PT. AG IRM SERVIS INDONESIA

ABS In-Water Specialist
Cert No. 21-4655696-A
ABS ESP Hull Gauging
Cert No. 21-4655692-A
ABS Remote Inspection Techniques
Cert No. 21-4996595-A
SKUP MIGAS NDT ★★★

VISUAL INSPECTION REPORT

Job Details

Client	: PT. Armada Gema Nusantara	***Material***	: PIPE SMLS A106 Gr B
Project Name	: CMP Project	***Design Temperature***	: 65
P.O. Number	: 4500215518	***Operating Temp***	: AMB
Location	: HCML FIELD MADURA Straits, East Java	***Design Pressure***	: 10 Barg
Installation	: FPSO KAS III	***Operating Pressure***	: 5-7 Barg
Date of Inpection	: 2024-05-24	***Rep Line***	: No
Report No	: 20AGN22191410PP377	***Corrosion Loop***	: 059-IN/UN-C
AG IRM Project No	: 20AGN2219	***Line From***	: NITROGEN DISTRIBUTION HEADER (MARINE PIPE RACK)
Module	: M35	***Line To***	: BLANKET GAS FOR COOLING WATER EXPANSION VESSEL (65-VB-6710)2-AC110-59-BG-4202-V
Component ID	: 2-AC110-59-IN-4260-V	***P&ID***	: 21022-BAE-75900-PR-DW-100321022-BAE-76400-PR-DW-1006
Component Type	: Piping		

Inspection Summary

Isometric Index	*Results*	*Rectification WO No.*
2-AC110-59-IN-4260-V	Fit For Service	N/A

External Inspection Checklist for Process Piping

2-AC110-59-IN-4260-V

Section 1 - Structural

a) Check and enscure expansion joints are not bent out of shape.
b) Check for any dents and misalignments,overhung, inadequate support and vibration that can cause rupture.

Status	Discrepancy	Photo ref
N/A	N/A	
N/A	No dicrepancy	

Section 2 - Piping Supports

a) Check for missing supports that can cause the pipe to rupture under weight.

Status	Discrepancy	Photo ref
N/A	No discrepancy	

Section 3 - Coating

a) Asess the coating condition of the piping system.

Status	Discrepancy	Photo ref
N/A	Coating deterioration	

Section 4 - Leaks

a) Check for leaks and identify locations.

Status	Discrepancy	Photo ref
N/A	No dicrepancy	

Section 5 - Corrosion

a) Identify corroded areas and record them. Take measurements and record pit depth.

Status	Discrepancy	Photo ref
N/A	Surface corrosion	

Section 6 - Insullation and Insulation Penetrations

a) Ensure all cladding is sealed.
b) Seal all exposed areas.
c) Expose some insulation to check the pipe surface for corrosion.

Status	Discrepancy	Photo ref
N/A		
N/A		
N/A		

Section 7 - Small Bore Attachments

a) Ensure all small bore attachments are not vibrating or cracking.

Status	Discrepancy	Photo ref
N/A		

Section 8 - Threaded Plugs

a) Check condition of threaded plugs to ensure they are not corroded.

Status	Discrepancy	Photo ref
N/A		

Legend

Status ✓ : Drawing as per actual condition, no anomaly
Status X : Drawing as per actual condition, found anomaly
Status N/A : Not exist at drawing and actual condition, no access for inspection

Comments

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External visual was performed in accordance with API 570, with the findings detailed in this report. The piping was online, opened and at elevated temperature at the time of inspection. Comments as follow:

1. Generally all piping segment was visually in a good condition with no cracking, leaking, bulging, distortion, vibration or mechanical damage present.

2. Finding :
- Piping has painting as external corrosion control,
- petrolatum paste / grease use as corrosion control for treaded part
- advance corrosion flange and stud bolt with with indication of initial stage metal loss
- coating dateoriation leading to corrosion and rust propagation at suppot P6, Small Bore Connection , line pipe P5

3. Recomendation :
- Recommended recommend to remove rust/surface corrosion and to apply proper protective coating based company specification and coating (painting) manufacture application guideline to stop further external corrosion
- Recomended to replace in kind corroded bolting (stud bolt) with suitable protective coating ie: FCC (fluorocarbon coating)
- Recommend to set up inspection strategy/program to detect the concealed wall loss, advance NDT such as PAUT and SRUT will be an option.
- it is imperative to perform regular condition monitoring to ensure detection before catastrophic failure.

4. Consider to label/tagging the piping line so that it can be easily traced and identified (reff to ISO 14726:2008 or ANSI A13.1-2015)

5. Perform next external inspection in a regular basis (every 5 years) as per API 57

	Name:	Qualification	Signature
API Inspector	Ercarter E. Silalahi	API 570/API 510	

VISUAL INSPECTION REPORT

Photographic Support

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VISUAL INSPECTION REPORT

Isometric