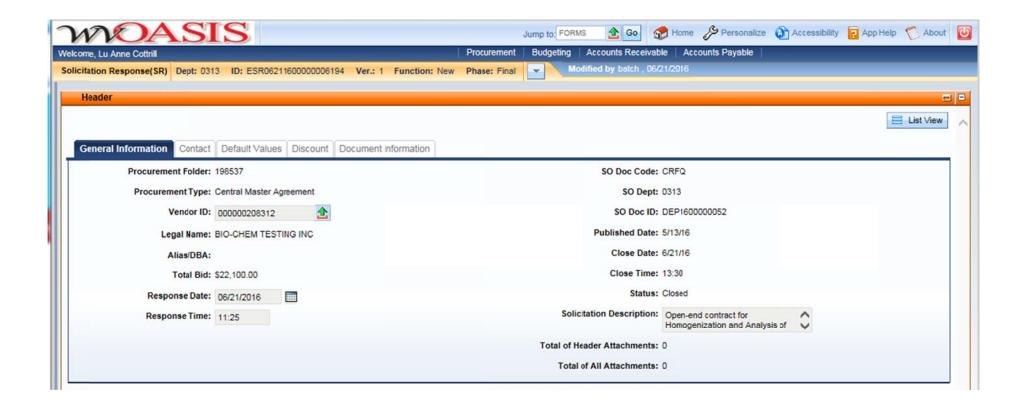


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





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

State of West Virginia Solicitation Response

Proc Folder: 198537

Solicitation Description: Open-end contract for Homogenization and Analysis of Fish

Proc Type: Central Master Agreement

Date issued	Solicitation Closes	Solicitation No	Version
	2016-06-21 13:30:00	SR 0313 ESR06211600000006194	1

VENDOR

000000208312

BIO-CHEM TESTING INC

FOR INFORMATION CONTACT THE BUYER

Beth Collins (304) 558-2157 beth.a.collins@wv.gov

Signature X FEIN # DATE

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

Page: 1 FORM ID: WV-PRC-SR-001

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Prepare fillets from whole-fish samples	250.00000	EA	\$15.000000	\$3,750.00

Comm Code	Manufacturer	Specification	Model #	
41105901				

Extended Description:

Cost per fish to prepare fillets from whole-fish samples. Includes both left and fight side fillets. (This is an estimated quantity for bid purposes only and not a guaranteed amount.)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Prepare homogenate of fillet specimens	100.00000	EA	\$15.000000	\$1,500.00

Comm Code	Manufacturer	Specification	Model #	
41105901				

Extended Description:

Cost per sample (up to 10 fillets) to prepare homogenate of fillet specimens. (This is an estimated quantity for bid purposes only and not a guaranteed amount.)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Prepare homogenate for whole-fish samples	50.00000	EA	\$20.000000	\$1,000.00

Comm Code	Manufacturer	Specification	Model #	
41105901				

Extended Description:

Cost per fish to prepare homogenate for whole-fish samples. Small fish may be grouped and considered one sample. (This is an estimated quantity for bid purposes only and not a guaranteed amount.)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Perform % lipids analysis	100.00000	EA	\$45.000000	\$4,500.00

Comm Code	Manufacturer	Specification	Model #	
41105901				

Extended Description:

Cost per sample to perform % lipids analysis. (This is an estimated quantity for bid purposes only and not a guaranteed amount.)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Perform Hg analysis	100.00000	EA	\$35.000000	\$3,500.00

Comm Code	Manufacturer	Specification	Model #	
41105901				

Extended Description:

Cost per sample to perform Hg analysis. (This is an estimated quantity for bid purposes only and not a guaranteed amount.)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
6	Perform PCBs analysis	100.00000	EA	\$70.000000	\$7,000.00

Comm Code	Manufacturer	Specification	Model #	
41105901				

Extended Description:

Cost per sample to perform PCBs analysis.
(This is an estimated quantity for bid purposes only and not a guaranteed amount.)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
7	Perform Se analysis	25.00000	EA	\$30.000000	\$750.00

Comm Code	Manufacturer	Specification	Model #	
41105901				

Extended Description:

Cost per sample to perform Se analysis.

(This is an estimated quantity for bid purposes only and not a guaranteed amount.)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
8	Fee per trip to WVDEP HQ to pick up samples.	1.00000	EA	\$0.000000	\$0.00

Comm Code	Manufacturer	Specification	Model #	
41105901				

Extended Description:

Fee per trip to WVDEP HQ to pick up samples. (This is an estimated quantity for bid purposes only and not a guaranteed amount.)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
9	Cost per hour for professional staff representation of data	1.00000	HOUR	\$100.000000	\$100.00

Comm Code	Manufacturer	Specification	Model #	
41105901				

Extended Description:

Cost per hour for professional staff representation of data in legal/administrative meetings. (This is an estimated quantity for bid purposes only and not a guaranteed amount.)



Pace Analytical Services, Inc. PO Box 634 Teays, WV 25569 Phone: 304.757.8954

Pnone: 304.757.8954 Fax: 304.757.9676 www.pacelabs.com

June 20, 2016

BID CLERK
Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305

RE: Solicitation No. CRFQ 0313 DEP1600000052

Dear Sir/Madam:

Attached you will find the bid for subject solicitation on behalf of Bio-Chem Testing, Division of Pace Analytical, Inc. We have read and have an understanding of the above solicitation. Bio-Chem was awarded the above contract in 2013 and several times prior to that. Attached with this contract is the following:

- WVDEP Certificate of Bio-Chem Testing, Division of Pace of Pace Analytical, Inc.
- Resume of key personnel involved in the subject project
- Relevant Experience in the subject project
- Resume of key personnel involved in the subject project by subcontractor

Finally, I would like to thank you for the opportunity. Should you require any additional information, please contact me at 304-757-8954.

Sincerely yours,

Bio-Chem Testing, Division of Pace Analytical, Inc.

Mukesh Shah

General Manager

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:
Vendor's Name: B10-Chrm Tisting, drision of Parl
Authorized Signature:
State of
County of <u>Putnam</u> , to-wit:
Taken, subscribed, and sworn to before me this 2/day of
My Commission expires March 17 . 2019
AFFIX SEAL HERE OFFICIAL SEAL MICHELLE D. ATWOOD NOTARY PUBLIC Purchasing Affidavit (Revised 07/01/2012)
MOTARY PUBLIC STATE OF WEST VIRGINIA 80 Great Tears Blvd Soot Depol LWV 25560-9545 My Convression Express March 17, 2019

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.

Mukesh Shah
(Name, Title) Mulces) Shah, General Manager
(Printed Name and Title) (Printed Name and Title) (Address) (Address)
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
(Phone Number) / (Fax Number) (email address)
(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.

-B
Parothem Testy Livision of Poul
(Company)
Mukesh Shah, Grains Manyso
(Authorized Signature) (Representative Name, Title)
(Printed Name and Title of Authorized Representative)
6-21-2016
(Date)
304-757-8954 304-757-9676
(Phone Number) (Fax Number)

REQUEST FOR QUOTATION

Homogenization and Analysis of Fish Tissue Samples for Metals and Polychlorinated Biphenyls

Attachment A

Vendor must provide the following information:

Approximate Minimum Detection Limit lab is able to attain for each analyte (bidders must use format below):

- a. Total Mercury: 0.03 mg/kg or lower
- b. Total Selenium: 0.75 mg/kg or lower
- c. Total PCBs: 0.036 mg/kg or lower

Name of Laboratory Contact:	Bro-Chan Testing, Sivisian of Pace
Contact's Signature:	Dul
Contact's Phone Number:	304-757-8954; 304-437-5405
Contact's Address: 5	Veatheridge Drive, Harricane, WY 25526

REQUEST FOR QUOTATION

Homogenization and Analysis of Fish Tissue Samples for Metals and Polychlorinated Biphenyls

- 6.2 The following remedies shall be available to Agency upon default.
 - 6.2.1 Immediate cancellation of the Contract.
 - 6.2.2 Immediate cancellation of one or more release orders issued under this Contract.
 - 6.2.3 Any other remedies available in law or equity.

7. MISCELLANEOUS:

- 7.1 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.
- 7.2 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: Multih Shah Arian Richards
Telephone Number: 304-437-5405, 304-757-8954
Fax Number: 304-157-9176
Email Address: 7170 @ biochimttstinglab.com

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received: A	Vo Addendum has been issued. dum received)
☐ Addendum No. 1 ☐ Addendum No. 2 ☐ Addendum No. 3 ☐ Addendum No. 4 ☐ Addendum No. 5	☐ Addendum No. 6 ☐ Addendum No. 7 ☐ Addendum No. 8 ☐ Addendum No. 9 ☐ Addendum No. 10
I further understand that any verba	the receipt of addenda may be cause for rejection of this bid. It representation made or assumed to be made during any oral representatives and any state personnel is not binding. Only and added to the specifications by an official addendum is
Bio-Chem Testing Company	Division of Pace
Authorized Signature	
6-21-16 Date	
NOTE: This addendum acknowled	dgement should be submitted with the bid to expedite

Revised 05/04/2016

document processing.



west virginia department of environmental protection

Division of Water and Waste Management 601 57th Street SE Charleston, WV 25304-2345

Phone: (304) 926-0495 Fax: (304) 926-0497 Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

May 05, 2016

Mukesh Shah President Bio-Chem, division of PASI P.O. Box 634 Teays, WV 25569

Dear Mr. Shah:

Please find enclosed an ATTACHMENT I modifying certification of your facility through July 31, 2016.

The laboratory name has been changed to:

"Bio-Chem, division of PASI"

If you have any questions, and if I can be of further assistance please call me at (304) 926-0499 ext. 1601 or e-mail me at <u>Tommy.W.Smith@wv.gov</u>.

Sincerely,

Tommy W. Smith II

Quality Assurance Officer

ts

Enclosure:

Attachment I

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

List of Certified Parameters for

BIO-CHEM, DIVISION OF PASI

TEAYS, WEST VIRGINIA

PARAMETERS CERTIFIED

NONPOTABLE WATER INORGANIC NONMETALS

ANALYTE	METHOD	TECHNOLOGY
ANALYTE Acidity, Hot Alkalinity Ammonia Ammonia Ammonia Bromide Carbon, Total Organic (TOC) Chloride Chloride Chlorine, Residual Chromium, Hexavalent Color Conductance, Specific Cyanide, Total Cyanide, Total Cyanide, Weak Acid Dissociable Fluoride Hardness, Calcium Hardness, Total	METHOD SM2310 B(4a)-97 SM2320 B-97 HACH 8038 Lachat 10-107-06-5-J SM4500-NH3 B-97 SM4500-NH3 C-97 EPA300.0 Rev 2.1-1993 SM5310 C-00 EPA300.0 Rev 2.1-1993 SM4500-CI C-97 HACH 8167 SM3500 Cr B-09 SM2120 B-01 EPA120.1 Rev 1982 SM4500-CN C-99 SM4500-CN E-99 SM4500-CN E-99 SM4500-CN E-99 SM4500-CN I-99 EPA300.0 Rev 2.1-1993 SM2340 B-97 HACH 8226	Titrimetric Titrimetric Spectrophotometric Spectrophotometric Distillation Titrimetric IC Oxidation IC Titrimetric Spectrophotometric Spectrophotometric Visual Comparison Probe Distillation Spectrophotometric Spectrophotometric Distillation IC Calculation
Hardness, Total Iron, Ferrous	SM2340 B-97	Titrimetric Calculation
Nitrate Nitrate	SM3500-Fe B(4.c)-97 EPA300.0 Rev 2.1-1993 EPA353.2 Rev 2.0-1993	Spectrophotometric IC Calculation
Nitrate Nitrate-Nitrite Nitrate-Nitrite	Lachat 10-107-04-1-C EPA300.0 Rev 2.1-1993 EPA353.2 Rev 2.0-1993	Calculation Calculation Spectrophotometric
Nitrate-Nitrite Nitrite Nitrite Nitrite	Lachat 10-107-04-1-C EPA300.0 Rev 2.1-1993 EPA353.2 Rev 2.0-1993	Spectrophotometric IC Spectrophotometric
Millie	Lachat 10-107-04-1-C	Spectrophotometric

ANALYTE	<u>METHOD</u>	<u>TECHNOLOGY</u>
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Nitrogen, Total Kjeldahl (TKN)	HACH 8038	Spectrophotometric
Nitrogen, Total Kjeldahl (TKN)	Lachat 10-107-06-2-E	Spectrophotometric
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 B-97	Distillation
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 C-97	Titrimetric
Nitrogen, Total Kjeldahl (TKN)	SM4500-Norg C-97	Digestion
Oil & Grease	EPA 1664 A	Gravimetric
Oxygen Demand, Biochemical (BOD)	SM5210 B-01	Probe
Oxygen Demand, Carbonaceous	SM5210 B-01	Probe
Biochemical (CBOD)		
Oxygen Demand, Chemical (COD)	HACH 8000	Spectrophotometric
Oxygen, Dissolved	SM4500-O G-01	Probe
pH (Hydrogen Ion)	SM4500-H B-00	Electrode
Phenolics, Total	EPA420.1 Rev 1978	Spectrophotometric
Phosphorus, Ortho	SM4500-P E-99	Spectrophotometric
Phosphorus, Total	EPA365.1 Rev 2.0-1993	Spectrophotometric
Phosphorus, Total	Lachat 10-115-01-1-F	Spectrophotometric
Phosphorus, Total	SM4500-P B(5)-99	Digestion
Phosphorus, Total	SM4500-P E-99	Spectrophotometric
Solids, Dissolved	SM2540 C-97	Gravimetric
Solids, Settleable	SM2540 F-97	Imhoff
Solids, Suspended	SM2540 D-97	Gravimetric
Solids, Total	SM2540 B-97	Gravimetric
Solids, Volatile	EPA160.4	Gravimetric
Sulfate	EPA300.0 Rev 2.1-1993	IC
Temperature	SM2550 B-00	Thermometric
Turbidity	EPA180.1 Rev 2.0-1993	Turbidimetric
•		

NONPOTABLE WATER TRACE METALS

METAL	METHOD	TECHNOLOGY
Aluminum	EPA200.7 Rev 4.4-1994	ICP
Aluminum	EPA200.8 Rev 5.4-1994	ICP-MS
Aluminum	SW6010B	ICP
Aluminum	SW6020	ICP-MS
Antimony	EPA200.7 Rev 4.4-1994	ICP
Antimony	EPA200.8 Rev 5.4-1994	ICP-MS
Antimony	SM3113 B-04	GFAA
Antimony	SW6010B	ICP
Antimony	SW6020	ICP-MS
Arsenic	EPA200.7 Rev 4.4-1994	ICP
Arsenic	EPA200.8 Rev 5.4-1994	ICP-MS
Arsenic	SM3113 B-04	GFAA
Arsenic	SW6010B	ICP
Arsenic	SW6020	ICP-MS
Barium Barium Barium	EPA200.7 Rev 4.4-1994 EPA200.8 Rev 5.4-1994 SW6010B	ICP ICP-MS
Barium Beryllium	SW6020 EPA200.7 Rev 4.4-1994	ICP ICP-MS ICP

METAL	METHOD	TECHNOLOGY
Beryllium	EPA200.8 Rev 5.4-1994	ICP-MS
Beryllium	SW6010B	ICP
Beryllium	SW6020	ICP-MS
Boron	EPA200.7 Rev 4.4-1994	ICP
Boron	SW6010B	ICP
Cadmium	EPA200.7 Rev 4.4-1994	ICP
Cadmium	EPA200.8 Rev 5,4-1994	ICP-MS
Cadmium	SM3113 B-04	GFAA
Cadmium	SW6010B	ICP
Cadmium	SW6020	ICP-MS
Calcium	EPA200.7 Rev 4.4-1994	ICP
Calcium	SW6010B	ICP
Chromium	EPA200.7 Rev 4.4-1994	ICP
Chromium	EPA200.8 Rev 5.4-1994	ICP-MS
Chromium	SW6010B	ICP
Chromium	SW6020	ICP-MS
Cobalt	EPA200.7 Rev 4.4-1994	ICP
Cobalt	EPA200.8 Rev 5.4-1994	ICP-MS
Cobalt	SW6010B	ICP
Cobalt	SW6020	ICP-MS
Copper	EPA200.7 Rev 4.4-1994	ICP
Copper	EPA200.8 Rev 5.4-1994	ICP-MS
Copper	SM3113 B-04	GFAA
Copper	SW6010B	ICP
Copper	SW6020	ICP-MS
Iron	EPA200.7 Rev 4.4-1994	ICP
Iron	SW6010B	ICP
Lead	EPA200.7 Rev 4.4-1994	ICP
Lead	EPA200.8 Rev 5.4-1994	ICP-MS
Lead	SM3113 B-04	GFAA
Lead	SW6010B	ICP
Lead	SW6020	ICP-MS
Magnesium	EPA200.7 Rev 4.4-1994	ICP
Magnesium	SW6010B	ICP
Manganese	EPA200.7 Rev 4.4-1994	ICP
Manganese	EPA200.8 Rev 5.4-1994	ICP-MS
Manganese	SW6010B	ICP
Manganese	SW6020	ICP-MS
Mercury	EPA245.1 Rev 3.0-1994	CVAA
Mercury	SW7470A	CVAA
Metals, Total	SM3030 E-97	Digestion
Metals, Total	SM3030 F-97	Digestion
Molybdenum	EPA200.7 Rev 4.4-1994	ICP
Molybdenum	EPA200.8 Rev 5.4-1994	ICP-MS
Molybdenum	SW6010B	ICP
Molybdenum	SW6020	ICP-MS
Nickel	EPA200.7 Rev 4.4-1994	ICP
Nickel	EPA200.8 Rev 5.4-1994	ICP-MS
Nickel	SW6010B	ICP
Nickel	SW6020	ICP-MS

METAL	METHOD	TECHNOLOGY
Potassium	EPA200.7 Rev 4.4-1994	1CP
Potassium	SW6010B	ICP
Selenium	EPA200.7 Rev 4.4-1994	ICP
Selenium	EPA200.8 Rev 5.4-1994	ICP-MS
Selenium	SM3113 B-04	GFAA
Selenium	SM3114 C-97 (Modified)	HGAF
Selenium	SW6010B	ICP
Selenium	SW6020	ICP-MS
Silica	EPA200.7 Rev 4.4-1994	Calculation
Silica	SW6010B	Calculation
Silicon	EPA200.7 Rev 4.4-1994	ICP
Silicon	SW6010B	ICP
Silver	EPA200.7 Rev 4.4-1994	ICP
Silver	EPA200.8 Rev 5.4-1994	ICP-MS
Silver	SM3113 B-04	GFAA
Silver	SW6010B	ICP
Silver	SW6020	ICP-MS
Sodium	EPA200.7 Rev 4.4-1994	ICP
Sodium	SW6010B	ICP
Strontium	EPA200.7 Rev 4.4-1994	ICP
Strontium	SW6010B	ICP
Thallium	EPA200.7 Rev 4.4-1994	ICP
Thallium	EPA200.8 Rev 5.4-1994	ICP-MS
Thallium	EPA279.2 (1978)	GFAA
Thallium	SW6010B	ICP
Thallium	SW6020	ICP-MS
Tin	EPA200.7 Rev 4.4-1994	ICP
Tin	SW6010B	ICP
Titanium	EPA200.7 Rev 4.4-1994	ICP
Titanium	SW6010B	ICP
Vanadium	EPA200.7 Rev 4.4-1994	ICP
Vanadium	EPA200.8 Rev 5.4-1994	ICP-MS
Vanadium	SW6010B	IC₽
Vanadium	SW6020	ICP-MS
Zinc	EPA200.7 Rev 4.4-1994	ICP
Zinc	EPA200.8 Rev 5.4-1994	ICP-MS
Zinc	SW6010B	ICP
Zinc	SW6020	ICP-MS

NONPOTABLE WATER MICROBIOLOGY

GROUP	<u>METHOD</u>	TECHNOLOGY
Coliform, Fecal (MF)	SM9222 D-97	Membrane Filter
Coliform, Fecal (MPN)	SM9221 E-06	Multiple Tube
Coliform, Total (MF)	SM9222 B-97	Membrane Filter
E. Coli (MF)	HACH 10029	Membrane Filter
Steptococci, Fecal (MF)	SM9230 C-07	Membrane Filter

HAZARDOUS WASTE CHARACTERISTICS

PROCEDURE		<u>METHOD</u>	TECHNOLOGY
Corrosivity Paint Filter Test SPLP- Metals TCLP- Metals	¥	SW9040C SW9095B SW1312 SW1311	Electrode Gravimetric Extraction Extraction

SOLID AND CHEMICAL INORGANIC NONMETALS

ANALYTE	<u>METHOD</u>	TECHNOLOGY
Ammonia	HACH 8038	Spectrophotometric
Ammonia	SM4500-NH3 B-97	Distillation
Ammonia	SM4500-NH3 C-97	Titrimetric
Chloride	EPA300.0 Rev 2.1-1993	IC
Chloride	SM4500-CI C-97	Titrimetric
Cyanide, Total	SM4500-CN C-99	Distillation
Cyanide, Total	SM4500-CN E-99	Spectrophotometric
Fluoride	EPA300.0 Rev 2.1-1993	IC
Nitrate	EPA300.0 Rev 2.1-1993	IC
Nitrate	EPA353.2 Rev 2.0-1993	Calculation
Nitrate-Nitrite	EPA300.0 Rev 2.1-1993	IC
Nitrate-Nitrite	EPA353.2 Rev 2.0-1993	Spectrophotometric
Nitrite	EPA300.0 Rev 2.1-1993	IC
Nitrite	EPA353.2 Rev 2.0-1993	Spectrophotometric
Nitrogen, Total Kjeldahl (TKN)	HACH 8038	Spectrophotometric
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 B-97	Distillation
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 C-97	Titrimetric
Nitrogen, Total Kjeldahl (TKN)	SM4500-Norg C-97	Digestion
pH (Hydrogen Ion)	SW9045C	Electrode
Phosphorus, Total	EPA365.1 Rev 2.0-1993	Spectrophotometric
Phosphorus, Total	SM4500-P B(5)-99	Digestion
Phosphorus, Total	SM4500-P E-99	Spectrophotometric
Solids, Total, Fixed, & Volatile	SM2540 G-97	Gravimetric
Solids, Volatile	EPA160.4	Gravimetric
Sulfate	EPA300.0 Rev 2.1-1993	IC

SOLID AND CHEMICAL TRACE METALS

<u>METAL</u>	METHOD	TECHNOLOGY
Aluminum	SW6010B	ICP
Antimony	SW6010B	ICP
Antimony	SW7010	GFAA
Arsenic	SW6010B	ICP
Arsenic	SW7010	GFAA
Barium	SW6010B	ICP
Beryllium	SW6010B	ICP
Boron	SW6010B	ICP
Cadmium	SW6010B	ICP
Cadmium	SW7010	GFAA

<u>METAL</u>	METHOD	TECHNOLOGY
Calcium	SW6010B	ICP
Chromium	SW6010B	ICP
Cobalt	SW6010B	ICP
Copper	SW6010B	ICP
Copper	SW7010	GFAA
Iron	SW6010B	ICP
Lead	SW6010B	ICP
Lead	SW7010	GFAA
Magnesium	SW6010B	ICP
Manganese	SW6010B	ICP
Mercury	SW7470A	CVAA
Mercury	SW7471A	CVAA
Metals, Total	SW3050B	Digestion
Molybdenum	SW6010B	ICP
Nickel	SW6010B	ICP
Phosphorus	SW6010B	ICP
Potassium	SW6010B	ICP
Selenium	SW6010B	ICP
Selenium	SW7010	GFAA
Silicon	SW6010B	ICP
Silver	SW6010B	ICP
Silver	SW7010	GFAA
Sodium	SW6010B	ICP
Strontium	SW6010B	ICP
Thallium	SW6010B	ICP
Thallium	SW7010	GFAA
Tin	SW6010B	ICP
Titanium	SW6010B	ICP
Vanadium	SW6010B	ICP
Zinc	SW6010B	ICP
	- · ·	101

SOLID AND CHEMICAL MICROBIOLOGY

GROUP	METHOD	<u>TECHNOLOGY</u>
Coliform, Fecal (MPN)	EPA-821-R-10-003 (2010)	Multiple Tube
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 July 31, 2016.

Certificate No 220

Tommy W. Smith II

Quality Assurance Officer

NOTE: This Attachment I supersedes and voids all previous Attachment I documents issued by WV DEP.

___ Issued on May 05, 2016

Mukesh Shah Laboratory Manager/President

Experience

May 1975 to April 1989 *Technical Testing, Inc.*

- BOD5.
- Chemical Oxygen Demand
- Specific Conductance
- TSS, TDS, TS, %Solids
- Phenolics
- Fecal Coliform, Total Coliform
- Acidity, Alkalinity, Hardness
- Nutrient, Ammonia, TKN, Organic Nitrogen
- Metals by AA Flame, AA Furnace
- Mercury by Cold Vapor Technique using Mercury Analyzer
- Quality Control
- Supervision of 8 Technicians
- Over seeing production

April 1989 to March 1995

SGS Environmental, Commercial Testing & Engineering

- Supervision of 11 Technicians
- Wet Chemistry, Physical Characteristics (as described above)
- Metals analysis by ICP, AA Furnace, AA Flame, Mercury Analyzer
- Over seeing production

March 1995 to date

Bio-Chem Testing, Inc.

- Operation over all laboratory including but not limited to:
 - 1. Purchasing
 - 2. Business development
 - 3. Hiring new employees
 - 4. Management

Education

West Virginia Institute of Technology; Graduate, BS in Chemistry 1975, Montgomery, WV

Bio-Chem Testing, Inc. 5 Weatheridge Drive, Hurricane, WV 25526 304-757-8954

Brian Richards Laboratory Supervisor

Experience

June 2003 - October 2005

Environmental Assessment Associates, LLC. (EAA), Barboursville, WV

- Field Assistant (2003-2004)
- Project Supervisor (2004-2005)
- Benthic Identification WVSCI, Habitat Assessments (2002-2005)

December 2005 - Present Bio-Chem Testing, Inc.

- Laboratory / Manager/Client Relation/New Business Development: 6 years experience
- Field Crew Supervision: 9 years experience
- Fish filleting and homogenization: 6 years
- ICP: 3 years experience
- Preparation of Fish for analysis

Education

Alderson Broaddus College; Graduate, BS in Environmental Science, 2003, Philippi, WV

Marshall University; GeoBioPhysical Modeling, 2003-2005, Huntington, WV

Cindy Walker Analyst

Experience

August 2008 - Present Bio-Chem Testing, Inc.

• Metals Digestions: 6.5 years experience

• Turbidity: 6.5 years experience

• TS: 6.5 years experience

• TDS: 6.5 years experience

• Color PtCo: 6.5 years experience

• TCLP: 6.5 years experience

• SPLP: 6.5 years experience

• pH: 6.5 years experience

• % Solids water and soils: 6.5 years experience

• % Solids fish tissue: 5 years

• Volatile Solids: 6.5 years experience

• Selenium by GHAF: 2.5 years

• ICP Metals: 3.5 years

Education

West Virginia State University; Graduate, BS in Biology, 2007, Institute, WV

Kara Frampton Production Supervisor/Analyst

Experience

May 2004 – Present Bio-Chem Testing, Inc. Production Supervisor

- Cold Vapor Mercury water, soil, and fish tissue: 10.7 years experience
 Graphite Furnace AA water, soil, and fish tissue: 10.2 years experience
- Settleable Solids: 7.2 years experience
 Paint Filter Test: 10.7 years experience
 Chlorides Titration: 9.2 years experience
- ICP: 2.2 years experience
- Generation of Laboratory Reports: 6.2 years experience
- eDMRs: 5.2 years experience

Education

Fairmont State College; Graduate, BS Biology 2003, Fairmont, WV



PO Box 634 Teays, WV 25569

Phone: 304.757.8954 Fax: 304.757.9676 www.pacelabs.com

Bio-Chem Testing, Inc. A Division of Pace Analytical

Pace Analytical *

<u>Year</u>	Client	Parameter
2016	Marshall University, Huntington, West Virginia	Selenium, % Moisture
2015	GEI Consultant, Michigan	Selenium, % Moisture
	West Virginia Department of Environmental Protection	Selenium, % Moisture, Mercury
	Potesta & associates, Charleston, West Virginia	Selenium, % Moisture
2014	Arch Coal Company, Charleston, West Virginia	Selenium, % Moisture
	GEI Consultant, Michigan	Selenium, % Moisture
	Potesta & associates, Charleston, West Virginia	Selenium, % Moisture
2013	Marshall University, Huntington, West Virginia	Selenium, % Moisture
	Potesta & associates, Charleston, West Virginia	Selenium, % Moisture
2012	Marshall University, Huntington, West Virginia	Selenium, % Moisture
	Potesta & associates, Charleston, West Virginia	Selenium, % Moisture
2011	Potesta & associates, Charleston, West Virginia	Selenium, % Moisture
	US Army Corps of Engineers, Apple Groove, WV	Selenium, % Moisture

Relevant Experience

06/20/2016



Personnel Resume

Michael T. Wesoloski Wet Chemistry Supervisor I

Qualifications Summary

Mr. Wesoloski is the Wet Chemistry Supervisor and an experienced Wet Chemistry analyst.

Professional Experience

Supervisor I, Wet Chemistry - TestAmerica Pittsburgh - 2007 to Present Mr. Wesoloski's responsibilities include supervising personnel in the Wet Chemistry laboratory section and analysis of samples using distillation, gravimetric, electrometric, titrimetric, colorimetric and instrumental analytical procedures. As an experienced analyst and section supervisor, Mr. Wesoloski is also responsible for training other analysts, reviewing analytical data for analysts, reviewing standard operating procedures and implementing changes to methodology and instrumentation.

Team Leader, Wet Chemistry Group - STL - Pittsburgh PA - 2004 to 2007

Team Leader, Metals Group - STL - Pittsburgh PA - 2000 to 2003

Chemist/Analyst III - STL - Pittsburgh PA - 2000

Chemist/Analyst III - Quanterra Inc. - Pittsburgh PA - 1996 to 2000

Inorganics Group Leader - Quanterra Inc. - Pittsburgh PA -1994 to 1996

Team Leader, Metals Group - Quanterra Inc. - Pittsburgh PA - 1994

Team Leader, Metals Group - IT Analytical Services - Pittsburgh PA - 1991 to 1994

Group Leader, Inorganic Preparation group - IT Analytical Services - Pittsburgh PA - 1990 to 1991

Laboratory Technician, Metals Group - IT Analytical Services - Pittsburgh PA - 1989 to 1990

Sample Preparation Specialist, Laboratory Technician - IT Analytical Services - Pittsburgh PA - 1987 to 1989

Education

➤ BS in Biology – LaRoche College – Pittsburgh, PA -- 1987

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Personnel Resume

John Oravec Laboratory Analyst V

Qualifications Summary

Mr. Oravec is an organics analyst with extensive experience in HPLC, GC and GC/MS laboratory sections.

Professional Experience

Analyst V, GC Department – TestAmerica Pittsburgh – 2007 to Present Mr. Oravec's responsibilities include sample analysis in the GC laboratory section for Pesticides, PCBs, Herbicides, and Inorganic Anions. He prepares standards and performs needed clean-up and preparation of samples for analysis. He also performs review of analytical data for other analysts.

Lead Analyst, GC Department - STL - Pittsburgh PA - 2004 to 2007

Chemist, Organics Department – UEC Labs – Monroeville PA – 1997 to 2004

Chemist, Organics Department – Chester Labnet / RCRA Labs – Monroeville PA – 1989 to 1997

Education

B.S. Chemistry – University of Pittsburgh – Pittsburgh, PA - 1989

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