>					<b>\$438,185.00</b>

Quantities listed on the bid schedule are for bid evaluation purposes only and are not a guarantee of quantities to be ordered over the life of the contract. Actual quantities may be more or less than those stated on this schedule.

Company: ALS Environmental  
Name: Rebecca Kiser  
Signature: Rebecca Kiser Date: 05.20.20



ATTACHMENT I

WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER AND WASTE MANAGEMENT

List of Certified Parameters  
for

**ALS ENVIRONMENTAL - SOUTH  
CHARLESTON, WV  
SOUTH CHARLESTON, WEST VIRGINIA**

PARAMETERS CERTIFIED

NONPOTABLE WATER INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Chlorine, Residual	SM4500-Cl G-11	Spectrophotometric
Color	SM2120 B-11	Visual Comparison
Conductance, Specific	SM2510 B-11	Probe
Nitrite	SM4500-NO2 B-11	Spectrophotometric
Oxygen Demand, Biochemical (BOD)	SM5210 B-11	Probe
Oxygen Demand, Carbonaceous Biochemical (CBOD)	SM5210 B-11	Probe
Oxygen, Dissolved	SM4500-O G-11	Probe
pH (Hydrogen Ion)	SM4500-H B-11	Electrode
pH (Hydrogen Ion)	SW9040C	Electrode
Solids, Settleable	SM2540 F-11	Imhoff
Sulfite	SM4500-SO3 B-11	Titrimetric
Temperature	SM2550 B-00	Thermometric
Turbidity	EPA180.1 Rev 2.0-1993	Turbidimetric

NONPOTABLE WATER MICROBIOLOGY

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Coliform, Fecal (MF)	SM9222 D-06	Membrane Filter
Coliform, Fecal (MPN)	SM9221 E-06	Multiple Tube
Coliform, Total (MF)	SM9222 B-06	Membrane Filter
Coliform, Total (MPN)	SM9221 B-06	Multiple Tube
E. Coli (MF)	HACH 10029	Membrane Filter

WHOLE EFFLUENT TOXICITY

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Acute - Ceriodaphnia dubia	EPA821-R-02-012 2002.0	Acute
Acute - Fathead Minnow	EPA821-R-02-012 2000.0	Acute
Chronic - Ceriodaphnia dubia	EPA821-R-02-013 1002.0	Chronic
Chronic - Fathead Minnow	EPA821-R-02-013 1000.0	Chronic

SOLID AND CHEMICAL INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
pH (Hydrogen Ion)	SW9040C	Electrode
pH (Hydrogen Ion)	SW9045D	Electrode

SOLID AND CHEMICAL MICROBIOLOGY

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Coliform, Fecal (MPN)	SM9221 E-06	Multiple Tube

This laboratory may test **ONLY** for those environmental parameters listed above for compliance reporting purposes. All testing must be by the test method cited in the current application for certification.

This Certification Expires May 31, 2020.

Certificate No 385

 Issued on June 01, 2019

Justin Carpenter  
QA Auditor

*This certified parameter list supersedes all previously issued parameter lists for this certificate number.*

ATTACHMENT I

WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER AND WASTE MANAGEMENT

List of Certified Parameters  
for

**ALS ENVIRONMENTAL - HOLLAND**  
**MICHIGAN**  
**HOLLAND, MICHIGAN**

PARAMETERS CERTIFIED

NONPOTABLE WATER INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Acidity	SM2310 B-11	Titrimetric
Alkalinity	SM2320 B-11	Titrimetric
Ammonia	EPA350.1 Rev 2.0-1993	Spectrophotometric
Ammonia	SM4500-NH3 G-11	Spectrophotometric
Bromide	EPA300.0 Rev 2.1-1993	IC
Bromide	SW9056A	IC
Carbon, Total Organic (TOC)	SM5310 C-11	Oxidation
Carbon, Total Organic (TOC)	SW9060A	Oxidation
Chloride	EPA300.0 Rev 2.1-1993	IC
Chloride	SM4500-Cl C-11	Titrimetric
Chloride	SM4500-Cl E-11	Spectrophotometric
Chloride	SW9056A	IC
Chromium VI, Dissolved	SM3500-Cr B-11	Spectrophotometric
Chromium VI, Dissolved	SW7196A	Spectrophotometric
Conductance, Specific	SM2510 B-11	Probe
Conductance, Specific	SW9050A	Probe
Cyanide, Amenable to Chlorination	SM4500-CN E-11	Spectrophotometric
Cyanide, Amenable to Chlorination	SM4500-CN G-11	Digestion
Cyanide, Available	OIA-1677	FI/LE
Cyanide, Free	OIA-1677	FI
Cyanide, Total	ASTM D7511-09	Amperometric
Cyanide, Total	EPA335.4 Rev 1.0-1993	Spectrophotometric
Cyanide, Total	Kelada-01	Colorimetric
Cyanide, Total	SM4500-CN C-11	Distillation
Cyanide, Total	SM4500-CN E-11	Spectrophotometric
Cyanide, Total	SW9010B	Distillation
Cyanide, Total	SW9012B	Spectrophotometric
Cyanide, Weak Acid Dissociable	SM4500-CN E-11	Spectrophotometric
Cyanide, Weak Acid Dissociable	SM4500-CN I-11	Distillation
Fluoride	EPA300.0 Rev 2.1-1993	IC
Fluoride	SW9056A	IC

Hardness, Total	SM2340 B-11	Calculation
Hardness, Total	SM2340 C-11	Titrimetric
Nitrate	EPA300.0 Rev 2.1-1993	IC
Nitrate	EPA353.2 Rev 2.0-1993	Calculation
Nitrate	SM4500-NO3 F-11	Calculation
Nitrate	SW9056A	IC
Nitrate-Nitrite	EPA300.0 Rev 2.1-1993	Calculation
Nitrate-Nitrite	EPA353.2 Rev 2.0-1993	Spectrophotometric
Nitrate-Nitrite	SM4500-NO3 F-11	Spectrophotometric
Nitrate-Nitrite	SW9056A	Calculation
Nitrite	EPA300.0 Rev 2.1-1993	IC
Nitrite	EPA353.2 Rev 2.0-1993	Spectrophotometric
Nitrite	SM4500-NO2 B-11	Spectrophotometric
Nitrite	SM4500-NO3 F-11	Spectrophotometric
Nitrite	SW9056A	IC
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 B-11	Distillation
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 G-11	Spectrophotometric
Oil & Grease	EPA1664 A	Gravimetric
Oxygen Demand, Biochemical (BOD)	SM5210 B-11	Probe
Oxygen Demand, Carbonaceous Biochemical (CBOD)	SM5210 B-11	Probe
Oxygen Demand, Chemical (COD)	EPA410.4 Rev 2.0-1993	Spectrophotometric
Phenolics, Total	EPA420.4 Rev 1.0-1993	Spectrophotometric
Phenolics, Total	SW9066	Spectrophotometric
Phosphorus, Ortho	EPA365.1 Rev 2.0-1993	Spectrophotometric
Phosphorus, Ortho	SM4500-P E-11	Spectrophotometric
Phosphorus, Total	EPA365.1 Rev 2.0-1993	Spectrophotometric
Phosphorus, Total	SM4500-P E-11	Spectrophotometric
Solids, Dissolved	SM2540 C-11	Gravimetric
Solids, Settleable	SM2540 F-11	Imhoff
Solids, Suspended	SM2540 D-11	Gravimetric
Solids, Total	SM2540 B-11	Gravimetric
Solids, Volatile	EPA160.4	Gravimetric
Solids, Volatile	SM2540 E-11	Gravimetric
Sulfate	EPA300.0 Rev 2.1-1993	IC
Sulfate	SM4500-SO4 E-11	Turbidimetric
Sulfate	SW9056A	IC
Sulfide	SM4500-S F-11	Titrimetric
Sulfide	SW9030B	Distillation
Sulfide	SW9034	Titrimetric
Surfactants (MBAS)	SM5540 C-11	Spectrophotometric
Turbidity	SM2130 B-11	Turbidimetric

#### NONPOTABLE WATER TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	EPA200.7 Rev 4.4-1994	ICP
Aluminum	EPA200.8 Rev 5.4-1994	ICP-MS
Aluminum	SW6010C	ICP
Aluminum	SW6010D	ICP
Aluminum	SW6020B	ICP-MS
Antimony	EPA200.7 Rev 4.4-1994	ICP
Antimony	EPA200.8 Rev 5.4-1994	ICP-MS
Antimony	SW6010C	ICP
Antimony	SW6010D	ICP

Antimony	SW6020B	ICP-MS
Arsenic	EPA200.7 Rev 4.4-1994	ICP
Arsenic	EPA200.8 Rev 5.4-1994	ICP-MS
Arsenic	SW6010C	ICP
Arsenic	SW6010D	ICP
Arsenic	SW6020B	ICP-MS
Barium	EPA200.7 Rev 4.4-1994	ICP
Barium	EPA200.8 Rev 5.4-1994	ICP-MS
Barium	SW6010C	ICP
Barium	SW6010D	ICP
Barium	SW6020B	ICP-MS
Beryllium	EPA200.7 Rev 4.4-1994	ICP
Beryllium	EPA200.8 Rev 5.4-1994	ICP-MS
Beryllium	SW6010C	ICP
Beryllium	SW6010D	ICP
Beryllium	SW6020B	ICP-MS
Boron	EPA200.7 Rev 4.4-1994	ICP
Boron	EPA200.8 Rev 5.4-1994	ICP-MS
Boron	SW6010C	ICP
Boron	SW6010D	ICP
Boron	SW6020B	ICP-MS
Cadmium	EPA200.7 Rev 4.4-1994	ICP
Cadmium	EPA200.8 Rev 5.4-1994	ICP-MS
Cadmium	SW6010C	ICP
Cadmium	SW6010D	ICP
Cadmium	SW6020B	ICP-MS
Calcium	EPA200.7 Rev 4.4-1994	ICP
Calcium	EPA200.8 Rev 5.4-1994	ICP-MS
Calcium	SW6010C	ICP
Calcium	SW6010D	ICP
Calcium	SW6020B	ICP-MS
Chromium	EPA200.7 Rev 4.4-1994	ICP
Chromium	EPA200.8 Rev 5.4-1994	ICP-MS
Chromium	SW6010C	ICP
Chromium	SW6010D	ICP
Chromium	SW6020B	ICP-MS
Cobalt	EPA200.7 Rev 4.4-1994	ICP
Cobalt	EPA200.8 Rev 5.4-1994	ICP-MS
Cobalt	SW6010C	ICP
Cobalt	SW6010D	ICP
Cobalt	SW6020B	ICP-MS
Copper	EPA200.7 Rev 4.4-1994	ICP
Copper	EPA200.8 Rev 5.4-1994	ICP-MS
Copper	SW6010C	ICP
Copper	SW6010D	ICP
Copper	SW6020B	ICP-MS
Iron	EPA200.7 Rev 4.4-1994	ICP
Iron	EPA200.8 Rev 5.4-1994	ICP-MS
Iron	SW6010C	ICP
Iron	SW6010D	ICP
Iron	SW6020B	ICP-MS
Lead	EPA200.7 Rev 4.4-1994	ICP
Lead	EPA200.8 Rev 5.4-1994	ICP-MS
Lead	SW6010C	ICP
Lead	SW6010D	ICP
Lead	SW6020B	ICP-MS

Magnesium	EPA200.7 Rev 4.4-1994	ICP
Magnesium	EPA200.8 Rev 5.4-1994	ICP-MS
Magnesium	SW6010C	ICP
Magnesium	SW6010D	ICP
Magnesium	SW6020B	ICP-MS
Manganese	EPA200.7 Rev 4.4-1994	ICP
Manganese	EPA200.8 Rev 5.4-1994	ICP-MS
Manganese	SW6010C	ICP
Manganese	SW6010D	ICP
Manganese	SW6020B	ICP-MS
Mercury	EPA1631 E	CVAF
Mercury	EPA245.1 Rev 3.0-1994	CVAA
Mercury	SW7470A	CVAA
Metals	SW3005A	Digestion
Molybdenum	EPA200.7 Rev 4.4-1994	ICP
Molybdenum	EPA200.8 Rev 5.4-1994	ICP-MS
Molybdenum	SW6010C	ICP
Molybdenum	SW6010D	ICP
Molybdenum	SW6020B	ICP-MS
Nickel	EPA200.7 Rev 4.4-1994	ICP
Nickel	EPA200.8 Rev 5.4-1994	ICP-MS
Nickel	SW6010C	ICP
Nickel	SW6010D	ICP
Nickel	SW6020B	ICP-MS
Potassium	EPA200.7 Rev 4.4-1994	ICP
Potassium	EPA200.8 Rev 5.4-1994	ICP-MS
Potassium	SW6010C	ICP
Potassium	SW6010D	ICP
Potassium	SW6020B	ICP-MS
Selenium	EPA200.7 Rev 4.4-1994	ICP
Selenium	EPA200.8 Rev 5.4-1994	ICP-MS
Selenium	SW6010C	ICP
Selenium	SW6010D	ICP
Selenium	SW6020B	ICP-MS
Silver	EPA200.7 Rev 4.4-1994	ICP
Silver	EPA200.8 Rev 5.4-1994	ICP-MS
Silver	SW6010C	ICP
Silver	SW6010D	ICP
Silver	SW6020B	ICP-MS
Sodium	EPA200.7 Rev 4.4-1994	ICP
Sodium	EPA200.8 Rev 5.4-1994	ICP-MS
Sodium	SW6010C	ICP
Sodium	SW6010D	ICP
Sodium	SW6020B	ICP-MS
Strontium	EPA200.7 Rev 4.4-1994	ICP
Strontium	EPA200.8 Rev 5.4-1994	ICP-MS
Strontium	SW6010C	ICP
Strontium	SW6010D	ICP
Strontium	SW6020B	ICP-MS
Thallium	EPA200.7 Rev 4.4-1994	ICP
Thallium	EPA200.8 Rev 5.4-1994	ICP-MS
Thallium	SW6010C	ICP
Thallium	SW6010D	ICP
Thallium	SW6020B	ICP-MS
Tin	EPA200.7 Rev 4.4-1994	ICP
Tin	EPA200.8 Rev 5.4-1994	ICP-MS

Tin	SW6010C	ICP
Tin	SW6010D	ICP
Tin	SW6020B	ICP-MS
Titanium	EPA200.7 Rev 4.4-1994	ICP
Titanium	EPA200.8 Rev 5.4-1994	ICP-MS
Titanium	SW6010C	ICP
Titanium	SW6010D	ICP
Titanium	SW6020B	ICP-MS
Vanadium	EPA200.7 Rev 4.4-1994	ICP
Vanadium	EPA200.8 Rev 5.4-1994	ICP-MS
Vanadium	SW6010C	ICP
Vanadium	SW6010D	ICP
Vanadium	SW6020B	ICP-MS
Zinc	EPA200.7 Rev 4.4-1994	ICP
Zinc	EPA200.8 Rev 5.4-1994	ICP-MS
Zinc	SW6010C	ICP
Zinc	SW6010D	ICP
Zinc	SW6020B	ICP-MS

#### NONPOTABLE WATER VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Purge & Trap For Aqueous Samples	SW5030B	Extraction
Purgeables	EPA624.1	GC/MS
Total Petroleum Hydrocarbons (GRO)	SW8015C	GC/FID
Total Petroleum Hydrocarbons (GRO)	SW8015D	GC/FID
Volatile Organic Compounds	SW8260B	GC/MS
Volatile Organic Compounds	SW8260C	GC/MS

#### NONPOTABLE WATER EXTRACTABLE AND SEMI-VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Base/Neutrals & Acids	EPA625.1	GC/MS
Carbonyl Compounds	SW8315A	HPLC
Chlorinated Herbicides	SW8151A	GC
EDB & DBCP	SW8011	GC/ECD
Glycols	SW8015C	GC/FID
Microextraction	SW3511	Extraction
Organochlorine Pesticides	SW8081A	GC
Organochlorine Pesticides & PCBs	EPA608.3	GC
Organophosphorus Compounds	SW8141A	GC
Polychlorinated Biphenyls	SW8082	GC
Polynuclear Aromatic Hydrocarbons	SW8270C	SIM
Polynuclear Aromatic Hydrocarbons	SW8270D	SIM
Semivolatile Organic Compounds	SW8270C	GC/MS
Semivolatile Organic Compounds	SW8270D	GC/MS
Separatory Funnel Liquid-Liquid	SW3510C	Extraction
Total Petroleum Hydrocarbons (DRO)	SW8015C	GC/FID
Total Petroleum Hydrocarbons (DRO)	SW8015D	GC/FID
Total Petroleum Hydrocarbons (ORO)	SW8015C	GC/FID
Total Petroleum Hydrocarbons (ORO)	SW8015D	GC/FID

#### HAZARDOUS WASTE CHARACTERISTICS

<u>PROCEDURE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Corrosivity	SW9045D	Electrode
Ignitability	SW1010A	Closed Cup
Paint Filter Test	SW9095B	Gravimetric
SPLP- Metals & Organics	SW1312	Extraction
TCLP- Metals & Organics	SW1311	Extraction

### SOLID AND CHEMICAL INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Ammonia	SM4500-NH3 B-11	Distillation
Ammonia	SM4500-NH3 G-11	Spectrophotometric
Bromide	EPA300.0 Rev 2.1-1993	IC
Bromide	SW9056A	IC
Carbon, Total Organic (TOC)	Walkley-Black	
Chloride	EPA300.0 Rev 2.1-1993	IC
Chloride	SW9056A	IC
Chromium VI, Dissolved	SW3060A	Digestion
Chromium VI, Dissolved	SW7196A	Spectrophotometric
Cyanide, Total	SW9010B	Distillation
Cyanide, Total	SW9012B	Spectrophotometric
Fluoride	EPA300.0 Rev 2.1-1993	IC
Fluoride	SW9056A	IC
Nitrate	EPA300.0 Rev 2.1-1993	IC
Nitrate	EPA353.2 Rev 2.0-1993	Calculation
Nitrate	SW9056A	IC
Nitrate-Nitrite	EPA300.0 Rev 2.1-1993	IC
Nitrate-Nitrite	EPA353.2 Rev 2.0-1993	Spectrophotometric
Nitrate-Nitrite	SW9056A	Calculation
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 B-11	Distillation
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 G-11	Spectrophotometric
Nitrogen, Total Kjeldahl (TKN)	SM4500-Norg B-11	Digestion
Oil & Grease	SW9071B	Gravimetric
Oxygen Demand, Chemical (COD)	EPA410.4 Rev 2.0-1993	Spectrophotometric
Phenolics, Total	SW9066	Colorimetric
Phosphorus, Total	EPA365.1 Rev 2.0-1993	Spectrophotometric
Solids, Total, Fixed, & Volatile	SM2540 G-11	Gravimetric
Sulfate	EPA300.0 Rev 2.1-1993	IC
Sulfate	SW9056A	IC
Sulfide	SW9030B	Distillation
Sulfide	SW9034	Titrimetric

### SOLID AND CHEMICAL TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	SW6010C	ICP
Aluminum	SW6020A	ICP-MS
Aluminum	SW6020B	ICP-MS
Antimony	SW6010C	ICP
Antimony	SW6020A	ICP-MS
Antimony	SW6020B	ICP-MS
Arsenic	SW6010C	ICP



Arsenic	SW6020A	ICP-MS
Arsenic	SW6020B	ICP-MS
Barium	SW6010C	ICP
Barium	SW6020A	ICP-MS
Barium	SW6020B	ICP-MS
Beryllium	SW6010C	ICP
Beryllium	SW6020A	ICP-MS
Beryllium	SW6020B	ICP-MS
Beryllium	SW6020B	ICP-MS
Boron	SW6010C	ICP
Boron	SW6020A	ICP-MS
Boron	SW6020B	ICP-MS
Cadmium	SW6010C	ICP
Cadmium	SW6020A	ICP-MS
Cadmium	SW6020B	ICP-MS
Calcium	SW6010C	ICP
Calcium	SW6020A	ICP-MS
Calcium	SW6020B	ICP-MS
Chromium	SW6010C	ICP
Chromium	SW6020A	ICP-MS
Chromium	SW6020B	ICP-MS
Cobalt	SW6010C	ICP
Cobalt	SW6020A	ICP-MS
Cobalt	SW6020B	ICP-MS
Copper	SW6010C	ICP
Copper	SW6020A	ICP-MS
Copper	SW6020B	ICP-MS
Iron	SW6010C	ICP
Iron	SW6020A	ICP-MS
Iron	SW6020B	ICP-MS
Lead	SW6010C	ICP
Lead	SW6020A	ICP-MS
Lead	SW6020B	ICP-MS
Lithium	SW6010C	ICP
Lithium	SW6020A	ICP-MS
Lithium	SW6020B	ICP-MS
Magnesium	SW6010C	ICP
Magnesium	SW6020A	ICP-MS
Magnesium	SW6020B	ICP-MS
Manganese	SW6010C	ICP
Manganese	SW6020A	ICP-MS
Manganese	SW6020B	ICP-MS
Mercury	SW7471B	CVAA
Metals	SW3050B	Digestion
Molybdenum	SW6010C	ICP
Molybdenum	SW6020A	ICP-MS
Molybdenum	SW6020B	ICP-MS
Nickel	SW6010C	ICP
Nickel	SW6020A	ICP-MS
Nickel	SW6020B	ICP-MS
Potassium	SW6010C	ICP
Potassium	SW6020A	ICP-MS
Potassium	SW6020B	ICP-MS
Selenium	SW6010C	ICP
Selenium	SW6020A	ICP-MS
Selenium	SW6020B	ICP-MS

Silver	SW6010C	ICP
Silver	SW6020A	ICP-MS
Silver	SW6020B	ICP-MS
Silver	SW6020B	ICP-MS
Sodium	SW6010C	ICP
Sodium	SW6020A	ICP-MS
Sodium	SW6020B	ICP-MS
Strontium	SW6010C	ICP
Strontium	SW6020A	ICP-MS
Strontium	SW6020B	ICP-MS
Thallium	SW6010C	ICP
Thallium	SW6020A	ICP-MS
Thallium	SW6020B	ICP-MS
Tin	SW6010C	ICP
Tin	SW6020A	ICP-MS
Tin	SW6020B	ICP-MS
Titanium	SW6010C	ICP
Titanium	SW6020A	ICP-MS
Titanium	SW6020B	ICP-MS
Vanadium	SW6010C	ICP
Vanadium	SW6020A	ICP-MS
Vanadium	SW6020B	ICP-MS
Zinc	SW6010C	ICP
Zinc	SW6020A	ICP-MS
Zinc	SW6020B	ICP-MS

SOLID AND CHEMICAL VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Closed System Purge & Trap	SW5035	Extraction
Total Petroleum Hydrocarbons (GRO)	SW8015D	GC/FID
Volatile Organic Compounds	SW8260B	GC/MS
Volatile Organic Compounds	SW8260C	GC/MS

SOLID AND CHEMICAL EXTRACTABLE AND SEMI-VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Carbonyl Compounds	SW8315A	HPLC
Chlorinated Herbicides	SW8151A	GC/ECD
Microwave Extraction	SW3546	Extraction
Organochlorine Pesticides	SW8081A	GC
Polychlorinated Biphenyls	SW8082	GC
Polynuclear Aromatic Hydrocarbons	SW8270C	SIM
Polynuclear Aromatic Hydrocarbons	SW8270D	SIM
Semivolatile Organic Compounds	SW8270C	GC/MS
Semivolatile Organic Compounds	SW8270D	GC/MS
Silica Gel Cleanup	SW3630C	Cleanup
Soxhlet	SW3540C	Extraction
Soxhlet, Automated	SW3541	Extraction
Sulfur Cleanup	SW3660B	Cleanup
Sulfuric Acid/Permanganate Cleanup	SW3665A	Cleanup
Total Petroleum Hydrocarbons (DRO)	SW8015D	GC/FID
Total Petroleum Hydrocarbons (ORO)	SW8015D	GC/FID
Ultrasonic	SW3550C	Extraction

Waste Dilution

SW3580A

Dilution

This laboratory may test **ONLY** for those environmental parameters listed above for compliance reporting purposes. All testing must be by the test method cited in the current application for certification.

This Certification Expires August 31, 2020.

Certificate No 355

Linda B. Keller Issued on November 30, 2019

Linda Keller  
Program Manager

*This certified parameter list supersedes all previously issued parameter lists for this certificate number.*

ATTACHMENT I

WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER AND WASTE MANAGEMENT

List of Certified Parameters  
for

**ALS ENVIRONMENTAL**  
**MIDDLETOWN, PENNSYLVANIA**

PARAMETERS CERTIFIED

NONPOTABLE WATER INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Acidity	SM2310 B-11	Titrimetric
Alkalinity	SM2320 B-11	Titrimetric
Ammonia	ASTM D6919-09	IC
Ammonia	SM4500-NH3.G-11	Spectrophotometric
Bromide	EPA300.0 Rev 2.1-1993	IC
Bromide	EPA300.1 Rev 1.0-1997	IC
Bromide	SW9056A	IC
Carbon, Total Organic (TOC)	SM5310 B-11	Combustion
Carbon, Total Organic (TOC)	SW9060A	Combustion
Chloride	EPA300.0 Rev 2.1-1993	IC
Chloride	SW9056A	IC
Chromium VI, Dissolved	EPA218.6 Rev 3.3-1994	IC
Chromium VI, Dissolved	SM3500-Cr B-11	Spectrophotometric
Chromium VI, Dissolved	SW7196A	Spectrophotometric
Color	SM2120 B-11	Visual Comparison
Conductance, Specific	SM2510 B-11	Probe
Conductance, Specific	SW9050A	Probe
Cyanide, Amenable to Chlorination	SM4500-CN G-11	Digestion
Cyanide, Total	EPA335.4 Rev 1.0-1993	Spectrophotometric
Cyanide, Total	Kelada-01	Colorimetric
Cyanide, Total	SW9010C	Distillation
Cyanide, Total	SW9012B	Spectrophotometric
Cyanide, Weak Acid Dissociable	SM4500-CN I-11	Distillation
Fluoride	EPA300.0 Rev 2.1-1993	IC
Fluoride	SW9056A	IC
Hardness, Calcium	SM2340 B-11	Calculation
Hardness, Total	SM2340 B-11	Calculation
Hardness, Total	SM2340 C-11	Titrimetric
Nitrate	EPA300.0 Rev 2.1-1993	IC
Nitrate	SW9056A	IC
Nitrate-Nitrite	EPA300.0 Rev 2.1-1993	Calculation
Nitrate-Nitrite	EPA353.2 Rev 2.0-1993	Spectrophotometric
Nitrate-Nitrite	SW9056A	Calculation

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Nitrite	EPA300.0 Rev 2.1-1993	IC
Nitrite	SM4500-NO2 B-11	Spectrophotometric
Nitrite	SW9056A	IC
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 G-11	Spectrophotometric
Nitrogen, Total Kjeldahl (TKN)	SM4500-Norg B-11	Digestion
Nitrogen, Total Kjeldahl (TKN)	SM4500-Norg C-11	Digestion
Oil & Grease	EPA1664 B	Gravimetric
Oxygen Demand, Biochemical (BOD)	SM5210 B-11	Probe
Oxygen Demand, Carbonaceous Biochemical (CBOD)	SM5210 B-11	Probe
Oxygen Demand, Chemical (COD)	EPA410.4 Rev 2.0-1993	Spectrophotometric
Oxygen Demand, Chemical (COD)	HACH 8000	Spectrophotometric
Perchlorate	EPA314	IC
Phenolics, Total	EPA420.4 Rev 1.0-1993	Spectrophotometric
Phenolics, Total	SW9066	Spectrophotometric
Phosphorus, Ortho	SM4500-P E-11	Spectrophotometric
Phosphorus, Total	EPA365.1 Rev 2.0-1993	Spectrophotometric
Silica	SM4500-SiO2 C-11	Spectrophotometric
Solids, Dissolved	SM2540 C-11	Gravimetric
Solids, Settleable	SM2540 F-11	Imhoff
Solids, Suspended	SM2540 D-11	Gravimetric
Solids, Total	SM2540 B-11	Gravimetric
Solids, Volatile	SM2540 E-11	Gravimetric
Sulfate	EPA300.0 Rev 2.1-1993	IC
Sulfate	SW9056A	IC
Sulfide	SM4500-S F-11	Titrimetric
Surfactants (MBAS)	SM5540 C-11	Spectrophotometric
Turbidity	SM2130 B-11	Turbidimetric

#### NONPOTABLE WATER TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	EPA200.7 Rev 4.4-1994	ICP
Aluminum	EPA200.8 Rev 5.4-1994	ICP-MS
Aluminum	SW6010C	ICP
Aluminum	SW6010D	ICP
Aluminum	SW6020A	ICP-MS
Aluminum	SW6020B	ICP-MS
Antimony	EPA200.7 Rev 4.4-1994	ICP
Antimony	EPA200.8 Rev 5.4-1994	ICP-MS
Antimony	SW6010C	ICP
Antimony	SW6010D	ICP
Antimony	SW6020A	ICP-MS
Antimony	SW6020B	ICP-MS
Arsenic	EPA200.7 Rev 4.4-1994	ICP
Arsenic	EPA200.8 Rev 5.4-1994	ICP-MS
Arsenic	SW6010C	ICP
Arsenic	SW6010D	ICP
Arsenic	SW6020A	ICP-MS
Arsenic	SW6020B	ICP-MS
Barium	EPA200.7 Rev 4.4-1994	ICP

METALMETHODTECHNOLOGY

Barium	EPA200.8 Rev 5.4-1994	ICP-MS
Barium	SW6010C	ICP
Barium	SW6010D	ICP
Barium	SW6020A	ICP-MS
Barium	SW6020B	ICP-MS
Beryllium	EPA200.7 Rev 4.4-1994	ICP
Beryllium	EPA200.8 Rev 5.4-1994	ICP-MS
Beryllium	SW6010C	ICP
Beryllium	SW6010D	ICP
Beryllium	SW6020A	ICP-MS
Beryllium	SW6020B	ICP-MS
Boron	EPA200.7 Rev 4.4-1994	ICP
Boron	SW6010C	ICP
Boron	SW6010D	ICP
Boron	SW6020B	ICP-MS
Cadmium	EPA200.7 Rev 4.4-1994	ICP
Cadmium	EPA200.8 Rev 5.4-1994	ICP-MS
Cadmium	SW6010C	ICP
Cadmium	SW6010D	ICP
Cadmium	SW6020A	ICP-MS
Cadmium	SW6020B	ICP-MS
Calcium	EPA200.7 Rev 4.4-1994	ICP
Calcium	EPA200.8 Rev 5.4-1994	ICP-MS
Calcium	SW6010C	ICP
Calcium	SW6010D	ICP
Calcium	SW6020A	ICP-MS
Calcium	SW6020B	ICP-MS
Chromium	EPA200.7 Rev 4.4-1994	ICP
Chromium	EPA200.8 Rev 5.4-1994	ICP-MS
Chromium	SW6010C	ICP
Chromium	SW6010D	ICP
Chromium	SW6020A	ICP-MS
Chromium	SW6020B	ICP-MS
Cobalt	EPA200.7 Rev 4.4-1994	ICP
Cobalt	EPA200.8 Rev 5.4-1994	ICP-MS
Cobalt	SW6010C	ICP
Cobalt	SW6010D	ICP
Cobalt	SW6020A	ICP-MS
Cobalt	SW6020B	ICP-MS
Copper	EPA200.7 Rev 4.4-1994	ICP
Copper	EPA200.8 Rev 5.4-1994	ICP-MS
Copper	SW6010C	ICP
Copper	SW6010D	ICP
Copper	SW6020A	ICP-MS
Copper	SW6020B	ICP-MS
Iron	EPA200.7 Rev 4.4-1994	ICP
Iron	EPA200.8 Rev 5.4-1994	ICP-MS
Iron	SW6010C	ICP
Iron	SW6010D	ICP
Iron	SW6020A	ICP-MS
Iron	SW6020B	ICP-MS
Lead	EPA200.7 Rev 4.4-1994	ICP

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Lead	EPA200.8 Rev 5.4-1994	ICP-MS
Lead	SW6010C	ICP
Lead	SW6010D	ICP
Lead	SW6020A	ICP-MS
Lead	SW6020B	ICP-MS
Lithium	EPA200.7 Rev 4.4-1994	ICP
Lithium	SW6010C	ICP
Lithium	SW6010D	ICP
Lithium	SW6020B	ICP-MS
Magnesium	EPA200.7 Rev 4.4-1994	ICP
Magnesium	EPA200.8 Rev 5.4-1994	ICP-MS
Magnesium	SW6010C	ICP
Magnesium	SW6010D	ICP
Magnesium	SW6020A	ICP-MS
Magnesium	SW6020B	ICP-MS
Manganese	EPA200.7 Rev 4.4-1994	ICP
Manganese	EPA200.8 Rev 5.4-1994	ICP-MS
Manganese	SW6010C	ICP
Manganese	SW6010D	ICP
Manganese	SW6020A	ICP-MS
Manganese	SW6020B	ICP-MS
Mercury	EPA1631 E	CVAF
Mercury	EPA245.1 Rev 3.0-1994	CVAA
Mercury	SW6020A	ICP-MS
Mercury	SW6020B	ICP-MS
Mercury	SW7470A	CVAA
Metals	SW3015A	Digestion
Molybdenum	EPA200.7 Rev 4.4-1994	ICP
Molybdenum	EPA200.8 Rev 5.4-1994	ICP-MS
Molybdenum	SW6010C	ICP
Molybdenum	SW6010D	ICP
Molybdenum	SW6020A	ICP-MS
Molybdenum	SW6020B	ICP-MS
Nickel	EPA200.7 Rev 4.4-1994	ICP
Nickel	EPA200.8 Rev 5.4-1994	ICP-MS
Nickel	SW6010C	ICP
Nickel	SW6010D	ICP
Nickel	SW6020A	ICP-MS
Nickel	SW6020B	ICP-MS
Potassium	EPA200.7 Rev 4.4-1994	ICP
Potassium	EPA200.8 Rev 5.4-1994	ICP-MS
Potassium	SW6010C	ICP
Potassium	SW6010D	ICP
Potassium	SW6020A	ICP-MS
Potassium	SW6020B	ICP-MS
Selenium	EPA200.7 Rev 4.4-1994	ICP
Selenium	EPA200.8 Rev 5.4-1994	ICP-MS
Selenium	SW6010C	ICP
Selenium	SW6010D	ICP
Selenium	SW6020A	ICP-MS
Selenium	SW6020B	ICP-MS
Silicon	EPA200.7 Rev 4.4-1994	ICP

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Silicon	SW6010C	ICP
Silicon	SW6010D	ICP
Silicon	SW6020A	ICP-MS
Silicon	SW6020B	ICP-MS
Silver	EPA200.7 Rev 4.4-1994	ICP
Silver	EPA200.8 Rev 5.4-1994	ICP-MS
Silver	SW6010C	ICP
Silver	SW6010D	ICP
Silver	SW6020A	ICP-MS
Silver	SW6020B	ICP-MS
Sodium	EPA200.7 Rev 4.4-1994	ICP
Sodium	EPA200.8 Rev 5.4-1994	ICP-MS
Sodium	SW6010C	ICP
Sodium	SW6010D	ICP
Sodium	SW6020A	ICP-MS
Sodium	SW6020B	ICP-MS
Strontium	EPA200.7 Rev 4.4-1994	ICP
Strontium	EPA200.8 Rev 5.4-1994	ICP-MS
Strontium	SW6010C	ICP
Strontium	SW6010D	ICP
Strontium	SW6020A	ICP-MS
Strontium	SW6020B	ICP-MS
Thallium	EPA200.7 Rev 4.4-1994	ICP
Thallium	EPA200.8 Rev 5.4-1994	ICP-MS
Thallium	SW6010C	ICP
Thallium	SW6010D	ICP
Thallium	SW6020A	ICP-MS
Thallium	SW6020B	ICP-MS
Tin	EPA200.7 Rev 4.4-1994	ICP
Tin	EPA200.8 Rev 5.4-1994	ICP-MS
Tin	SW6010C	ICP
Tin	SW6010D	ICP
Tin	SW6020A	ICP-MS
Tin	SW6020B	ICP-MS
Titanium	EPA200.7 Rev 4.4-1994	ICP
Titanium	EPA200.8 Rev 5.4-1994	ICP-MS
Titanium	SW6010C	ICP
Titanium	SW6010D	ICP
Titanium	SW6020A	ICP-MS
Titanium	SW6020B	ICP-MS
Uranium	EPA200.8 Rev 5.4-1994	ICP-MS
Uranium	SW6020A	ICP-MS
Vanadium	EPA200.7 Rev 4.4-1994	ICP
Vanadium	EPA200.8 Rev 5.4-1994	ICP-MS
Vanadium	SW6010C	ICP
Vanadium	SW6010D	ICP
Vanadium	SW6020A	ICP-MS
Vanadium	SW6020B	ICP-MS
Zinc	EPA200.7 Rev 4.4-1994	ICP
Zinc	EPA200.8 Rev 5.4-1994	ICP-MS
Zinc	SW6010C	ICP
Zinc	SW6010D	ICP



<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Zinc	SW6020A	ICP-MS
Zinc	SW6020B	ICP-MS

#### NONPOTABLE WATER MICROBIOLOGY

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Coliform, Fecal (MF)	SM9222 D-06	Membrane Filter
Coliform, Fecal (MPN)	Colilert	Multiple Well
Coliform, Fecal (MPN)	Colilert 18	Multiple Well
Coliform, Fecal (MPN)	SM9223 B-04	Multiple Tube
Enterococci	SM9230 D-07	Multiple Well
Heterotrophic Plate Count (HPC)	SM9215 B-04	Pour Plate

#### NONPOTABLE WATER VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Dissolved Gases	ASTM D8028-17	GC
Purge & Trap For Aqueous Samples	SW5030B	Extraction
Purgeables	EPA624.1	GC/MS
Total Petroleum Hydrocarbons (GRO)	SW8015D	GC/FID
Volatile Organic Compounds	SW8260B	GC/MS
Volatile Organic Compounds	SW8260C	GC/MS

#### NONPOTABLE WATER EXTRACTABLE AND SEMI-VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Base/Neutrals & Acids	EPA625.1	GC/MS
Chlorinated Herbicides	SW8151A	GC
Florisol Cleanup	SW3620B	Cleanup
Microextraction	SW3511	Extraction
Nitroaromatics & Nitramines	SW8330B	HPLC
Organochlorine Pesticides	SW8081B	GC
Organochlorine Pesticides & PCBs	EPA608.3	GC
Polychlorinated Biphenyls	SW8082A	GC
Semivolatile Organic Compounds	SW8270D	GC/MS
Semivolatile Organic Compounds	SW8270D	SIM
Separatory Funnel Liquid-Liquid	SW3510C	Extraction
Silica Gel Cleanup	SW3630C	Cleanup
Sulfur Cleanup	SW3660B	Cleanup
Sulfuric Acid/Permanganate Cleanup	SW3665A	Cleanup
Total Petroleum Hydrocarbons (DRO)	SW8015D	GC/FID
Total Petroleum Hydrocarbons (ORO)	SW8015D	GC/FID

#### HAZARDOUS WASTE CHARACTERISTICS

<u>PROCEDURE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Corrosivity	SW9040C	Electrode
Corrosivity	SW9045D	Electrode

<u>PROCEDURE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Ignitability	SW1010A	Closed Cup
Ignitability (Solids)	SW1030	
Paint Filter Test	SW9095B	Gravimetric
TCLP- Metals	SW1311	Extraction
TCLP- Organics	SW1311	Extraction

#### SOLID AND CHEMICAL INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Ammonia	SM4500-NH3 G-11	Spectrophotometric
Bromide	SW9056A	IC
Carbon, Total Organic (TOC)	SW9060A	Combustion
Chloride	SW9056A	IC
Chromium VI, Dissolved	SW7196A	Spectrophotometric
Cyanide, Total	SW9012B	Spectrophotometric
Fluoride	SW9056A	IC
Nitrate	SW9056A	IC
Nitrate-Nitrite	SW9056A	Calculation
Nitrite	SW9056A	IC
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 D-11	ISE
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 G-11	Spectrophotometric
Oil & Grease	SW9071B	Gravimetric
pH (Hydrogen Ion)	SW9045D	Electrode
Phenolics, Total	SW9066	Colorimetric
Phosphorus, Total	EPA365.1 Rev 2.0-1993	Spectrophotometric
Solids, Total, Fixed, & Volatile	SM2540 G-11	Gravimetric
Sulfate	SW9056A	IC

#### SOLID AND CHEMICAL TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	SW6010C	ICP
Aluminum	SW6010D	ICP
Aluminum	SW6020A	ICP-MS
Aluminum	SW6020B	ICP-MS
Antimony	SW6010C	ICP
Antimony	SW6010D	ICP
Antimony	SW6020A	ICP-MS
Antimony	SW6020B	ICP-MS
Arsenic	SW6010C	ICP
Arsenic	SW6010D	ICP
Arsenic	SW6020A	ICP-MS
Arsenic	SW6020B	ICP-MS
Barium	SW6010C	ICP
Barium	SW6010D	ICP
Barium	SW6020A	ICP-MS
Barium	SW6020B	ICP-MS
Beryllium	SW6010C	ICP
Beryllium	SW6010D	ICP
Beryllium	SW6020A	ICP-MS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Beryllium	SW6020B	ICP-MS
Boron	SW6010C	ICP
Boron	SW6010D	ICP
Cadmium	SW6010C	ICP
Cadmium	SW6010D	ICP
Cadmium	SW6020A	ICP-MS
Cadmium	SW6020B	ICP-MS
Calcium	SW6010C	ICP
Calcium	SW6010D	ICP
Calcium	SW6020A	ICP-MS
Calcium	SW6020B	ICP-MS
Chromium	SW6010C	ICP
Chromium	SW6010D	ICP
Chromium	SW6020A	ICP-MS
Chromium	SW6020B	ICP-MS
Cobalt	SW6010C	ICP
Cobalt	SW6010D	ICP
Cobalt	SW6020A	ICP-MS
Cobalt	SW6020B	ICP-MS
Copper	SW6010C	ICP
Copper	SW6010D	ICP
Copper	SW6020A	ICP-MS
Copper	SW6020B	ICP-MS
Iron	SW6010C	ICP
Iron	SW6010D	ICP
Iron	SW6020A	ICP-MS
Iron	SW6020B	ICP-MS
Lead	SW6010C	ICP
Lead	SW6010D	ICP
Lead	SW6020A	ICP-MS
Lead	SW6020B	ICP-MS
Lithium	SW6010C	ICP
Lithium	SW6010D	ICP
Magnesium	SW6010C	ICP
Magnesium	SW6010D	ICP
Magnesium	SW6020A	ICP-MS
Magnesium	SW6020B	ICP-MS
Manganese	SW6010C	ICP
Manganese	SW6010D	ICP
Manganese	SW6020A	ICP-MS
Manganese	SW6020B	ICP-MS
Mercury	SW6020A	ICP-MS
Mercury	SW6020B	ICP-MS
Mercury	SW7471B	CVAA
Metals, Total	SW3050B	Digestion
Metals, Total	SW3051A	Digestion
Molybdenum	SW6010C	ICP
Molybdenum	SW6010D	ICP
Molybdenum	SW6020A	ICP-MS
Molybdenum	SW6020B	ICP-MS
Nickel	SW6010C	ICP
Nickel	SW6010D	ICP

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Nickel	SW6020A	ICP-MS
Nickel	SW6020B	ICP-MS
Potassium	SW6010C	ICP
Potassium	SW6010D	ICP
Potassium	SW6020A	ICP-MS
Potassium	SW6020B	ICP-MS
Selenium	SW6010C	ICP
Selenium	SW6010D	ICP
Selenium	SW6020A	ICP-MS
Selenium	SW6020B	ICP-MS
Silicon	SW6010C	ICP
Silicon	SW6010D	ICP
Silver	SW6010C	ICP
Silver	SW6010D	ICP
Silver	SW6020A	ICP-MS
Silver	SW6020B	ICP-MS
Sodium	SW6010C	ICP
Sodium	SW6010D	ICP
Sodium	SW6020A	ICP-MS
Sodium	SW6020B	ICP-MS
Strontium	SW6010C	ICP
Strontium	SW6010D	ICP
Strontium	SW6020A	ICP-MS
Strontium	SW6020B	ICP-MS
Thallium	SW6010C	ICP
Thallium	SW6010D	ICP
Thallium	SW6020A	ICP-MS
Thallium	SW6020B	ICP-MS
Tin	SW6010C	ICP
Tin	SW6010D	ICP
Tin	SW6020A	ICP-MS
Tin	SW6020B	ICP-MS
Titanium	SW6010C	ICP
Titanium	SW6010D	ICP
Titanium	SW6020A	ICP-MS
Titanium	SW6020B	ICP-MS
Uranium	SW6010D	ICP
Uranium	SW6010C	ICP
Uranium	SW6020A	ICP-MS
Uranium	SW6020B	ICP-MS
Vanadium	SW6010C	ICP
Vanadium	SW6010D	ICP
Vanadium	SW6020A	ICP-MS
Vanadium	SW6020B	ICP-MS
Zinc	SW6010C	ICP
Zinc	SW6010D	ICP
Zinc	SW6020A	ICP-MS
Zinc	SW6020B	ICP-MS

SOLID AND CHEMICAL MICROBIOLOGY

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Coliform, Fecal (MF)	SM9222 D-06	Membrane Filter

SOLID AND CHEMICAL VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Closed System Purge & Trap	SW5035A	Extraction
Total Petroleum Hydrocarbons (GRO)	SW8015D	GC/FID
Volatile Organic Compounds	SW8260B	GC/MS
Volatile Organic Compounds	SW8260C	GC/MS

SOLID AND CHEMICAL EXTRACTABLE AND SEMI-VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Chlorinated Herbicides	SW8151A	GC/ECD
Florisil Cleanup	SW3620B	Cleanup
Microwave Extraction	SW3546	Extraction
Nitroaromatics & Nitramines	SW8330B	HPLC
Organochlorine Pesticides	SW8081B	GC
Polychlorinated Biphenyls	SW8082A	GC
Semivolatile Organic Compounds	SW8270D	GC/MS
Semivolatile Organic Compounds	SW8270D	SIM
Silica Gel Cleanup	SW3630C	Cleanup
Sulfur Cleanup	SW3660B	Cleanup
Sulfuric Acid/Permanganate Cleanup	SW3665A	Cleanup
Total Petroleum Hydrocarbons (DRO)	SW8015D	GC/FID
Total Petroleum Hydrocarbons (ORO)	SW8015D	GC/FID
Waste Dilution	SW3580A	Dilution

This laboratory may test **ONLY** for those environmental parameters listed above for compliance reporting purposes. All testing must be by the test method cited in the current application for certification.

This Certification Expires September 30, 2020.

Certificate No 343



Issued on January 07, 2020

Justin Carpenter  
QA Auditor

*This certified parameter list supersedes all previously issued parameter lists for this certificate number.*