

POST JOB REVIEW

TEMANA TANGO SAND CLEAN-OUT

PREPARED BY	APPROVED BY
IKRAM MUSLIM / IMAN RAZAK	FARIS FIRDAUS

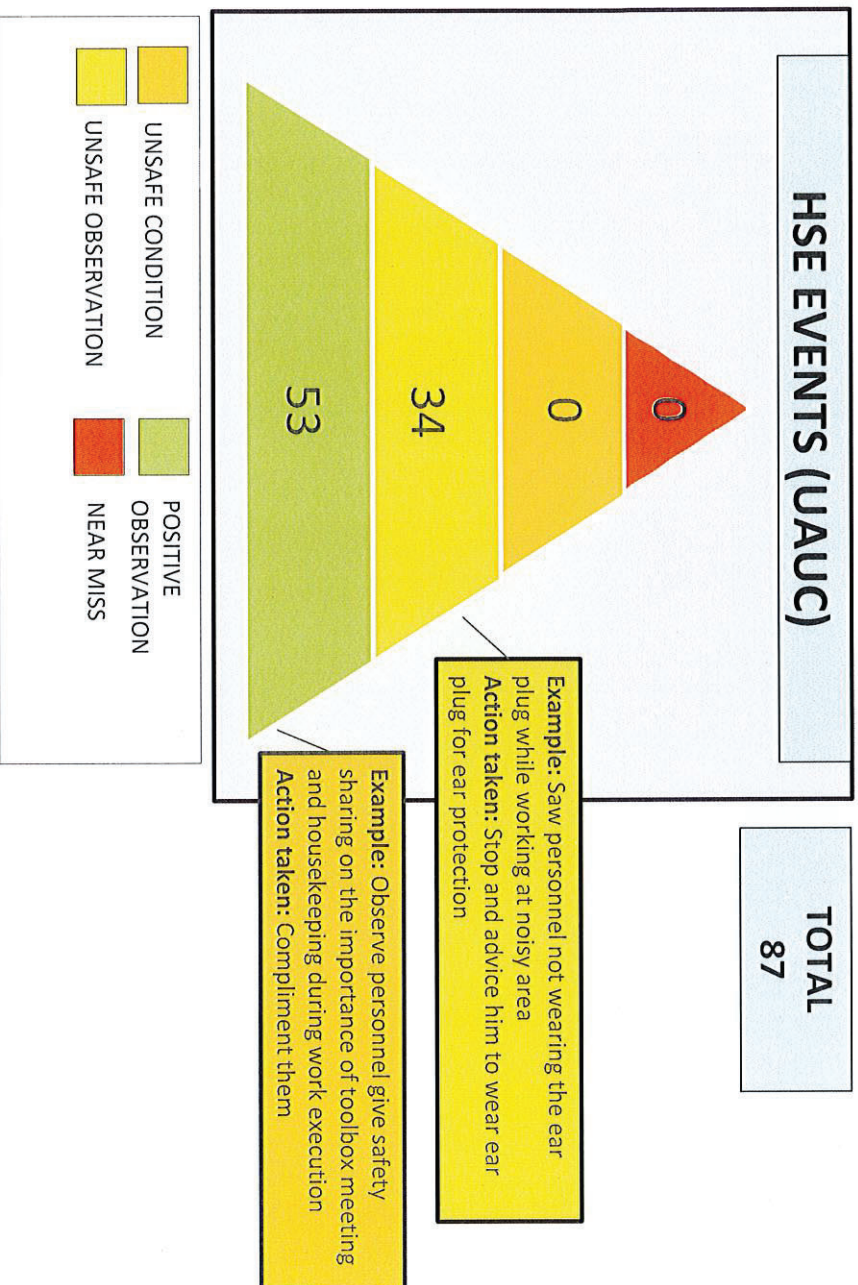


PRESENTATION OUTLINE

- ✓ HSE & Governance
- ✓ Problem Statement
- ✓ Background
- ✓ Operation Summary
- ✓ Result Summary
- ✓ Operation Analysis
- ✓ Conclusion



HSE & GOVERNANCE



TEMANA T-77S



OPERATION SUMMARY

PLANNED

Well	Run	Description
T-77S	1	Perform Dummy Run (Basic PLT)
	2 - 12	Perform 1 st Phase Wellbore Cleanout Run
	13 - 45	Perform 2 nd Phase Wellbore Cleanout Run



OPERATION SUMMARY

ACTUAL

Date	Well	Run	Description	Remarks
28/06/2023	T-77S	1	<ul style="list-style-type: none"> Perform Dummy Run Toolstring: CBH + 2.13" SWV + 2.13" ART + 2.50" TRACTOR + XTU + QPS + PRT + PGR + CCL + 2.0" TWB + 2.0" TWB + 2.0" TWB + 2.0" TWB + 2.0" TWB + 1.69" BUL SITHP: 392 PSI Tag Fluid Level 731.7 ft-MDDF uncorrected depth RIH with 90 ft/m, slow at restriction and pick up weight every 300 ft. Reach HUD at 2081.26 ft-MDDF (uncorrected depth). Perform correlation pass from 1900 ft (SPM#3) - 1610 ft-MDDF (SPM#1) Perform 2nd pass of correlation from HUD at 2082.36 ft-MDDF (corrected depth) to 800 ft-MDDF (SPM#1) to make sure on depth. 	COMPLETE
29/06/2023 – 12/7/2023	T-77S	2 - 32	<ul style="list-style-type: none"> Perform SCO Run #1 – SCO Run #30 Toolstring: CBH + 2.13" SWV + 2.13" ART + 2.13" CCL + 2.50" TRACTOR + 2.50" DDR + 2.50" PRECISION COLLECTOR + 2.625" ROCK BIT SITHP: 400 PSI RIH with 90 ft/m, slow at restriction and pick up weight every 300 ft. Perform correlation pass #1 from HUD to 1900 ft-MDDF (SPM#3) Depth covered: 2082 – 2160.94 ft-MDDF 	COMPLETE

OPERATION SUMMARY

ACTUAL

Date	Well	Run	Description	Remarks
13/7/2023	T-77S	33	<ul style="list-style-type: none"> Perform Scratcher Run Toolstring: CBH + 2.13" ART + 2" TWB + 2" TWB + 1.69" TWB + X-OVER + 3" WIRE SCRATCHER SITHP: 500 PSI RIH with speed 15 ft/min, slow when approaching TR-SCSSSV. Tag HUD at 466 ft-MDDF (uncorrected depth). Perform up and down passes from 467 ft-MDDF to 446 ft-MDDF for 4 times. Observe tension drop from 370 lbs to 330 lbs when passing 466 ft-MDDF. Observe pick up tension increase from 440 to 540 lbs when passing 466 ft-MDDF. 	COMPLETE
14/07/2023 – 16/07/2023	T-77S	34 - 36	<ul style="list-style-type: none"> Perform Sinker Bar Run #1 - #3 Toolstring: CBH + 2.13" ART + 2" TWB + 2" TWB + XTU + CCL + BUL SITHP: 500 PSI RIH with speed 15 ft/min from surface to 400 ft-MDDF. Pick up weight every 100 ft. Reach TR-SCSSV at depth 463.4 ft-MDDF (uncorrected depth). Perform correlation pass. Depth offset : -2.1 ft RIH back to TR-SCSSV depth. Reach at depth 467 ft-MDDF. Perform yoyo area TR-SCSSV 15x times. No abnormalities found. No indication changes on SWCP Deleum. 	COMPLETE

OPERATION SUMMARY

ACTUAL

Date	Well	Run	Description	Remarks
17/7/2023	T-77S	37	<ul style="list-style-type: none"> Perform Drift Run Toolstring: CBH + 2.13" ART + 2" TWB + 2" TWB + XTU + CCL + ASB + XO + 2.735" DRIFT SITHP: 500 PSI RIH with speed 15 ft/min from surface to 400 ft-MDDF. Pick up weight every 100 ft. Reach FC at depth 458.233 ft-MDDF (uncorrected depth). Perform correlation pass. Depth offset : +0.312 ft Perform 2.735" Drift Run. No HUD observed. Final Depth: 461.84 ft-MDDF. Running weight: 560 lbs. Pulling weight: 666 lbs. 0.5 ft of 2.735" Drift pass through TR-SCSSV. 	COMPLETE
22/07/2023 – 23/07/2023	T-77S	38- 40	<ul style="list-style-type: none"> Perform SCO Run #31 - #33 Toolstring: CBH + 2.13" SWV + 2.13" ART + 2.13" CCL + 2.50" TRACTOR + 2.50" DDR + 2.50" PRECISION COLLECTOR + 2.625" ROCK BIT SITHP: 480 PSI RIH with 50 ft/m, slow at restriction and pick up weight every 300 ft. Perform correlation pass #1 from HUD to 1900 ft-MDDF (SPM#3) Depth covered: 2160.59 – 2170.7 ft-MDDF 	COMPLETE

OPERATION SUMMARY

FAILURE DETAILS

Date	Event Description
20/6/2023	<ul style="list-style-type: none">• At 1530 hours, after PETI inspection onsite, after around 2 hours running, power supply from powerpack shutdown. Found AVR blown (resistor and fuse). Proceed to replace AVR with backup in spares inventory.• PP Gen parameters post AVR replacement;• RESULT - NORMAL• Line 1 – 2 : 112.8 VAC / 60 Hz / F1F2 12Vdc• Line 1 – 3 : 225.9 VAC / 60 Hz / F1F2 12Vdc• Line 2 – 3 : 112.8 VAC / 60 Hz / F1F2 12Vdc
21/6/2023	<ul style="list-style-type: none">• At 1030 hours, same problem occurred. Found 2nd AVR blown (capacitor and fuse). Proceed to shutdown powerpack and replace with additional AVR sent by town.• PP Gen parameters post AVR replacement;• RESULT - NORMAL• Line 1 – 2 : 113.8 VAC / 60 Hz / F1F2 12Vdc• Line 1 – 3 : 225.9 VAC / 60 Hz / F1F2 12Vdc• Line 2 – 3 : 112.8 VAC / 60 Hz / F1F2 12Vdc
22/6/2023	<ul style="list-style-type: none">• At 2030 hours, same problem occurred. Found 3rd AVR blown (capacitor and fuse). Proceed to shutdown powerpack and replace with additional AVR sent by town.• PP Gen parameters post AVR replacement;• RESULT - NORMAL• Line 1 – 2 : 113.8 VAC / 60 Hz / F1F2 12Vdc• Line 1 – 3 : 225.9 VAC / 60 Hz / F1F2 12Vdc• Line 2 – 3 : 112.8 VAC / 60 Hz / F1F2 12Vdc

OPERATION SUMMARY

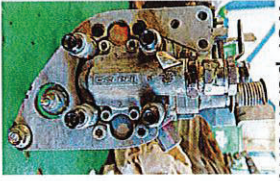
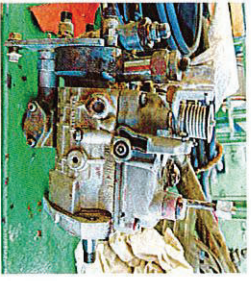
FAILURE DETAILS

Date	Event Description
23/6/2023	<ul style="list-style-type: none">• Powerpack shutdown suddenly. AVR in good condition before powerpack started to shutdown.• Checking wire for electrical connection of powerpack and AVR. All in good condition.• Replace oil water separator and fuel filter.• Recheck needle plunger condition. All good.• Disassemble and clean up diesel strainer.• Checking diesel flow to fuel pump. Noticed diesel can flow correctly.• Disassemble injector to the combustion chamber. Noticed diesel fuel can be supplied to combustion chamber• Packing powerpack for lifting to MVDP.• Replace powerpack with backup powerpack from town.
28/6/2023	<ul style="list-style-type: none">• At 1300 hours, day shift crew found out that the winch brake cannot be turned off.• Engineers and crews diagnoses the problem and found out that the WABCO pump is clogged. Thus, proceeded to clean it until the pump can move properly.• Day shift crew also found out that the air supply from ASEP Cabin Unit to Cable Winch is clogged with water. Thus, proceeded to purge water from the air supply first before connecting it back.• Currently, Cable Winch is functioning properly
7/7/2023	<ul style="list-style-type: none">• Unit trip due to air-condition at the unit require higher voltage than the voltage set at the UVR (Upper Voltage Relay).• Proceed to change the upper voltage and lower voltage setting at the UVR (Upper Voltage Relay).• No unit trips reported after resetting the UVR (Upper Voltage Relay).

OPERATION SUMMARY

POWERPACK FINDINGS AND REPORTS

Date	Event Description
3/7/2023	<ul style="list-style-type: none">• Power Pack SN#103055 arrived at Labuan Base.
4/7/2023	<ul style="list-style-type: none">• Unmount and Take Off the Generator unit from the power pack.• Send out the generator to OM E&I (M) Sdn Bhd to perform further inspection going through the internal parts (rotor, main stator, main field rotor, etc.)• Check the fuel system for any clogged lines – No clogged lines• Replaced fuel filters – Done• Bypass fuel to confirm fuel sentinel functionality and possible clogged line. – ok• Dismantle the overspeed valve to phase out airflow clogged – Done• Test low fuel line pressure from the tank to the fuel pump for any clogged – ok• Test high fuel line pressure from the fuel pump to the injector - intermittent supplies to injectors• Suspected Fuel injectors and Fuel Pump need to service and calibrate.• Take off fuel injectors and fuel pumps from the power pack and send them to a third party for calibration and detailed servicing.
7/7/2023	<ul style="list-style-type: none">• Post Inspection end result on the generator unit done by OM E&I (M) Sdn Bhd, comes out with a list of findings and recovery work scope



OPERATION SUMMARY

POWERPACK FINDINGS AND REPORTS

Description

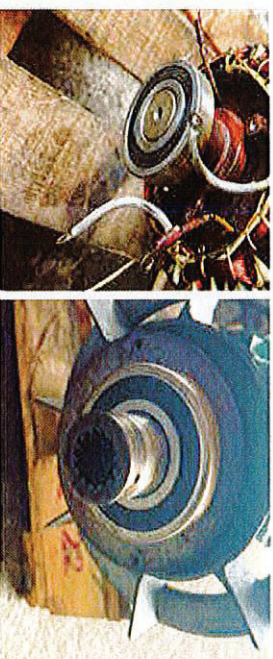
Pictures

Finding:

DE & NDE bearing worn out

Recovery Action:

Replaced with new bearings.

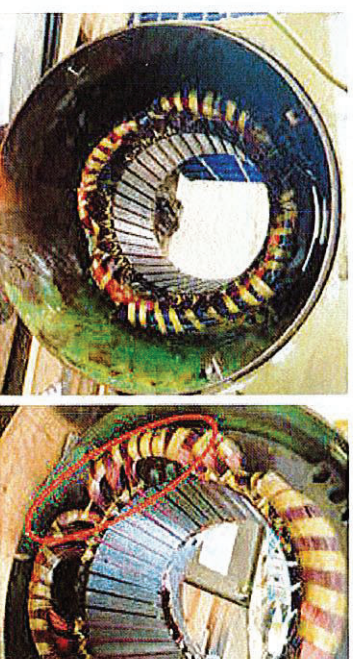


Finding:

Main Stator Winding
overheated phase 1

Recovery Action:

Rewinding new main stator
winding



OPERATION SUMMARY

POWERPACK FINDINGS AND REPORTS

Description

Pictures

Finding:

Main field rotor IR low

Recovery Action:

Wash, dip varnish and oven baking winding



Finding:

Exciter Stator winding overheated

Recovery Action:

Rewinding new exciter stator winding



OPERATION SUMMARY

POWERPACK FINDINGS AND REPORTS

Description	Pictures
<p>Finding: Main field rotor IR low</p>	
<p>Recovery Action: Wash, dip varnish and oven baking winding</p>	
<p>Finding: Exciter Stator winding overheated</p>	
<p>Recovery Action: Rewinding new exciter stator winding</p>	
<p>Other servicing:</p> <ul style="list-style-type: none">• The rotor carries out buffing, cleaning, and re-balancing.• Exciter rotor wash, dip varnish, and oven baking.	

CONCLUSION

LOWLIGHT

- Powerpack Issue:
 1. Unable to Start-Up
 2. Auto Voltage Regulator (AVR) Malfunction)
 - Winch Brake Unable to Release
 - Air-Condition Trips

HIGHLIGHT

- No LTI reported throughout operations.
- No cases of tool or cable stuck.
- Managed to complete the whole 1st Phase of Wellbore Cleanout.



CONCLUSION

ROOT CAUSE

- Fuel injectors and Fuel Pump need to service and calibrate
- Generator unit was sent to 3rd party OM E&I (M) Sdn. Bhd. to perform further inspection going through the internal parts (rotor, main stator, main field rotor, etc.)
- WABCO pump is clogged,
- The upper voltage and lower voltage setting at the UVR (Upper Voltage Relay).

WAY FORWARD

- Take off fuel injectors and fuel pumps from the power pack and send them to a third party for calibration and detailed servicing.
- Post Inspection end result on the generator unit done by OM E&I (M) Sdn Bhd, comes out with a list of findings and recovery work scope.
- Proceed to clean WABCO pump until the pump can move properly.
- Proceed to change the upper voltage and lower voltage setting at the UVR (Upper Voltage Relay). No trips reported after this reset.



THANK YOU



PREPARED AND SUBMITTED BY

SIGNATURE 

NAME : NUR IMAN BIN ABDUL RAZAK

POS : JUNIOR FIELD ENGINEER

DATE :

VERIFIED BY

SIGNATURE

NAME :

POS :

DATE :

AGREED BY

SIGNATURE

NAME :

POS :

DATE :

