

- DIVING CERT. No.:
- LIFTING CERT. No.:
- LoEAC. No.:
- JHA. No. JHA 01254 DA
- EXCAVATION CERT. No.:
- ELECTRICAL ISOLATION CERT. No.:
- PHYSICAL ISOLATION CERT. No.:
- RADIATION CERT. No.:
- SAFETY SYSTEM BYPASS/OVERRIDE C
- VEHICLE ENTRY CERT. No.:
- PORTABLE ELECTRICAL TEMPORARY II
- WORK METHOD STEPS. No.:
- SUPPORTING DOCUMENT. No: NOWIP
- WORKING AT HEIGHT CERT. No.:
- VENTILATION PLAN. No.:
- PRESSURISED HABITAT CERTIFICATE

SECTION 6: ACKNOWLEDGEMENT REQUIRED AS IDENTIFIED BY APPROVING AUTHORITY (e.g. CSR)

Position: SR

Name: Saiful Akmal M Noor M Noor

Initial/Date: 4 Oct 2024 10:53 AM

SECTION 7: AUTHORIZING AUTHORITY

Name: zainuddin yaacob

Signature: Submitted

Date: 22 Oct 2024

Time: 9:34 PM

SECTION 8: JOINT SITE VISIT BEFORE WORK COMMENCES (AAR & RA/WL)

I have personally checked the area and equipment to be worked on and I am satisfied that the work requested can be carried out safely. Reason why:-

APPROVING AUTHORITY

Name: M Ariffuddin B A Halim (PMO/Upstream)

Signature:

Date: 24 Oct 2024 Time: 1:46 PM

SECTION 9: DAILY PERMIT RETURN AND SUSPENSION (WL & AAR) - due to e.g. End of Shift, Stop Work, Drill, Eme

Date/Shift	Day	/Night	/Day	/Night	/Day	/Night	/Day	/Night
24/10/2024								
25/10/2024								
26/10/2024								
27/10/2024								
28/10/2024								
29/10/2024								

SECTION 10: DAILY REVALIDATION & ENDORSEMENT (WL, AAR & AA)

Date/Shift	Day	/Night	/Day	/Night	/Day	/Night	/Day	/Night
24/10/2024								
25/10/2024								
26/10/2024								
27/10/2024								
28/10/2024								
29/10/2024								

SECTION 11: HANDBACK & CLOSE (WL, AAR & AA)

Zone 1 Zone 2 Non Hazardous Area Non Hydrocarbon Area

WORK ORDER NO.: SUB AREA: Main Deck

Equipment for Acid Wash Treatment on Well D-7

- ACTIVITIES (APPLICANT & AS)
- High Traffic
 - Hot Surface
 - Hydrocarbon
 - Liquid/Gas
 - Hydro-jetting
 - Lifting
 - Mercury
 - Metal Drilling
 - Needle Gun
 - Noise
 - Pressure
 - Test
 - Radiation
 - Rotating Equipment
 - Saw/Cold Cut
 - Scaffolding
 - Static Electricity
 - Steam
 - TENORM
 - Toxic substance/Chemical
 - Underground piping/cables/drains
 - Vehicle
 - Volatile Liquid
 - Wellhead Activities
 - Wireline Activities
 - Working at Height adequately
 - Working Overboard
 - Others:
- Note: AS is responsible to ensure hazards / hazardous activities are identified adequately

- PRECAUTIONS (APPLICANT/RA & AS)
- Fire extinguisher on work site
 - Locked/ventilated
 - Removal of Energy
 - Removal of Energy
 - Worksite: free of combustibles
 - Others:
 - Gas Monitor ing
 - Continuous
 - Every _____ HRS
 - Anticipation (tagging)
 - Meeting
- Additional Precautions:
- Note: AS is responsible to ensure worksite preparation/ precautions are identified adequately

- EQUIPMENT (APPLICANT/RA & AS)
- Face Protection
 - Fall Protection
 - Hand Protection
 - Personal monitoring Equipment
 - Personal Distress Unit
 - Personal Dosimeter/Film Badge/Survey Meter
 - Personal O2 Monitor
 - Chemical Boot
 - Others



JOB HAZARD ANALYSIS (JHA) WORKSHEET

JHA NO.	JHA 0025419A	PTW NO.	0025419	WORK PERMIT TYPE	Cold Work
FACILITY	PMA	LOCATION	ANGSI	SPECIFIC WORKSTATION	ANDP-D
EQUIPMENT NO.	D-7	WORK DESCRIPTION	To Perform Rig Up Pumping Equipment for Acid Wash Treatment on Well D-7		
OVERALL RISK RATING (Tick ✓)		<input type="checkbox"/> Low	<input checked="" type="checkbox"/> Medium	<input type="checkbox"/> High	<input type="checkbox"/> Very High

NOTE

1. JHA Shall be applicable for all work activities which required PTW.
2. Personnel carrying out the work shall be fully familiar with the written Work/Operating Procedures developed for the job. The Work/operating procedures shall describe, in step-by-step instructions, the correct method of executing the specified work.
3. Prior to commencement of work, the task-specific JHA shall be discussed amongst all personnel involved in the execution; and requirements contained shall be fully understood and agreed by all involved personnel.
4. Overall Risk Rating to be based on PETRONAS Risk Matrix 5x5
5. STOP WORK AUTHORITY to be enforced for any deviation from JHA job step

JOB STEP	DESCRIPTION OF JOB STEP	POTENTIAL HAZARD	POTENTIAL CONSEQUENCES	CONTROL BARRIERS	ACTION PARTY	MONITORING REQUIREMENT (Y/N)	RECOVERY BARRIERS	ACTION PARTY	MONITORING REQUIREMENT (Y/N)
1	Toolbox Meeting	H.20.01 H2S (hydrogen sulfide, sour gas) / *H2S (hydrogen sulfida, gas masam)	Hazardous gas, personal injury	Attended H2S Awareness Training	All Worker - db crew	N	Standby escape set at site	All Worker - db crew	Y
				To have H2S detector at all time	All Worker - db crew	Y	First aid kit and medical services.	Medic	N
		H.24.06 Other communicable diseases / Penyakit berjangkit lain	SPREAD OF INFECTIOUS DISEASE (COVID-19)	Good practice of personal hygiene	All Worker - db crew	N	Case isolation and effective treatment	All Worker - db crew	N
				Social distancing whenever possible	All Worker - db crew	N	Site clinic facilities / Medical Services.	Medic	N
		H.9.01 Weather / Cuaca	ADVERSE WEATHER CAN CAUSE AN ACCIDENT	Stop work for adverse weather conditions (heat stress etc.).	All Worker - db crew	N	Others-Stop work and go to safe sheltered	All Worker - db crew	N

2 Mobilize to worksite

		H.30.01 High-level noise / *Bunyi bising yang kuat	Hearing injury	Limit exposure duration through job rotation.	All Worker - db crew	N	Annual audiometric testing.	All Worker - db crew	N
		Pinch Point	Finger or hand injury	Wear Ear Plug/Ear Muff with sufficient noise reduction rating (NRE).	All Worker - db crew	Y	Others-Use double ear protection	All Worker - db crew	Y
3	Spot the equipment accordingly to space availability	Miscommunication	Personnel injury (Body injury) Equipment damage	Maintain safe distance from pinch point area	All Worker - db crew	N	Wear high impact glove	All Worker - db crew	N
		H.30.02 Intrusive noise / *Bunyi bising mengganggu	Hearing impairment	Conduct toolbox talk and make sure everyone clearly understands their task and associated hazard.	All Worker - db crew	N	Stop work and get clarification if not clear about the task	All Worker - db crew	N
4	Lifting pumping equipment by using crane	Pinch Point	Body injury	Limit exposure duration through job rotation.	All Worker - db crew	N	Job rotation.	All Worker - db crew	N
		Ergonomic/Bodily position	Back pain	Maintain safe distance from pinch point area	All Worker - db crew	N	Stop work and step back to assess the condition	All Worker - db crew	N
5	Manual lifting treating iron for surface line	H.26.11 Work Environment / Persekitaran Kerja	Slip, Trip and Fall (Body, hands and leg injury) & Defects on equipment	Ensure proper body posture while doing the job	All Worker - db crew	N	Seek immediate medical attention for back pain/injury	All Worker - db crew	N
		H.25.10 Incompatible hand controls / kawalan tangan yang tidak serasi	Finger injury	Work arrangement and procedures	All Worker - db crew	N	Others-Work condition/practice improvement	All Worker - db crew	N
6	Rig up 4" hose from storage tank to single pump	H.25.01 Manual materials handling / *Pengendalian barang secara manual	Personnel injury or back pain	Others-Correct manual material handling procedure	All Worker - db crew	N	Work condition/practice improvement	All Worker - db crew	N
		H.25.01 Manual materials handling / *Pengendalian barang secara manual	Personnel injury or back pain	Use right tool for the job	All Worker - db crew	N	Medical services.	Medic	N
7	Rig up treating iron from single pump to pumping tee and well injection	Pinch Point	Hand or finger injury	Apply buddy system	All Worker - db crew	N	Work condition/practice improvement	All Worker - db crew	N
		H.25.01 Manual materials handling / *Pengendalian barang secara manual	Personnel injury or back pain	Correct manual material handling procedures	All Worker - db crew	N	Others-Apply buddy system	All Worker - db crew	N
		Trapped Pressure	Personnel Injury	Correct hand placement/ positioning	All Worker - db crew	Y	Wear high impact glove	All Worker - db crew	Y
8	Connect hydraulic hose on pumping equipment	Trapped Pressure	Personnel Injury	Maintain safe distance from pinch point area	All Worker - db crew	N	First Aid/Medical Treatment	Medic	N
		Trapped Pressure	Personnel Injury	Bleed off any trapped pressure	All Worker - db crew	N	First Aid/Medical Treatment	Medic	N

9	Housekeeping work area	H.26.11 Work Environment / Persekitaran Kerja	Slip, trip and fall	Work arrangement and procedures Others-Maintain housekeeping during working period	All Worker - db crew All Worker - db crew	N N	Others-Stop work and step back to assess the condition	All Worker - db crew	N
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JHA PRECAUTIONARY CONTROL BARRIER (JPCB) CHECK

NOTE

1. Barriers to be extracted from JHA and timing for Barrier Verification Frequency to be agreed with PTW AA and PTW WL
2. JPCB check to be filled for every PTW revalidation.

No.	JHA Barriers (Date: <u>24/10/2014</u>)	2.00 pm	4.00 pm	Barrier Verification Frequency (Tick ✓ and times:amp where applicable)	Remarks
1	To have H2S detector at all time	/	/		
2	Standby escape set at site	/	/		
3	Wear Ear Plug/Ear Muff with sufficient noise reduction rating (NRR).	/	/		
4	Others-Use double ear protection	/	/		
5	Correct hand placement/ positioning	/	/		
6	Wear high impact glove	/	/		

To be filled every PTW suspension / stop work authority, daily

**DEBRIEF
(TO BE FILLED BY WORK LEADER)**

- What went well?
- What did not happen as planned?
- How can it be done better?
- Unsafe observations
- Other feedback from workers

Date:

Remarks: