

Installation / Location	PS-3
Subject	Corrosion Monitoring Activities
Contract Number	LC241047A0
Assigned Axxess Representatives	Stuart Dunthorne
Date of Issue	18-07-2025





Activities Summary

Work activities were completed today, with Coupon and ER Probe locations being serviced on PS3-D Upper Deck and Main Decks. We also returned to PS3-B to install a new ER Probe at 1 location where there was a handrail obstruction. Further details as follows.

Time	Activities
06:00 to 07:00	Awaiting gas test & permit issue
07:00 to 11:30	Replace ER Probes at 2 locations and retrieve Coupons at 4 locations
11:30 to 12:30	Lunch
12:30 to 17:00	Retrieve & replace coupons at 2 locations and replace ER Probe at 1 location. 3 ER Probe locations also externally serviced
17:00 to 18:00	Move all equipment back over to PS3-Q laydown area for packing

Locations Serviced Summary

Tag No	Line Description	Work Completed
43-XCC-171	<u>10-GP-430032</u> 10" Vapor Gas Export to PS-1	3" Strip Coupons Removed & Replaced. All pressure retaining seals replaced
43-XCP-170	<u>10-GP-430032</u> 10" Vapor Gas Export to PS-1	Removed old ER Probe and installed new 10.5" S8 Flush Strip ER Probe. All pressure retaining seals replaced. Probe reading obtained
43-XCC-169	<u>10-GP-430032</u> 10" Vapor Gas Export to PS-1	3" Strip Coupons Removed & Replaced. All pressure retaining seals replaced
43-XCC-176	<u>8-P-430070-9144</u> 8" Liquid Export Line to PS-1	3" Strip Coupons Removed & Replaced. All pressure retaining seals replaced
43-XCC-300	<u>8-P-430070-9144</u> 8" Liquid Export Line to PS-1	3" Strip Coupons Removed & Replaced. All pressure retaining seals replaced
43-XCP-177	<u>8-P-430070-9144</u> 8" Liquid Export Line to PS-1	Removed old ER Probe and installed new 7" T20 Cylindrical ER Probe. All pressure retaining seals replaced. Probe reading obtained
43-XCC-178	<u>6-P-43350-9144</u> 6" Liquid Line	3" Strip Coupons Removed & Replaced. All pressure retaining seals replaced
43-XCC-1037	<u>24-P-430009</u> 24" Gas from V-5536 HP Separator to E-4303 2nd Stage Condenser	3" Strip Coupons Removed & Replaced. All pressure retaining seals replaced
53-XCP-1169	<u>6-OC-530044-15101</u> 6" Oil from BH-3 WHJ to PS3-B Production Manifold	Removed old ER Probe and installed new 9.5" S8 Flush Strip ER Probe. All pressure retaining seals replaced. Probe reading obtained
43-XCP-1036	<u>24-P-430015-1101</u> 24" Gas Line from HP Gas Header to E4303 2nd Stage Condenser	Cap removed, threads brushed and re-greased
43-XCP-1038	<u>12-P-43010-1101</u> 12" Gas Line from MP Gas Header to E4302 2nd Stage Cooler	Cap removed, threads brushed and re-greased
43-XCP-1040	<u>14-P-43001-1101</u> 14" Gas Line from V5367 via LP Gas Header to V4301	Cap removed, threads brushed and re-greased

Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	Retrieved Coupons ID / Holder Length	Coupon Appearance	Installed Coupons ID / Weight / Material / Date	Tool Used	Location Access	Remedial Actions
43-XCC-171	10-GP-430032 10" Vapor Gas Export to PS-1 (Right Hand Side A/F)	800psi	11 o Clock	Replace 3" Strip Coupons	MP983 & MP984 3.50" Holder	Dark in colour Minimal Corrosion Observed	NE622 – 36.7233 NE623 – 36.8286 C1018 18-07-2025	25"	Access OK	Repair Sealing Face
Access Fitting Photograph				Retrieved Coupons / Device Photograph			Installed Coupons / Device Photograph			
										
										
Comments Although the location was serviced, the Access Fitting sealing face is in poor condition, with widespread pitting. This can become problematic during the retrieval process if a good seal between the Service Valve and sealing face is not maintained. It is recommended that the Access Fitting be replaced during shutdown, or the existing fitting be repaired/refaced during normal operations.										

Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	New Probe Size / Specification	Probe Readings	Date	Tool Used	Location Access	Remedial Actions
43-XCP-170	<u>10-GP-430032</u> 10" Vapor Gas Export to PS-1 (Middle A/F)	800psi	11 o Clock	Install New ER Probe	10.5" Flush Strip 4705-S8-K03005-10.50-0	Check – 814 Div – 69.3 M.Loss – 0.138 CR – N/A	18-07-2025	25"	Access OK	Repair Sealing Face

Access Fitting Picture





Removed Device

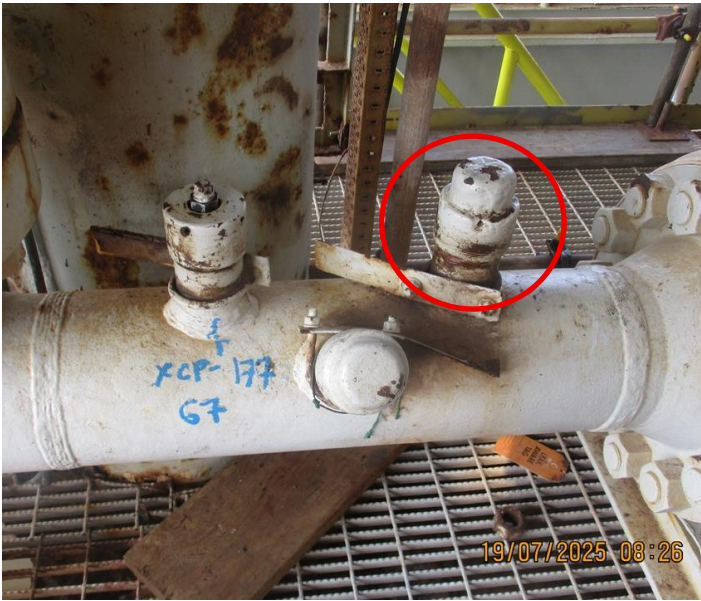


New Probe

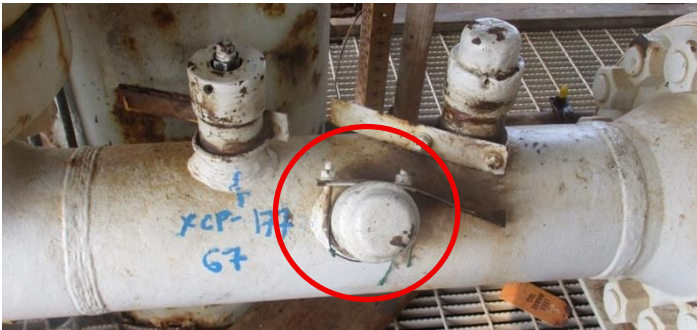








Comments




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Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	Retrieved Coupons ID / Holder Length	Coupon Appearance	Installed Coupons ID / Weight / Material / Date	Tool Used	Location Access	Remedial Actions
43-XCC-169	10-GP-430032 10" Vapor Gas Export to PS-1 (Left Hand Side A/F)	800psi	11 o Clock	Replace 3" Strip Coupons	MP981 & MP982 9.50" Holder	Dark in colour Minimal Corrosion Observed	NE624 – 37.0274 NE625 – 37.0795 C1018 18-07-2025	25"	Access OK	Repair Sealing Face
Access Fitting Photograph				Retrieved Coupons / Device Photograph			Installed Coupons / Device Photograph			
 										
Comments Although the location was serviced, the Access Fitting sealing face is in poor condition, with widespread pitting. This can become problematic during the retrieval process if a good seal between the Service Valve and sealing face is not maintained. It is recommended that the Access Fitting be replaced during shutdown, or the existing fitting be repaired/refaced during normal operations.										

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43-XCC-176	8-P-430070-9144 8" Liquid Export Line to PS-1 (Right Hand Side A/F)	300psi	11 o Clock	Replace 3" Strip Coupons	MQ007 & MQ008 7.00" Holder	Dark in colour Minimal Corrosion Observed	NE626 – 36.9555 NE627 – 36.6822 C1018 18-07-2025	25"	Access OK	None Required
Access Fitting Photograph				Retrieved Coupons / Device Photograph			Installed Coupons / Device Photograph			
										
Comments										

Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	Retrieved Coupons ID / Holder Length	Coupon Appearance	Installed Coupons ID / Weight / Material / Date	Tool Used	Location Access	Remedial Actions
43-XCC-300	8-P-430070-9144 8" Liquid Export Line to PS-1 (Middle A/F)	300psi	11 o Clock	Replace 3" Strip Coupons	MQ009 & MQ010 3.00" Holder	Dark in colour Minimal Corrosion Observed	NE368 – 37.0628 NE369 – 36.9566 C1018 18-07-2025	25"	Access OK	Repair Sealing Face
Access Fitting Photograph				Retrieved Coupons / Device Photograph			Installed Coupons / Device Photograph			
										
										
Comments Although the location was serviced, the Access Fitting sealing face is in poor condition, with widespread pitting. This can become problematic during the retrieval process if a good seal between the Service Valve and sealing face is not maintained. It is recommended that the Access Fitting be replaced during shutdown, or the existing fitting be repaired/refaced during normal operations.										

Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	New Probe Size / Specification	Probe Readings	Date	Tool Used	Location Access	Remedial Actions
43-XCP-177	8-P-430070-9144 8" Liquid Export Line to PS-1 (Left Hand Side A/F)	300	12 o Clock	Install New ER Probe	7.00" Cylindrical 4500-T20-K03005- 7.00-1-0	Check – 783 Div – 48.8 M.Loss – 0.488 CR – N/A	18-07-2025	25"	Access OK	None Required
Access Fitting Picture				Removed Device		New Probe				
  18/07/2025 11:00				 18/07/2025 10:44		 18/07/2025 10:53				
Comments Exact specification of probe was not available, so slightly different specification was installed. Removed probe was 8.5" T10. The Checkmate handheld device was set up with the new specification of element. This location has also suffered pitting on the sealing face so it should be repaired as soon as possible.										

Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	Retrieved Coupons ID / Holder Length	Coupon Appearance	Installed Coupons ID / Weight / Material / Date	Tool Used	Location Access	Remedial Actions
43-XCC-178	6-GC-430036 6" Liquid Line	300psi	9 o Clock	Replace 3" Strip Coupons	MP735 & MP736 3.00" Holder	Dark in colour Scoring marks from internal obstruction Coupon bent	NE370 – 36.9679 NE371 – 36.7598 C1018 18-07-2025	18" must be used	Access OK	Repair fitting internal obstruction
Access Fitting Photograph				Retrieved Coupons / Device Photograph			Installed Coupons / Device Photograph			
										
Comments Although the coupons were successfully retrieved, resistance could be felt during operation of the tool, indicating that something was jamming/catching the installed coupons. Upon closer inspection of the retrieved coupons, mechanical damage could clearly be seen on the edges of the coupons. This would indicate an obstruction within the Access Fitting, most likely weld impingement from the fabrication process. It is recommended that this fabrication defect be repaired during the next available shutdown. This task could probably be completed with just basic hand tools										

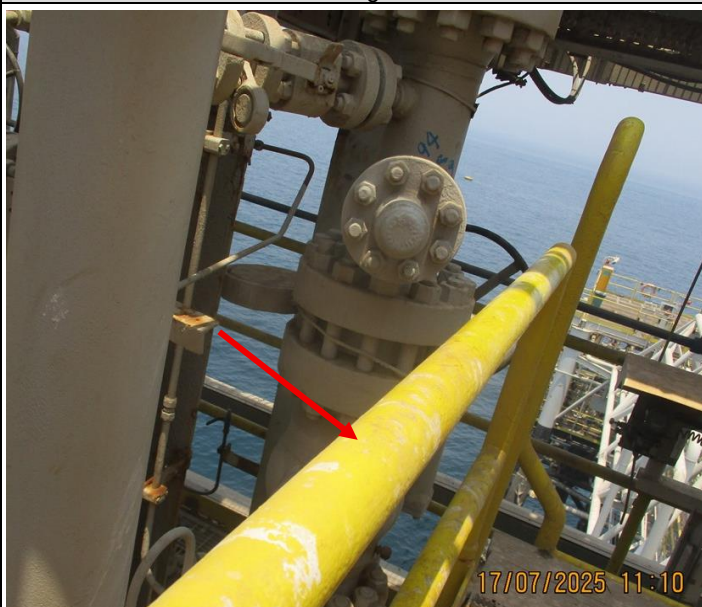
Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	Retrieved Coupons ID / Holder Length	Coupon Appearance	Installed Coupons ID / Weight / Material / Date	Tool Used	Location Access	Remedial Actions
43-XCC-1037	24-GP-430009 24" Gas from V-5536 HP Separator to E-4303 2nd Stage Condenser	150psi	12 o Clock	Replace 3" Strip Coupons	MP985 & MP986 2.12" Holder removed 11.5" Holder installed	Dark in colour Thick wax like substance	NE372 – 36.9714 NE373 – 36.9204 C1018 18-07-2025	25"	Access OK Large scaffold required	None Required
Access Fitting Photograph				Retrieved Coupons / Device Photograph			Installed Coupons / Device Photograph			
 				 18/07/2025 14:21			 18/07/2025 14:33			
Comments This location has suffered some pitting on the sealing face so it should be repaired/refaced as soon as possible. The retrieved coupon holder was only 2.12" long so a longer 11.5" holder was installed. An even longer holder could potentially be installed, but this would mean moving up to the 37" Retrieval Tool. Using the 37" tool would however be much more difficult, as the tool would need to be moved up onto the high scaffolding tower.										

Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	New Probe Size / Specification	Probe Readings	Date	Tool Used	Location Access	Remedial Actions
53-XCP-1169	6-OC-530044-15101 6" Oil from BH-3 WHJ to PS3-B Production Manifold	150psi	9 o Clock	Install New ER Probe	9.5" Flush Strip 4705-S8-K03005-9.75-0	Check – 795 Div – 14.9 M.Loss – 0.059 CR – N/A	18-07-2025	25"	Handrail must be removed	Modification to Handrail

Access Fitting Picture


Removed Device


New Probe




Comments

The Access Fitting at this location is obstructed by a handrail. The handrail was successfully removed by the mechanical team, but it took quite some time and proved very challenging. It is recommended that a permanent modification be made to the handrail so future servicing is easier.

Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	Work Performed	Probe Readings	Date	Tool Used	Location Access	Remedial Actions
43-XCP-1036	24-P-430015-1101 24" Gas Line from HP Gas Header to E4303 2 nd Stage Condenser	N/A	12 o Clock	External Service of Access Fitting	Cap removed, threads brushed and re-greased	Obtained Previously	18-07-2025	N/A	Access OK	None Required
Access Fitting Picture										
										
Comments										

Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	Work Performed	Probe Readings	Date	Tool Used	Location Access	Remedial Actions
43-XCP-1038	12-P-43010-1101 12" Gas Line from MP Gas Header to E4302 2 nd Stage Cooler	N/A	12 o Clock	External Service of Access Fitting	Cap removed, threads brushed and re-greased	Obtained Previously	18-07-2025	N/A	Access OK	None Required
Access Fitting Picture										
										
Comments										

Tag No	Line No / Description	Pressure (psi)	A/F Orientation	Scope of Work	Work Performed	Probe Readings	Date	Tool Used	Location Access	Remedial Actions
43-XCP-1040	14-P-43001-1101 14" Gas Line from V5367 via LP Gas Header to V4301	N/A	12 o Clock	External Service of Access Fitting	Cap removed, threads brushed and re-greased	Obtained Previously	18-07-2025	N/A	Access OK	None Required
Access Fitting Picture										
										
Comments										

Observations & Recommendations

All possible work on PS3 has now been completed.

24 Hour Lookahead

The plan for Saturday 19th July is to return to Halul with all of the equipment

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