



- ### NOTES
- FOR SYMBOL, LEGEND AND GENERAL NOTES, REFER P&ID'S NUMBER
 - P11671-11-99-08-2601
 - ALL EQUIPMENT AND INSTRUMENT TAG NOS. ON THIS DRAWING SHALL BE PREFIXED BY AREA CODE (11) AND PLANT AREA CODE (71) UNLESS SPECIFIED OTHERWISE.
 - PRESSURE TRANSMITTER TRIPS THE ESP ON HIGH PRESSURE THAN WHFP.
 - SPEED CONTROL OF ESP BY FLOW (WITH PRESSURE OVERRIDE) MAY BE CONSIDERED IN CASE BUBBLE POINT PRESSURE OF CRUDE IS LOWER THAN SELECTED WHFP.
 - INTEGRAL DOUBLE BLOCK & BLEED VALVES FOR ALL PRESSURE INSTRUMENT IS CONSIDERED.
 - "04" REPRESENTS 04A/04B/04C (2003 VOTING SYSTEM).
 - ESP TO TRIP ON HYDRAULIC LINE LOSS OF PRESSURE.
 - CONNECTION FOR PORTABLE TEST SEPARATOR.
 - COSASCO TYPE OF FITTING OR EQUIVALENT TO BE USED FOR CHEMICAL INJECTION PURPOSES.
 - VALVES SHALL NOT BE OPENED UNLESS THE SYSTEM (INCLUDING FLOWLINE) IS BLOWN DOWN, DRAINED THROUGH THE GATHERING STATION AND PURGED WITH NITROGEN.
 - DELETED.
 - BREAK FLANGES SPOOL OF 06m LENGTH TO BE PROVIDED FOR WELLHEAD WORK-OVER PURPOSES.
 - DELETED.
 - MATING FLANGE FOR SSV SHALL BE API5000 RATED MATCHING WITH PIPING SCHEDULE.
 - DELETED.
 - 1 NOS OF ESD PUSHBUTTON IS PROVIDED AT PERSONNEL GATE, AND 4 NOS OF ESD PUSH BUTTONS ARE PROVIDED AT SAFETY GATE. 1 NOS OF ESD PUSHBUTTON IS PROVIDED AT PERSONNEL GATE, AND 4 NOS OF ESD PUSH BUTTONS ARE PROVIDED AT SAFETY GATE.
 - CORROSION COUPON SHALL BE INSTALLED AT 12 O'CLOCK POSITION AND MONITOR AT 6 O' CLOCK POSITION.
 - PROVIDE HIGH AND LOW PRESSURE FUSIBLE PLUGS.
 - SPARE CONNECTION.
 - FOR CORROSION COUPON (CC).
 - COSASCO FITTINGS OR EQUIVALENT FOR CORROSION COUPONS (CC).
 - PROVISION ONLY FOR CORROSION PROBE (CP) ACCESS FITTINGS BODY WITHOUT PROBE TO BE CONSIDERED.
 - VALVES SHALL BE AS CLOSE AS POSSIBLE TO INJECTION POINT.
 - INJECTION QUILL TO BE PROVIDED. FOR MORE DETAIL REFER DETAIL 'A' OF LEGEND P&ID P11671-11-99-08-2601.
 - REFER TO TABLE A FOR THE SIGNALS BETWEEN THE RTU/PLC AND ESP VSD PANEL.
 - MINIMUM 1000 mm DISTANCE FLANGE TO FLANGE IS REQUIRED.
 - UNDER ALL CIRCUMSTANCES, THE PRESSURE UPSTREAM THE CHOKE SHALL BE MAINTAINED ABOVE THE BUBBLE POINT PRESSURE THROUGH THE CONTROL OF THE FCV CHOKE OR MODULATION OF THE SPEED OF THE ESP.
 - CHOKE VALVE IS ADJUSTABLE WITH POSITIVE LOCKING DEVICE.
 - IF FEASIBLE, CONSIDER HANGING TYPE H2S DETECTOR TO AVOID CONFINED SPACE ENTRY FOR MAINTENANCE. 2 NOS. OF FLAME DETECTOR ARE IN WELLHEAD AREA, 2 NOS. ARE IN OIL SKID IVC AREA AND REMAINING 1 NOS. IS IN CHEMICAL INJECTION SKID AREA.
 - FIRE PROOFING TO BE CONSIDERED. SSV SHALL BE FIRE SAFE TO API 607/6FA IF APPLICABLE.
 - VSD PANEL AND PLC ALONG WITH POWER SKID IS FREE ISSUED BY ADNOC ONSHORE.
 - REFER TO WELLSITE CONTROL SYSTEM SPECIFICATION NO: P11671-11-99-39-2609 & PROJECT 10 SCHEDULE FOR THE COMPLETE PACKAGE AND INSTRUMENT SIGNAL DETAILS FOR THE HYDRAULIC PACKAGE.
 - SOLENOID VALVES FOR SSV & SSV ARE LOCATED IN HYDRAULIC PACKAGE PANEL.
 - SSSV OPEN/CLOSE POSITION SHALL BE DERIVED FROM THE HYDRAULIC LINE PRESSURE MEASUREMENT (PIT IS PART OF HPU PACKAGE).
 - FUSIBLE PLUG SHALL BE PROVIDED ON THE HYDRAULIC LINE TO SSSV & LP HYDRAULIC HEADER (3 FUSIBLE PLUGS AROUND WELLHEAD). IN CASE OF FIRE AROUND THE WELLHEAD, FUSIBLE PLUG MELTS AND IN TURN INITIATES ESD-1 IN WELLHEAD TO CLOSE SSSV AND SSV AND TRIPS THE ESP. FUSIBLE PLUGS ARE SUPPLIED BY HYDRAULIC PACKAGE VENDOR.
 - DISCREPANCY ALARM.
 - SPOOL PROVISION FOR FLOW METER, MINIMUM DISTANCE OF 1000 mm TO BE PROVIDED FOR FLOW METER INSTALLATION IN FUTURE IF REQUIRED. PROVISION SHALL BE KEPT IN PLC DESIGN FOR FUTURE INSTALLATION IF REQUIRED.
 - DRAIN TO BE LOCATED AT LOW POINT. TEMPORARY COLLECTION AND RECOVERY PIT OR DRUM TO BE CONSIDERED AS AND WHEN NEED ARISES. DRAIN CONNECTION SIZE IS 2".
 - ALL THE INTERFACE FLANGES FROM THE PIPELINE SHALL BE OF SAME RATING AS PIPING.
 - VALVE TO BE LOCATED AT 100m AWAY FROM WELLHEAD.
 - FOR MORE DETAIL REFER DETAIL 'A' OF LEGEND P&ID P11671-11-99-08-2601.
 - FLOW CONTROL OF WELL IS BY THE ESP BUILT-IN VIRTUAL FLOW CONTROL LOOP FLOW CONTROL OF WELL IS BY THE ESP BUILT-IN VIRTUAL.
 - OVERSPEED ALARM TO BE PROVIDED FOR ESP.
 - DOWNHOLE MONITORING SYSTEM TO HAVE SERIAL COMMUNICATION WITH ESP PANEL THROUGH POWER COMPOSITE CABLE.
 - CRA SPOOL SHALL BE PROVIDED UP TO 10 D DOWNSTREAM OF CORROSION INHIBITOR INJECTION POINT.

- ### HOLDS
- CHOKE VALVE SIZE WILL BE UPDATED IN SUBSEQUENT REVISIONS.

- ### LEGENDS
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|--|---------------------|
| | REVISION CLOUD |
| | PROJECT SCOPE |
| | P11671 OUT OF SCOPE |

REV.	DATE	DRN.	CHD.	APD.	DESCRIPTION
C	02.05.2025	SSK	TL/ST	AJ	ISSUED FOR HAZOP (IFH)
B	01.03.2025	SSK	VK/ST	AJ	ISSUED FOR DESIGN REVIEW (IDR)
A	17.01.2025	SSK	VK/ST	AJ	ISSUED FOR REVIEW (IFR)

SCALE: N.T.S. LOCATION: BAB / HABSHAN PROJECT No. P11671

أدنوك البرية
ADNOC Onshore

CONSULTANT: BELTUGER

CONTRACTOR/VENDOR: ROBT STONE

EPC CONTRACTOR

DRAWING No. AET01342-00-3143008

PROJECT:	EPC CALL OUT OF BAB ARTIFICIAL LIFT PHASE-II
DRG. TITLE:	PIPING AND INSTRUMENT DIAGRAM SINGLE COMPLETION ARTIFICIAL LIFT OIL WELL Bb-573P (ESP) (VARIABLE SPEED) (2500#) LOW H2S : BAB
ADNOC DRG. No.	11 71 08 1708 C 1/1
AREA	PIAREA
DOC. CODE	
SERIAL No.	
REV.	
SHT	
OF	
SHT	

THIS DRAWING IS GENERALLY REVISED

THIS DRAWING IS DEVELOPED FROM ADNOC ONSHORE MASTER DWG No. 11-71-08-0648 REV 01 SHT. 1/1 AND IT IS UPDATED FROM STANDARD PACKAGE DWG No. 11-71-08-0641 REV 01 SHT. 1/1 (PROJECT NO P30234)

TITLE	DRG. No.
P&ID LEGEND SHEET	P11671-11-99-08-2601
P&ID FOR CORROSION INHIBITOR CHEMICAL INJECTION PACKAGE FOR ESP OIL PRODUCER WELLS "SINGLE HEAD"	P11671-11-71-08-1991
P&ID SINGLE COMPLETION OIL WELL Bb-573P BAB (DEMOLITION)	P11671- 11-71-08-2608
P&ID STANDARD PACKAGE FOR SINGLE COMPLETION 2500# ESP WELL HEAD (VARIABLE SPEED)	P11671-11-71-08-641 SHT 1/1