



DEPARTMENT OF ADMINISTRATION  
PURCHASING DIVISION  
BUILDING 15  
2019 WASHINGTON STREET, EAST  
CHARLESTON, WV 25305-0130

RE: RFQ No. DEP15706  
Pace Analytical Services, Inc. response to RFQ

Enclosed is Pace Analytical Services, Inc. proposal for the above referenced RFQ. Prices have been entered for those Line Items in which Pace Analytical Services are bidding on. For the Line Items in which we do not have WV certification/capability, I did not submit pricing and therefore those items alone are not included in our bid proposal.

Further, as instructed our signed bid contains the "Purchasing Affidavit", "Vendor's Bid Sheet", proof of certification, and finally key staff chemists resumes.

Respectfully submitted,

A handwritten signature in cursive script that reads "Paul P. Painter".

Paul P. Painter  
Sr. Account Executive  
Pace Analytical Services, Inc.





State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

# Request for Quotation

RFQ NUMBER  
 DEP15706

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ADDRESS CORRESPONDENCE TO ATTENTION OF  
 GUY NISBET  
 304-558-8802

VENDOR

**Pace Analytical Services, Inc.**  
**833 Reunion Road**  
**Elkview, WV. 25071**

SHIP TO

ENVIRONMENTAL PROTECTION  
 DEPARTMENT OF  
 ENVIRONMENTAL ENFORCEMENT  
 601 57TH STREET  
 CHARLESTON, WV  
 25304 304-926-0499

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B	FREIGHT TERMS
12/23/2011				

BID OPENING DATE: 02/02/2012 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		961-48		
<p>OPEN END CONTRACT</p> <p>ORGANIC ANALYSIS OF WATER AND SOIL FIELD TESTING</p> <p>THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, WEST VIRGINIA DEPARTMENT OF ENVIROMENTAL PROTECTION'S DEPARTMENT OF ENVIROMENTAL ENFORCEMENT DIVISION, IS SOLICITING BIDS FROM QUALIFIED VENDOR'S TO PROVIDE THE AGENCY WITH ORGANIC ANALYSIS OF WATER AND SOIL PER THE FOLLOWING SPECIFICATIONS, SCOPE OF WORK, TERMS &amp; CONDITIONS AND BID REQUIREMENTS AS ATTACHED.</p> <p>INQUIRIES:</p> <p>WRITTEN QUESTIONS SHALL BE ACCEPTED THROUGH CLOSE OF BUSINESS ON THURSDAY, JANUARY 19, 2012. QUESTIONS MAY BE SENT VIA: USPS, FAX, COURIER OR EMAIL. IN ORDER TO ASSURE NO VENDOR RECEIVES AN UNFAIR ADVANTAGE, NO SUBSTANTIVE QUESTIONS WILL BE ANSWERED ORALLY. IF POSSIBLE, EMAIL QUESTIONS ARE PREFERRED. ANY TECHNICAL QUESTIONS RECEIVED WILL BE ANSWERED BY FORMAL WRITTEN ADDENDUM TO BE ISSUED BY THE PURCHASING DIVISION AFTER THE DEADLINE HAS LAPSED.</p> <p>ADDRESSES INQUIRIES TO:</p> <p>GUY NISBET</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
SIGNATURE	TELEPHONE	DATE	
	304-207-3797	2-1-2012	
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE	
Sr. Account Executive	41-1821617		

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

## GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
5. Payment may only be made after the delivery and acceptance of goods or services.
6. Interest may be paid for late payment in accordance with the *West Virginia Code*.
7. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
10. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern the purchasing process.
11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
12. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
13. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at [www.state.wv.us/admin/purchase/vrc/hipaa.html](http://www.state.wv.us/admin/purchase/vrc/hipaa.html) and is hereby made part of the agreement provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
14. **CONFIDENTIALITY:** The vendor agrees that he or she 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/noticeConfidentiality.pdf>.
15. **LICENSING:** Vendors 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, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
16. **ANTITRUST:** In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will 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 the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

### INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as EQUAL to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
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# Request for Quotation

RFQ NUMBER  
 DEP15706

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ADDRESS CORRESPONDENCE TO ATTENTION OF:  
 GUY NISBET  
 304-558-8802

RFQ COPY

TYPE NAME/ADDRESS HERE

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ENVIRONMENTAL PROTECTION  
 DEPARTMENT OF  
 ENVIRONMENTAL ENFORCEMENT  
 601 57TH STREET  
 CHARLESTON, WV  
 25304 304-926-0499

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
12/23/2011				

BID OPENING DATE: 02/02/2012 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION 2019 WASHINGTON STREET, EAST CHARLESTON, WV. 25305 FAX: 304.558.4115 EMAIL: GUY.L.NISBET@WV.GOV		
				EXHIBIT 3		
				LIFE OF CONTRACT: THIS CONTRACT BECOMES EFFECTIVE ON AWARD..... AND EXTENDS FOR A PERIOD OF ONE (1) YEAR OR UNTIL SUCH "REASONABLE TIME" THEREAFTER AS IS NECESSARY TO OBTAIN A NEW CONTRACT OR RENEW THE ORIGINAL CONTRACT. THE "REASONABLE TIME" PERIOD SHALL NOT EXCEED TWELVE (12) MONTHS. DURING THIS "REASONABLE TIME" THE VENDOR MAY TERMINATE THIS CONTRACT FOR ANY REASON UPON GIVING THE DIRECTOR OF PURCHASING 30 DAYS WRITTEN NOTICE.		
				UNLESS SPECIFIC PROVISIONS ARE STIPULATED ELSEWHERE IN THIS CONTRACT DOCUMENT, THE TERMS, CONDITIONS AND PRICING SET HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT.		
				RENEWAL: THIS CONTRACT MAY BE RENEWED UPON THE MUTUAL WRITTEN CONSENT OF THE SPENDING UNIT AND VENDOR, SUBMITTED TO THE DIRECTOR OF PURCHASING THIRTY (30) DAYS PRIOR TO THE EXPIRATION DATE. SUCH RENEWAL SHALL BE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT AND SHALL BE LIMITED TO TWO (2) ONE (1) YEAR PERIODS.		
				CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICE		

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Paul Hunter</i>	TELEPHONE 304-207-3797	DATE 2-1-2012
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TITLE Sr Account Executive	FEIN 41-1821617	ADDRESS CHANGES TO BE NOTED ABOVE
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WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



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<p>SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</p> <p>OPEN MARKET CLAUSE: THE DIRECTOR OF PURCHASING MAY AUTHORIZE A SPENDING UNIT TO PURCHASE ON THE OPEN MARKET, WITHOUT THE FILING OF A REQUISITION OR COST ESTIMATE, ITEMS SPECIFIED ON THIS CONTRACT FOR IMMEDIATE DELIVERY IN EMERGENCIES DUE TO UNFORESEEN CAUSES (INCLUDING BUT NOT LIMITED TO DELAYS IN TRANSPORTATION OR AN UNANTICIPATED INCREASE IN THE VOLUME OF WORK.)</p> <p>QUANTITIES: QUANTITIES LISTED IN THE REQUISITION ARE APPROXIMATIONS ONLY, BASED ON ESTIMATES SUPPLIED BY THE STATE SPENDING UNIT. 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.</p> <p>ORDERING PROCEDURE: SPENDING UNIT(S) SHALL ISSUE A WRITTEN STATE CONTRACT ORDER (FORM NUMBER WV-39) TO THE VENDOR FOR COMMODITIES COVERED BY THIS CONTRACT. THE ORIGINAL COPY OF THE WV-39 SHALL BE MAILED TO THE VENDOR AS AUTHORIZATION FOR SHIPMENT, A SECOND COPY MAILED TO THE PURCHASING DIVISION, AND A THIRD COPY RETAINED BY THE SPENDING UNIT.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.</p> <p>THE TERMS AND CONDITIONS CONTAINED IN THIS CONTRACT SHALL SUPERSEDE ANY AND ALL SUBSEQUENT TERMS AND CONDITIONS WHICH MAY APPEAR ON ANY ATTACHED PRINTED DOCUMENTS SUCH AS PRICE LISTS, ORDER FORMS, SALES</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Paul Painter</i>	TELEPHONE 304-207-3797	DATE 2-1-2012
TITLE SR ACCOUNT EXECUTIVE	FEIN 41-1821617	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ. INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



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LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
				AGREEMENTS OR MAINTENANCE AGREEMENTS, INCLUDING ANY ELECTRONIC MEDIUM SUCH AS CD-ROM.		
				REV. 05/26/2009		
				EXHIBIT 10		
				REQUISITION NO.: DEP15706....		
				ADDENDUM ACKNOWLEDGEMENT		
				I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.		
				ADDENDUM NO.'S:		
				NO. 1 .....		
				NO. 2 .....		
				NO. 3 .....		
				NO. 4 .....		
				NO. 5 .....		
				I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.		
				VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.		

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE *Paul R. ...* TELEPHONE 304-207-3797 DATE 2-1-2012

TITLE Sr Account Executive FEIN 41-1821617 ADDRESS CHANGES TO BE NOTED ABOVE

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 GUY NISBET  
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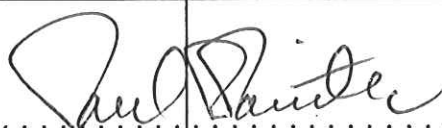
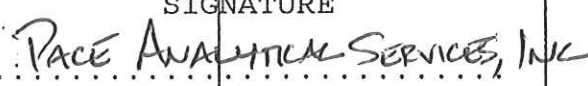
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LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
 ..... SIGNATURE  ..... COMPANY 2-1-2012 ..... DATE						
NOTE: THIS ADDENDUM ACKNOWLEDGEMENT SHOULD BE SUBMITTED WITH THE BID.  REV. 09/21/2009  PURCHASING CARD ACCEPTANCE: THE STATE OF WEST VIRGINIA CURRENTLY UTILIZES A VISA PURCHASING CARD PROGRAM WHICH IS ISSUED THROUGH A BANK. THE SUCCESSFUL VENDOR MUST ACCEPT THE STATE OF WEST VIRGINIA VISA PURCHASING CARD FOR PAYMENT OF ALL ORDERS PLACED BY ANY STATE AGENCY AS A CONDITION OF AWARD.  NOTICE  A SIGNED BID MUST BE SUBMITTED TO:  DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE  TELEPHONE 304-207-3717 DATE 2-1-2012

TITLE SR Account Executive FEIN 41-1821617 ADDRESS CHANGES TO BE NOTED ABOVE

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BID OPENING DATE: 02/02/2012 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER: -----GN-----</p> <p>RFQ. NO.: -----DEP15706-----</p> <p>BID OPENING DATE: -----02/02/2012-----</p> <p>BID OPENING TIME: -----1:30PM-----</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:            -----(724) 850-5601-----</p> <p>CONTACT PERSON (PLEASE PRINT CLEARLY):            -----PAUL P. PAINTER-----</p> <p>***** THIS IS THE END OF RFQ DEP15706 ***** TOTAL: _____</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Paul Painter</i>	TELEPHONE 304-207-3797	DATE 2-1-2012
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TITLE SR Account Executive	FEIN 41-1821617	ADDRESS CHANGES TO BE NOTED ABOVE
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WHEN RESPONDING TO RFQ INSERT NAME AND ADDRESS IN SPACE ABOVE LABELLED 'VENDOR'



## ORGANIC ANALYSIS OF WATER AND SOIL

DEP15706

## Bid Schedule

Vendors Name: PACE ANALYTICAL SERVICES, INC.

The DEP reserves the right to request additional information and supporting documentation regarding unit prices when the unit price appears to be unreasonable.

ITEM NO.	ESTIMATED QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1.0		Method 601, Purgeable Halocarbons - See page 7		
1.1	12	Single compound analysis cost		\$
1.2	12	Up to 10 compounds then complete list cost applies		\$
1.3	12	Complete list cost		\$
2.0		Method 602, Purgeable Aromatics - See page 7		
2.1	15	Single compound analysis cost		\$
2.2	15	Complete list cost		\$
3.0		Method 603, Acrolein & Acrylonitrile - See page 7		
3.1	15	Single compound analysis cost		\$
3.2	15	Complete list cost		\$
4.0		Method 604, Phenols - See page 8		
4.1	20	Single compound analysis cost		\$
4.2	20	Up to 10 compounds then complete list cost applies		\$
4.3	20	Complete list cost		\$
5.0		Method 605, Benzidines - See page 8		
5.1	12	Single compound analysis cost		\$
5.2	12	Complete list cost		\$
6.0		Method 606, Phthalate Esters - See page 8		
6.1	12	Single compound analysis cost		\$
6.2	12	Complete list cost		\$
7.0		Method 607, Nitrosamines - See page 8		
7.1	12	Single compound analysis cost		\$
7.2	12	Complete list cost		\$
8.0		Method 608, Organochlorine Pesticides & PCBs - See page 8-9		
8.1	15	Single compound analysis cost	50.00	\$ 750.00
8.2	15	Up to 10 compounds then complete list cost applies	50.00	\$ 750.00
8.3	15	Complete list cost	80.00	\$ 1,200.00

ITEM NO.	ESTIMATED QUANTITY	DESCRIPTION		AMOUNT
9.0		Method 609, Nitroaromatics & Isophorone - See page 9		
9.1	12	Single compound analysis cost		\$
9.2	12	Complete list cost		\$
10.0		Method 610, Polynuclear Aromatic Hydrocarbons - See page 9		
10.1	20	Single compound analysis cost		\$
10.2	20	Up to 10 compounds then complete list cost applies		\$
10.3	20	Complete list cost		\$
11.0		Method 611, Halocthers - See page 9		
11.1	12	Single compound analysis cost		\$
11.2	12	Complete list cost		\$
12.0		Method 612, Chlorinated hydrocarbons - See page 10		
12.1	12	Single compound analysis cost		\$
12.2	12	Complete list cost		\$
13.0		Method 613, 2,3,7,8 Tetrachlorodibenzo-P-dioxin - See page 10		
13.1	12	Single compound analysis cost		\$
14.0		Method 613, Tetra-through Octa-Chlorinated Dibenzo-P-dioxins (CDDs) & Dibenzofurans (CDFs) - See page 10		
14.1	12	Complete list cost		\$
15.0		Method 624, Purgeables - See page 10-11		
15.1	20	Single compound analysis cost	28.00	\$ 560.00
15.2	20	Up to 10 compounds then complete list cost applies	42.00	\$ 840.00
15.3	20	Complete list cost	60.00	\$ 1,200.00
16.0		Method 625, Base/Neutrals Extractables - See page 11-12		
16.1	12	Single compound analysis cost	65.00	\$ 780.00
16.2	12	Up to 10 compounds then complete list cost applies	80.00	\$ 960.00
16.3	12	Complete list cost	95.00	\$ 1,140.00
17.0		Method 625, Acid Extractables - See page 12		
17.1	12	Single compound analysis cost	65.00	\$ 780.00
17.2	12	Up to 10 compounds then complete list cost applies	80.00	\$ 960.00
17.3	12	Complete list cost	95.00	\$ 1,140.00
18.0		Method 8015B - See page 12-13		
18.1	20	Single compound analysis cost		\$
18.2	20	Up to 10 compounds then complete list cost applies		\$
18.3	20	Complete list cost		\$
19.0		Method 8041, Phenols by GC - See page 13		
19.1	12	Single compound analysis cost		\$
19.2	12	Up to 10 compounds then complete list cost applies		\$
19.3	12	Complete list cost		\$

ITEM NO.	ESTIMATED QUANTITY	DESCRIPTION	AMOUNT	
20.0		<b>Method 8100, Polynuclear Aromatic Hydrocarbons - See page 14-15</b>		
20.1	20	Single compound analysis cost		\$
20.2	20	Up to 10 compounds then complete list cost applies		\$
20.3	20	Complete list cost		\$
21.0		<b>Method 8121, Chlorinated Hydrocarbons - See page 15</b>		
21.1	12	Single compound analysis cost		\$
21.2	12	Up to 10 compounds then complete list cost applies		\$
21.3	12	Complete list cost		\$
22.0		<b>Method 8151A, Chlorinated Herbicides - See page 15-16</b>		
22.1	12	Single compound analysis cost	70.00	\$ 840.00
22.2	12	Up to 10 compounds then complete list cost applies	100.00	\$ 1,200.00
22.3		Complete list cost	115.00	\$ 1,380.00
23.0		<b>Method 8260, - See page 16-18</b>		
23.1	15	Search for additional tentatively identified compounds	10.00	\$ 150.00
23.2	15	Single compound analysis cost	28.00	\$ 420.00
23.3	15	Up to 10 compounds then complete list cost applies	42.00	\$ 630.00
23.4	15	Complete list cost	60.00	\$ 900.00
23.5	15	GC-MS Scan per TIC, report TICS that are detected at 10% of the area of the nearest internal standard	10.00	\$ 150.00
24.0		<b>Method 8270, - See page 18-22</b>		
24.1	15	Search for additional tentatively identified compounds	10.00	\$ 150.00
24.2	15	Single compound analysis cost	65.00	\$ 975.00
24.3	15	Up to 10 compounds then complete list cost applies	100.00	\$ 1,500.00
24.4	15	Complete list cost	125.00	\$ 1,875.00
24.5	15	GC-MS Scan per TIC, report TICS that are detected at 10% of the area of the nearest internal standard	10.00	\$ 150.00
25.0		<b>Method 8310, Polynuclear Aromatic Hydrocarbons by HPLC - See page 22-23</b>		
25.1	15	Single compound analysis cost		\$
25.2	15	Up to 10 compounds then complete list cost applies		\$
25.3	15	Complete list cost		\$
26.0		<b>TCLP RCRA Pesticides &amp; Herbicides EPA 1311/SW846 - See page 23</b>		
26.1	12	Single compound analysis cost	70.00	\$ 840.00
26.2	12	Complete list cost	190.00	\$ 2,280.00
27.0		<b>TCLP RCRA Metals EPA 1311/SW846 - See page 23</b>		
27.1	24	Single compound analysis cost	30.00	\$ 720.00
27.2	24	Complete list cost	80.00	\$ 1,920.00
28.0		<b>TCLP Volatile Organics 8260 with 1311 extraction - See page 23</b>		
28.1	20	Single compound analysis cost	48.00	\$ 960.00
28.2	20	Up to 10 compounds then complete list cost applies	55.00	\$ 1,100.00
28.3	20	Complete list cost	80.00	\$ 1,600.00

ITEM NO.	ESTIMATED QUANTITY	DESCRIPTION	AMOUNT	
29.0		TCLP Semi-Volatile Organics 8720 with 1311 extraction - See page 24		
29.1	12	Single compound analysis cost	85.00	\$ 1,020.00
29.2	12	Up to 10 compounds then complete list cost applies	120.00	\$ 1,440.00
29.3	12	Complete list cost	145.00	\$ 1,740.00
30.0		RCRA General Chemistry - See page 24		
30.1	12	Single compound analysis cost	25.00	\$ 300.00
30.2	12	Complete list cost	75.00	\$ 900.00
31.0		Metals/Cyanide Target Analyte List (TAL)-Low level option EPA 200.7/SW 7470/7471 - See page 24-25		\$
31.1	12	Single compound analysis cost		\$
31.2	12	Complete list cost		\$
32.0	10	Priority Pollutant Metals-(low level option-Mercury) Water		\$
33.0	10	Priority Pollutant Metals-(low level option-Mercury) Soil		\$
34.0	10	8081A Organochlorine Pesticides GC	75.00	\$ 750.00
35.0	10	8280 PCBs by GC by 8082	55.00	\$ 550.00
36.0	10	8061A Phthalate Esters by GC/EDC		\$
37.0	20	8270 PAH by GC/MS	60.00	\$ 1,200.00
38.0	20	8260B Semivolatile Organics by GC/MS	60.00	\$ 1,200.00
39.0	20	8270C Semivolatile Organics by GC/MS	125.00	\$ 2,500.00
40.0	30	BTEX (8021B)(8260B)	28.00	\$ 840.00
41.0	30	<sup>8260B 8260B</sup> BTEX (8021B)/MTBE (8021B)	30.00	\$ 900.00
42.0	30	<sup>8260B</sup> BTEX (8021B)/GRO (8015B)	58.00	1,740.00
43.0	30	<sup>8260B</sup> BTEX (8021B)/DRO/GRO (8015B)	88.00	\$ 2,640.00
44.0	30	<sup>8260B 8260B</sup> BTEX (8021B)/GRO (8015B)/MTBE (8021B)	60.00	1,800.00
45.0	30	<sup>8260B 8260B</sup> BTEX (8021B)/DRO/GRO (8015B)/MTBE (8021B)	90.00	\$ 2,700.00
46.0	30	BTEX/MTBE/TBA/EDB/EDC by 8260B (SIM)	50.00	\$ 1,500.00
47.0	10	TPH-ORO (8015B)	30.00	\$ 300.00
48.0	10	TPH-GRO (8015B)	30.00	\$ 300.00
49.0	10	TPH-DRO (8015B)	30.00	\$ 300.00
50.0	10	TPH-DRO/ORO (8015)	30.00	\$ 300.00

ITEM NO.	ESTIMATED QUANTITY	DESCRIPTION		AMOUNT
51.0	10	TPH-GRO/DRO (8015B)	60.00	\$ 600.00
52.0	20	TPH-GRO/DRO/ORO (8015B)	60.00	\$ 1,200.00
53.0		Solid Waste Phase I Organics (Title 33 Series1) Cost (Groundwater only) per set: - See page 25-26		
53.1	12	Search for additional tentatively identified compounds	10.00	\$ 120.00
53.2	12	Single compound analysis cost	28.00	\$ 336.00
53.3	12	Up to 10 compounds then complete list cost applies	42.00	\$ 504.00
53.4	12	Total cost Phase I 8260 complete list	60.00	\$ 720.00
54.0		Priority Pollutants by SW-846 Protocol Analysis		
54.1	12	Priority Pollutant Volatiles	60.00	\$ 720.00
54.2	12	Priority Pollutant Semi-Volatiles	125.00	\$ 1,500.00
54.3	12	Priority Pollutant Pesticides/PCBs	80.00	\$ 960.00
54.4	12	Priority Pollutant Inorganics	95.00	\$ 1,140.00
54.5	12	Total Package Cost (less dioxins) Dioxin (2,3,7,8-Tetrachlorodibenzo-p-Dioxin) quoted at time of analysis	380.00	\$ 4,560.00
55.0		Total Toxic Organics (TTO) by SW-846 Protocol Analysis		
55.1	12	TTO Volatiles	70.00	\$ 840.00
55.2	12	TTO Semi-Volatiles	160.00	\$ 1,920.00
55.3	12	TTO Pesticides/PCBs	90.00	\$ 1,080.00
55.4	12	TTO Inorganics	115.00	\$ 1,380.00
55.5	12	Total Package Cost (less dioxins) Dioxin (2,3,7,8-Tetrachlorodibenzo-p-Dioxin) quoted at time of analysis	435.00	\$ 5,220.00
56.0		Target Compounds List (TCL) Analysis		
56.1	12	TCL Volatiles	60.00	\$ 720.00
56.2	12	TCL Semi-Volatiles	125.00	\$ 1,500.00
56.3	12	TCL Pesticides/PCBs	80.00	\$ 960.00
56.4	12	TCL Inorganics	115.00	\$ 1,380.00
56.5	12	Total Package Cost (less dioxins) Dioxin (2,3,7,8-Tetrachlorodibenzo-p-Dioxin) quoted at time of analysis	380.00	\$ 4,560.00
57.0		Hazardous Waste Characterizations Analysis		
57.1	12	Reactivity	50.00	\$ 600.00
57.2	12	Ignitability	25.00	\$ 300.00
57.3	12	Corrosivity (pH)	5.00	\$ 60.00
57.4	12	Corrosivity (NACE)		\$
57.5	12	BTU		\$
57.6	12	TCLP	445.00	\$ 5,340.00
57.7	12	Total Package Cost (less BTU / CORROSIVITY-NACE)		\$ 6,300.00

ITEM NO.	ESTIMATED QUANTITY	DESCRIPTION		AMOUNT
58.0		<b>TCLP Extractions Analysis</b>		
58.1	15	Percent Solids (metals, semi-volatiles, volatiles, pesticides, herbicides)	8.00	\$ 120.00
58.2	15	Characterization Extraction (metals, semi-volatiles, pesticides, herbicides)	20.00	\$ 300.00
58.3	15	Zero Headspace Extraction (volatiles)	20.00	\$ 300.00
59.0		<b>TCLP Analysis - Analysis</b>		
59.1	20	TCLP Metals quantified to 10% of TCLP levels	60.00	\$ 1,200.00
59.2	20	TCLP-Mercury	15.00	\$ 300.00
59.3	20	TCLP-Individual Metal	6.50	\$ 130.00
59.4	20	Additional Metals (Flame, Furnace, ICP, ICP-MS)	5.00	\$ 100.00
59.5	20	Analysis by Standard Method of Addition (per metal)		\$
59.6	20	TCLP Pb characterization (includes extraction fees)	26.50	\$ 530.00
59.7	20	TCLP Volatile Organics	60.00	\$ 1,200.00
59.8	20	TCLP Semi-Volatile Organics	125.00	\$ 2,500.00
59.9	20	TCLP Pesticides/Herbicides	160.00	\$ 3,200.00
59.10	20	TCLP Pesticides	60.00	\$ 1,200.00
59.11	20	TCLP Herbicides	100.00	\$ 2,000.00
59.12	20	Full TCLP	445.00	\$ 8,900.00
		NOTE: Multiphasic samples will be subject to additional extraction and analytical fee		
60.0	12	<b>Phase II Groundwater Parameters</b>		\$
51.0	12	Volatiles by Method 8260 - Groundwater II	60.00	\$ 720.00
62.0	12	Volatiles by Method 8270 - Groundwater II	125.00	\$ 1,500.00
63.0	12	Encore Sampling Kits (3 kits/sample @ \$8.00 each)	24.00	\$ 288.00
64.0	12	Terra Core Sampling Kits	10.00	\$ 120.00
<b>Collection of Samples-Cost associated with samples from DEP Offices</b>				
65.0	24	*Charleston Office, 601 57th St., SE, Charleston, WV 25304	0.00	\$ 0.00
66.0	24	*Teays Office, P.O. Box 662, Teays, WV 25596	0.00	\$ 0.00
67.0	24	*Fairmont Office, 2031 Pleasant Valley Rd., Fairmont, WV 26554	70.00	\$ 1,680.00
68.0	24	*Romney Office, HC 63, Box 2545, Romney, WV 26757	150.00	\$ 3,600.00
69.0	24	*French Creek Office, P.O. Box 38, French Creek, WV 26218	50.00	\$ 1,200.00
70.0	24	*Wheeling Office, 131A Peninsula St., Wheeling, WV 26003	110.00	\$ 2,640.00
71.0	24	*Parkersburg Office, 2311 Ohio Ave., Parkersburg, WV 26010	50.00	\$ 1,200.00
72.0	24	*Oak Hill Office, 116 Industrial Dr., Oak Hill, WV 25901	40.00	\$ 960.00

ITEM NO.	ESTIMATED QUANTITY	DESCRIPTION	AMOUNT
73.0	10	24 Hour Turn-Around Rush Orders**	\$ 80%
74.0	10	48 Hour Turn-Around Rush Orders**	\$ 60%
75.0	10	72 Hour Turn Around Rush Orders**	\$ 40%
<b>TOTAL</b>			<b>\$ 136,128.00</b>
All unit pricing quoted should be based on standard (not to exceed two weeks) turn-around time.			
**During emergency situations samples may be requested on a quicker turn-around basis.			

RFQ No. DEP15706

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

West Virginia Code §5A-3-10a states: 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 the debt owed is an amount greater than one thousand dollars in the aggregate.

**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.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "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.

**EXCEPTION:** The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this 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.

Under penalty of law for false swearing (*West Virginia Code §61-5-3*), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

**WITNESS THE FOLLOWING SIGNATURE**

Vendor's Name: PACE ANALYTICAL SERVICES, INC.

Authorized Signature: *Caul Rankin* Date: 1-27-2012

State of WEST VIRGINIA

County of KANAWHA, to-wit:

Taken, subscribed, and sworn to before me this 27<sup>th</sup> day of January, 2012.

My Commission expires January 31, 2018.

AFFIX SEAL HERE

NOTARY PUBLIC *Beverly Agee*





## **Proof of Certification**



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west virginia department of environmental protection

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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.wv.dep.gov](http://www.wv.dep.gov)

31 March 2011

Lab # 143 [6-10-1]  
Randal T Hill, Quality Assurance Manager  
Pace Analytical Services, Incorporated - Pittsburgh Laboratory  
1638 Roseytown Road – Suites: 2, 3, & 4  
Greensburg, Pennsylvania 15601

Dear Randy:

I have enclosed the **ATTACHMENT I** recertifying your facility through, **31 January 2012**.

Please do not hesitate to contact me, if you have any questions or concerns. I can be contacted by phone at: 304-472-5124, by fax at: 304-473-4203, by e-mail at: [davidfwolfe@frontier.com](mailto:davidfwolfe@frontier.com), or by e-mail at: [david.f.wolfe@wv.gov](mailto:david.f.wolfe@wv.gov).

Sincerely,

David F Wolfe, PhD  
Quality Assurance Officer

Division of Water and Waste Management  
28 Hickory Flat Road  
Buckhannon, West Virginia 26201-8541

Phone: 304-472-5124  
Fax: 304-473-4203

dfw

Enclosure:

Promoting a healthy environment.

Attachment I

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

Annual Certified Parameter List

for

PACE ANALYTICAL SERVICES, INCORPORATED- PITTSBURGH  
GREENSBURG, PENNSYLVANIA

PARAMETERS CERTIFIED

NONPOTABLE WATER FIELD TESTS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
pH (Field Test - Hydrogen Ion)	SM20th4500-H B	Probe
Temperature(Field Test)	SM20th2550 B	Probe

NONPOTABLE WATER INORGANICS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Acidity	SM20th2310 B (4a)	Titrimetric
Alkalinity	SM20th2330B	Titrimetric
Ammonia	EPA350.1	Discrete
Chloride	SM20th4500-Cl <sup>-</sup> E	Discrete
Conductance, Specific	EPA120.1	Probe
Chromium, Hexavalent	SM19th3500-Cr D	Colorimetric
Chromium, Hexavalent	SW7196A	Colorimetric
Cyanide	SM20th4500-CN <sup>-</sup> C	Distillation
Cyanide, Total	SM20th 4500-CN E	Spectrometric
Cyanide, Total	EPA335.4	Spectrometric
Cyanide, Amenable	SM20th4500-CN G	Spectrometric
Demand, Biochemical(BOD)	SM20th5210 B	Probe
Demand, Carbonaceous(CBOD)	SM20th5210 B	Probe
Demand, Chemical Oxygen (COD)	EPA410.4	Spectrometric
Fluoride	EPA300.0	IC
Fluoride	SM20th4500-F B	Distillation
Fluoride	SM20th4500-F C	ISElectrode
Hardness, Total	SM20th2340 B	ICP Calculation
Hardness, Total	EPA200.7 Rev 4.4-1994	ICP Calculation
Kjeldahl Nitrogen, Total	SM20th4500-Norg B	Digestion
Kjeldahl Nitrogen, Total	SM20th4500-NH3 B	Distillation
Kjeldahl Nitrogen, Total	EPA351.2	Discrete

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Nitrate	SM20th4500-NO <sub>3</sub> F	Discrete
Nitrate-Nitrite	SM20th4500-NO <sub>3</sub> F	Discrete
Nitrite	SM20th4500-NO <sub>3</sub> F	Discrete
Oil & Grease	EPA1664A	Gravimetric
Organic Carbon, Total	SM20th5310 C	Oxidation
Petroleum Hydrocarbons, Total	EPA1664A	Gravimetric
Phenolics, Total	EPA420.1 Rev 1978	Spectrometric
Phosphate, Ortho	SM20th4500-P E	Discrete
Phosphorus, Total	SM20th4500-P B.5	Digestion
Phosphorus, Total	SM20th4500-P E	Discrete
Solids, Dissolved	SM20th2540 C	Gravimetric
Solids, Settleable	SM20th2540 F	Gravimetric
Solids, Suspended	SM20th2540 D	Gravimetric
Solids, Total	SM20th2540 B	Gravimetric
Sulfate	ASTM D516-90, 02	Turbidimetric
Sulfide	SM20th4500-S F	Titrimetric
Turbidity	EPA180.1	Turbidimetric

### NONPOTABLE WATER TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	EPA200.7 Rev 4.4-1994	ICP
Antimony	EPA200.7 Rev 4.4-1994	ICP
Arsenic	EPA200.7 Rev 4.4-1994	ICP
Barium	EPA200.7 Rev 4.4-1994	ICP
Beryllium	EPA200.7 Rev 4.4-1994	ICP
Boron	EPA200.7 Rev 4.4-1994	ICP
Cadmium	EPA200.7 Rev 4.4-1994	ICP
Calcium	EPA200.7 Rev 4.4-1994	ICP
Chromium	EPA200.7 Rev 4.4-1994	ICP
Cobalt	EPA200.7 Rev 4.4-1994	ICP
Copper	EPA200.7 Rev 4.4-1994	ICP
Iron	EPA200.7 Rev 4.4-1994	ICP
Lead	EPA200.7 Rev 4.4-1994	ICP
Magnesium	EPA200.7 Rev 4.4-1994	ICP
Manganese	EPA200.7 Rev 4.4-1994	ICP
Molybdenum	EPA200.7 Rev 4.4-1994	ICP
Nickel	EPA200.7 Rev 4.4-1994	ICP
Potassium	EPA200.7 Rev 4.4-1994	ICP
Selenium	EPA200.7 Rev 4.4-1994	ICP
Silver	EPA200.7 Rev 4.4-1994	ICP
Sodium	EPA200.7 Rev 4.4-1994	ICP
Strontium	EPA200.7 Rev 4.4-1994	ICP
Thallium	EPA200.7 Rev 4.4-1994	ICP
Tin	EPA200.7 Rev 4.4-1994	ICP
Titanium	EPA200.7 Rev 4.4-1994	ICP
Vanadium	EPA200.7 Rev 4.4-1994	ICP
Zinc	EPA200.7 Rev 4.4-1994	ICP
Mercury	EPA245.1 Rev 3.0-1994	CVAA

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	SW6010B	ICP
Antimony	SW6010B	ICP
Arsenic	SW6010B	ICP
Barium	SW6010B	ICP
Beryllium	SW6010B	ICP
Boron	SW6010B	ICP
Cadmium	SW6010B	ICP
Calcium	SW6010B	ICP
Chromium	SW6010B	ICP
Cobalt	SW6010B	ICP
Copper	SW6010B	ICP
Iron	SW6010B	ICP
Lead	SW6010B	ICP
Magnesium	SW6010B	ICP
Manganese	SW6010B	ICP
Molybdenum	SW6010B	ICP
Nickel	SW6010B	ICP
Potassium	SW6010B	ICP
Selenium	SW6010B	ICP
Silver	SW6010B	ICP
Sodium	SW6010B	ICP
Strontium	SW6010B	ICP
Thallium	SW6010B	ICP
Tin	SW6010B	ICP
Titanium	SW6010B	ICP
Vanadium	SW6010B	ICP
Zinc	SW6010B	ICP
Mercury	SW7470A	CVAA

**NONPOTABLE WATER VOLATILES**

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Purgeables	EPA624	GC/MS
Total Petroleums (TPH - Fuel - GRO)	SW8015B	GC/FID
Volatiles	SW8260B	GC/MS

**NONPOTABLE WATER EXTRACTABLES & SEMI-VOLATILES**

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Pesticides & PCBs	EPA608	GC/ECD
Base/Neutrals & Acids	EPA625	GC/MS
Total Petroleums (TPH - Fuel - DRO)	SW8015B	GC/FID
Organochlorine Pesticides	SW8081A	GC/ECD
Polychlorinated Biphenyls	SW8082	GC/ECD
Semi-volatiles	SW8270C	GC/MS
Polynuclear Aromatics (PAHs/PNAs)	SW8270-SIM	GC/MS-SIM

## NONPOTABLE WATER RADIOCHEMISTRY

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Alpha Counting Error	EPA900.0	Gas Flow Proportional
Beta Counting Error	EPA900.0	Gas Flow Proportional
Gross Alpha	EPA900.0	Gas Flow Proportional
Gross Beta	EPA900.0	Gas Flow Proportional
Gamma Emitters	EPA901.1	Gamma Spectroscopy
Alpha Radium	EPA903.0	Gas Flow Proportional
Strontium-90	EPA-905.0	Gas Flow Proportional
Tritium	EPA-906.0	Gas Flow Proportional
Uranium	EPA-908.0	Gas Flow Proportional
Radium 226	SM20th7500Ra C	Scintillation Cell System
Radium 228	SM20th7500Ra D	Gas Flow Proportional
Isotopic Thorium	US DOE EML-HASL-300	Alpha Spectroscopy
Isotopic Uranium	US DOE EML-HASL-300	Alpha Spectroscopy

## HAZARDOUS WASTE CHARACTERISTICS

<u>PROCEDURE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Corrosivity (Water)	SW9040B	Probe
Corrosivity (Soil)	SW9045C	Probe
Ignitability (Penske-Martin)	SW1010A	Closed Cup
Paint Filter Test	SW9095B	Gravimetric
Reactive Cyanide	Chap 7.3.3.2	SW9010/9012A/9014
Reactive Sulfide	Chap 7.3.4.2	SW9030/9034
TCLP (Metals & Organics)	SW1311	Rotating Extractor

## SOLID & CHEMICAL INORGANICS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Chromium, Hexavalent	SW7196A	Spectrometric
Cyanide, Total	SW9014	Spectrometric
Hardness, Total	SW6010B	ICP Calculation
Oil & Grease	SW9071A	Gravimetric

## SOLID & CHEMICAL TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	SW6010B	ICP
Antimony	SW6010B	ICP
Arsenic	SW6010B	ICP
Barium	SW6010B	ICP
Beryllium	SW6010B	ICP
Boron	SW6010B	ICP
Cadmium	SW6010B	ICP
Calcium	SW6010B	ICP
Chromium	SW6010B	ICP
Cobalt	SW6010B	ICP
Copper	SW6010B	ICP
Iron	SW6010B	ICP
Lead	SW6010B	ICP
Magnesium	SW6010B	ICP
Manganese	SW6010B	ICP
Molybdenum	SW6010B	ICP
Nickel	SW6010B	ICP
Potassium	SW6010B	ICP
Selenium	SW6010B	ICP
Silver	SW6010B	ICP
Sodium	SW6010B	ICP
Strontium	SW6010B	ICP
Thallium	SW6010B	ICP
Tin	SW6010B	ICP
Titanium	SW6010B	ICP
Vanadium	SW6010B	ICP
Zinc	SW6010B	ICP
Mercury	SW7471A	CVAA

## SOLID & CHEMICAL VOLATILES

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Total Petroleum (TPH - Fuel - GRO)	SW8015B	GC/FID
Volatiles	SW8260B	GC/MS

## SOLID & CHEMICAL EXTRACTABLES & SEMI-VOLATILES

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Total Petroleum (TPH - Fuel - DRO)	SW8015B	GC/FID
Organochlorine Pesticides	SW8081A	GC/ECD
Polychlorinated Biphenyls (PCBs)	SW8082	GC/ECD
Semi-volatiles	SW8270C	GC/MS
Polynuclear Aromatics (PAHs/PNAs)	SW8270-SIM	GC/MS-SIM

## SOLID & CHEMICAL RADIOCHEMISTRY

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Gross Alpha	SW9310	Gas Flow Proportional
Gross Beta	SW9310	Gas Flow Proportional
Gamma Emitters	EPA901.0	Gamma Spectroscopy
Gamma Spectrometry(Ra-226 modified)	EPA901.1	Gamma Spectroscopy
Gamma Spectrometry(Ra-228 modified)	EPA901.1	Gamma Spectroscopy
Strontium-90	US DOE EML-HASL-300	Alpha Spectroscopy
Strontium-90	EPA-905.0	Gas Flow Proportional
Isotopic Thorium	US DOE EML-HASL-300	Alpha Spectroscopy
Isotopic Uranium	US DOE EML-HASL-300	Alpha Spectroscopy

## EXTRACTION, DIGESTION, CLEANUP, & PREPARATORY METHODS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Metals Digestion	EPA200.7 Rev 4.4-1994	Total
Metals Digestion	EPA200.7 Rev 4.4-1994	Dissolved
Metals digestion-	SW3005A	Hot Block
Metals digestion	SW3050B	Acid
Metals digestion	SW3051A	Microwave
Metals digestion	SW3060A	Hexchrome
Extraction	SW3500B	Organic Samples
Extraction	SW3510C	Separatory Funnel (LL)
Extraction	SW3520C	Continuous (CLL)
Extraction	SW3535A	Solid Phase (SPE)
Extraction	SW3546	Pressurized Fluid (PFE)
Extraction	SW3550B	Ultrasonic (Sonication)
Extraction	SW3580A	Waste Dilution
Cleanup	SW3660B	Sulfur
Cleanup	SW3665A	H <sub>2</sub> SO <sub>4</sub> /Permanganate
Extraction (Aqueous)	SW5030B	Purge & Trap (P&T)
Extraction (Soils)	SW5035	Purge & Trap (Closed)

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 On, **31 January 2012**.

Certificate No. **143**.

David F Wolfe Issued On, 31 March 2011.

David F Wolfe, PhD  
Quality Assurance Officer



**Key Staff Chemists  
Resumes**



**Dennis J. Leeke**  
**General Manager**  
**Pace Analytical Services, Inc.**

**Experience**

Mr. Leeke joined Pace Analytical Services in 2011. He is currently serving as the General Manager. He is responsible for the day-to-day activities of the Pittsburgh Laboratory. His job duties include:

- Supervise department managers, providing guidance in the management of personnel, quality of services, technical competence, productivity and technical expansion, and assure a smooth operation of the support functions for the laboratory
- Develop and maintain laboratory client business base working closely with sales team
- Profit and loss responsibility for the laboratory, development of annual budget, business and marketing plans

**Previous Experience**

Prior to joining Pace, Mr. Leeke worked at Underwriters Laboratories as the Business Manager of their Water Business. His job duties included:

- Site manager for drinking water laboratory, operations manager for an engineering team, and provided support for international expansion of the business in Asia and Europe
- Led customer service, sales, operations, and administration teams
- Managed operating and capital budgets with responsibility for top and bottom line performance

**Instrumentation**

GC-ECD, GC-FID, GC-MS, ICP-OES, ICP-MS, IC, CVAA, FAA, GFAA, TOX

**Education**

Master of Business Administration, Magna Cum Laude  
University of Notre Dame, Notre Dame, Indiana 2009

Bachelor of Arts, Cum Laude, Biology Major/Chemistry Minor  
Franklin College, Franklin, Indiana 1993

**DANETTE S. CAVALIER**  
**Semivolatile Laboratory Supervisor**  
**Pace Analytical Services, Inc.**  
**Pittsburgh Laboratory**

**Experience**

Danette Cavalier joined Pace Analytical Services in July 2006. She started as an analyst in the Organic Preparation department and was promoted to the group leader of the department in August 2007. In April of 2011 she became the Semivolatile Laboratory Supervisor. She is responsible for the Semivolatile and Organic Preparation departments at the Pittsburgh Laboratory. Her job duties include:

- Supervise and manage the Semivolatile and Organic Preparation departments.
- Develop and maintain department SOPs and quality programs.
- Ensure and guide staff training and cross training.

**Previous Experience**

Prior to joining Pace, Ms. Cavalier started her career at Lancaster Laboratories. She held positions as a Project Manager and Chemist over the course of 5 years.

- Communicate and interact with clients.
- Manage and review client projects.
- Prepare and extract samples for semivolatile analysis.

**Instrumentation** GC-FID, GC-ECD, MARS, ASE 200

**Education** Bachelor of Science, Biology, Pennsylvania State University, State College, PA, 2000.



**Jennifer L. Holmes Ph.D.**  
**Senior Quality Manager**  
**Pace Analytical Services, Inc.**

**Experience**

Dr. Holmes joined Pace Analytical Services in 2010. She is currently serving as the Senior Quality Manager. She is responsible for the quality assurance at the Pittsburgh Laboratory. Her job duties include:

- Supervise department manager and assistant(s), providing guidance in the management of quality including updating standard operating procedures (SOPs).
- Develop and maintain laboratory Quality plan including overseeing project specific Quality plans
- Maintaining quality systems that includes both radiological and environmental methods.

**Previous Experience**

Prior to joining Pace, Dr. Holmes worked at Washington State Department of Health Public Health Lab as a Chemist III. Her job duties included:

- Project lead performing and developing methods to look for radionuclides in various matrices including but not limited to: food, water, soil, sediment and waste.
- Reported to several managerial groups and committees on progress of developing procedures for screening various products for radiation
- Led teams to validate fast radiochemical procedures and also had training and trained other as to microwave digestion sample preparation.

**Instrumentation**

GC-ECD, GC-FID, GC-MS, ICP-OES, ICP-MS, IC, CVAA, GFAA, TOX, TOC, GFPC, Alpha Spectrometer, Gamma Spectrometer, Liquid Scintillation Counter, distillations, pH, COD/BOD, and FTIR.

**Education**

Ph. D. Chemistry, University of Washington, Seattle, WA, 1993.

Bachelor of Science, Chemistry, Arizona State University, Tempe AZ, 1985



**Brayan Hampton**  
**Inorganic Supervisor**  
**Pace Analytical Services, Inc.**

**Experience**

Brayan Hampton joined Pace Analytical in October 2005 as the General Chemistry Supervisor. In October of 2009 Mr. Hampton became the supervisor for the Inorganics departments, which includes General Chemistry, Metals, and Microbiology. Mr. Hampton is responsible for staff training, SOP development, maintenance, general management and supervision of the Inorganics departments. He supervises 2 overlapping shifts for a total of 8 analysts. Brayan has over 10 years of laboratory experience, including extensive knowledge of wet chemistry as well as metals and GC/MS experience.

**Previous Experience**

Prior to joining the Pittsburgh Laboratory, Mr. Hampton gained extensive knowledge and technical experience in the environmental field by serving in several capacities in laboratory testing. These include the following:

- Firstech Inc. Cleveland, Ohio. Inorganic Chemistry Supervisor, June 1999-Jan 2005.
- Security Resource Management, Latrobe, PA. Metals Group Leader 1998-1999.
- United States Army Forensic Drug Testing Laboratory, Wiesbaden, Germany. Quality Assurance and Radio Immunoassay Department. Jan 1990-Sept 1992.

**Instrumentation**

Lachat FIA, Aurora TOC Analyzer, pH meters, Smartchem Discrete Analyzer, Dionex IC, BOD meter, Perkin Elmer AA, and Thermo ICP.

**Education**

B.S. Natural Sciences, University of Pittsburgh. Cum Laude. 1998

**MICHAEL. A. KLUNK JR.**  
**Laboratory Analyst II/Supervisor**  
**Pace Analytical Services, Inc.**  
**Pittsburgh Laboratory**

**Experience**

Michael Klunk joined Pace Analytical in May 2002 as an Environmental Sampler and was promoted to Laboratory Analyst III/Supervisor of the Volatile Department in October of 2003. In November or 2006 Mr. Klunk was promoted to Laboratory Supervisor. He oversees the Volatiles department and their staff. He is responsible for staff training, developing SOPs, developing quality programs, performing maintenance on instruments, and ensuring that all analyses are conducted on time.

Prior to his appointment to Laboratory Supervisor, Mr. Klunk was the Senior Analyst of the Volatile Department.

Mr. Klunk has over 10 years of professional experience as an analyst or supervisor. Prior to joining the Pittsburgh Laboratory, Mr. Klunk gained technical experience by serving in several additional responsible positions. These include the following.

- K Chem Lac, Inc., Latrobe, PA – Laboratory Technician, 1997-2002
- Stewart Laboratories, Strattanville, PA – Laboratory Technician, 1996-1997

**Education**

B.S. (pending), Chemistry, Clarion University of Pennsylvania, expected date 2012

**PENNY J. WESTRICK**  
**Client Services Manager and Project Manager**  
**Pace Analytical Services, Inc.**  
**Pittsburgh Laboratory**

**Experience**

Penny Westrick joined Pace Analytical in May 2002 with Pace Analytical's acquisition of the environmental laboratory of Antech Ltd. She joined Antech as a Laboratory Technician in 1989 and was appointed Client Services Manager and Project Manager in 2001. In addition to serving as the primary liaison between the laboratory and clients, including coordinating with lab operations supervisors to ensure projects are completed according to client requirements and on time, Ms. Westrick also supervises the Sample Management, Field Services, and Courier teams. Penny has 20 years of experience in providing quality environmental laboratory services, as an analyst, lab supervisor, and project manager as well as playing a large roll with safety operations.

Prior to her appointment as Client Services Manager and Project Manager, Ms. Westrick served as a Laboratory Technician, Organic Analyst, and Group Leader for Pesticides/PCBs. In addition to analyzing environmental samples, her responsibility as a group leader included quality, technical, and operations leadership.

Before joining the Pace Analytical, Pittsburgh Laboratory, Ms. Westrick gained additional technical experience as a Sample Receiving Technician for Med-Chek Laboratories in Pittsburgh, PA.

**Education**

B.S., Microbiology, University of Pittsburgh, 1987