



Gbaran IVD Sustain Close-Out/Post Implementation Review Session

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AGENDA

		Time
1	HSSE and Agenda	5 mins
2	Welcome/Opening Remarks	5 mins
3	Introduction to IVD	5 Mins
4	Review of Objectives of Gbaran IVD	5 Mins
5	Review of Gbaran Compressor Trips (2022-2024)	5 Mins
6	Review of Gbaran Compressor 2024 Availability	
7	Review of Gbaran Compressor Related Deferment and Total Flare Volume (2022-2024 YTD)	5 Mins
8	Highlights from IVD and Actions Moved to Fit4/MTO	5 Mins
9	Learnings and Challenges	5 Mins
10	Q&A	10 Mins
11	Closing Remarks	5 Mins

Safety and Health

At Home



Make sure your workspace is ergonomically sound



Ensure adequate lighting in the room when you work



Clean surfaces frequently



Maintain clear walkways and fire exits



Have an emergency and evacuation plan in place

On site



Know locations for fire alarms, extinguishers, emergency exits, defibrillators, and muster points



Make sure you can hear the fire alarm



Know what the fire alarm sounds like

On the move



Do not take this call, or any other call, while driving – ever



Do not use any hands-free device – Bluetooth, built-in, etc. – whilst driving

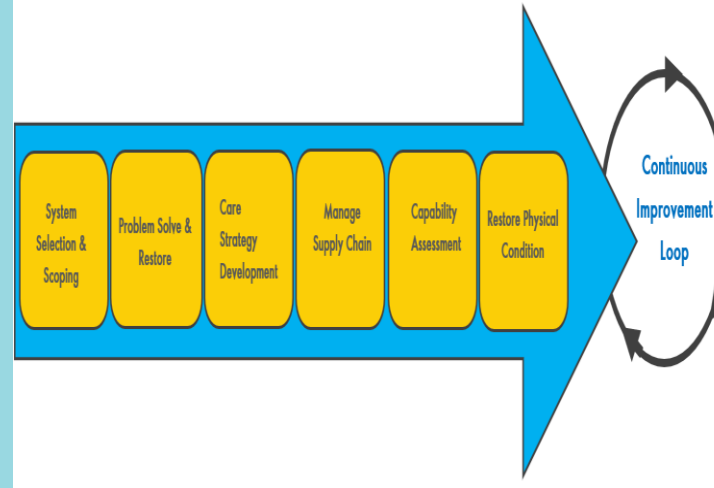


In the event of any kind of emergency, please leave the call – promptly and safely

Integrated Value Delivery Process

What is IVD?

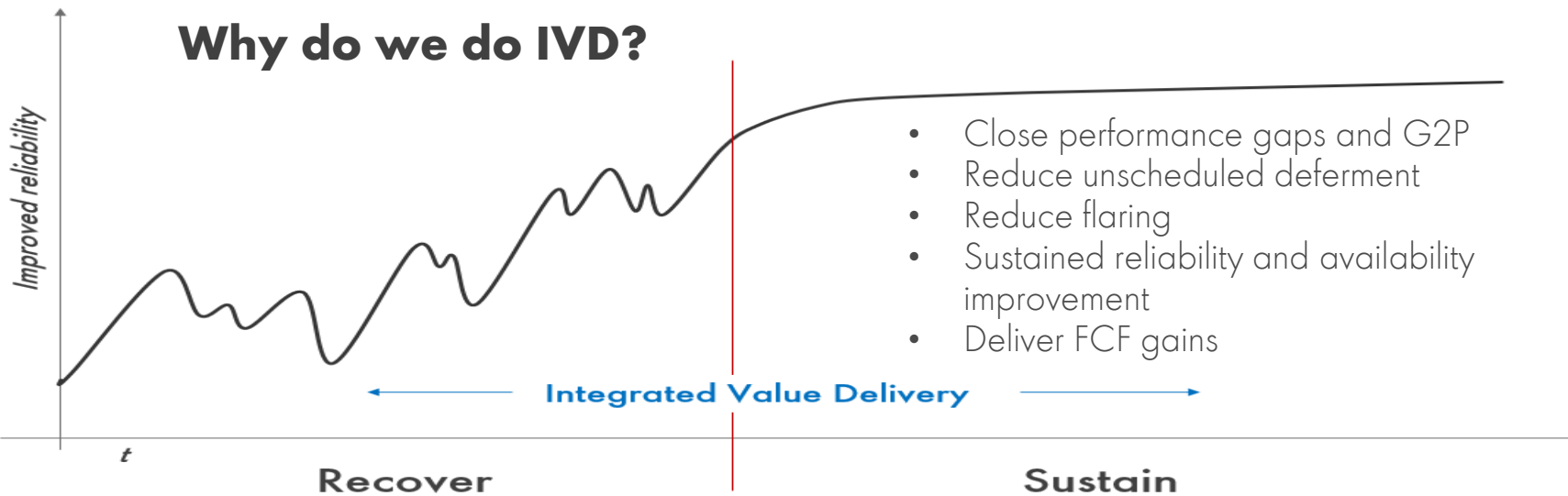
- An E2E focused improvement on a system that is viewed as a reliability performance outlier, with potential to derive value improvement at speed.
- Improvement scope kept manageable (**months** not years) leveraging Agile and Cadence.
- Cross-functional integration with a reliability engineer at the center, and Asset LT sponsorship.
- AMS MAC and MTO at its core, but fully integrated with other key AMS processes to maximize and sustain value.



Who is involved?

- Frontline Leaders
- Asset Operations & Maintenance engineers
- Maintenance Execution and AGG Team
- CMMS and the ORCSU
- Reliability Engineers and EPST
- Supply Chain and Logistics
- Discipline Engineers and TAs
- Capability Advisors
- WRFM

Why do we do IVD?



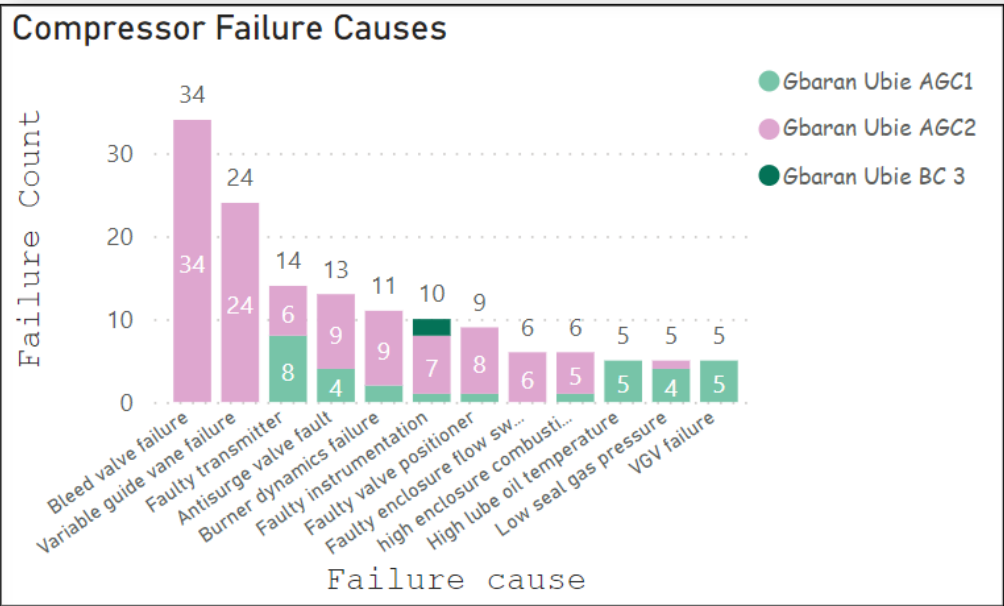
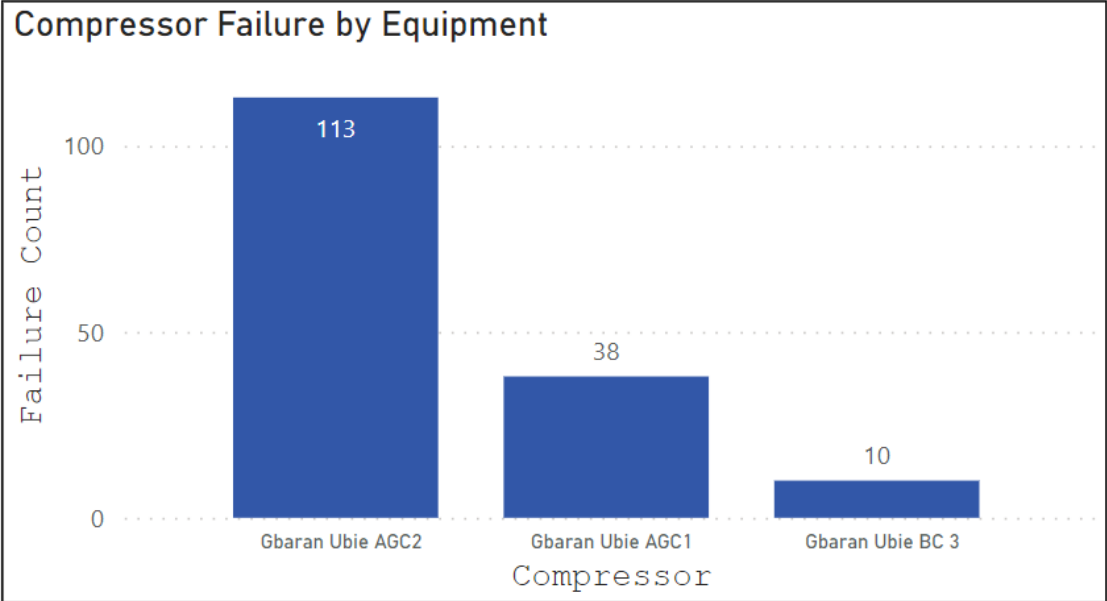
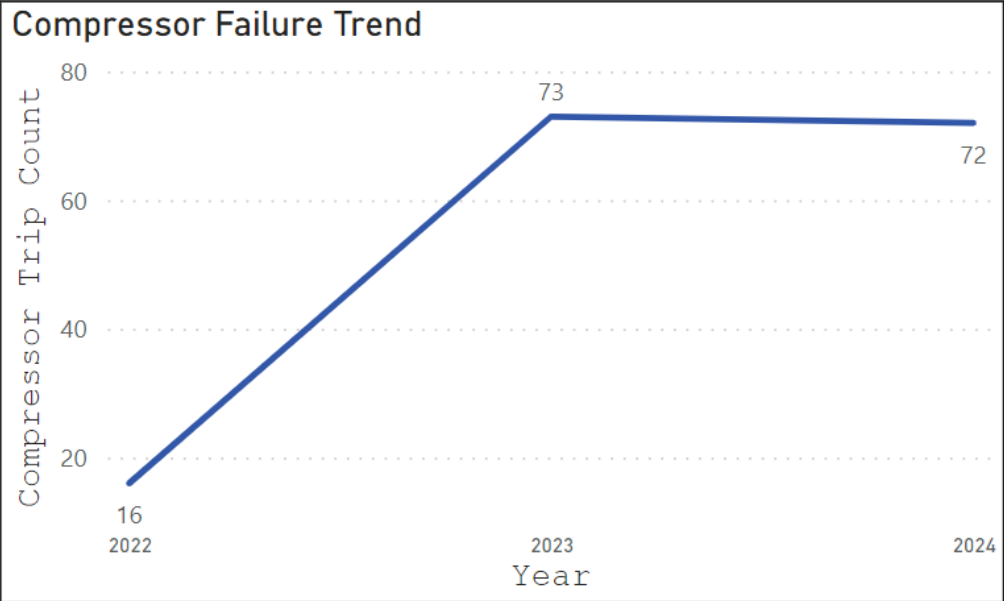
Review of Objectives of Gbaran IVD

The IVD workshop for Gbaran was kicked off in October 2022. The Objectives of the Gbaran IVD were:

Improve SPDC compressor reliability and reduce compressor related plant trips to:

- Reduce Compressor Related deferment by 25%
- Reduce flaring by 25%

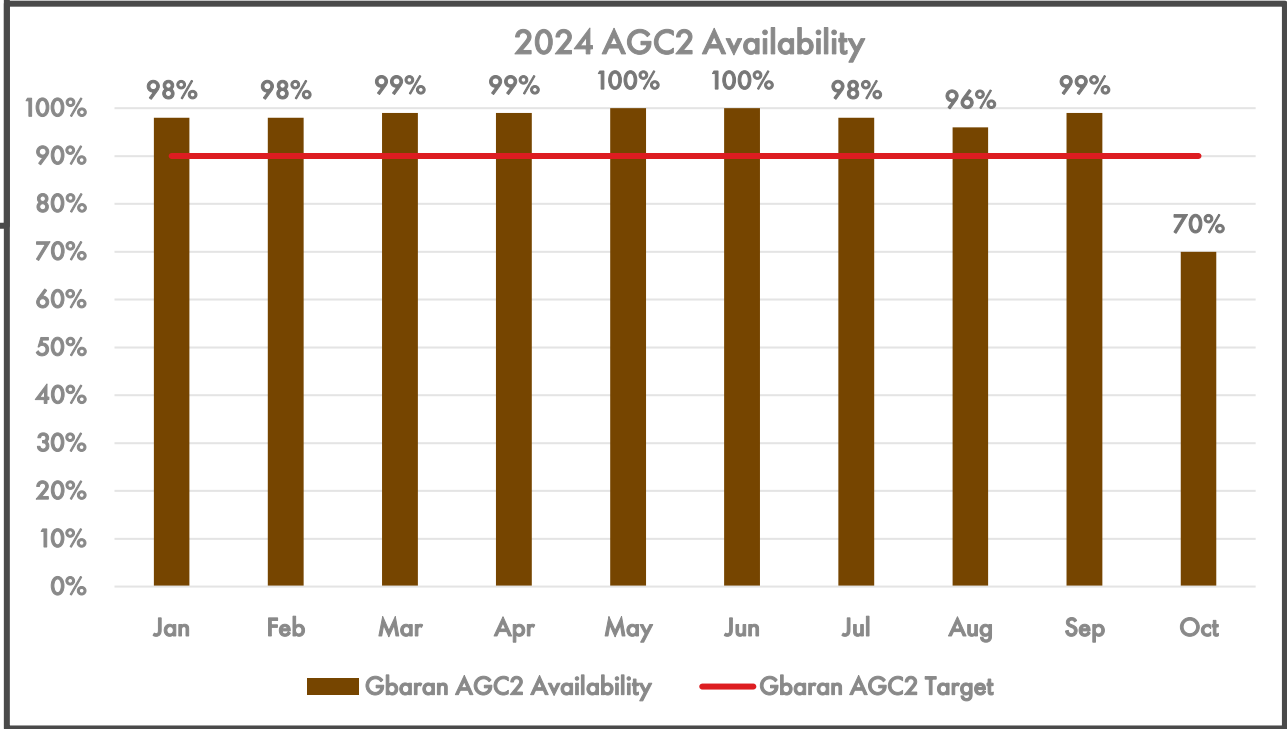
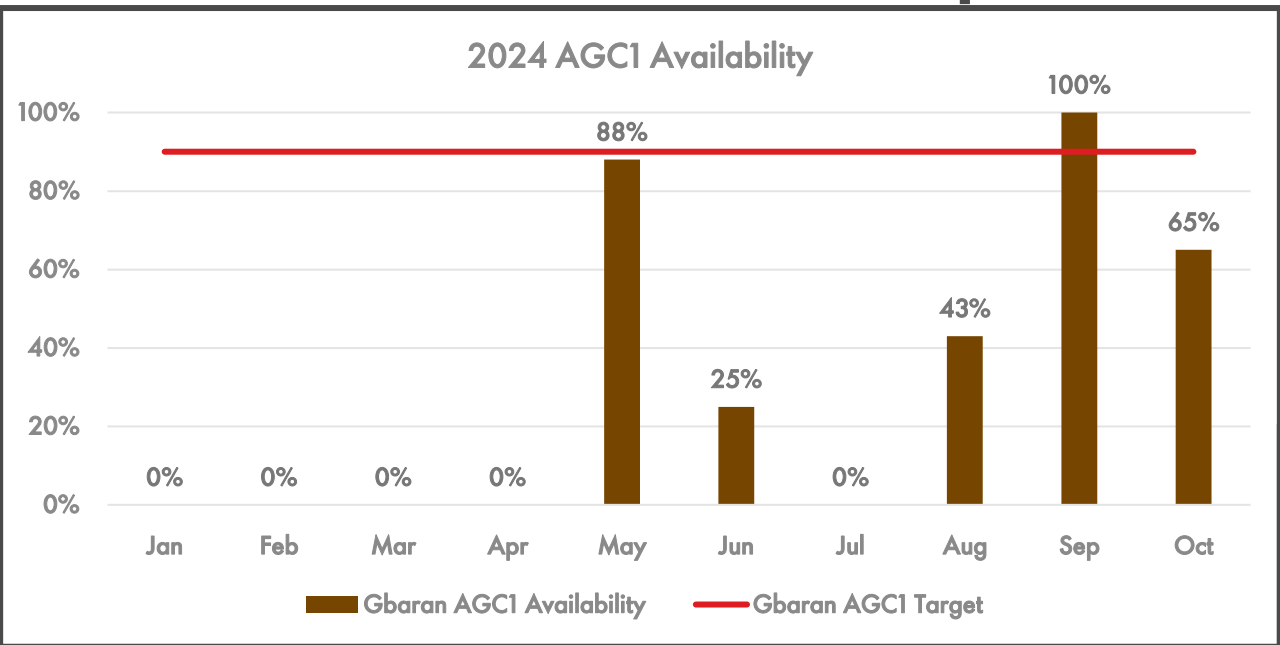
Review of Gbaran Compressor Trips (2022-2024)



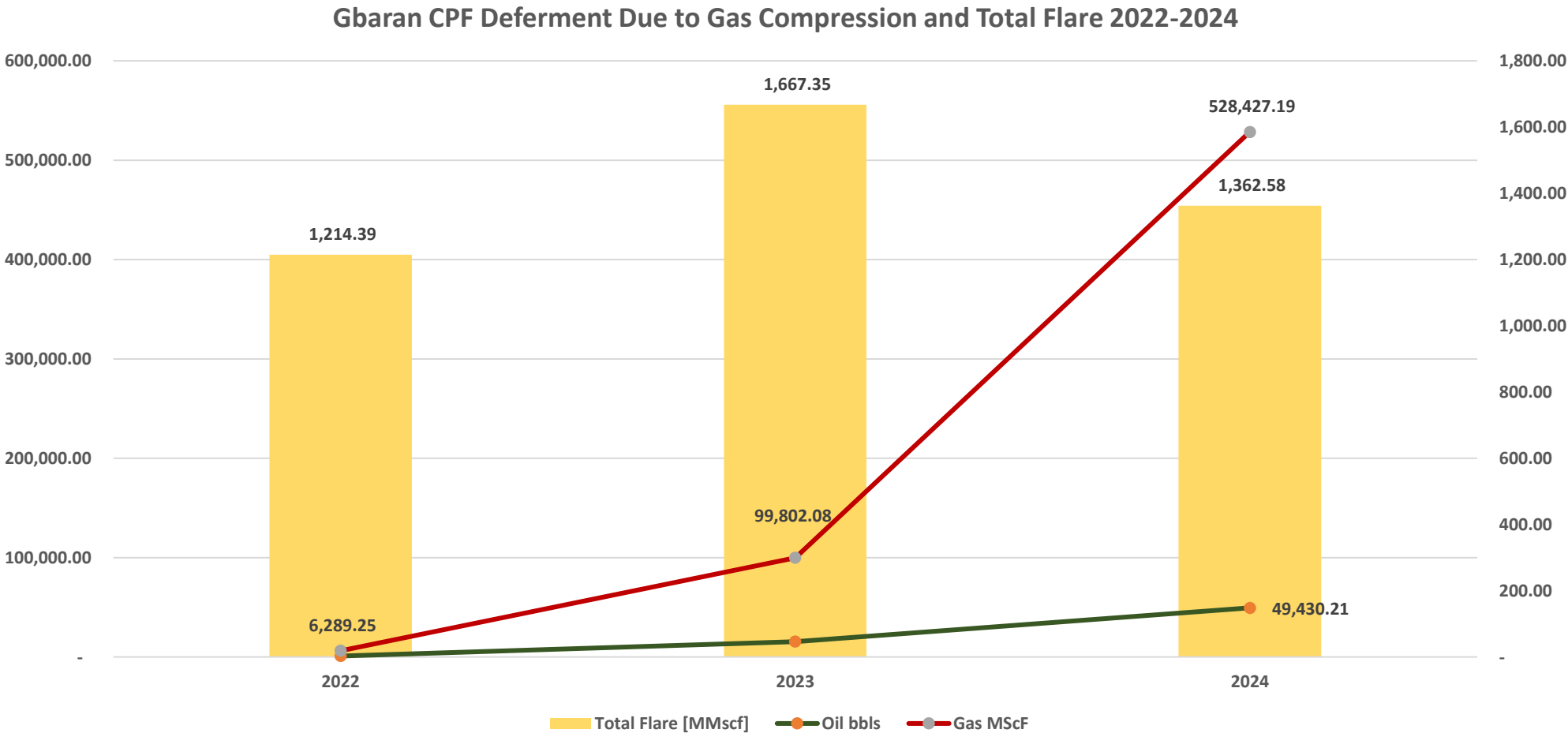
Details

Trip Date/Time	Compressor	Comment	Startup Date/Tlme
10/25/2024 9:11:00 PM	Gbaran Ubie AGC2	Low lube oil pressure alarm "PT6"	29/10/2024 11:36:00
10/25/2024 3:29:00 PM	Gbaran Ubie AGC2	PT GG interstage bleed air supply hand valve failure to open"ZS839"	25/10/2024 20:25:00
10/21/2024 5:44:00 PM	Gbaran Ubie AGC2	PT GG interstage bleed air supply hand valve failure to open	21/10/2024 23:00:00
10/16/2024 6:01:00 AM	Gbaran Ubie AGC1	Anti-surge valve position fault & On-skid vent valve failure to open	26/10/2024 20:14:00
9/20/2024 10:16:00 AM	Gbaran Ubie AGC2	PT GG interstage bleed air supply hand valve failure to	20/09/2024 11:24:00

Review of Gbaran Compressor Availability (2024)



Review of Gbaran Compressor Related Deferment and Total Flare Volume (2022-2024 YTD)



Highlights from IVD and Actions Moved to Fit4/MTO

15 Actions and 89 Sub Actions Closed.

- ❑ Obsolescence Management plan updated and signed off.
- ❑ AGC blowdown valve installed in May 2023
- ❑ New Seal Gas Heater Installed
- ❑ RCA on HMI freezes completed.
- ❑ Instrument Air Compressor Electric motors RCA completed, and solution implemented.
- ❑ Deployment of new alignment kit for fire and gas detectors.
- ❑ Updated maintenance strategy for Fire and Gas Detection - updated frequency and included all equipment in loop
- ❑ Implemented downgrade of executive action on F&G at condensate spiking to OSD2 from ESD.
- ❑ AGC1 Main Lube Oil Pump Replaced
- ❑ Flushing of AGC1 seal gas lines

IVD Actions Migrated to Fit4/MTO

Procure AGC1 Seal Gas Transmitters.

Conduct Competence Enhancement for Personnel on SGT400 Control System and Compressor Dry Seal Changeout

Order Gas Turbine Air Flow Switches

Instrument Air Compressor HMI Upgrade

Carry Out Alternator Milestone Inspections

Learnings and Challenges

- ❑ Weekly Cadence Approach provided visibility for actions.
- ❑ Leadership focus had a positive effect on front line care & attention
- ❑ Long Time to Implement IVD (October 2022- Date) defeats purpose of IVD.
- ❑ Longer Term Solutions may be abandoned when Short term operational actions give improvement.
- ❑ Budget constraints leading to delay of executing agreed actions
- ❑ Supply Chain bottlenecks
- ❑ Clear Ownership (On Site and Support functions) of IVD actions will improve Process Efficiency
- ❑ Causal Approach to handling Post IVD emerging threats would improve delivery and equipment uptime.
- ❑ Generic actions are difficult to close.
- ❑ Actions on IVD heavily focused on F&G, Turbines affecting alignment to objectives.
- ❑ Clear Communication and Plan for milestone activities will improve delivery.



Q&A

