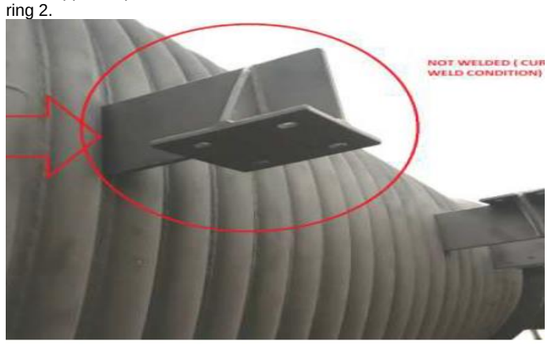
Action Item No.	Category	OPENED		Description	Action	Action By	Date Due (2 weeks)	CLOSED		Comments
		Date	SQS Report No.					Date	SQS Report No.	
1.	(MATL)	16-Mar-2021	FR#31	**@ V3304A: Shell External Surface** Mechanical Damages (Dent) has been found on the below locations of Half tube surfaces. **1st Half Tube from the Head** 1. Approximately 1.5 mm depth at one location @ 45° Orientation **2.** Approximately 3 mm depth at another location @ 105° Orientation; 400 mm distance from the LS weld.   	**PT dent surfaces and perform pneumatic test to check the mechanical integrity which is approved by client dated 13-April- 2021. Test pressure : 721 psig.** **Areas to be tested are** **A) 1st and 2nd half tube from dish head Mechanical Damages (Dent) observed location at orientation 45° and 105.**	QICL	30-Mar-2021	**Closed**		QICL provided dent length: DENT LENGTH OF 128 MM OBSERVED  DENT LENGTH OBSERVED IS 80MM   QICL Performed the PT on the above identified locations and test results confirmed the no surface defects and found satisfactory. Reports# QICL /J915 /PT/ 3304A/ 03 & QICL /J915 /VIR/ 3304A/ 04 reviewed and Endorsed. **Pneumatic test has been performed and found satisfactory.**

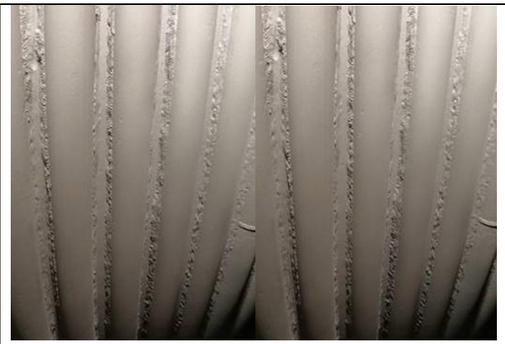
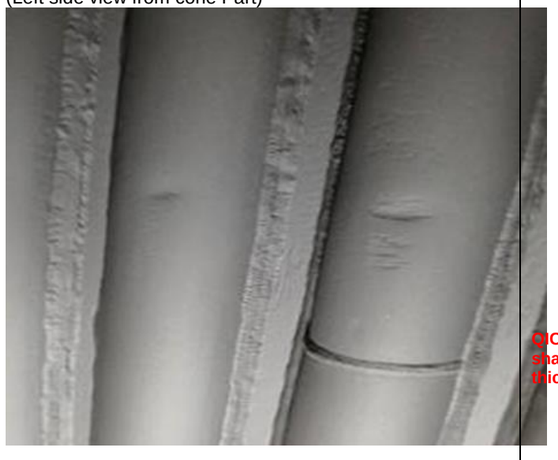
2.	(MATL)	16-Mar-2021	FR#31	**@ V3304A: Shell External Surface** Mechanical Damages (Dent) has been found on the below location of Half tube surfaces. **4th Half Tube from the Head**- Approximately 1 mm depth at one location @ 45° Orientation 	**PT dent surfaces and perform pneumatic test to check the mechanical integrity which is approved by client dated 13-April- 2021. Test pressure : 721 psig.** **Areas to be tested are** **4th half tube from dish head Mechanical Damages (Dent) observed location at orientation 45°.**	QICL	30-Mar-2021	**Closed**		QICL provided dent length:  QICL Performed the PT on the above identified locations and test results confirmed the no surface defects and found satisfactory. Reports# QICL /J915 /PT/ 3304A/ 03 & QICL /J915 /VIR/ 3304A/ 04 reviewed and Endorsed. **Pneumatic test has been performed and found satisfactory.**
3.	(WELD)	16-Mar-2021	FR#30	**@ V3304A: Cone External Surface** One support clip was not been welded – 2nd Cleat from the Insulation ring 2. 	**Weld the support clip per MHI fabrication dwg and R-stamp. MHI to provide Manufacturer data report and proof of NBR registration.** **QICL to develop welding procedure per NBIC, part 3 such that re-PWHT and re-hydrotesting are not required.**	MHI/ QICL	30-Mar-2021	Closed	FR#47	Manufacturer data report and proof of NBR were received from MHI dated 31-March-2021. QICL repair procedure QICL-J915-REP-01, rev. 1 , 24-March-2021 was approved by MDR. QICL done the welding as per approved WPS (03 R_0) Complete the Visual inspection and LPT Were found satisfactory. QCIL completed the R stamp Certification and submitted the AI signed Form R1 REPORT FOR REPAIR. (Ref email# From Mr. Sreeraj, QC Engineer, Dated on 22.06.2021) V3304A R1 & R4 FORMS.pdf

										
4.	(WELD)	16-Mar-2021	FR#31	**@ V3304A: Cone External Surface** Weld defect (Cluster porosity) found on one Half tube weld surface. – 2nd Tube from the Insulation Ring 3 @ 315° Orientation, 300 mm distance from the LS weld. 	**Grinding to remove the porosity and perform the NDE. Check the thickness after grinding. The required thickness for pipe and weld is 6 mm minimum per MHI fabrication dwg.**	MHI/QICL	30-Mar-2021	24-Mar-2021	FR#37	**Action by QICL:** 1.QICL removed the porosity by grinding and performed the NDT. Inspection result found satisfactory. 2.. NDT reports# QICL/J915/PT/3304A/01, 02 were Reviewed and Endorsed.
5.	(MATL)	16-Mar-2021	FR#31	**@ V3304A: Cone External Surface** Mechanical Damages (approximately 1mm Dent) has been found on one Half tube surface -6th Tube from Insulation ring 2 @ 225° Orientation	**Grinding to remove the defects and perform the NDE. Check the thickness after grinding. The required thickness for pipe and weld is 6 mm minimum per MHI fabrication dwg.**	MHI/QICL	30-Mar-2021	24-Mar-2021	FR#37	**Action by QICL:** 1.QICL Performed the UT verification on the Identified Location (Before Grinding) and actual thickness found in the range of 7.5 to 7.6 which is above the required minimum thickness (6mm). Thickness report # GPTI-UTG-6183 was reviewed and Endorsed. 2.QICL Performed the UT verification on the Identified Location (After Grinding) and actual thickness found in the range of 7.3 to 7.6 which is above the required minimum thickness (6mm). Thickness report # GPTI-UTG-6184 was reviewed and Endorsed. 3.QICL Performed the PT on the above grinded surface and test results found satisfactory. Report# QICL/J915/PT/3304A/02 reviewed and Endorsed.

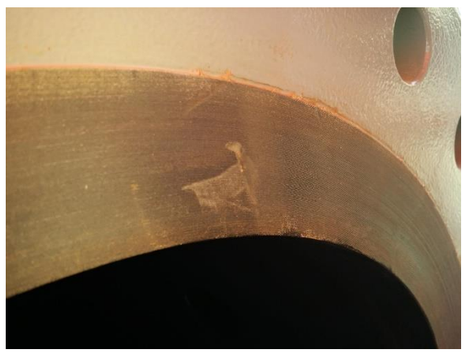
				 						
6.	(MATL)	16-Mar-2021	QICL-VIR-01	Mechanical Damage observed on one location at Half Pipe no#2 from man way M2 at orientation 0° to 270° 	**Grind and PT, and recheck pipe thickness, 6 mm minimum.**	MHI/QICL	30-Mar-2021	24-Mar-2021	FR#37	**Action by QICL:** 1.QICL Performed the UT verification on the Identified Location (Before Grinding) and actual thickness found in the range of 7.5 to 7.6 which is above the required minimum thickness (6mm). Thickness report # GPTI-UTG-6183 was reviewed and Endorsed. 2.QICL Performed the UT verification on the Identified Location (After Grinding) and actual thickness found in the range of 7.3 to 7.6 which is above the required minimum thickness (6mm). Thickness report # GPTI-UTG-6184 was reviewed and Endorsed. 3.QICL Performed the PT on the above grinded surface and test results found satisfactory. Report# QICL/J915/PT/3304A/02 reviewed and Endorsed.
7.	(Weld)	16-Mar-2021	QICL-VIR-01	Porosity observed at one location on one location at Half Pipe no#2 from man way M2 at orientation 0° to 270°	**Grind and PT, and recheck fillet weld size, 6 mm minimum.**	MHI/QICL	30-Mar-2021	24-Mar-2021	FR#37	**Action by QICL:** 1.QICL removed the porosity by grinding and performed the NDT. Inspection result found satisfactory. 2.. NDT reports# QICL/J915/PT/3304A/01, 02 were Reviewed and Endorsed.

										
8.	MATL	15-04-2021	FR#56	During visual inspection after primer coat on vessel internals observed pin holes on MH1 Plug (Bottom areas where requirement PFF Coating 20-50mm) That need to be repair before proceeding further coat. 	1.This identified Pin holes on the base metal and these pin holes should remove (By buffing / Grinding) and NDT required on the grinded surface. 2.For these repair activity (pin holes removal) QICL has completely removed the applied primer on the affected surface. Hence Heat treatment (backing) is required as per the coating application procedure.	QICL & AMI	29-04-2021	15-04-2021	FR#57 & Supplier (AMI) Email Confirmation	**QICL Action:** This identified Pin holes on the base metal and these pin holes were removed (By buffing / Grinding) and was done the NDT on the grinded surface. NDT report # QICL-J1915-PT-3304A-05 reviewed and found satisfactory. **AMI action** Supplier (AMI) confirmed that the reapplied primer is not required to be baked. Hence this observation was closed. Adobe Acrobat Document
				Supporting doc's for corrective actions of points – 1,2,4,5,6,7	Adobe Acrobat Document Adobe Acrobat Document Adobe Acrobat Document					
9.	CTG	22-04-2021	FR#62	Applied Internal coating was detached on the Vessel cone surface at one location. This was totally not acceptable. Supplier needs to provide the Technical clarification for this coating detachment.	**AMI Response** **Root Cause:** As is known, the PFA coated surface is slippery. The operator stumbled while steadying himself in the cone area during spraying and slipped. During that time, the material hose came loose from the spray gun and some PFA dispersion spilled on to the surface which was already coated. This spill was cleaned up and the surface was coated again. Some of the dispersion topcoat may have had a slightly higher thickness on the boundary. This unbaked topcoat may not have hung on to the baked PFA Powder and would have fallen during the unbaked state. The polymer of the dispersion fell before melting temperature was reached and fell on the bottom surface. **Remedial Action:** Roughen with emery paper on the edges and the exposed powder coated surface. Apply light coat of PFA dispersion on the edge and inside the boundary of the area where the material fell and then merge with the topcoat on the surrounding area. Total thickness will be targeted more than 80 microns.	AMI	06-05-2021	26-004-2021	FR#65	Supplier rectified the coating defect (Coating Detachment) which was found at the 1st Topcoat Inspection. These rectified areas were visually checked and not found the uniform appearance (shadows) on the surface. No coating defect was found on this repaired area and DFT checked and was found the thickness as more than 80 microns. Hence the recorded observation as specified in the Flash report# 62 was closed.

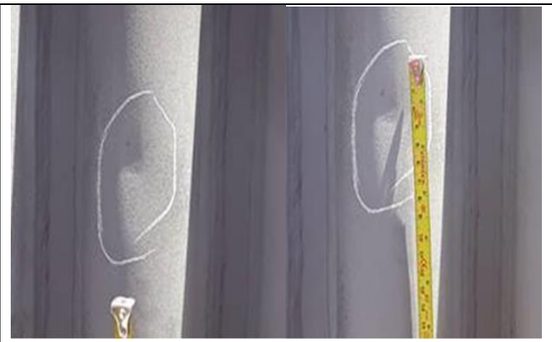
10.	CTG	22-04-2021	FR#62	Applied Internal coating was detached on the Nozzle M18 bottom surface and the DFT reading was found as 20 to 25µm which is below the required minimum Powder coating thickness as 30µm. It is confirmed that the coating detachment was happened on the powder coat itself. Supplier needs to provide the Technical clarification for this coating detachment.	**AMI Response** **Root Cause:** More thickness of coating and possibly high heating air velocity may be the reason coating detached before fully baking **Remedial Action:** Sandpaper with smooth emery paper and apply topcoat. If the total thickness is less than 80 microns after this coat, apply another coat during PFA coating of the next equipment. (3305 or 3304B)	AMI	06-05-2021	29-05-2021	FR#91	AMI Action: Internal coating activities completed.
11.	CTG	26-04-2021	FR#65	Severe Coating Damage was found on the Nozzles M1, M18, M2 coated surface. This damage was occurred due to the improper preheating cycle (Coated surface were directly exposed to the Furnace Nozzles outlet).	**AMI Response:** supplier was agreed to remove the complete coating and restart the activities along with the other upcoming vessel.	AMI	10-05-2021	29-05-2021	FR#91	AMI Action: Internal coating activities completed.
12.	WELD	28-04-2021	FR#67	**Final surface preparation of exterior of vessel@ V3304A-Saddle Contact Areas** 1 Some Weld spatters randomly found on the offered Blasted surfaces. 2 Cluster Weld porosity found at one location. 3 Weld layer /toe properly not merged, 4 Weld overlap, sharp edges and Poor weld profile noticed on most of Half Tube weld surfaces on the saddle contact areas. QICL needs to ensure the necessary surface preparation on the poor weld profiles to meet the painting specification / QICL approved procedure requirements. 	**External surface preparation for painting from spec:** **Before further surface preparation, all sharp edges shall be rounded to minimum radius of 1.5 mm.** **Particular attention shall be paid to:** **Removal of weld spatter** **Rounding off or chamfering of sharp edges (without damaging welds!)** **Ensuring that all weld seams are continuous, smooth and rounded** **Grinding/buffing to meet the spec and to remove porosity, spatters, etc., PT and check the fillet weld size, 6 mm min.**	QICL	12-05-2021	24-05-2021	FR#87	**Action by QICL:** 1.Weld spatters removed. All the Identified weld defects were removed (By buffing / Grinding) and was done the NDT on the grinded surface. Inspection reports # QICL-J1915-PT-3304A-Saddle-01 and QICL-J915-VIR-3304A—SADDLE-01 were reviewed and found satisfactory.

										
13.	MATL	28-04-2021	FR#67	**Final surface preparation of exterior of vessel@ V3304A-Saddle Contact Areas.** Mechanical damage was found on the below half tube surfaces 1 14th and 15th Half tube surfaces- From the Nozzle N9B (Left side view from cone Part)  2 13th and 14th Half tube surface- From the Nozzle N9B (Right side view from Cone part)  QICL needs to perform the close visual Inspection and should	**QICL to measure the depth of the dent. If it is minor without sharp edges or corner, then grind, PT , check the pipe thickness(6 mm min) and pneumatic testing at 721 psig.**	QICL	12-05-2021	24-05-2021	FR#87	**Action by QICL:** 1.QICL measured the reported mechanical Damage and observed the maximum depth was 0.35 mm. 2.NDT-PT was carried out on the damaged locations. Inspection results were found satisfactory. (PT report# QICL-J915-VIR-3304A/saddle/010 reviewed and Endorsed) QICL performed the Pneumatic Test on the Half tube surfaces to ensure the weld integrity at the reported dent Half tubes as specified in the Flash report# 67. The witnessed test result on the repaired Half Tubes were found satisfactory. Report# J915 /PNT/ 3304A/ 01)

				measure the dimensions of the above observed mechanical damages for further discussion with MCD Eng. team.							
14.	MATL + WELD	24-05-2021	FR#87	**Final surface preparation of exterior of vessel V3304A** 1 Minor Mechanical damages were observed on the Head surfaces 2 Porosity (Less than 1 mm) observed on the below locations 2.1 One spot at head surface. 2.2 N11 Nozzle attachment weld surfaces 2.3 Insulation ring weld surface near nozzle M15A 3 Sharp edges found randomly on the all structural attachments. 4 Porosity / blow holes found on the Rain ring attachment welds with Nozzle M1. Weld defects (Arc crater) found on the Support lug ring welds		QICL	31-05-2021	26-05-2021	FR#89	**Action by QICL:** All the Identified weld defects, Mechanical damages were removed (By buffing / Grinding) and was done the NDT on the grinded surface. Inspection reports # QICL-J1915-PT-3304A-07, 08 and QICL-J915-VIR-3304A-EXT-02 were reviewed and found satisfactory.
15.	CTG	24-05-2021	FR#87	**Final surface preparation of exterior of vessel V3304A** Incomplete Blasting found at the following locations 1 Most of the bolt / slot holes in the support lug rings, Radioactive cleats, and insulation support cleats etc... 2 Nozzles N9B, weld neck surface Support ring stiffener plates		QICL	31-05-2021	26-05-2021	FR#93	**QICL Action:** Blasting done on the missing areas and Coating application completed.
16.	MATL	26-05-2021	FR#89	Mechanical Damage was found on the Nozzle's N5, N7, Flange side surfaces.		QICL	09-06-2021	02-06-2021	FR#95	**Action by QICL:** Mechanical damages were removed (By buffing / Grinding) and was done the NDT on the grinded surface. Inspection reports # QICL-J1915-PT-3304A-09 and QICL-J915-VIR-3304A-06 were reviewed and found satisfactory.
17.	CTG	26-05-2021	FR#91	1 Supplier rectified the coating defect (Coating Detachment) which was found at the 1st Topcoat Inspection in Nozzle M15. These rectified areas were visually checked and found yellow color appearance. The DFT reading was found in the range of 230 µm to 300µm. As per client approved coating procedure (236910-BAY3-AMI-31000-01-00011, Rev K) Appendix D, the causes for this type of coating Failure is "Low metal temperature, poor vending of exhaust, insufficient oxygen supply, too thick topcoat. 2 Supplier needs to provide the technical Justification for MCD Team / Client review.	Technical Justification from AMI To recall, during the first topcoat, flaking of coating took place at the same location in an area of approx 2"-3". The same was rectified as per the repair procedure. After baking, the coating was rough in appearance. The same has been smoothened out by use of localized heat. When localized heat is applied, a yellow tint appears in PFA film. Note: PFA coating in this nozzle (Hand Hole) is applied for about 50 mm along the circumference. (Not the entire length of the nozzle) In our opinion, a: Whenever the coating is rectified locally, the yellow tint will be present. b: Performance of the coating will not be affected Conclusion-Disposition: The coating should be accepted 'use as is' without any further work	AMI	09-06-2021	16-06-2021	Email ref#	**This observation was closed based on the below referred Email Acceptance from MCD Coating Specialist.** **"They smoothed these repair areas and checked the DFTs were in range. We know the yellowing can be an effect of the localized heating for the repair, and they (AMI) did adhesion testing on these areas to confirm the coating was adherent"** **Email reference# From Melissa, Dated on # June 16, 2021**
18.	CTG	30-05-2021	FR#92	1 Supplier rectified the Coating defect (Pin holes) which were found at the Final Topcoat inspection in Nozzle plugs (# M18, M15) coated surface. These rectified areas were visually checked and found yellow color appearance. The DFT reading was found in the range of 120 µm to 250 µm. As per client approved coating procedure (236910-BAY3-AMI-31000-01-00011, Rev K) Appendix D, the causes for this type of coating Failure is "Low metal temperature, poor vending of exhaust, insufficient oxygen supply, too thick	Technical Justification from AMI To recall, during the first topcoat, flaking of coating took place at the same location in an area of approx 2"-3". The same was rectified as per the repair procedure. After baking, the coating was rough in appearance. The same has been smoothened out by use of localized heat. When localized heat is applied, a yellow tint appears in PFA film. Note: PFA coating in this nozzle (Hand Hole) is applied for about	AMI	13-06-2021	16-06-2021	Email ref#	**This observation was closed based on the below referred Email Acceptance from MCD Coating Specialist.** **"They smoothed these repair areas and checked the DFTs were in range. We know the yellowing can be an effect of the localized heating for the repair, and they (AMI) did adhesion testing on these areas to confirm the coating was adherent"**

				topcoat. 2 Supplier needs to provide the technical Justification for MCD Team / Client review.	50 mm along the circumference. (Not the entire length of the nozzle) In our opinion, a: Whenever the coating is rectified locally, the yellow tint will be present. b: Performance of the coating will not be affected Conclusion-Disposition: The coating should be accepted 'use as is' without any further work					**Email reference# From Melissa, Dated on # June 16, 2021**
19.	CTG	31-05-2021	FR#93	During DFT inspection for paint system-2 on Vessel 3304A, it is found that on most of the locations got high DFT in between 300 to 400 microns, (Requirement is 200 +20%=240microns). As per client specification BES-CO-04-002-05 & BES-US-04-002-03, Clause 9.3.3.2, the allowed DFT range is 100% to 120%.	As per manufacturer (International Paint) confirmation the acceptable Maximum DFT range is 300-400 microns for the total system thickness.	QICL	14-06-2021	02-06-2021	FR#95	**QICL Action:** QICL submitted the Confirmation letter from the Paint manufacturer for the allowed maximum DFT range.
20.	MATL	01-06-2021	FR#94	Mechanical Damage / Handling damages were found on the Nozzle's Plug Flange Edges. (Nozzle N11, M15, M15A, M18, M1, M2)		QICL	15-06-2021	03-06-2021	FR#96	**Action by QICL:** Mechanical damages were removed (By buffing / Grinding) and was done the NDT on the grinded surface. Inspection reports # QICL-J1915-PT-3304A-10 and QICL-J915-VIR-3304A-07 were reviewed and found satisfactory.
21.	CTG	01-06-2021	FR#94	Blasting Garnets have not been completely removed on the Flange Bolt Holes. Incomplete surface preparation was been found on the Flange Bolt Holes at Nozzle M2 Plug.		QICL	15-06-2021		Closed	**QICL Action** Blasting Garnets completely removed Surface preparation completed on the missing areas.
22.	CTG	02-06-2021	FR#95	During DFT inspection for paint system-2 on Vessel 3304A, it is found that high DFT (More than 400 microns). Allowed max DFT is 400 microns.		QICL	15-06-2021		Closed	**QICL Action** High DFT areas were rectified and submitted the Inspection report. V3304 A-Punch points report.pdf
23.	CTG	03-06-2021	FR#96	3 coat painting system (Painting System# 1) was applied on the SS Bolts surface at David Arm assembly. This is not acceptable.		QICL	16-06-2021		Closed	QICL Action Coating on the SS Bolts surface were removed.
24.	MATL	05-06-2021	FR#97	Nozzle N7 flange serrations found to have damaged at 3 locations along the surface. The Damage seems to be some metal contact and it have created a depression on the serrations crosswise which may affect the integrity of the Nozzle under operation. 		QICL		26/06/2021	Email#	NCR#124 issued to QICL for this identified nonconformance. This NCR was closed with Client approval "Use as is". Hence this punch point was closed. 236910-BAY3-ME-31 010-18-NCR-01 CLOS

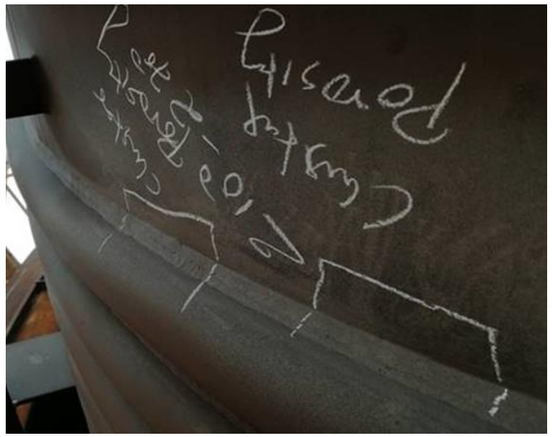
Action Item No.	Category	OPENED		Description	Action	Action By	Date Due (2 weeks)	CLOSED		Comments
		Date	SQS Report No.					Date	SQS Report No.	
1.	WELD	17-April-2021	FR# 57	**@ V3304B: Head** Weld spatters found (Random locations) on / around welds.	MDR: Remove spatters on base metal	QICL	26-Apr-21	**Closed**		QICL Action: Spatters removed
2.	WELD	17-April-2021	FR# 57 (QICL/ J915/VIR /3304-B / 01, item 5, 7)	**@ V3304B: Head** 1. Cluster porosity observed on one Insulation support clip weld surface @ 180° Orientation.  2. Porosity observed on Insulation support clips (2 nos) corner weld surface @ 90° Orientation.  	MDR: Grind to remove porosity	QICL	26-Apr-21	**09.05.2021**	**FR#77**	**QICL Action** Weld defects removed and NDT Performed. NDT Report# QICL/J915/PT/3304B/02 reviewed, Endorsed and found satisfactory
3.	WELD	17-April-2021	FR# 57	**@ V3304B: Shell External Surface** Weld spatters found (Random locations) on / around the Half pipe weld to Shell.	MDR: Remove spatters on base metal	QICL	26-Apr-21	**Closed**		QICL Action: Spatters removed
4.	MATL	17-April-2021	FR# 57 (QICL/ J915/VIR /3304-B / 01, item 2)	**@ V3304B: Shell External Surface** Mechanical Damages (Dent- 0.76 mm Depth up to 70 mm Length) has been found on the Half tube surface - 8th Half Tube from the Head @ 180° - 270° Orientation.	MDR: PT dent surfaces and perform pneumatic test to check the mechanical integrity. Test pressure : 721 psig.	QICL	26-Apr-21	**09.05.2021**	**FR#73, FR#77**	**QICL Action:** NDT performed on the Dent surface. Test result was found satisfactory. NDT Report# QICL/J915/PT/3304B/01 QICL performed the Pneumatic Test on the Half tube (Shell Side) to ensure the weld integrity at the identified

										Half tubes as specified in the Flash report# 57. The witnessed test result was found satisfactory. Test Report# J915/PNT/3304B/01 reviewed and Endorsed.
5.	WELD	17-April-2021	FR# 57 (QICL/ J915/VIR /3304-B / 01, item 3, 4)	**@ V3304B: Shell External Surface** 1. Pin hole (2mm Dia, 1 mm Depth) observed on one Half Pipe weld surface – 2nd Half Pipe from the Head @180° - 270° Orientation.  2. Pin hole (1mm Dia, 1 mm Depth) observed on one Half Pipe surface – 9th Half Pipe from the Head @0° - 90° Orientation. 	MDR: Grind to remove pin hole, PT and check the pipe thk and fillet weld size, 6 mm minimum.	QICL	26-Apr-21	**09.05.2021**	**FR#77**	**QICL Action** Pin hole removed and NDT performed on the Grinded surface. NDT Report# QICL/J915/PT/3304B/01 reviewed and Endorsed.
6.	WELD	17-April-2021	FR# 57	**@ V3304B: Cone External Surface** Weld spatters found (Random locations) on / around the Half pipe weld to Cone.	MDR: Remove spatters on base metal	QICL	26-Apr-21	**Closed**		QICL Action: Spatters removed

7.	WELD	17-April-2021	FR# 57 (QICL/ J915/VIR /3304-B / 01, item 6, 12)	**@ V3304B: Cone External Surface** 1. Weld defect (Cluster porosity) found on one Half tube weld surface. – 9th Tube from the Cone @ 180° Orientation. 2. Weld defect (Single porosity, 1mm Dia) found on the 1st one Half tube weld surface. – 9th Tube from the Cone @ 180° Orientation. 3. Weld defect (Single porosity up to 5 mm dia) found on the Insulation support Ring (1st Ring) @ 0° Orientation.  	MDR: Grind to remove porosity. PT and check the fillet weld size, 6 mm minimum. For point no.3 – Grind to remove porosity	QICL	26-Apr-21	**09.05.2021**	**FR#77**	**QICL Action** Weld defects removed and NDT Performed. NDT Report# QICL/J915/PT/3304B/02 reviewed, Endorsed and found satisfactory
8.	WELD	18-April-2021	FR# 58 (QICL/ J915/VIR /3304-B / 01, item 15)	**@ V3304B: Head** Weld under fill was observed on one Insulation support clip corner weld surface @ 270° Orientation. 	MDR: Grind to remove porosity	QICL	26-Apr-21	**10.05.2021**	**FR#78**	QICL Action: Weld defects removed and NDT Performed. NDT Report# QICL/J915/PT/3304B/03 reviewed, Endorsed and found satisfactory
9.	WELD	18-April-2021	FR# 58 (QICL/ J915/VIR /3304-B /	**@ V3304B: Head**Weld Defect (Cluster Porosity) observed on one Insulation support clips corner weld surface @ 270° Orientation. (Dia Less than 1mm)		QICL	26-Apr-21	**10.05.2021**	**FR#78**	QICL Action: Weld defects removed and NDT Performed.

			01, item 14)		MDR: Grind to remove porosity. PT and check the fillet weld size, 6 mm minimum.					NDT Report# QICL/J915/PT/3304B/03 reviewed, Endorsed and found satisfactory.
10.	MATL	18-April-2021	FR# 58 (QICL/ J915/VIR /3304-B / 01, item 16,17)	**@ V3304B: Shell External Surface** 1. Mechanical Damages (Dent- 0.98 mm Depth up to 70 mm Length) has been found on the Half tube surface - 6th Half Tube from the Nozzle N9C @ 210° Orientation.  2. Mechanical Damages (Dent- 0.66 mm Depth up to 30 mm Length) has been found on the Half tube surface - 7th Half Tube from the Nozzle N9C @ 210° Orientation. 3. Mechanical Damages (Dent- 0.81 mm Depth up to 6 mm Length) has been found on the Half tube surface - 7th Half Tube from the Dish head @ 180°- 270° Orientation.	MDR: Pipe # 6,7, QICL please re-examine and provide close up photos. If the surface is smooth without sharp edges, discontinuity, buckle or corner, may only need PT and pneumatic testing. Otherwise cut and patch will be required. Existing rough welds of half pipe to cone that does not meet weld profile and pattern, and not suitable for painting, shall be ground and PT, and check the fillet weld size, 6 mm minimum. For # 3,buffing lightly and smoothly. PT dent surfaces, and recheck pipe thickness. 6mm thick minimum.	QICL	26-Apr-21	**09.05.2021**	**FR#73, 77**	QICL Action: QICL performed the Pneumatic Test on the Half tube (Shell Side) to ensure the weld integrity at the identified Half tubes as specified in the Flash report# 58. The witnessed test result was found satisfactory. Test Report# J915/PNT/3304B/01 reviewed and Endorsed.
11.	MATL	18-April-2021	FR# 58 (QICL/ J915/VIR /3304-B / 01, item 9,10)	**@ V3304B: Cone External Surface** 1. Mechanical Damages (Dent- 6 mm Depth up to 80 mm Length) has been found on the Half tube surface - 4th Half Tube from the Insulation Support Cleat 2B towards to Shell side @ 210° - 270° Orientation. 2. Mechanical Damages (Dent- 6 mm Depth up to 95 mm Length) has been found on the Half tube surface - 5th Half Tube from the Insulation Support Cleat 2B towards to Shell side @ 210° - 270° Orientation.	~~MDR: Pipe # 4, 5, Cut and patch~~ the ~~dent section, PT root and final~~ passes of butt welds and pneumatic testing at 721 psig, and R-stamp. QICL to provide repair procedure for approval.	QICL	26-Apr-21	**Closed**	**FR#71, 74, 77**	**QICL action:** 1.Dent section was removed as per the above recommendation. Splice / Patch fit-up was offered for the above repair locations. Patch materials (SA 333 Gr 6, Thick 7.62 mm) traceability was hard stamped on the surface. Fit up checked and found satisfactory. Fit up Inspection report# QICL-J915-V3304B-FTB-01 reviewed and Endorsed. (QR#71) 2.Welding completed and found satisfactory. Reports# QICL/J915/JMH20-5-80058-ASME-VIR-01, QICL-J915/V3304B/WHS/01 were reviewed and Endorsed. 3.NDT reports# QICL/ J915/ PT/3304B/ RT/01, 02 reviewed and Endorsed.

										4.QICL performed the Pneumatic Test on the Half tube (Cone side) to ensure the weld integrity at the reported dent Half tubes as specified in the Flash report# 58. The witnessed test result on the repaired Half Tubes were found satisfactory. Report# J915 /PNT/ 3304B/ PATCH/01) 5.QCIL completed the R stamp Certification and submitted the signed Form R1 REPORT FOR REPAIR. V3304B R1 & R4 FORMS.pdf
12.	MATL+WELD	18-April-2021	FR# 58 (QICL/ J915/VIR /3304-B / 01, item 8)	**@ V3304B: Cone External Surface** One ~~Insulation~~ radioactive detector support cleat 5B was having bent and sharp edges due to Transportation Handling from MHI to QICL. The identified bent on the cleat was causes the incorrect elevation level (~~Up to 42 mm difference~~). This is not acceptable. NDT to be performed on the cleat weld joints to ensure the absence of any weld defect.  	MDR: Straight clip # 5B to the original position and line up center of bolt holes and end plates with clip # 7B based on MHI fabrication dwg HR01-25248-1(1/2), Rev 11. Clip to be perpendicular to vessel wall and center to center to be 977 mm between # 5B and 7B. PT clip welds to the cone surface	QICL	26-Apr-21	**09.05.2021**	**FR# 74, 77**	QICL Action: The observed bent was rectified by slight hammering (Indirect) on the bent clip surface. NDT-PT was performed on the repaired surface + existing welded surface. After completing the NDT QICL has been verified the Dimension (Distance between Radioactive cleat 5B& 7B) as per MHI fabrication dwg HR01-25248-1(1/2), Rev 11. This was ensured in QICL inspection report Inspection report# QICL/J915/V3304B/FDR/01. Report reviewed and Endorsed. NDT report# QICL/J915/PT/3304B/06 was reviewed and Endorsed.

										
13.	WELD	18-April-2021	FR# 58 (QICL/ J915/VIR /3304-B / 01, item 11)	**@ V3304B: Cone External Surface** Weld defect (Cluster porosity) found on one Half tube weld surface at two locations. – 1st Half Tube from the Insulation support cone Ring#3 @ 210°-270° Orientation. 	MDR: Grind to remove porosity. PT. Recheck fillet weld size, 6 mm minimum.	QICL	26-Apr-21	**09.05.2021**	**FR#77**	**QICL Action** Weld defects removed and NDT Performed. NDT Report# QICL/J915/PT/3304B/02 reviewed, Endorsed and found satisfactory
14.	MATL	18-April-2021	FR# 58 (QICL/ J915/VIR /3304-B / 01, item 18)	One mechanical damage was also found on the Nozzle N8C Flange surface. The observed mechanical damage physically shows uneven surface level (Protrusion). The height (+) of the uneven surface was less than the Flange RF height.	MDR: Buff flange edge smoothly. Remove rug from nozzle hole. Using plastic or metal plate to cover the hole and to prevent fibers or foreign objects fall in.	QICL	26-Apr-21	**09.05.2021**	**FR#77**	**QICL Action:** Mechanical Damage was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3304B/04 was reviewed and Endorsed.

										
15.	DIMEN	14-06-2021	FR#105	**All the recorded actual Dimensions (Elevations & Nozzle projection) as reported in QICL Inspection report# QICL/J915/V3304B/FDR/02 was witnessed and noted the Below observations.** 1. Nozzle N5- projection Deviation found -3 mm at 315° Side and +5mm at 135° side. 2. Nozzle N6A- projection Deviation found -1 mm at 135° side. 3. Nozzle N6B- projection Deviation found -3 mm at 315° Side and +2mm at 135° side. 4. Nozzle N11- projection Deviation found -18.4 mm at 315° Side and +20.6 mm at 135° side. 5. Nozzle M1- projection Deviation found -3.8 mm at 315° Side and -6.2 mm at 135° side.	MHI REPLY As per the project specification, the tolerance of the nozzles location from datum line is ±6mm, the tolerance of the manhole location from datum line is ±12mm, and the tolerance of flange seal face from datum is ±0.5° . If we measure the nozzles projection using the method in the below report, we need to consider the impact of the tilt angle of nozzle seal face. Please see the attached pictures to show the inspection nozzle dimension after welding in MHI workshop, the nozzle dimension is not problem. If we use the measurement data in the below inspection report: **For nozzle N11:** The tilt angle of flange seal face should be arctan ((18.4+20.6)/(5994.4+152))=0.36° , which meets the project spec. tolerance requirement. No deviation. The project of nozzles N11 should be （20.6-18.4）/2=+1.1mm ,meet requirement. **For nozzle N5:** The project of nozzles N5 should be （5-3）/2=+1 mm , meet requirement.			**15.06.2021**	**CLOSED**	**Ref Email from MCD TEAM Dated on 15.06.2021**

					For nozzle N6B: The project of nozzles N6B should be （2-3）/2=-0.5 mm , meet requirement. For nozzle M1: The project of nozzles M1 should be （-6.2-3.8）/2=-5 mm , meet requirement. So in our opinion, these nozzle dimension and projection are no problem.					
16.	MATL	14-06-2021	FR#105	Mechanical damages were found on the Nozzle M1 Flange serration surfaces at 2 locations. 1 **Location 1**: (Inner edge)- Mechanical damage found up to 4 mm in radial projection **with protrusions**. As per ASME B16.5 Protrusions above the serrations are not permitted. Hence it is not acceptable.  2 **Location 2**: (Outer edge) Mechanical Damage (Imperfection) found up to 4 mm in radial projection. The observed imperfection is deeper than the bottom of the serrations. As per ASME B16.5 the Maximum allowed length is 6.4 mm. Hence it is accepted. 	QICL to remove protrusions and resurface the face of flange	QICL		**28.06.2021**	**FR#117**	**QICL Action:** Supplier has removed the mechanical damage (4mm in radial projection with protrusions) on the Nozzle M1 Flange serration surface. Close visual Inspection carried out on the repaired area and was found imperfection max up to 4.4 mm length in radial projection. As per ASME B16.5 the maximum allowed radial projection of imperfections that are Deeper than the Bottom of the serrations is 6.4 mm. Hence it is acceptable
17.	WELD + MATL	15-06-2021	FR#106	**V3304B- Final Surface Preparation Inspection** 1. Arc spatters, weld deposits and some material damages were found on the Support lugs surfaces, and cone surface. 2. Blasting missed areas found in part of the SS nozzles surface at Cone side + Insulation support cleat + Support Lug Inside areas + Radioactive cleat side surface and bolt hole inside	QICL to take remedial actions.	QICL		**19.06.2021**	FR#109	**QICL Action** Weld defects and material damages were removed and NDT Performed. Visual inspection Report # QICL-J915-VIR-3304B-05 and NDT reports QICL-J1915-PT-3304B-07 were reviewed and Endorsed.

				3. Weld overlap and sharp edges were found on the support lug weld (some location)						
18.	MATL	29.06.2021	FR#118	During Inspection it was found that supplier has provided the Timber material directly on the Nozzle plug RF surfaces. This is not acceptable. Supplier needs to remove the Timber material and should offer for reinspection and to ensure the absence of imperfection on the serration surface.		QICL		30.06.2021	FR#119	**QICL Action:** Timber material removed and cleaned the serration surface Flange serrations checked on the above said Nozzles Plug assembly Flange surface and found satisfactory.
19.	CTG	29.06.2021	FR#118	PFA coating was found at the Nozzle's N16A and N19 Flange serration surface from inner edge and visually looks protrusion on the serration surface. This is not acceptable. Supplier needs to take the necessary action to remove the PFA coating on the serration surface.		QICL/AMI		30.06.2021	FR#119	**AMI Action:** PFA Coating was removed on the serration surface Visually inspected and found satisfactory.
20.	MATL	29.06.2021	FR#118	Flange Serrations on the RF surface at the Nozzle N9C was not visible and looks rusted. QICL needs to take the necessary action to ensure the Flange serration on the RF surface. 	QICL REPLY: Flange was cleaned with liquid cleaner rust was removed but serration is not visible. It is coil nozzle and we have very short duration we cannot do anything for this. MCD is confirm us for the blanking and N2 Filling. Field to repair.	Field		**Open**		**Serrations will be repaired at site** **Ref Email from MCD TEAM Dated on 02.07.2021**
21.	DOC	01.07.2021	FR#120	Adhesion test reports yet to be submitted		QICL		**04.07.2021**	**FR# 123**	QICL submitted the Adhesion test reports. Adhesion Test reports # QICL-J915-PNT-MP-07 & # QICL-J915-PNT-MP-07 were reviewed and Endorsed.

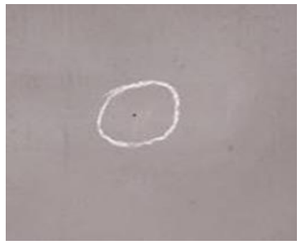
NOTE: Action items listed should reference an order requirement, project specification, procedure, drawing, etc. that is not complied with.

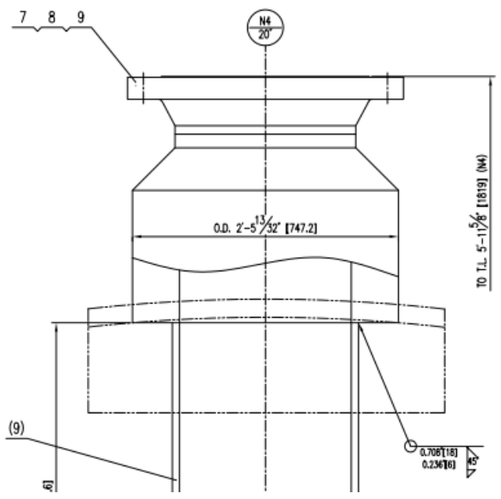
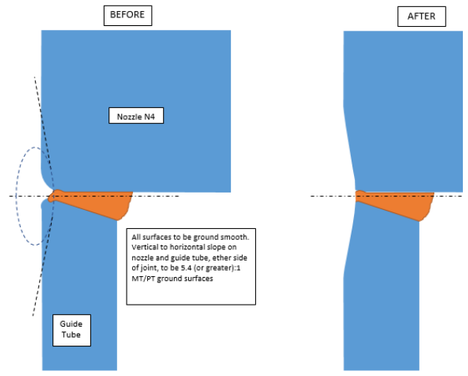
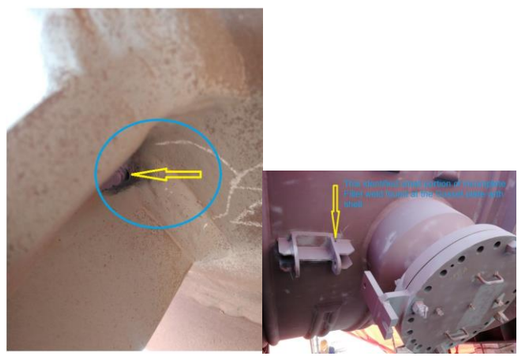
CATEGORY NAME

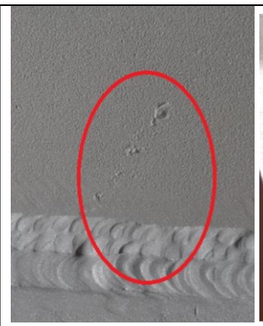
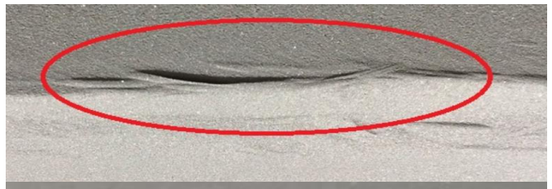
- COATING	(CTG)	Action item is related to a coating discrepancy	- NON-DESTRUCTIVE TESTING	(NDT)	Action item is related to a NDT discrepancy
- DIMENSIONAL	(DIM)	Action item is related to a dimensional discrepancy	- SPECIFICATION	(SPEC)	Action item is related to a specification non-compliance / conflict
- DOCUMENTATION	(DOC)	Action item is related to a documentation disscrepancy	- TESTING	(TEST)	Action item is related to a testing discrepancy
- MATERIAL	(MATL)	Action item is related to a material discrepancy	- WELDING	(WELD)	Action item is related to a welding discrepancy

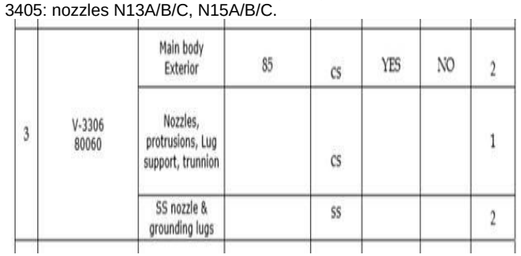
Action Item No.	Category	OPENED		Description	Action	Action By	Date Due (2 weeks)	CLOSED		Comments
		Date	SQS Report No.					Date	SQS Report No.	
1.	(MATL)	13-Feb-2021	31010- 2	**@ V3306 Head External Surface** Deep grinding marks were found on the Head surface at the locations 0°-90° & 180°- 90° 	Recheck thickness	QICL	25-Feb-2021	Closed	31010- 3	Thickness report reviewed and confirmed the actual thickness was more than the required thickness.
2.	(WELD)	13-Feb-2021	31010- 2	**@ V3306 Head External Surface** Weld spatters found (Random locations) on / around welds. 	**MHI Response:** it is the sand adhesion during remove the scaffold after finishing temporary coating, it can be removed when the sandblasting for external surface.	QICL	25-Feb-2021	Closed		
3.	(WELD)	13-Feb-2021	31010- 2	**@ V3306 Shell External Surface** Weld defect (undercut <1mm) found on the Half pipe weld to Shell @ 10th Half Pipe from Head end; @ 0°-90° 	**MHI Response:** the weld seams can meet the requirement of ASME Ⅷ(1) UW-35 Standard. no need to repair.			Closed		Action not required

4.	(WELD)	13-Feb-2021	31010- 2	**@ V3306 Shell External Surface** Weld defect (Porosity) found on the Half pipe weld to Shell @ 13th Half Pipe from Head end; @ 0°-90° 	**Relevant rounded indications found less than 3/16 in and it is accepted as per code, no action required.**			Closed		Action not required
5.	(WELD)	13-Feb-2021	31010- 2	**@ V3306 Shell External Surface** Weld spatters found (Random locations) on / around the Half pipe weld to Shell. 	MHI Response: it is the sand adhesion during remove the scaffold after finish temporary coating, it can be removed when the sandblasting for external surface.	QICL	25-Feb-2021	Closed		
6.	(WELD)	13-Feb-2021	31010- 2	**@ V3306 Shell External Surface** Weld defects (porosity, spatters) found on the shell stiffener top ring weld surface. @ 270°-90°	MHI Response: it can be removed when the sandblasting for external surface. relevant rounded indications found less than 3/16 in and it is accepted as per code, no action required.	QICL	25-Feb-2021	Closed		
7.	(WELD)	13-Feb-2021	31010- 2	**@ V3306 Shell External Surface** Incomplete weld found inside the support lug @ Above Manway M2A.	**This identified small portion of incomplete Fillet weld found at the Gusset plate with shell.**	QICL	30-Mar-2021	Closed		Refer Action Item No# 18
8.	(WELD)	13-Feb-2021	31010- 2	**@ V3306 Shell External Surface** Weld defect (Arc crater) found at the shell stiffener top ring weld surface. @ 180°-90° location. 	**Polish and PT**	QICL	25-Feb-2021	06-Mar-2021	FR#21	NDT report reviewed and satisfied after completion of the corrective action

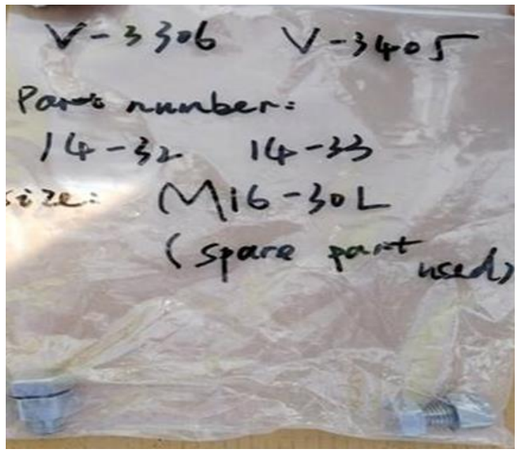
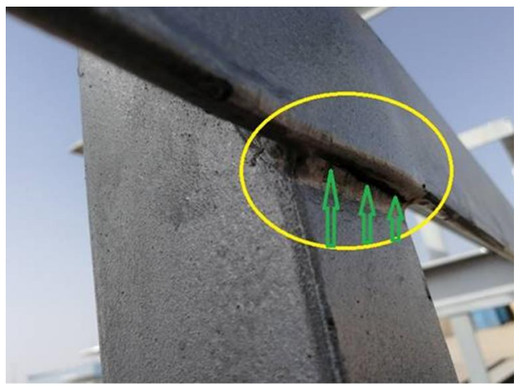
9.	(MATL)	13-Feb-2021	31010- 2	**@ V3306 Shell External Surface** Deep grinding marks were found on the shell surface at below the insulation cleats @ 0°-90°	**Recheck thickness**	QICL	25-Feb-2021	Closed	31010- 3	Thickness report reviewed and confirmed the actual thickness was more than the required thickness.
10.	(MATL)	13-Feb-2021	31010- 2	**@ V3306 Shell External Surface** Pin hole found on the base material in-between location of 9th Half pipe to 10th Half pipe from the Head @ (180°-90°). 	**The observed pin hole looks less than 1mm depth. Grind the surface and should perform the NDT (PT/MPI) on the surface.** **Recheck thickness**	QICL	25-Feb-2021	Closed	FR# 19	Thickness report reviewed and confirmed the actual thickness was more than the required thickness.
11.	(MATL)	13-Feb-2021	31010- 2	**@ V3306 Shell External Surface** Cutting edges were not ground smooth on the shell Stiffener ring.	**Remove the rough surface as per the coating requirement.**	QICL	25-Feb-2021	06-Mar-2021	FR#21	NDT report reviewed and satisfied after completion of the corrective action
12.	(WELD)	13-Feb-2021	31010- 2	**@ V3306 Cone External Surface** Weld spatters found (Random locations) on / around the Half pipe weld to Cone.	**MHI Response: it is the sand adhesion during remove the scaffold after finishing temporary coating, it can be removed when the sandblasting for external surface.**	QICL	25-Feb-2021	Closed		
13.	(WELD)	13-Feb-2021	31010- 2	**@ V3306 Cone External Surface** Weld crack found on all the welds in temporary jig	**MHI Response: the crack is on the weld seams between rib plates and base metal, not the cracks on the base metal. proposed that grind to remove after finish the lining and remove the temporary jig .**	QICL	25-Feb-2021	Closed		
14.	(WELD)	13-Feb-2021	31010- 2	@ V3306 Cone External Surface Weld overlap found on the Half pipe weld to Cone in one location. @ 90°-0°) 	**Remove the weld overlap by grinding and Perform the NDT (PT/MPI) on the applicable area.**	QICL	25-Feb-2021	06-Mar-2021	FR#21	NDT report reviewed and satisfied after completion of the corrective action
15.	(WELD)	13-Feb-2021	31010- 2	**@ V3306 Cone External Surface** 1.Insufficient Fillet weld size found up to 100 mm at the Half pipe weld to Cone. @ 10th Half Pipe from Cone bottom end; @ 0°-90° 2.Insufficient Throat size found up to 100 mm at the Half pipe weld to Cone. @ 2nd Half Pipe from Cone bottom end; @ 180°-90°	**MHI Response:** the thickness of half-pipe is 7.62mm, the drawing required the weld leg is 6mm, the actual weld leg can meet the drawing requirement, no need to repair. MHI Response: the thickness of half-pipe is 7.62mm, the drawing required the weld leg is 6mm, the actual weld leg can meet the drawing requirement, no need to repair.		Closed	Closed		Action not required
16.	(MATL)	13-Feb-2021	31010- 2	**@ V3306 Cone External Surface** Mechanical damage found at one location on one Half pipe surface. @ 180°-90°.	**MHI Response: the design minimum thickness of half-pipe is 6mm, please measure the depth of hole, if the depth is less than 1.6mm, please grind it smoothly and perform PT.**	QICL	25-Feb-2021	06-Mar-2021	FR#21	NDT report reviewed and satisfied after completion of the corrective action

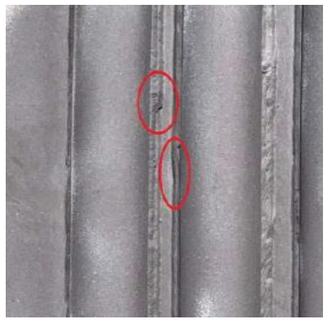
										
17.	(WELD)	14-Feb-2021	FR# 04	While checking Nozzle N4 inside, it was found lack of weld penetration at the Butt Joint in Part no#9 with part # 8. The requirement of Weld / Edge preparation was verified in the Dr# '236910-BAY3-MHI-31006-01-00047 and noted the below. 	Grind and taper 5.4:1 ratio each sdie. MT/PT ground surfaces 	QICL	26-Feb-2021	Closed		Refer to email sent to QICL, Feb 20, 2021 Corrective action was completed. NDT reports reviewed and satisfied.
18.	(WELD)	13-Feb-2021	QICL report #J915/VIR /3306/01	Incomplete weld (void) on the support lug of manway M2A 	As advised by MDR void needs to be grounded off and associated NDT inspection has to be performed.	QICL	30-Mar-2021	Closed	FR#21	Corrective action was completed. NDT reports has been reviewed and found satisfactory. Adobe Acrobat Document

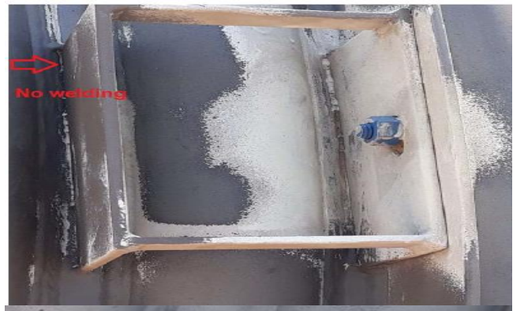
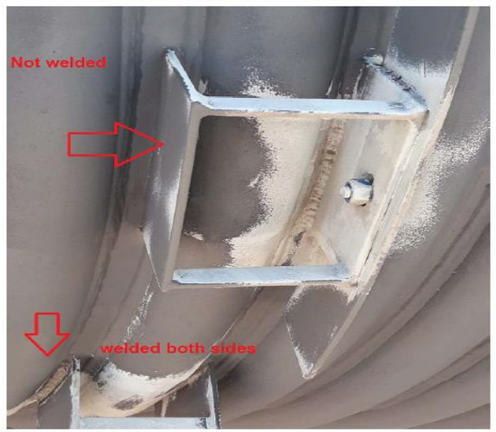
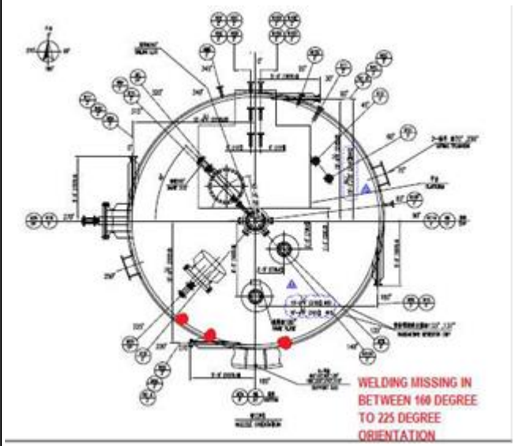
				   						
28.	CTG	08-04-2021	FR#50	During primer inspection observed weld visual defects CONE TO HALF PIPE WELD i)Cluster porosity ii) Mechanical damages   	i) – The porosity cluster appears as though preliminary grinding has already begun and yet severe porosity remains. This cluster is unacceptable and shall be removed. It appears from photo that significant weld metal will be required to be removed in order to clear the porosity. Thus resulting in a need weld metal restoration and invoking R-stamping weld repair. ii) – Lightly grind smooth. MT or PT shall be performed. UT thickness check.	QICL	14-04-2021	10-04-2021	FR#54	QCIL : Grind and NDE (LPT) were found satisfactory(Rep No: QICL/J915/VIR/3306/10) Dated 10 APRIL 2021. MHI : Verified the corrective action found satisfactory. ????
29.	CTG	11-04-201	FR#52	It is observed that the grounding/earthing lugs (Qty-2) which is at support lug on vessel # 3306 is painted (Primer coat) with paint system-1 (Inorganic zinc silicate) instead of paint system-2. As per the QICL approved procedure.	To remove the paint on earthing lug's using buffing. Paint system -2 for grounding lugs	QICL				

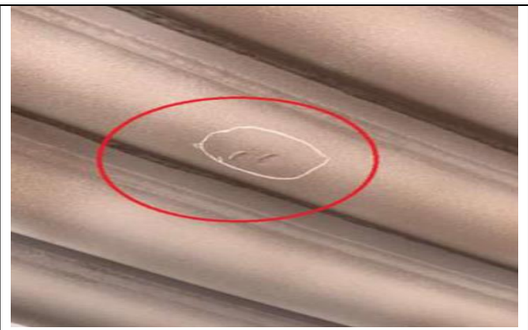
				"The following are stainless steel and shall not be contaminated by carbon steel tools / particles / abrasive or anything that has been in contact with carbon steel previously. Inorganic zinc primer shall also be Kept away from these stainless steels: (2) Earthing lugs at vessel support lug location for each vessel. V-3304A/B: nozzles N16A/B/C, K12/13/14 V-3305: nozzles K11A/B, K14, K16 V-3306: nozzle K15 V-3405: nozzles N13A/B/C, N15A/B/C.  				Closed	FR#71	**QICL Action:** **QICL updated the procedure (painting system changed as PS2 for Earthing Lug) and got approval as code 2.** **Ref# 236910- BAY3- QUA - 31010-01 00020, Code# 2** **The existing applied Painting system 1 was removed and reapplied the correct painting system 2 on the Earthing Lug.** **Reference# Coating Inspection report# QICL-J915-PNT-5**
30.				As per the procedure, All the nozzles shall be painted with paint system#1 and it is observed that the area of the nozzle N7 is painted with paint system#2(attached is the picture for reference)  	Use paint system -1 for N7 nozzle, and paint system- 2 for stainless steel nozzle N15.	QICL		Closed	FR#71	**QICL Action:** **The existing applied Painting system 2 was removed and reapplied the correct painting system 1 on the Nozzle N7.** **Ref# 236910- BAY3- QUA - 31010-01 00020, Code# 2** **Reference# Coating Inspection report# QICL-J915-PNT-3**
31.	DIM	11-04-201		Trial assembly of ladder and platform assembly observed platform handrail are bend . 	MHI email 14-April- 2021 states no bent prior to shipping. QICL to straight the handrail	QICL		**Closed**	**FR#74**	**QICL Action:** **The identified Bend was rectified. Visual Inspection was carried out on the repaired areas (Bend removal surfaces) and found satisfactory. Hence this punch point was closed.**
32.	CTG	19/04/2021 & 25/04/2021	FR# 59 & Email Clarification	**V3306- Nozzle Flanges – Surface Preparation** 1.It is noticed that painting activity is almost completed on all the nozzle's flange areas including flange holes. 2.surface conditioning on the flange thickness including bolt holes and flange face (serration area needed to be protected) on the exterior surface/areas while blasting of entire vessel was not completed. 3.QICL has not offered this activity to McDermott/Client TPI and when checked with QICL Painting QC, 4.QICL QC has not witnessed/checked the surface	Closed as per QICL mail concurrence	QICL		Closed	05.05.2021	**Closed based on the QICL Email reply.** Email ref #Deepak@qualityinternational.ae, dated 05.05.2021

				preparation/cleanliness on the above said flanges including flange holes prior to primer activity.						
33.	CTG/MATL	26-04-2021	FR#65	**V3306- Final Topcoat External Visual Inspection** During the above witnessed Inspection, it was found that QICL has been fixed one Temporary packing at the vessel cone surface. The installed Temporary support is having direct contact with the vessel Half tube surface and due that the Half tube surfaces might have been damaged. Hence Close visual inspection is required to ensure the absence of any coating, material defects. QICL needs to take the necessary action for the above observation. 	QICL to action on remedial works	QICL	05.05.2021	FR#70	01-05-2021	QICL Action: QICL removed the Installed Temporary packing. Close visual Inspection has been performed on the Half Tube material surface. No coating / material damages were observed, and the Inspection result was found satisfactory. Inspection report# QICL/J915/VIR/3306/14 was reviewed and endorsed. Hence the above punch point# 33 was closed.
34.	MATL	19-04-2021	FR#59	Cluster Porosity, and pin hole found the Nozzle N7 Blasted surface. This is not acceptable. 	QICL needs to remove the observed defects and do the NDT on the repair area.	QICL	03-05-2021	FR#66	27-04-2021	**Corrective Action by QICL:** QICL repaired the identified weld, material defects on the N7 nozzle at V3306 as specified in the Flash report# 59 and performed the NDT on all the repaired areas. The submitted Inspection reports # QICL/J915/VIR/3306/11 & QICL /J915/VIR/3306/11 were reviewed and was found satisfactory. Hence the identified observations were closed.
35.	SPEC	02-05-2021	Email confirmation	**Permanent blinds/nozzle which includes MH1, M2B, M1 and nozzle K13** QICL has not offered the visual & DFT inspection on above mentioned flange areas.	QICL to produce necessary justification with proper supporting documents	QICL		Closed	05.05.2021	**Closed based on the QICL Email reply.** Email ref #Deepak@qualityinternational.ae, dated 05.05.2021
36.	SPEC	04-05-2021	FR#73	Adhesion Test for External coating Painting System# 1 was not done.	To conduct adhesion test by QICL	QICL		Closed	10.05.2021	**Test has been performed and found satisfactory.**
37.	CTG	05-05-2021	FR#74	**Platform Assembly** After applied the zinc-rich epoxy paint on the coating damaged areas, Visual appearance was not in uniform (as compared with the Existing HDG Coating appearance).	Gal coat visual appearance has been accepted by MDR engg and QA team	QICL		Closed	08.05.2021	**Closed based on the MCD Team Email Confirmation** **Email ref# Sanipina, Kasi V. <KVSanipina@mcdermott.com; Dated on 08/05/2021**
38.	SPEC	08.05.2021	FR#76	QICL not provided any New Packing List and new ship loose List as specified in the MCD Technical Requestion Note clause 2.4, 2.6.	MCD Team reviewed and commented on the Final packing List which was submitted by QICL. Ref Email From: Jeff.Tseng@mcdermott.com, dated on 11.05.2021	QICL		Closed	18.05.2021	**Closed based on the MCD Team Email Confirmation** **Email ref# Sanipina, Kasi V. <KVSanipina@mcdermott.com; Dated on 18/05/2021**
39.	SPEC	08.05.2021	FR#76	QICL was not made any special precaution on the Installed David sleeve as specified in the MCD Technical Requestion Note clause 2.19.	QICL Action: special precaution Provided	QICL		FR# 78	10.05.2021	**Closed**
40.	SPEC	08.05.2021	FR#76	The labelled shipping weight has been found as 103208 In KGS, whereas the required correct weight is 103, 000 KGS (Reference Email# From MCD Sr. principle mechanical Engineer. Mr. Jeff, Dated on April 17)	QICL Action- Labelled Weight has been corrected, Checked, and found satisfactory.	QICL		FR# 78	10.05.2021	**Closed**
41.	SPEC	08.05.2021	FR#76	Lifting points and Lifting limitation was not labelled on the vessel surface List as specified in the MCD Technical Requestion Note clause 5.7	QICL Action: Lifting points and Lifting limitation was labelled. Checked and found satisfactory	QICL		FR# 78	10.05.2021	**Closed**
42.	SPEC	08.05.2021	FR#76	All the vent /weep holes on repads were not plugged with grease as specified in the MCD Technical Requestion Note clause 5.8.	QICL Action: All the vent /weep holes on repads were plugged with grease. Checked and found satisfactory	QICL		FR# 78	10.05.2021	**Closed**

3.	DOC	06-03-2021	FR#21	**@ Packing Lists # SO22; Si no# JMH20-580059; (V-3305)** MHI Packing List has been showing the Part no# 14-32 (M16 Bolt) and Part no# 14-33 (Hex Nut) for Vessel V 3305, whereas in the received packing shows the different Vessel number V 3405. 	Discard these (2) sets of stainless steel bolting for platform. MHI will mail (2) sets of galvanized bolting to replace them, 5/8" dia-1.181" (30 mm long) .One set for V-3306, new part # 15-45 for bolt and 15-34 for nut, The other set for vessel V-3305, the new part # 14-45 for bolt and 14-33 for nut. QICL to trial fit to make sure no fouling to safety gate in fully open and close positions.	MHI/QICL	20-03-2021	06.07.2021	FR# 125	  Replacing bolt received, but 38 mm long. QICL to trial fit to see any fouling with safety gate **QICL Action:** **Trail fit performed and found satisfactory.** **Visual Inspection report# QICL-J915-VIR-3305/09 reviewed and endorsed.**
4.	WELD	06-03-2021	FR#21	**@ Packing Lists # SO22; Si no# JMH20-580059; (V-3305)** Weld crack was found at one location in the received Platform Handrail. 	Repair the weld crack and redo galvanizing based on approved Galvanizing Repair Procedure	QICL	20-03-2021	06.07.2021	FR# 121 FR# 125	1. **QICL Action:** Weld crack removed and rewelded. NDT performed on the repaired area. 2. 2.3. Visual inspection was carried out on the repaired area and found satisfactory. Inspection reports# QICL-J915-VIR-3305-04; QICL-J915-PT-3305-05, 06 were reviewed and Endorsed. 3. The damaged/removed galvanized coating was restored as per the approved galvanizing procedure 4. Coating Inspection report# QICL-J915-PNT-45 reviewed and endorsed.
5.	WELD	07-04-2021	QICL report # J915/VIR/ 3305/02	Mechanical damage observed on welding of 2nd half pipe to shell joint from dish head near nozzle N17 at orientation 270° to 0°.	Grind, PT and re-check weld size (6 mm min.)	MHI/ QICL	25-Apr-2021	Closed		**QICL Action:** Mechanical Damage was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/01 was reviewed and Endorsed.

										
6.	WELD	07-04-2021	QICL report # J915/VIR/ 3305/02	Weld undercut observed on 1st and 2nd half pipe at one location each from 1st insulation ring on shell at orientation 270° to 0°. 	Grind, PT and re-check weld size (6 mm min.) ..	MHI/ QICL	25-Apr-2021	Closed		**QICL Action:** The identified weld defect was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/01 was reviewed and Endorsed.
7.	WELD	07-04-2021	QICL report # J915/VIR/ 3305/02	Deep grinding marks observed manway hub M2A at orientation 270°. 	Grind and PT	MHI/QICL	25-Apr-2021	Closed		**QICL Action:** The identified weld defect was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/02 was reviewed and Endorsed.
8.	WELD	07-04-2021	QICL report # J915/VIR/ 3305/02	3 No's of insulation support clip to cone are observed without welding & poor weld profile and cluster porosity observed on support clips welding.	(1) Cut off and grind smoothly(TYP) all unwelded clips. (2) Grind to remove cluster porosity and correct the weld pro-file for painting purpose.	MHI/QICL	25-Apr-2021	Closed		QICL Action: Trimmed off the incomplete weld clips and ground smooth on the cutting edges. NDT-PT performed on the cutting edges. Test results found satisfactory.

				  	(3) Make sure top plates have continuous fillet welds both sides,  					NDT Report# QICL/J915/PT/3305/01 was reviewed and Endorsed.
9.	WELD	29.04.2021	FR# 68	Weld spatters found (Random locations) on / around the Half pipe weld to Cone.	QICL to remove the spatters			Closed		**QICL Action** Spatters removed.
10.	MATL	29.04.2021	FR# 68	One minor mechanical damage was observed on the Half tube surface- 4th Half tube towards shell side from support ring# 2 @ 60° orientation.	Grind, PT, and check pipe thickness (6 mm min.)			Closed		**QICL Action:** The identified mechanical damage was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/02 was reviewed and Endorsed. UTG has been carried out on the smooth grinded surface

										and found the actual Thickness more than the required thickness. UTG Report# QICL-J915-V3305-UTG-01 was reviewed and Endorsed.
11.	WELD	29.04.2021	FR# 68	Poor weld profile was found on the Half tube weld surface towards cone side - 7th Half tube from the Insulation support cleat#4 @ 60°-140° Orientation. 	**External surface preparation for painting from spec:** **Before further surface preparation, all sharp edges shall be rounded to minimum radius of 1.5 mm.** **Particular attention shall be paid to:** **- Removal of weld spatter** **- Rounding off or chamfering of sharp edges (without damaging welds!)** **- Ensuring that all weld seams are continuous, smooth and rounded** **Grind/buff smoothly to correct the weld profile and PT, and check the weld size (6 mm min.)**			Closed		**QICL Action:** The identified weld defect was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/02 was reviewed and Endorsed.
12.	WELD	29.04.2021	FR# 68	Cluster porosity was found at the 1st Half tube weld surface from Radioactive Cleat# 10 @ 133° Orientation 	Grind/buff smoothly to remove porosity and PT, and check the weld size (6 mm min.)			Closed		**QICL Action:** The identified weld defect was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/02 was reviewed and Endorsed.
13.	MATL	29.04.2021	FR# 68	Sharp Edges were found at the Radioactive Cleat# 10	Grind to remove sharp edges and weld spatters			Closed		**QICL Action:** The identified sharp edges were removed, and NDT performed. Test results was found satisfactory.

										NDT Report# QICL/J915/PT/3305/03 was reviewed and Endorsed.
14.	WELD	29.04.2021	FR# 68	Weld overlap found on the Half tube weld surface- 2nd Half tube from Radioactive Cleat#11 	Grind and PT , and check weld size (6 mm min.)			Closed		**QICL Action:** The identified weld defect was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/03 was reviewed and Endorsed.
15.	WELD	29.04.2021	FR# 68	Weld metal Deposit found on the Half Tube surface- 1st Half tube towards cone End from Insulation support ring # 5 	Grind, PT , and check pipe thickness (6 mm min.)			Closed		**QICL Action:** The identified weld defect was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/03 was reviewed and Endorsed. UTG has been carried out on the smooth grinded surface and found the actual Thickness more than the required thickness. UTG Report# QICL-J915-V3305-UTG-01 was reviewed and Endorsed.
16.	WELD	29.04.2021	FR# 68	Cluster porosity found at the Half tube weld surface- 4th Half tube from the Insulation support ring #5 @ 340° Orientation.	Grind, PT, and check weld size (6 mm min.)			Closed		**QICL Action:** The identified weld defect was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/03 was reviewed and Endorsed.

										
17.	MATL	29.04.2021	FR# 68	Mechanical damage found on the below Half tube surfaces. 1. 5th Half tube towards the cone end from the Insulation support # 2 @ 225° Orientation.  2. 6th Half tube towards the cone end from the Insulation support # 2 @ 200° Orientation. 	Grind/buff smoothly and PT, and check pipe thickness (6 mm min.)			Closed		**QICL Action:** The identified mechanical damage was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/02 was reviewed and Endorsed. UTG has been carried out on the smooth grinded surface and found the actual Thickness more than the required thickness. UTG Report# QICL-J915-V3305-UTG-01 was reviewed and Endorsed.
18.	MATL	29.04.2021	QICL/J915/VIR/3305/02-Rev 01	Mechanical Damage observed on 4th and 5th Half tube from insulation support# 5 towards shell at 180°	QICL to re-evaluate the degree of damage and depth of dent. If it is lightly dent, smooth and no sharp edges or buckle, then grind, PT, check the thickness (6 mm min.) and pneumatic test at 728 psig. If it is severe, then cut and patch, PT and pneumatic test (similar to repair procedure for V-3304B)			Closed		**QICL Action:** The identified mechanical damage was removed on the Identified surface and NDT performed. Test results was found satisfactory. NDT Report# QICL/J915/PT/3305/02 was reviewed and Endorsed.

										UTG has been carried out on the smooth grinded surface and found the actual Thickness more than the required thickness. UTG Report# QICL-J915-V3305-UTG-01 was reviewed and Endorsed.
19.	CTG	07.06.2021	FR#99	The Serrations on these Flanges of Nozzles N11A, N11B have been blasted as they were not properly covered during Blasting Process. 	Resurfacing to meet ASME B16.5	AMI / QICL		26.06.2021	FR# 115	**QICL Action:** 1. Supplier performed the effective cleaning on the serration surface and offered for reinspection 2. Close visual Inspection has been carried out on the Flange Serrations and found no Imperfection on the serration surface. Hence it is acceptable.
~~20.~~	~~CTG~~	~~07.06.2021~~	~~FR#99~~	~~(2) blind flanges were blasted to 60 mm diameter range.~~ 	~~These two blinds to be used as shipping covers for nozzles # N11A and N18 and painted yellow.~~	~~QICL~~				
21.	CTG	07.06.2021	FR#99	The salt contamination testing failed as the Bresle method Digital Salt tester could not read the Valves properly.as it was giving 28 --22 mg/m2 for all the test including the dis tilled water		AMI		13-06-2021	FR# 104	**Action by supplier (AMI)** a) Additional sample plate prepared. For surface preparation on the sample plate supplier has used the Blasting grit which is taken from the

										same lot which was used for the vessel surface preparation. b) Chloride level checked by using Bresle method. Chloride level found less than 20 mg/m2. c) This test was witnessed by MCD and the test result was found satisfactory. Hence the recorded punch point as specified in the Flash report# 99 was closed.
22.	CTG	09.06.2021	FR#101	During the Painting material storage inspection in line to the email from AMI Polymers related to the shelf life validity extension for the shelf life expired PFA material it was observed that AMI Polymers have stored the PFA paint material in the container and the container is placed in the open area under the sun, the temperature measured inside container during inspection at 34.5 deg C. But as per AMI Email storage condition, maximum temperature of 30 deg.C. It is difficult to achieve during peak day time (container is hot from outside due to high temperature in UAE reaching around 45 degC) even the air condition (window AC) is running 24hrs. 		AMI		Closed		**AMI Action** 1.Letter from Chemours was submitted 2.Spray ability test was conducted and found OK. 3.Adhesion test was carried out on sample plates of V 3304B which was processed within a week of the expiry test. 4.The materials were declared 'good' for further processing for V3305. 5.After V 3305 was completed, its sample plates were tested for adhesion and found OK. 6.This confirmed that the material was OK to be used.,
23.	CTG	15.06.2021	Email Clarification	**SS Solid Plug (Part# 29)** Surface preparation completed and Inspected on 07.06.2021. and supplier has done the Primer coat 50 mm (2") long from the Bottom end. Primer Inspection completed on 10-06-2021. Later, as per Rev 1 requirement, Full PFA coating required on this Nozzle Plug. Hence AMI applied the primer on the remaining part on 10-06-2021 after completing the local Drying Time immediately applied the Full powder coating on the plug entire surface. This additional primer applied part (Including surface preparation) was not offered to MCD/ Client TPI. - Total Length of the plug is 14.724",	Supplier (AMI) stated that the remaining 85% part required only local drying as they considered this part is under repair category not for new surface. This long plug was partially coated up to primer stage when the clarification was received. The rest of the plug was coated with primer, dried with localized hot air source, and powder coated with the rest of the area. It was inspected after the baking of the powder coat and found OK. This is an acceptable practice as per Chemours Fact sheet. It was concluded that the coating is acceptable	AMI		29/06/2021	Email	Supplier justification was reviewed and accepted by MCD Coating Specialist. Ref Email # Dated on 30/06/2021, From MCD Team .
24.	CTG	15.06.2021	Email Clarification	**CS Solid Plug (Part# 28)** AMI provided the incorrect marking (N11A) on the Nozzle plug (N11B). Surface preparation completed and Inspected on 07.06.2021. and has done the Primer coat 50 mm long from the Bottom end. Later, as per Rev 1 requirement, Full PFA coating required on this Nozzle Plug.	Accepted	AMI		16/06/2021	Email	This observation was closed based on the Email acceptance from MCD Team (Mr. David)

<table>
<tr><td>25.</td><td>CTG</td><td>20.06.2021</td><td>FR#110</td><td>During Inspection It was found that PFA Coating on Nozzle 16 Flange serration surface. The coated area was 55 mm X 10 mm from the inner Edge. This is not acceptable. Supplier needs to take necessary action to remove the PFA coating on the serration surface without damaging the serration.</td><td></td><td>AMI</td><td></td><td>28.06.2021</td><td>FR#117</td><td><u>AMI Action:</u>
PFA Coating was removed on the serration surface

Visually inspected and found satisfactory.</td></tr>
<tr><td>26.</td><td>MATL/DOC</td><td>21.06.2021</td><td>FR#111</td><td>The below Listed Items were not included / offered for the packing Inspection

<table><tr><td colspan="4">Package # QICL/PL/J915/002; Dated on 20.06.2021</td></tr><tr><td>Packing List Sl#</td><td>Part#</td><td>Item</td><td>Qty</td></tr><tr><td>1</td><td>14</td><td>Platform (V3305)</td><td>1</td></tr><tr><td>3</td><td>14-23; 14-28; 14-35</td><td>Ladder (V3305)</td><td>1</td></tr><tr><td>23</td><td>NA</td><td>Test plate (V3305)</td><td>1</td></tr><tr><td>33</td><td>14-34</td><td>Hardened Washer 5/8”-11 UNC (V3305)</td><td>1</td></tr><tr><td>8</td><td>NA</td><td>Test plate (V3304A)</td><td>1</td></tr><tr><td>8</td><td>NA</td><td>Test plate (V3304B)</td><td>1</td></tr></table></td><td></td><td>QICL</td><td></td><td>06.07.2021</td><td>FR# 114
FR#125</td><td>QICL Action:

Part# 14-34 was deleted in the packing List and this Item will be Installed at the Platform.

Re offered Quantity verification for the ship loose Items (Test Plates) and found ok.

QICL offered Final Packing Inspection of Ladder and Platform assembly- Found satisfactory.

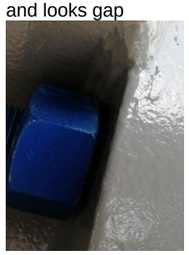
Inspection report# QICL-J915-VIR-3305-11 reviewed and endorsed.</td></tr>
<tr><td>27.</td><td>CTG</td><td>30.06.2021</td><td>FR#119</td><td>During inspection, the SS Bolt Head (Part# 21 at David assembly Bearing Block) was completed Blasted. This is not acceptable.</td><td></td><td>QICL</td><td></td><td>06.07.2021</td><td>FR# 125</td><td><u>QICL Action:</u>

Bolts replaced.

Visual Inspection Report#QICL-J915-VIR/3305/VIR/10 reviewed and endorsed.</td></tr>
<tr><td>28.</td><td>WELD</td><td>01.07.2021
03.07.2021</td><td>FR#120
FR#122</td><td>Weld visual inspection carried out on the platform support clips which were welded on the re pads.
Poor weld profile / Less Filler sizes were observed on some of the weld joints. Supplier needs to take the corrective action on the identified locations. All the repaired locations should require NDT.

During Final Coating Inspection It was found Less Fillet weld size in the Platform support clip on the support pad at vessel head.</td><td></td><td>QICL</td><td></td><td>05.07.2021</td><td>FR# 124</td><td><u>QICL Action:</u>

Fillet size increased as per the requirement.

Inspection reports# QICL-J915-PT-3305-07; QICL-J915-PT-3305-08; QICL-J915-3305-VIR-05 reviewed and Endorsed.</td></tr>
<tr><td>29.</td><td>WELD</td><td>05.07.2021</td><td>Email</td><td>During shipping Inspection, it was found that the installed Blind flange bolt (1no) at M1 Nozzle is fouling with the David support weld. Hence tightening of this nut is not effective and looks gap
  </td><td><u>QICL Reply</u>

Davit support clip was not welded by QICL.</td><td></td><td></td><td>OPEN</td><td>Email</td><td>MCD Team Comments:

This is load bearing 10 mm fillet weld, to slightly grind the weld at the nut area for nut just to sit flat on the flange, not a large area grinding.

To be corrected in the field

Email Reference: From Rader, Deborah deborah.rader@mcdermott.com; Dated on 05.07.2021</td></tr>
<tr><td>30.</td><td>CTG</td><td>06.07.2021</td><td>FR#125</td><td>Adhesion test on test plate for system-1 and 2 is not completed, coating was not fully cured on the test plate at the time of vessel shipping</td><td><u>Done @13 July 2021</u></td><td>QICL</td><td></td><td>Close</td><td></td><td>Adhesion Test satisfactory.</td></tr>
</table>

NOTE: Action items listed should reference an order requirement, project specification, procedure, drawing, etc. that is not complied with.

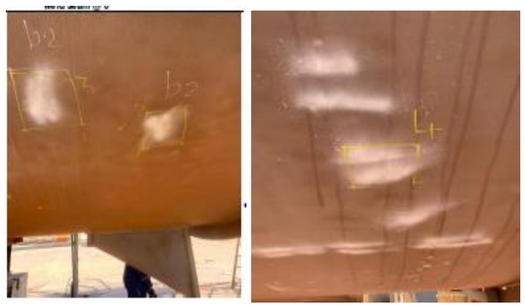
CATEGORY NAME

- COATING	(CTG)	Action item is related to a coating discrepancy	- NON-DESTRUCTIVE TESTING	(NDT)	Action item is related to a NDT discrepancy
- DIMENSIONAL	(DIM)	Action item is related to a dimensional discrepancy	- SPECIFICATION	(SPEC)	Action item is related to a specification non-compliance / conflict

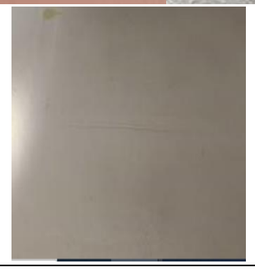
SQS ACTION ITEM LIST (V-3405)

Project Name : Borstar Bay3
Project No. : 236910
Purchase Order No. : 236910-BAY3-31010 & 236910-BAY3-31000
Client : Bayport Polymers, LLC

Date : 23-May-2021
Vendor Name : MHI / QICL
Vendor Location : HFZ, Sharjah, UAE
Scope of Supply : Repairs & Coating of Jacketed Vessels

Action Item No.	Category	OPENED		Description	Action	Action By	Date Due (2 weeks)	CLOSED		Comments
		Date	SQS Report No.					Date	SQS Report No.	
1.	(WELD)	17-Feb-2021	31010- 2	**@ V3405 Head External Surface** Mechanical damage (Length up to 1", depth 1 mm) found on the circumferential weld seam B1 surface near the Head T joint @ 0° level. 	**To grind, MT/PT, and re-check thickness**	QICL	4-Mar-21	**04-Mar-2021**	**FR#20**	Closed Thickness report reviewed and confirmed the actual thickness was more than the required thickness.
2.	(WELD)	17-Feb-2021	31010- 2	**@ V3405 Shell External Surface** Weld spatters found (Random locations) on shell surface.	**As per earlier response from MHI, it can be removed when the sandblasting for external surface.**	QICL		25-Feb-21	31010- 2	Closed
3.	(MATL)	17-Feb-2021 18-Feb-2021	31010- 2	**@ V3405 Shell External Surface** Deep grinding marks were found on the shell surface at 2 locations in @ 0°-90° Deep grinding marks were found on the shell surface at 3 locations in @ 180°-270° 	**To recheck thickness**	QICL	4-Mar-21	**04-Mar--2021**	**FR#19**	Closed Thickness report reviewed and confirmed the actual thickness was meeting the code requirement thickness.
4.	(WELD)	17-Feb-2021	31010- 2	**@ V3405 Cone External Surface** Weld spatters found (Random locations) on the cone surface.	**it can be removed when the sandblasting for external surface.**	QICL		25-Feb-21	31010- 2	Closed
5.	(MATL)	17-Feb-2021 18-Feb-2021	31010- 2	**@ V3405 Cone External Surface** Deep grinding marks were found on the shell surface at 4 locations @ 0°-90° Deep grinding marks were found on the shell surface at approximately 5 locations @ 270°	**To recheck thickness**	QICL	04-Mar-2021	25-Feb-21	31010- 3	Closed Thickness report reviewed and confirmed the actual thickness was more than the required thickness.

				 						
6.	(WELD)	17-Feb-2021	31010- 2	**@ V3405 Cone External Surface** Weld overlap found on the Stiffening Ring Fillet weld in 2 locations up to 100 mm length @ 90°-0° & 180°-90°	**Remove the weld overlap by grinding and Perform the NDT (PT/MPI) on the applicable area.**	QICL	4-Mar-21	06-Mar-2021	FR#21	Closed NDT report reviewed and satisfied after completion of the corrective action
7.	(MATL)	17-Feb-2021	31010- 2	@ V3405 Cone External Surface Material defect (Inclusion) found on one Insulation cleat Edge @ 180°. This material damage was Identified on the Insulation support cleat in Support Clip 4 orientation as per the GA Drawing.	**To grind smooth the defect edge of the clip**	QICL	4-Mar-21	06-Mar-2021	FR#21	Closed NDT report reviewed and satisfied after completion of the corrective action
8.	(MATL)	17-Feb-2021	31010- 2	@ V3405 Cone External Surface Pin hole found on the base material in 2 locations @ 180°-90°. 	**The observed pin hole looks less than 1mm depth. Grind the surface and should perform the NDT (PT/MPI) on the surface.** **Re-check thickness after grinding**	QICL	4-Mar-21	**04-Feb-2021**	**FR#20**	Closed Thickness report reviewed and confirmed the actual thickness was more than the required thickness.
9.	(MATL)	17-Feb-2021	31010- 2	**@ V3405 Cone External Surface** Rough cutting edges found on the davit arm support Stiffener plate @0°-90	**Remove the rough surface as per the coating requirement.**	QICL	4-Mar-21	06-Mar-2021	FR#21	Closed NDT report reviewed and satisfied after completion of the corrective action
10.	(MATL)	17-Feb-2021		**@ V3405 Head External Surface** Number of pin holes (Approximately 10) has been observed on the head surface (@ 0°-270°) after removal of temporary external coating. This observed location was found as the Deep grinded surface which was done at the manufacturer facility. The identified location is approximately 100 mm distance from the Cir seam B1 (below the 0° level towards 270°). All the identified pinholes are having approximately 1 mm dia and cumulative length of all holes will may come up to 5 mm. Further investigation is required for this deep pinhole.	**To grind, MT/PT and recheck the thickness**	QICL	4-Mar-21	**04-Feb-2021**	**FR#20**	Closed Thickness report reviewed and confirmed the actual thickness was more than the required thickness.

				 						
11.	(DIM)	22-April-21	FR#62	As per QICL inspection report 8mm out of Plumpness was noted @ Nozzle N11A.	QICL needs to confirm the Direction of the 8mm out of plumb of nozzle N11A on V-3405 in reference to the vessel centerlines.	QICL	06-May-2021	**20-May-2021**	**FR#84**	MDR to verify at job site (confirm by Package Manager Mr. Kasi)
12.	(WELD/MATL)	22-April-21	FR#63	**The below Observations were noted @ V3405 During the Final surface preparation Inspection.** 1 Weld pin holes found at One Trunnion RF Pad weld surface @ Shell side and cone surface @ near the 1st Insulation cleat 2 Cluster porosity found at one location on the shell surface (Near the cone-Shell Insulation ring @ in line with the Trunnion axis) 3 Sharp edges were found in most of the Brackets 4 Weld drop / spatter observed at one location @ Head surface 5 Mechanical damage found at one location on the Head surface  		QICL	06-May-2021	**27-April-2021**	**FR#66**	QICL repaired the identified weld, material defects on the vessel V3405 External surface as specified in the Flash report# 63 and performed the NDT on all the repaired areas. The submitted Inspection reports # QICL/J915/VIR/3405/08 & QICL /J915/VIR/3405/04 were reviewed and was found satisfactory. Hence the identified observations were closed.