



ProbeTec Troubleshooting

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ProbeTec Scenario 1

- A new study started 6 weeks ago
- The patient population is low risk for STDs
- ProbeTec was run 5 times
- A total of 30 samples tested
- All negative for GC/CT

BD ProbeTec ET

Run 6

Plate Layout Report

A	PTID 1			PTID 5		
	CT	GC	AC	CT	GC	AC
	0	18209	17921	0	24592	22545
B	PTID 2			PTID 6		
	CT	GC	AC	CT	GC	AC
	0	24032	29801	0	24553	22598
C	PTID 3			QC+ (5126935)		
	CT	GC	AC	Ct	GC	AC
	23596	15957	18904	23156	21925	24514
D	PTID 4			QC- (5126935)		
	CT	GC	AC	CT	GC	AC
	0	29203	23083	0	0	26547
				5299668		

Green

Yellow

Black

Green

Yellow

Black

BD ProbeTec ET

Run 7

Plate Layout Report

A	PTID 1			PTID 5		
	CT	GC	AC	CT	GC	AC
	0	0	17921	0	23175	11058
B	PTID 2			PTID 6		
	CT	GC	AC	CT	GC	AC
	0	24032	29801	0	19614	27086
C	PTID 3			QC+ (5126935)		
	CT	GC	AC	Ct	GC	AC
	26632	7100	18681	23156	21925	24514
D	PTID 4			QC- (5126935)		
	CT	GC	AC	CT	GC	AC
	0	156	25901	0	0	26547
				5299668		

Green

Yellow

Black

Green

Yellow

Black

What do you do now?

- Report to your supervisor/lab manager
- Monitor work area for DNA contamination
 - If positive: clean area and re-test all areas
 - If negative: test know pos and neg samples (CAP and previous patient samples)
- Review procedure
- Re-test the samples a 3rd time without AC

BD ProbeTec ET

Run 8

Plate Layout Report

A	PTID 1		PTID 5	
	CT	GC	CT	GC
	5	15	0	35
B	PTID 2		PTID 6	
	CT	GC	CT	GC
	0	24032	14	146
C	PTID 3		QC+ (5126935)	
	CT	GC	Ct	GC
	26632	25	23156	21925
			5299668	
D	PTID 4		QC- (5126935)	
	CT	GC	CT	GC
	0	101	0	0
			5299668	

Green

Yellow

Black

Green

Yellow

Black



What was the source of the error?

- Was it carryover from PTID 2?
- Was it carryover from the AC?
 - Amp Control is made from GC plasmid
- At what point was the error made?



What else needs to be done?

- Re-test PTID 5 and 6 to confirm negative
- Find out if PTID 2 & 3 are high risk for GC or CT.
- Discuss with physician/nurse if a second specimen should be tested before reporting
- Establish a corrective action plan
- Document the event



ProbeTec Scenario 2

- An experienced tech has been running the ProbeTec for 8 months with excellent results
- The patient population is from both family planning clinic and STD clinics.
- The following test run indicates multiple positive results.
- What do you do?

BD ProbeTec ET

Run 10

Plate Layout Report

A	PTID 1			PTID 5		
	CT	GC	AC	CT	GC	AC
	0	154	17921	1600	198	22545
B	PTID 2			PTID 6		
	CT	GC	AC	CT	GC	AC
	0	215	29801	300	255	22598
C	PTID 3			QC+ (5126935)		
	CT	GC	AC	Ct	GC	AC
	23596	4	18904	23156	21925	24514
				5299668		
D	PTID 4			QC- (5126935)		
	CT	GC	AC	CT	GC	AC
	18954	35	23083	0	0	26547
				5299668		

Green

Yellow

Black

Green

Yellow

Black



ProbeTec Scenario 2(cont.)

- The samples are retested but in a different order.
- The printout on the next slide shows that PTID 5 when placed ahead of 3 and 4 is now negative.

BD ProbeTec ET

Run 11

Plate Layout Report

A	PTID 5			PTID 6		
	CT	GC	AC	CT	GC	AC
	0	154	17921	391	198	22545
B	PTID 1			PTID 3		
	CT	GC	AC	CT	GC	AC
	0	215	29801	25478	255	22598
C	PTID 2			QC+ (5126935)		
	CT	GC	AC	Ct	GC	AC
	48	4	18904	23156	21925	24514
D	PTID 4			QC- (5126935)		
	CT	GC	AC	CT	GC	AC
	18954	35	23083	0	0	26547
				5299668		

Green

Yellow

Black

Green

Yellow

Black



Procedure for test runs with multiple positive samples

- Retest the samples but reorganize the placement
- Samples that are negative on 2nd run must be tested a 3rd time to confirm.



ProbeTec Scenario 3

- You notice that the GC negative MOTA scores have been increasing over time and are now close to 2000, the cutoff point.
- You have tested 2 lot numbers of reagents and get the same results.
- What is the problem and how do you solve it?

Reason for high negative scores

- If most of the GC negative scores are high (close to MOTA 2000):
 - Check for contamination by monitoring the work areas.
 - Check the instrument temperature. It must be $52^{\circ}\text{C} \pm 0.8^{\circ}\text{C}$.
 - Follow the instructions in the manual for testing temperature.



Resources for ProbeTec problems

- ProbeTec manual Troubleshooting section
- Network laboratory
 - Have quick access to BD technical services
- BD tech support Website
 - www.bd.com/diagnostics/support/