#### TRAINING UPDATE

Lab Location: Department: SGMC & WAH Core Lab 
 Date Distributed:
 4/16/2018

 Due Date:
 5/10/2018

 Implementation:
 5/1/2018

#### **DESCRIPTION OF PROCEDURE REVISION**

#### Name of procedure:

# GasPak EZ Anaerobe Pouch System SGAH.MI757 v1.2

Has been converted to system SOP

# GasPak EZ Anaerobe Pouch Indicator QC AG.F58.1 GasPak EZ Anaerobe Pouch New Lot / Shipment QC AG.F59.1

**Description of change(s):** 

### Forms:

Added column on Pouch Indicator QC form for when new lot/shipment was done (reminder to staff that to do this) Both forms were undated with current OD logo and SCMC name

# Both forms were updated with current QD logo and SGMC name

## SOP:

*Note: changes are mostly format updates* 

Section	Reason
Header	Add WAH
3.1	Updated online collection manual title
4,6	Updated reagent labeling statement to current general BPT format
15	Updated to new standard wording
16	Added forms
17	Updated reference

# The revised SOP and logs will be implemented on May 1, 2018

Document your compliance with this training update by taking the quiz in the MTS system.



Shady Grove Medical Center

Washington Adventist Hospital

#### GasPak EZ Anaerobe Pouch Indicator QC

Month / Year \_\_\_\_\_

**Daily upon use**: Always include an anaerobic indicator in each pouch to visually monitor the atmospheric condition. Record visual result. If indicator is not white, remove the plates and place into a new pouch with a new indicator.

**Corrective Action** (record on reverse of this sheet if necessary)

Date	Lot Number	Indicator Color (white/blue)	Acceptable (Y/N)	Tech	Date of New Lot or Shipment QC
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

Weekly review:	Weekly review:	Weekly review:
Weekly review:	Weekly review:	Monthly review:





□ Washington Adventist Hospital

#### GasPak EZ Anaerobe Pouch New Lot / Shipment QC

Month / Year \_\_\_\_\_

**Each new lot / shipment**: Subculture stock organism *Bacteroides fragilis* ATCC 25285 onto appropriate medium. Incubate at  $35\pm2^{\circ}$ C for 24-48 hours. This tests the system's ability to provide adequate conditions for growth of anaerobic bacteria. Always include anaerobic indicator.

Date	Lot Number	Indicator Color (white/blue)	B. fragilis (Growth / No growth)	Acceptable (Y/N)	Tech	<b>Corrective Action</b> (record on reverse of this sheet if necessary)
		(winterblue)				this sheet if heeessary)

Weekly review:	Weekly review:	Weekly review:
Weekly review:	Weekly review:	Monthly review:

Technical SOP			
Title	GasPak™ EZ Anaerobe Pouch System		
Prepared by	Gail Granillo, MT(ASCP)	Date:	11/14/2002
Owner/BPT Leader	Kathleen Carlson, S.M., MT(ASCP)	Date:	11/14/2002

#### Technical SOP

Corporate Approval			
BPT Medical Advisor	Jeffrey L. Craver, M.D.		
Signature	On file	Date:	11/22/2002
Medical Director/Designee	William M. Miller, M.D.		
Signature	On file	Date:	01/06/2003
Corporate Issue Date	January 13, 2003		

Laboratory Approval	Local Effective Date:	
Print Name	Signature	Date
Refer to electronic signature page		
for approval and approval dates.		

Review			
Print Name	Signature	Date	

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#### 1. TEST INFORMATION

Assay	Method/Instrument	QLS Order Code	Local Code
GasPak™ EZ Anaerobe System	Oxygen reduction / Gas generation	N/A	N/A

Synonyms/Abbreviations	
ANA Pak, GasPak	

#### Department

Microbiology

#### 2. ANALYTICAL PRINCIPLE

The BD GasPak<sup>™</sup> EZ Pouch Systems are single-use gas-generating systems that produce atmospheres suitable for the primary isolation and cultivation of anaerobic microorganisms.

#### 3. SPECIMEN REQUIREMENTS

#### **3.1** Patient Preparation

Component	nent Special Notations	
<b>Fasting/Special Diets</b>	None	
Specimen Collection and/or Timing	Refer to Laboratory Test Directory on Adventist Hospital Intranet, Microbiology Specimen Collection Information.	
Special Collection Procedures	Refer to Laboratory Test Directory on Adventist Hospital Intranet, Microbiology Specimen Collection Information.	
Other	N/A	

#### 3.2 Specimen Type & Handling

Criteria			
Type -Preferred	<ul> <li>Appropriately inoculated culture plates for recovery of organisms requiring anaerobic atmosphere.</li> <li>Refer to specific culture SOP's utilizing these atmospheric systems for culture inoculation details.</li> </ul>		
-Other Acceptable	Bacterial cultures in tubes.		
Collection Container	Refer to Microbiology Specimen Collection Chart.		
Volume - Optimum	All media plates appropriate for specimen source (Refer to related culture SOPs).		
- Minimum	One plate or tube		
Transport Container	Refer to related culture SOPs (Anaerobe, etc.) for further		
	details		
Stability & Storage	Ambient:         Plates – dependent on organisms cultivated		
Requirements	Swabs – up to 48 hours		
	Refrigerated: Not acceptable		
	Frozen: Not acceptable		
Timing Considerations	N/A		
Unacceptable Specimens	Refer to Specimen Acceptability, Microbiology procedure		
& Actions to Take			
<b>Compromising Physical</b>	Refer to Microbiology Specimen Collection Chart.		
Characteristics			
Other Considerations	N/A		

NOTE: Labeling requirements for all reagents, calibrators and controls include: (1) Open date, (2) Substance name, (3) Lot number, (4) Date of preparation, (5) Expiration date, (6) Initials of tech, and (7) Any special storage instructions. Check all for visible signs of degradation.

#### 4. **REAGENTS**

The package insert for a new lot of kits or reagents must be reviewed for any changes before the kit is used.

#### 4.1 Reagent Summary

Systems / Kits	Supplier & Catalog Number	Stock Clerk Number	Quantity
BD GasPak EZ Anaerobic Pouch System (Includes sachets, pouches, & indicators)	BD 260683	126421	20

#### 4.2 Reagent Preparation and Storage

Upon receipt, store GasPak<sup>™</sup> sachets and indicators at 2-25°C in a dry environment.

#### 5. CALIBRATORS/STANDARDS

Not applicable

#### 6. QUALITY CONTROL

#### 6.1 Controls Used

System	Quality Control / Organism		
GasPak EZ Anaerobic Pouch	Bacteroides fragilis ATCC 25285		
System	• Methylene blue or other appropriate anaerobic		
	indicator		

#### 6.2 Control Preparation and Storage

• Refer to other specifically related test procedures for preparation, storage and handling instructions.

#### 6.3 Frequency

• GasPak™ EZ Anaerobic Pouch System

- **Daily upon use**: Always include an anaerobic indicator in each pouch to visually monitor the atmospheric condition. Record visual result on appropriate Quality Control (QC) record / chart.
- New lot / shipment: Subculture stock organism *Bacteroides fragilis* ATCC 25285 onto appropriate medium. Incubate at 35±2°C for 24-48 hours. This tests the system's ability to provide adequate conditions for growth of anaerobic bacteria. Always include anaerobic indicator. Record on appropriate QC sheet.

#### 6.4 Tolerance Limits and Criteria for Acceptable QC

- When working properly, the anaerobic indicator will turn from blue to white within 2 to 4 hours and remain white until the jar or bag is opened.
- Growth of appropriate QC organism dependent on system being tested. Adequate growth of organism must be demonstrated.

#### **QC Failure / Corrective Action:**

- If noted that the anaerobic indicator does not turn white after 4 hours, this would indicate a leak in the pouch or some other failure of the system. Remove the plates and place them into a new pouch with a new sachet with indicator. If more than 4 hours have passed since initial incubation of the pouches and the indicator is blue <u>before</u> opening the GasPak<sup>™</sup> container, it will be necessary to re-set the culture from either the original specimen or the broth tube depending on the type and stability of the specimen received.
- All steps taken in response to QC failures must be documented, including: a description of the QC failure, the root cause of the problem, actions taken to correct the problem, how patient samples were handled, and the date and initials of the person recording the information.
- Supervisors may override rejection of partial or complete runs based on findings in the corrective-action investigation and based on established override criteria that have been approved by the Medical Director. The rationale for the override must be thoroughly documented.

#### 6.5 Review of Patient Data

Review patient results for unusual patterns, trends or distributions in patient results, such as unusual or unexpected isolates or lack of correlation with gram stain results.

#### 6.6 Documentation

Refer to local policies and procedures for QC documentation and to Quest Diagnostics records management program for record retention requirements.

#### 6.7 Quality Assurance Program

Refer to National and local policies and procedures for other quality assurance activities applicable to this procedure.

#### 7. EQUIPMENT and SUPPLIES

#### 7.1 Assay Platform

Not applicable.

#### 7.2 Equipment

- Incubator, 35-37°C ambient air or CO<sub>2</sub>
- Biological Safety Cabinet, Class II Type A

#### 7.3 Supplies

- GasPak EZ Anaerobic Pouch System
- Inoculation loops and needles
- Sterile swabs
- Media appropriate to culture type
- Other supplies as required in specifically related culture SOP's.

#### 8. **PROCEDURE**

**NOTE:** For all procedures involving specimens, buttoned lab coats, gloves, and face protection are required minimum personal protective equipment. Report all accidents to your supervisor.

8.1	GasPak™ EZ Gas Generating Pouch System				
1.	Place the desired plates inside the resealable pouch.				
2.	One GasPak <sup>™</sup> Pouch System Sachet is used in each resealable pouch. Remove the				
	GasPak <sup>™</sup> EZ Pouch System Sachet from the carton. Remove the outer foil packaging				
	to activate the sachet.				
3.	Place the activated sachet in the GasPak <sup>™</sup> EZ resealable pouch with the plates. The				
	sachet should be placed between the plates and the outside of the pouch.				
4.	Close the pouch by pressing the zipper part of the pouch together.				
5.	Incubate the GasPak <sup>™</sup> EZ Pouch System at the temperature appropriate for the				
	organism being cultured, but not to exceed 45°C.				
6.	After incubation, open the pouch, remove the plates and dispose of the GasPak <sup>™</sup> EZ				
	Pouch System Sachet, indicator, and pouch into an appropriate biohazard waste				
	container.				

# When systems are functioning properly, the following results should be achieved: Anaerobic conditions are achieved within 2.5 hours with greater than 16% carbon dioxide within 24 hours at 35-37°C. Visible condensate should occur within 30 minutes of activation. Blood-containing agar plates should appear reduced (darkened) within 2-4 hours at 35-37°C. The anaerobic indicator should appear reduced (white) within 2-4 hours at 35-37°C.

**NOTE:** In the event that the test system becomes inoperable, notify supervision or designee for further direction. Patient specimens must be stored in a manner that maintains the integrity of the specimen.

#### 9. CALCULATIONS

Not applicable

#### 10. REPORTING RESULTS AND REPEAT CRITERIA

Refer to department procedures on related cultures for appropriate reporting and repeat criteria.

#### 11. EXPECTED VALUES

#### **11.1 Reference Ranges**

Not applicable

#### **11.2** Critical Values

Not applicable

#### 11.3 Standard Required Messages

Not applicable

#### 12. CLINICAL SIGNIFICANCE

Appropriate atmospheric conditions (along with other factors such as culture media, incubation temperature, and properly collected specimens) are necessary to allow certain organisms with pathogenic potential to be cultivated. The GasPak<sup>™</sup> Anaerobic System provides the correct amount of oxygen to help ensure that anaerobic cultures are incubated in the appropriate atmosphere.

#### **13. PROCEDURE NOTES**

- **FDA Status:** Cleared
- Validated Test Modifications: N/A

- When properly stored, the sachets will retain their reactivity until the expiration on the outer box unless the foil wrapping has been damaged.
- Do not open until ready to use.
- Do not use a sachet if the outer foil is damaged or open in any manner prior to use.
- Do not open pouch until incubation is complete.
- Avoid direct sunlight and excessive temperatures.
- Discard sachets (when cool) after use into appropriate biohazard waste container.
- Use sachets and indicators only once.
- Indicator is sensitive to heat, light, oxygen, and CO<sub>2</sub>.

#### 14. LIMITATIONS OF METHOD

#### 14.1 Analytical Measurement Range (AMR)

Not applicable

14.2 Precision

Not applicable

#### 14.3 Interfering Substances

Not applicable

#### 14.4 Clinical Sensitivity/Specificity/Predictive Values

Not applicable

#### 15. SAFETY

Refer to your local and corporate safety manuals and Safety Data Sheet (SDS) for detailed information on safety practices and procedures and a complete description of hazards.

#### **16. RELATED DOCUMENTS**

- Quality Control Program, QA procedure
- Specimen Acceptability, Microbiology procedure
- Current package insert GasPak<sup>™</sup> EZ Pouch System
- GasPak EZ Anaerobe Pouch Indicator QC (AG.F58)
- GasPak EZ Anaerobe Pouch New Lot / Shipment QC (AG.F59)

#### **17. REFERENCES**

Becton, Dickinson and Company; 2017/05; Package Insert

#### 18. **REVISION HISTORY**

Version	Date	Section	Reason	Reviser	Approval
1.0	6/10/10	Page 1	Update BU site.		R. Master
		3.1 & 3.2	Update site specific collection manual		
		8.2	Delete section on products not used		
		11.2	Update title to Critical Values		
		13	Added FDA status and Modifications		
		14.1	Updated title terminology		
		16	Update to local documents		
1.0A	3/27/18	Header	Added WAH	L. Barrett	R. Master
		3.1	Updated online collection manual title	R. Master	
		4, 6	Updated reagent labeling statement to current general BPT format		
		11.3	Updated sub-section title to match current format		
		15	Updated to new standard wording		
		16	Added forms		
		17	Updated reference		
		Footer	New local version numbering adopted per corporate policy change.		

#### 19. **ADDENDA**

Addendum 1:

# **BD Gaspak**<sup>™</sup> **EZ Pouch System Procedure Overview** Reproduced with permission from BD Microbiology Systems

#### Addendum 1

## BD Gaspak<sup>TM</sup> EZ Pouch System Procedure Overview

1) Place the desired plates inside the resealable pouch.

2) One **GasPak EZ** Pouch System Sachet is used in each resealable pouch. Remove the **GasPak EZ** Pouch System Sachet from the carton. Remove the outer foil packaging.



3) Place the activated sachet in the GasPak EZ resealable pouch with the plates. The sachet should be placed between the plates and the outside of the pouch. If using the GasPak EZ Anaerobe Pouch System, add one of the dry anaerobic indicator strips to the pouch at this time.



4) Close the pouch by pressing the zipper part of the pouch together.

- 5) Incubate the **GasPak EZ** Pouch System at a temperature appropriate for the organism being cultured, but not to exceed 45 C.
- 6) After incubation, open the pouch, remove the plates and dispose of the **GasPak EZ** Pouch Systems Sachet, indicator and pouch in the appropriate manner.