

HuaZhen Luo

From: Alan Tan
Sent: Friday, 28 August, 2020 08:43
To: Edwin Koh; HuaZhen Luo
Cc: Sue Jin Ng
Subject: RE: Weekly Engineering Meeting (05 Aug 2020) - rework 4units of 2489 Detector from reliability test

Hi HZ
Approved
rdgs

From: Edwin Koh <Edwin_Koh@waters.com>
Sent: Friday, 28 August, 2020 08:34
To: HuaZhen Luo <HuaZhen_Luo@waters.com>; Alan Tan <Alan_Tan@waters.com>
Cc: Sue Jin Ng <Sue_Jin_Ng@waters.com>
Subject: RE: Weekly Engineering Meeting (05 Aug 2020) - rework 4units of 2489 Detector from reliability test

Hi HuaZhen,

Approved

Thanks and Best Regards
Edwin

From: HuaZhen Luo <HuaZhen_Luo@waters.com>
Sent: Friday, August 28, 2020 08:33
To: Edwin Koh <Edwin_Koh@waters.com>
Subject: FW: Weekly Engineering Meeting (05 Aug 2020) - rework 4units of 2489 Detector from reliability test

Luo HuaZhen
Senior Test Engineer

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From: HuaZhen Luo

Sent: Monday, 17 August, 2020 17:42

To: Edwin Koh <Edwin_Koh@waters.com>

Subject: RE: Weekly Engineering Meeting (05 Aug 2020) - rework 4units of 2489 Detector from reliability test

Hi Edwin,

I have updated PO with email attachment/remark and quotation from Flex.

Please kindly review and approve.

Thanks

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From: Edwin Koh <Edwin_Koh@waters.com>

Sent: Monday, 17 August, 2020 17:04

To: HuaZhen Luo <HuaZhen_Luo@waters.com>

Subject: RE: Weekly Engineering Meeting (05 Aug 2020) - rework 4units of 2489 Detector from reliability test

Hi Huazhen,

The rework cost is fine but please add into the PO remarks the reason to support the TUV for Alliance upgrade and also include the email from Mark J for reference.

Thanks

From: HuaZhen Luo <HuaZhen_Luo@waters.com>

Sent: Monday, August 17, 2020 16:57

To: Edwin Koh <Edwin_Koh@waters.com>

Subject: FW: Weekly Engineering Meeting (05 Aug 2020) - rework 4units of 2489 Detector from reliability test

Hi Edwin,

Please kindly review and approve 4x TUV rework cost for Alliance Final Tester upgrade as attached.

Thank you

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From: Niu Niu <niu.niu@flex.com>

Sent: Monday, 17 August, 2020 16:25

To: HuaZhen Luo <HuaZhen_Luo@waters.com>; Desmond Ann <Desmond_Ann@waters.com>; Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>; Aldwin Pilapil <aldwin.pilapil@flex.com>; Gary Lai Yam Bee <yambeegary.lai@flex.com>

Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <phanibhushan.nallajanula@flex.com>

Subject: [EXT] RE: Weekly Engineering Meeting (05 Aug 2020) - rework 4units of 2489 Detector from reliability test

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 Hua Zhen,
Please see attached cost to rework 4units.

Materials to be used:

S/n	Part number	Part Description	Qty
1	402000170	MIRROR, 3X ELLIPSOIDAL DT	1
2	402000351	ASSY, HB DEUTERIUM LAMP	1

Regards,
Niu Niu

From: HuaZhen Luo <HuaZhen_Luo@waters.com>

Sent: Monday, August 17, 2020 3:45 PM

To: Desmond Ann <Desmond_Ann@waters.com>; Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>; Aldwin Pilapil <aldwin.pilapil@flex.com>; Gary Lai Yam Bee <yambeegary.lai@flex.com>; Niu Niu <niu.niu@flex.com>

Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <phanibhushan.nallajanula@flex.com>

Subject: RE: Weekly Engineering Meeting (05 Aug 2020)

Hi Joel/NiuNiu,

Please kindly send me the quotation for 4x TUV rework as per discussion. So that we can prepare the PO for this rework.
Thank you

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From: HuaZhen Luo

Sent: Friday, 7 August, 2020 10:36

To: Desmond Ann <Desmond_Ann@waters.com>; Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>; Aldwin Pilapil <aldwin.pilapil@flex.com>; Gary Lai Yam Bee <yambeegary.lai@flex.com>; Niu Niu <niu.niu@flex.com>

Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <phanibhushan.nallajanula@flex.com>

Subject: RE: Weekly Engineering Meeting (05 Aug 2020)

Hi Desmond/NiuNiu/Joel,

We're working with Milford on Alliance Final Testers upgrade.

Currently we're in progress to upgrade 4x stations. Therefore we're only need 4x TUV rework quote and advise rework time. So to get ready for the upcoming upgrade kit.

The rest of units may reserve for future upgrade if these 4x stations upgrade are working as expected.

Hope above is clear to team, let's discuss if you have any other questions. Thanks

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From: Desmond Ann <Desmond_Ann@waters.com>

Sent: Friday, 7 August, 2020 08:58

To: Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>; HuaZhen Luo <HuaZhen_Luo@waters.com>; Aldwin Pilapil <aldwin.pilapil@flex.com>; Gary Lai Yam Bee <yambeegary.lai@flex.com>

Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <phanibhushan.nallajanula@flex.com>

Subject: RE: Weekly Engineering Meeting (05 Aug 2020)

Hi Edwin,

You can share your thoughts on this?

Regards,
Desmond.

Desmond Ann
Team Lead, Manufacturing



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From: Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>

Sent: Thursday, 6 August, 2020 01:46 PM

To: HuaZhen Luo <HuaZhen_Luo@waters.com>; Aldwin Pilapil <aldwin.pilapil@flex.com>; Desmond Ann <Desmond_Ann@waters.com>; Gary Lai Yam Bee <yambeegary.lai@flex.com>

Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <phanibhushan.nallajanula@flex.com>

Subject: [EXT] RE: Weekly Engineering Meeting (05 Aug 2020)

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Hi Desmond,

Niu Niu is asking if firm-up the quote for 10x 2489 Detector for tester spare usage only. Or some of this will be refurbish for shipment ?

Best Regards,



Joel Mamalateo Deduyo

Senior Test Engineer

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From: HuaZhen Luo <HuaZhen_Luo@waters.com>

Sent: Thursday, August 6, 2020 1:01 PM

To: Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>; Aldwin Pilapil <aldwin.pilapil@flex.com>; Desmond Ann <Desmond_Ann@waters.com>; Gary Lai Yam Bee <yambeegary.lai@flex.com>

Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <phanibhushan.nallajanula@flex.com>

Subject: RE: Weekly Engineering Meeting (05 Aug 2020)

Hi Joel,

As per discussion, please send us quote for 4x 2489 TUV rework.

Also advise the rework time for get 4x 2489 TUV from reliability test.

Thank you

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From: Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>

Sent: Wednesday, 5 August, 2020 19:58

To: Aldwin Pilapil <aldwin.pilapil@flex.com>; Desmond Ann <Desmond_Ann@waters.com>; HuaZhen Luo <HuaZhen_Luo@waters.com>; Gary Lai Yam Bee <yambeegary.lai@flex.com>

Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <phanibhushan.nallajanula@flex.com>

Subject: [EXT] Weekly Engineering Meeting (05 Aug 2020)

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Hi Team,
Update for this week:

Date	RECAP:
05-Aug-20	Loss Communication : 03-Jun-2020 Shutdown TE82882-10,11 and 13 and used TE82882-8,9 and 14, data collection in progress 10-Jun-2020 TE82882-10,11 and 13 still deactivated, and checklist PM has been executed. - when to conclude? how long to run? plan end until 22 July - HZL - with TE82882-10,11 and 13 still deactivated, is the yield better? - HZL HZL/EK: suggest to continue two more week TE82882-10,11 and 13 still deactivated HZL/JMD: to confirm with production tester preference and why? NPB: production did are certain model are configured to certain Testers e.g. 2998 high runner 24-Jun-2020 TE82882- 9 and 14 configured to high runner part number (2998 family), TE82882-10 and 11 suspect to have loss comm failure Show last 2 weeks data on communication failure. WW22-WW24 start to deactivate TE82882-10,11 and 13 TE82882-9 reached 100 data points and was deactivated . Activate TE82882-13 01-Jul-2020 Refer to Manual Data Collection / SS7 server is down 08-Jul-2020 Refer to Manual Data Collection (445/600 Tested as of 07 Jul 2020 refer to Manual Collection Data for details) Based on production run rate propose to extend another until 24-Aug. 14-Jul-2020 Refer to Manual Data Collection (458/600 Tested as of 14 Jul 2020) 15-Jul-2020 To raise Evaluation Form V01 to change target date and justification due to forecast demand. 22-Jul-2020 Refer to Manual Data Collection (502/600 Tested as of 20 Jul 2020) 29-Jul-2020 Refer to Manual Data Collection (600/600 Tested as of 28 Jul 2020) 1. Check tester cables and accessories wiring and see if can find differences (Completed 09 Jul 2020 JMD) 2. Swapping CPU between high and low FPY stations to see if it's caused by CPU (Team to advise) 3. Clone high FPY station (-9) image and test it on low FPY station; (Team to advise) 05-Aug-2020 Team to discuss next action. HZL to share the 600 data to Milford (Eric Turner) and propose for the next plan. JMD to add the 600 data points summary in the CIP 2020 slide.

Interface tubing Update

03-Jun-2020 To use last starting point and update the average replacement tubing.
10-Jun-2020 Data collection on-hold, received data from HZL and review / analysis for next Friday submission.
- JMD: In progress reviewing 2019 SS data provided by HZL to come up with the pareto
- JMD: to do the averaging of the start point
01-Jul-2020 Refer to attached pareto for 2019 using SS data. (team to review)
- as per new starting point, the average replacement tubing is 22
08-Jul-2020 - No replacement perform as of to date 07 Jul 2020
14-Jul-2020 - All tubing has been replaced, will update the data collection
15-Jul-2020 – Tester #15, #16 #17 and #18 – was removed and plugged the tester filter to avoid contamination
- replaced due to leak during priming #11, #12, #14 and #16.
22-Jul-2020 - Flex experienced low yield for the last 2 weeks and the troubleshooting result was retightening . We are not sure if our tech's are retightening the fittings on the UUT or the interface tubing. We interviewed them and found out that most of the time was retightening of interface tubing.
29-Jul-2020 - Plugged TE82943-11, 12,13 and 14 and unplug and installed new Interface Tubing on TE82943-14, 15, 16, 17 and 18 (27 Jul 2020)
05-Aug-2020 - TE82943-14, 15, 16, 17 and 18 and swap by 10 Aug 2020
The team concluded today to stop the evaluation of the average interface tubing replacement. Flex to continue monitor the yield.

Production tester utilization,

BSM QSM+ Loading as per tester.
03-Jun-2020 TUV Tester utilization added, refer to the slide. add'l May 2020 slide for 3 Family (TUV, BSM,QSM+ and PDA)
10-Jun-2020 Tracking of tester utilization in-progress for all the 3 model/family. (refer to updated slides)
(need to check volume as per build plan.)
- in-progress, continue monitor per build plan
24-Jun-2020 Prod'n still having low build as per build plan (KIV in Q4'2020)

BSM and QSM+ Manual Priming (EVALS20019)

03-Jun-2020 Data collected as of 29 May 2020 (23/29 (79.31 FPY). UUT recovered after Retest.
10-Jun-2020 Completed Data collection for QSP as of 05 Jun 2020 26/35 (74.28%). – with Manual Priming before test.
BSM to follow start from 1st WK Jul 2020 build plan, DA will check together with David today
24-Jun-2020 To be discuss as BSM start build only on 1st week Jul 2020
15-Jul-2020 - BSM Total Tested 11/35 . 10 all passed. To share before and after, pull from previous data
22-Jul-2020 11/16 PN186015001 UUT solvent line was primed prior to Final Test
3x fail due to Test Seal Wash Pump Prime/Flow
1x fail due to Test Pump A Input 2 Prime with IPA
UUT able to pass after retest
29-Jul-2020 16/21 (76.19%) PN186015001 UUT solvent line was primed prior to Final Test
4x fail due to Test Seal Wash Pump Prime/Flow
1x fail due to Test Pump A Input 2 Prime with IPA
UUT able to pass after retest
05-Aug-2020 18/23 (78.26%) PN186015001 UUT solvent line was primed prior to Final Test
4x fail due to Test Seal Wash Pump Prime/Flow
1x fail due to Test Pump A Input 2 Prime with IPA
UUT able to pass after retest

PMS SOP and Equipment List/ Asset List to send by 05 Jun 2020, purpose and usage as per current practice. 10-Jun-2020 Pls .refer to attached list and SOP - WAT-RW-SKI00709 Particle Measurement Operating Procedure to be Obsolete - get history if this procedure why not transferred to Key Point. - still need or use? - JMD (11-Jun-20) 24-Jun-2020 - To be arrange to bring back to WPPL.(HZL), JMD to initiate removal from documentations (Asset Manual, Dashboard, Calibration Master list, Consign Equipment Master List) 01-Jul-2020 - Removal from documentations (Asset Manual, Dashboard, Calibration Master list, Consign Equipment Master List) - In-progress 15-Jul-2020 - target to close 17-Jul-20 22-Jul-2020 - Removal from documentation completed 29-Jul-2020 - Team to advise for closure 05-Aug-2020 - JMD to resend the email & documentations - refer to Tooling Manual Rev B_removed the PMS - refer to EQID 0481 Removal form from Calibration Master List - JMD and HZL to work on the schedule for returning on the equipment
2489 Lamp reliability Test Units - Scope of work 186248900 01-Jun-2020 Team to advise (KIV) 15-Jul-2020 - Quote to WPPL to Refurb to current revision. 29-Jul-2020 Reliability unit need to refurbished by : 1. Replace Ellipsoidal DT Mirror P/n: 402000170 2. Replace 402000451 Deutium Lamp 3. Reoptimize Optic Bench 4. Full Final Test 05-Aug-2020 - to get quotation from Program
Solvent Container Cut-out window 01-Jul-2020 Gary to arrange HC to perform the agreed cut-out window 08-Jul- 2020 53 Solvent container cut-out window and plastic cover in progress 14-Jul-2020 Solvent container window has been cut-out and now placing the plastic cover (in-progress) 15-Jul-2020 placing the plastic cover (in-progress) target end of Jul '20 29-Jul2020 In-progress activity until end Sep 2020
CCD Inquiry 05-Aug-2020 - Flex team to share information gathered 1) How many failures of CCD instance of "Carousel Malfunction" (mostly) and "Carousel Z-axis 5 malfunction in the past 6 months and percentage failed. 2) Daily verification record of carousel in Final test station. 3) Last replacement and avg frequency of replace of carousel in Final test station 4) Total number of sets of carousel in Alliance final test station. 5) PM record of both CCD alignment station.
515 PUMP Competency Closure 05-Aug-2020 - to update by GLY after review - WPPL Eugene request for Monthly schedule for competency check. - Monthly from WPPL will be coming down for competency check. - Flex requesting WPPL to share the plan to know the date and model
Golden Unit List 05-Aug-2020 - JDM to update the golden unit list and send to HZL - JMD to perform retest for PUMP family
CCD Capacity Review 05-Aug-2020 - JDM & HZL to align with Program on 12 months loading number until 2021 Refer to Alliance Forecast Tab, data shows that we don't need add'l CCD station until Q4'21

Best Regards,



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