

HuaZhen Luo

From: HuaZhen Luo
Sent: Thursday, 5 March, 2020 10:53
To: Htay Ei Lwin
Cc: Desmond Ann; Teo Yiek Tiong; Tan Hong Cheng; 'Khalip Mohamed'; Siddharth Udayshankar
Subject: RE: [EXT] RE: [EXT] FTN tester TE83064-15 - Leakage at BSM -OESR

Hi Lwin,

As communicated previously, we're ok with this repair.
Please put it into monthly claim and close this OESR.

Luo HuaZhen
Senior Test Engineer

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From: Htay Ei Lwin <EiLwin.Htay@venture.com.sg>
Sent: Monday, 2 March, 2020 14:41
To: HuaZhen Luo <HuaZhen_Luo@waters.com>
Cc: Desmond Ann <Desmond_Ann@waters.com>; Teo Yiek Tiong <yiektiong_teo@venture.com.sg>; Tan Hong Cheng <hongcheng_tan@venture.com.sg>; 'Khalip Mohamed' <khalip_m@venture.com.sg>; Siddharth Udayshankar <Siddharth_Udayshankar@waters.com>
Subject: [EXT] RE: [EXT] FTN tester TE83064-15 - Leakage at BSM -OESR

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click any links unless you recognize the sender and know the content is safe.

Hi HuaZhen,

Attached is an OESR for TE83064-15 - Leakage at BSM issue.

As of today, functional verification with both H Class and I Class has no BSM leakage related failure at TE15.

Please provide acknowledgment to this OESR and approval on part change list.

Thank you.

Regards,
Lwin

From: Htay Ei Lwin [<mailto:EiLwin.Htay@venture.com.sg>]
Sent: Monday, 24 February, 2020 2:53 PM
To: 'HuaZhen Luo'

Cc: 'Desmond Ann'; 'Teo Yiek Tiong'; 'Tan Hong Cheng'; 'Khalip Mohamed'
Subject: RE: [EXT] FTN tester TE83064-15 - Leakage at BSM - follow up II -update

Hi HuaZhen,

After changing the parts, TE15 was verified with both 5088 (I Class) and 5085 (H Class) for functional.

There was no failure due BSM leakage during verification. Meanwhile I am compiling the list of parts that changed and their prices.

I'll send OESR of this tester issue.

Thank you.

Regards,
Lwin

From: HuaZhen Luo [mailto:HuaZhen_Luo@waters.com]
Sent: Thursday, 20 February, 2020 9:45 AM
To: EiLwin.Htay
Cc: Desmond Ann; Teo Yiek Tiong; Tan Hong Cheng; 'Khalip Mohamed'
Subject: RE: [EXT] RE: [EXT] RE: [EXT] FTN tester TE83064-15 - Leakage at BSM - follow up II

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Lwin,

Yes, please go ahead to replace the faulty parts and update us the status.
Thank you

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From: Htay Ei Lwin <EiLwin.Htay@venture.com.sg>
Sent: Wednesday, 19 February, 2020 11:04
To: HuaZhen Luo <HuaZhen_Luo@waters.com>
Cc: Desmond Ann <Desmond_Ann@waters.com>; Teo Yiek Tiong <yiektiong_teo@venture.com.sg>; Tan Hong Cheng <hongcheng_tan@venture.com.sg>; 'Khalip Mohamed' <khalip_m@venture.com.sg>
Subject: [EXT] RE: [EXT] RE: [EXT] FTN tester TE83064-15 - Leakage at BSM - follow up II

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click any links unless you recognize the sender and know the content is safe.

Hi HuaZhen,

I wanted to make sure that you are clear about those parts which we proposed to change are not in the list of half-yearly PM.

Thanks for approval. Attached is price list.

I'll update you the status of tester after we changed the parts.

Thank you.

Regards,
Lwin

From: HuaZhen Luo [mailto:HuaZhen_Luo@waters.com]
Sent: Wednesday, 19 February, 2020 9:54 AM
To: EiLwin.Htay
Cc: Desmond Ann; Teo Yiek Tiong; Tan Hong Cheng; 'Khalip Mohamed'
Subject: RE: [EXT] RE: [EXT] FTN tester TE83064-15 - Leakage at BSM - follow up II

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Hi Lwin,

Please let us know the cost of this repair as per previous email below and I didn't stop you to replace the part if it's defective.

Why do you still waiting? Please let me know if you have any unclear part from email below. Thanks

Hi Lwin,

Is this system due for half-yearly replacement soon? If it's due for half-yearly PM, then let's avoid double replacing for parts.

Please send us the repair parts list with price for approval and go ahead with replacement if it's found defective.

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From: Htay Ei Lwin <EiLwin.Htay@venture.com.sg>
Sent: Wednesday, 19 February, 2020 09:35
To: HuaZhen Luo <HuaZhen_Luo@waters.com>
Cc: Desmond Ann <Desmond_Ann@waters.com>; Teo Yiek Tiong <yiektiong_teo@venture.com.sg>; Tan Hong Cheng <hongcheng_tan@venture.com.sg>; 'Khalip Mohamed' <khalip_m@venture.com.sg>
Subject: [EXT] RE: [EXT] FTN tester TE83064-15 - Leakage at BSM - follow up II

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click any links unless you recognize the sender and know the content is safe.

Hi HuaZhen,

Please advise your approval on proposed parts change for FTN tester TE83064-15 or please provide suggestion if you can't agreed on it.

We are waiting your acceptance to proceed to troubleshoot this tester.

Thank you.

Regards,
Lwin

From: Htay Ei Lwin [<mailto:EiLwin.Htay@venture.com.sg>]
Sent: Tuesday, 18 February, 2020 9:49 AM
To: 'HuaZhen Luo'
Cc: 'Desmond Ann'; 'Teo Yiek Tiong'; 'Tan Hong Cheng'; 'Khalip Mohamed'
Subject: RE: [EXT] FTN tester TE83064-15 - Leakage at BSM

Hi HuaZhen,

This tester is not due for half-yearly replacement. It was completed PM in Dec.

Thank you.

Regards,
Lwin

From: HuaZhen Luo [mailto:HuaZhen_Luo@waters.com]
Sent: Tuesday, 18 February, 2020 9:17 AM
To: EiLwin.Htay
Cc: Desmond Ann; Teo Yiek Tiong; Tan Hong Cheng; 'Khalip Mohamed'
Subject: RE: [EXT] FTN tester TE83064-15 - Leakage at BSM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Lwin,

Is this system due for half-yearly replacement soon? If it's due for half-yearly PM, then let's avoid double replacing for parts.

Please send us the repair parts list with price for approval and go ahead with replacement if it's found defective.



From: Htay Ei Lwin <EiLwin.Htay@venture.com.sg>

Sent: Friday, 14 February, 2020 16:40

To: HuaZhen Luo <HuaZhen_Luo@waters.com>

Cc: Desmond Ann <Desmond_Ann@waters.com>; Teo Yiek Tiong <yiektiong_teo@venture.com.sg>; Tan Hong Cheng <hongcheng_tan@venture.com.sg>; 'Khalip Mohamed' <khalip_m@venture.com.sg>

Subject: [EXT] FTN tester TE83064-15 - Leakage at BSM

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click any links unless you recognize the sender and know the content is safe.

Hi HuaZhen,

As you have been informed on 12 Feb that there was leakage at BSM system at TE83064-15.

Based on our investigation, leakage at BSM was contributed by 2 locations, from pump B (Accumulator) and pump A (Primary).

	Accumulator		Primary	
Result:	Leak rate was above the acceptable limit		Test not run	
Leak Rate:	1459	nL/min	0	nL/min
Maximum Pressure:	17025	psi	0	psi
Percent of Final Stroke:	28	%	0	%
Compressed Volume:	262	uL	0	uL
Compression Strokes:	15		0	
Test Attempts:	1			

Actions taken

1. Change BSM seal of pump B (Accumulator). Verified and still leak.
2. Change BSM vent valve and verified. no more leakage at pump B (Accumulator). Please refers to below picture.

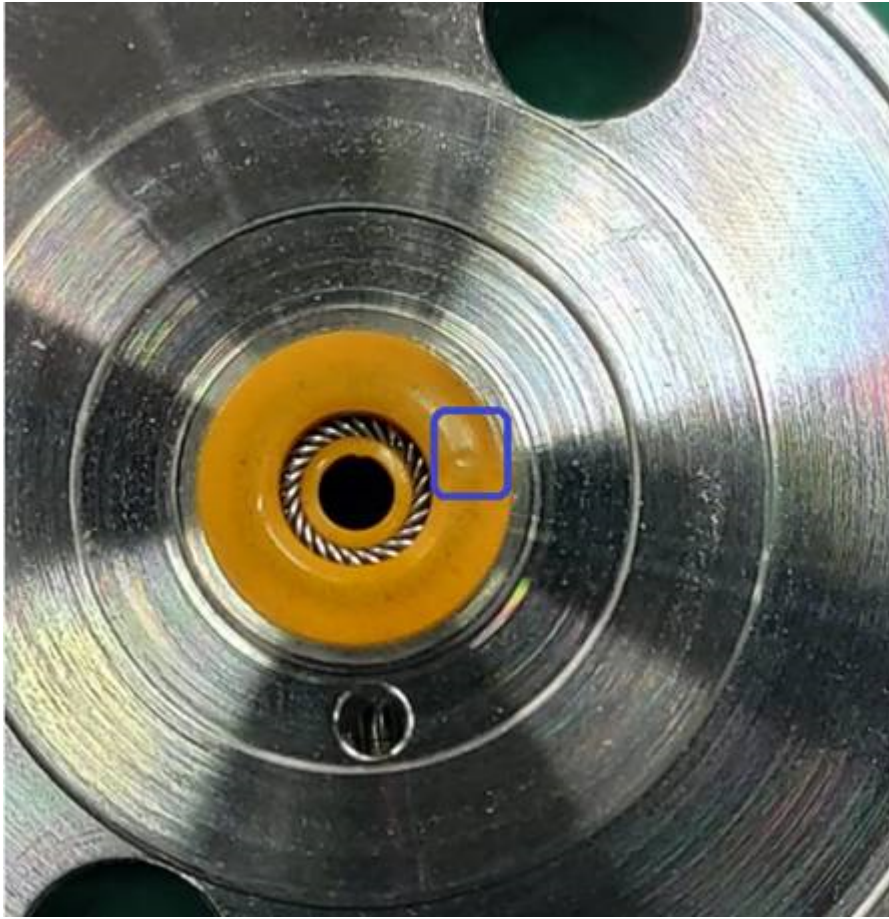
Dynamic Leak Test			performance		
Parameters Status Results					
			Accumulator		Primary
Result:	Passed		Passed		
Leak Rate:	24	nL/min	13	nL/min	
Maximum Pressure:	17022	psi	15034	psi	
Percent of Final Stroke:	28	%	28	%	
Compressed Volume:	16	uL	16	uL	
Compression Strokes:	1		1		
Test Attempts:	1				

3. But still have leakage at pump A (primary). Please refers to below picture.

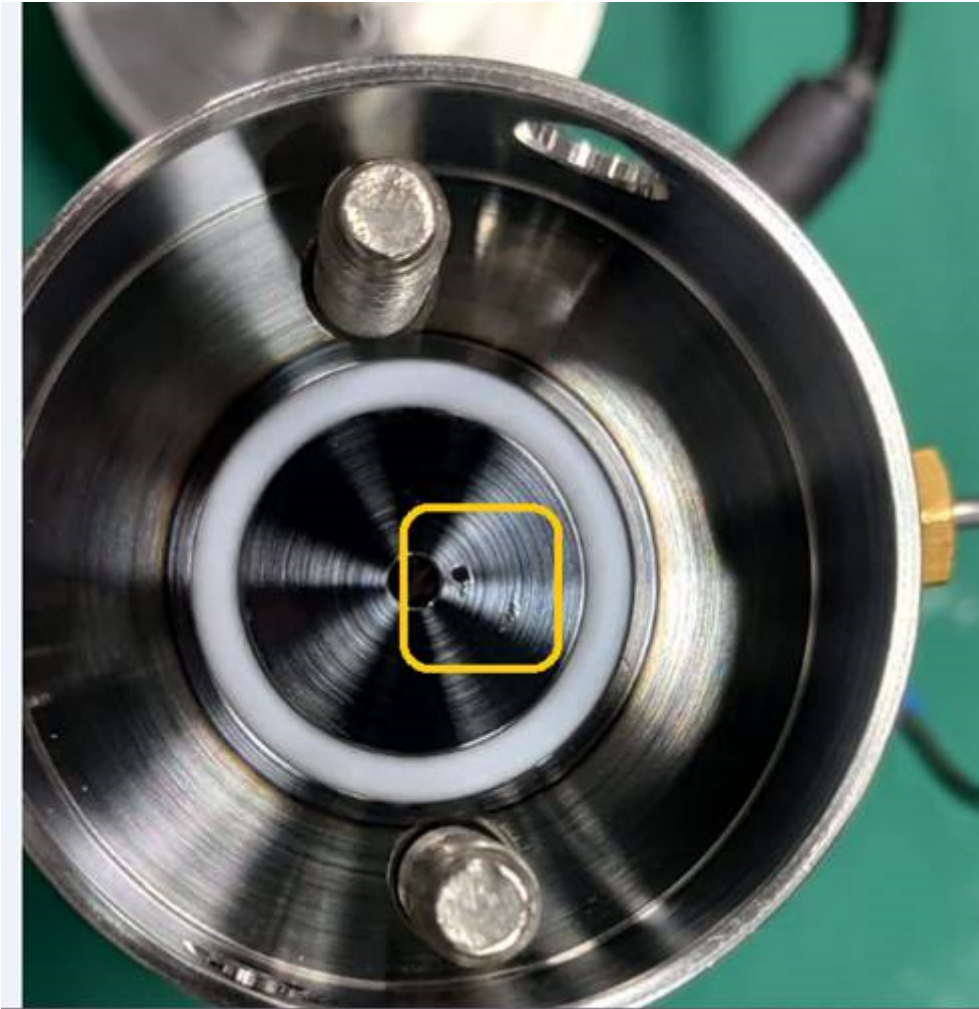
Dynamic Leak Test			performance		
Parameters Status Results					
			Accumulator		Primary
Result:	Passed		Unable to compress		
Leak Rate:	45	nL/min	0	nL/min	
Maximum Pressure:	17038	psi	0	psi	
Percent of Final Stroke:	28	%	50	%	
Compressed Volume:	16	uL	29	uL	
Compression Strokes:	1		1		
Test Attempts:	1				

Findings at pump A (primary)

1. Found dent at BSM seal. Please refers to below picture.



2. Found plating issue on the surface of pump head. Please refers to below picture.



Proposal

We propose to change seal wash housing (due to leakage and dent) and pump head of pump A (primary) due to plating issue which could contribute leakage issue later.

Please advise your acceptance of our proposal.

Thank you.

Regards,
Lwin

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