

 	SUPPLY, INSTALLATION AND COMMISSIONING OF TWO (2) MULTIPHASE PUMPS, NEWMASTER RTU IN MFPF & NEW RTU IN M- OGM-6 AND RECEIVER AT MOLEETA OGM-6, CIVIL WORK (FENCING) CONTRACT NO.: DPOC/23/20-4930H SERVICE ORDER NO.: DPOC-4930H-SO-09					
DOCUMENT NO.: DPOC-4930HSO09-DS-MEC-001			REV:A	PAGE 1 OF 7		
DAR PETROLEUM OPERATING COMPANY LIMITED SUPPLY, INSTALLATION AND COMMISSIONING OF TWO (2) MULTIPHASE PUMPS, NEWMASTER RTU IN MFPF & NEW RTU IN M- OGM-6 AND RECEIVER AT MOLEETA OGM-6, CIVIL WORK (FENCING) SO.09 DATA SHEET FOR MULTIPHASE PUMP CONTRACT NO.: DPOC/23/20-4930H SERVICE ORDER NO.: DPOC-4930H-SO-09						
			朱清南	蔡金创	陈敬峰	
A	ISSUED FOR REVIEW	07/07/2026	ZQN	CJJ	TMF	
REV.	DESCRIPTION	DATE	BY	CHECKED	APPROV.	CLIENT

 	DOCUMENT No.: DPOC-4930HSO09-DS-MEC-001 CLIENT: DPOC SERVICE ORDER NO.: DPOC-4930H-SO-09 SERVICE: MULTIPHASE PUMP	PAGE 2 OF 7 REV. A DATE 07/07/2026 LOCATION: SOUTH SUDAN TAG: MOL-OGM6-P-0601A/B															
MANUFACTURER: _____		SIZE: _____															
RFQ No.: _____	PO No.: _____	ORIENTATION: _____															
APPLICABLE TO: ☒ PROPOSALS ☐ PURCHASE ☐ AS BUILT																	
SITE: RUMAN FIELD TYPE: MULTIPHASE PUMP UNIT: TWO (NOTE-1) NO. STAGES: BY VENDOR																	
GENERAL (THE DATASHEET IS FOR ONE PUMP UNIT)																	
PUMP(S) TO OPERATE IN (PARALLEL) _____	NO. MOTOR DRIVEN ONE	NO. TURBINE DRIVEN NONE															
(SERIES) WITH PARALLEL	PUMP ITEM NO. LATER	PUMP ITEM NO. N.A.															
GEAR ITEM NO. VENDOR	MOTOR ITEM NO. LATER	TURBINE ITEM NO. N.A.															
GEAR PROVIDED BY VENDOR	MOTOR PROVIDED BY PUMP VENDOR	TURBINE PROVIDED BY N.A.															
GEAR MOUNTED BY VENDOR	MOTOR MOUNTED BY PUMP VENDOR	TURBINE MOUNTED BY N.A.															
GEAR DATA SHEET NO. VENDOR	MOTOR DATA SHEET NO. BY VENDOR	TURBINE DATA SHEET NO. N.A.															
VARIABLE FREQ. DRIVE BY PUMP VENDOR																	
OPERATING CONDITIONS (REFER NOTE-1)		SITE AND UTILITY DATA															
☐ CAPACITY, NORMAL (Note 4) _____ m³/h RATED 110 m³/h OTHER _____ ☐ SUCTION PRESS. MAX. 300 kPag RATEI _____ kPag ☐ DISCHARGE PRESSURE 2400 kPag ☐ DIFFERENTIAL PRESSURE 2100 kPag ☐ DIFFERENTIAL HEAD _____ m NPSHA _____ m ☐ PROCESS VARIATIONS SUITABLE FOR A 1:4 MIN TURNDOWN ☐ STARTING CONDITIONS _____ ☐ HYDRAULIC POWER _____ kW SERVICE: ☒ CONTINUOUS ☐ INTERMITTENT (START/DAY) ☒ PARALLEL OPERATION REQ'D ☒ VARIABLE SPEED		LOCATION ☐ INDOOR ☐ HEATED ☐ UNDER ROOF ☒ OUTDOOR ☐ UNHEATED ☐ PARTIAL SIDES ☐ GRADE ☐ MEZZANINE ☒ SUN ☒ ELECTRICAL AREA CLASSIFICATION CL ZONE 2 GR IIA/IIIB TEMP CLASS T3 ☐ WINTERIZATION REQ'D ☒ TROPICALIZATION REQ'D															
LIQUID (REFER NOTE-1 & 2) ☒ TYPE/NAME OF LIQUID CRUDE OIL +WATER+GAS ☒ PUMPING TEMPERATURE NORM. 55 °C MAX. 65 °C MIN. 45 °C ☒ VAPOR PRESSURE _____ (kPa abs) @ _____ °C ☒ OVERALL DENSITY (Kg/m³): NORM. 945 MAX. 1020 MIN. 870 ☒ SPECIFIC HEAT, Cp 3.2 kJ/kg °C ☒ VISCOSITY 900 cP @ 50 °C ☒ MAX VISCOSITY 3000 cP ☒ CORROSIVE/EROSIVE AGENT CO₂ (5 MOLE %) ☒ CHLORIDE CONCENTRATION 0 PPM ☒ H₂S CONCENTRATION 0 PPM LIQUID ☒ HAZARDOUS ☒ FLAMMABLE ☒ OTHER SAND		SITE DATA ☐ ALTITUDE 390 m BAROMETER 96.7 kPa abs ☒ RANGE OF AMBIENT TEMPS. MIN. 7.6 °C MAX. 47.5 °C ☒ RELATIVE HUMIDITY MIN. 23 % MAX. 78 %															
PERFORMANCE (BY PUMP VENDOR) PROPOSAL CURVE NO. _____ rpm ☒ RATED RANGE (GAS+OIL+WATER)27~126 m³/h ☐ NPSH REQUIRED _____ m ☒ RATED SPEED _____ rpm ☒ DISPLACEMENT _____ m³/h ☒ VOLUMETRIC EFFICIENCY _____ % ☒ MECHANICAL EFFICIENCY _____ % ☐ kW AT MAXIMUM VISCOSITY _____ kW ☐ kW AT RELIEF VALVE SETTING _____ kW ☒ MAXIMUM ALLOWABLE SPEED _____ rpm ☒ MINIMUM ALLOWABLE SPEED _____ rpm ☒ MAX SOUND PRESS. LEVEL REQ'D < 85 @ 1m dBA ☐ EST MAX SOUND PRESS. LEVEL _____ dBA		UNUSUAL CONDITIONS ☒ DUST ☐ FUMES ☒ OTHER SAND STORMS, HEAVY RAINFALL ☐ UTILITY CONDITIONS STEAM: N/A DRIVERS HEATING MIN. _____ kPag _____ °C _____ kPa g _____ °C MAX. _____ kPag _____ °C _____ kPa g _____ °C ELECTRICITY: DRIVERS HEATING CONTROL SHUTDOWN <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>VOLTAGE</td> <td>400 V</td> <td>N.A.</td> <td>110 V</td> <td></td> </tr> <tr> <td>HERTZ</td> <td>50</td> <td>N.A.</td> <td>50</td> <td></td> </tr> <tr> <td>PHASE</td> <td>3</td> <td>N.A.</td> <td>1</td> <td></td> </tr> </table> COOLING WATER (NOT NECESSARY) INLET TEMP. _____ °C MAX RETURN _____ °C PRESSURE NORMAL _____ kPag DESIGN _____ kPag MIN RETURN _____ kPag MAX ALLOW DP _____ kPag WATER SOURCE _____ CHLORIDE CONCENTRATION _____ PPM INSTRUMENT AIR PRESSURE MIN. _____ kPag MAX. _____ kPag	VOLTAGE	400 V	N.A.	110 V		HERTZ	50	N.A.	50		PHASE	3	N.A.	1	
VOLTAGE	400 V	N.A.	110 V														
HERTZ	50	N.A.	50														
PHASE	3	N.A.	1														
6) PUMP BODY ELECTRICAL TRACING & INSULATION IS REDAY TO MAINTAIN FLOW TEMPERATURE DURING SHORT-TERM SHUTDOWN & STANDBY.		NOTES: 1) VENDOR TO DECIDE THE NUMBER OF STAGES TO MEET DESIGN PARAMETERS FURNISHED IN THIS DATA SHEET. 2) PUMP PERFORMANCE CURVE SHALL BE FURNISHED IN TERMS OF DECREASING GVF AT SUCTION & INCREASING WATER CUT. 3) PUMP SYSTEM DESIGN PRESSURE SHOULD BE CLASS 300. DESIGN TEMPERATURE CAN NOT LOWER THAN 85 °C. 4) DIFFERENTIAL PRESSURE IS CALCULATED BASED ON RATED FLOWRATE. 5) IF THE FLOWRATE IS LOWER THAN 25% CAPACITY OF ONE PUMP, THIS PUMP SHALL BE SHUT DOWN AUTOMATICALLY.															

NOTE: ☐ BY PURCHASER ☐ BY VENDOR



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CLIENT: DPOC

LOCATION SOUTH SUDAN

SERVICE ORDER NO.: DPOC-4930H-SO-09

TAG: MOL-OGM6-P-0601A/B

SERVICE: MULTIPHASE PUMP

MANUFACTURER:

SIZE:

RFQ No.:

PO No.:

ORIENTATION:

CONSTRUCTION

APPLICABLE STANDARD

- ☒ API 676 (WITH VENDOR'S STANDARD DEVIATIONS)
☒ OTHER OWNER SPEC. DPOC-SP-MEC-039

☐ CONNECTIONS

SUCTION
DISCHARGE
GLAND FLUSH
DRAINS
VENTS
JACKET
PRESSURE GAUGE
TEMP, GAUGE
WARM-UP
BALANCE/LEAK-OFF

SIZE	ANSI RATING	FACING	POSITION
10"	300#	WNRF	
8"	300#	WNRF	
1"	300#		

PUMP TYPE

- ☐ INTERNAL GEAR
☐ EXTERNAL GEAR

GEAR TYPE

- ☐ SPUR ☐ HELICAL ☐ OTHER
☐ CYLINDRICAL THREADS REQUIRED

CASING MOUNTING (SEE SEPARATE SHEET FOR VERTICALS)

- ☐ CENTERLINE ☐ NEAR CENTERLINE
☒ FOOT ☐ SEPARATE MOUNTING PLATE
☐ INLINE

CASING SPLIT

- ☒ AXIAL ☐ RADIAL

CASING TYPE

- ☐ OVERHUNG ☐ SHAFT BETWEEN BEARINGS ☐ BARREL

CASE PRESSURE RATING

- ☒ MAX ALLOWABLE WORKING PRESSURE 4000 kPag @ °C
☒ HYDROTEST PRESSURE 6000 kPag
☐ STEAM JACKET PRESSURE N/A kPag

- ☒ SUCTION PRESS. REGIONS MUST BE DESIGNED FOR MAWP

ROTATION: (VIEW FROM COUPLING END)

- ☐ CW ☒ CCW

ROTOR MOUNT ☐ BETWEEN BEARINGS ☐ OVERHUNGTIMING GEARS ☐ YES ☐ NO

- ☐ BOLT OH3 PUMP TO PAD/FOUNDATION

SHAFT

- ☐ SHAFT DIAMETER AT COUPLING mm
☐ SHAFT DIAMETER BETWEEN BEARINGS mm
☐ SPAN BETWEEN BEARING CENTERS mm
☐ SPAN BETWEEN BEARING & IMPELLER mm

REMARKS

NOTES :

- The Pump Materials & Wetted Parts shall be suitable for corrosive fluid handled (high CO₂ content), with the material of construction being a corrosion alloy.
- Additional surface protection has to be provided on the screws & the liner for wear resistance. The surface protection on the screws & liner shall be Tungsten Carbide coating & Hard Chrome plating respectively.

NOTE: ☐ BY PURCHASER ☐ BY VENDOR

COUPLINGS

- ☐ MAKE _____
☐ MODEL _____
☐ CPLG RATING _____ kW/100 rpm
☐ LUBRICATION _____
☐ LIMITED END FLOAT REQ'D _____
☐ SPACER LENGTH _____ mm
☐ SERVICE FACTOR 2.8

DRIVER HALF COUPLING MOUNTED BY

- ☒ PUMP MFR ☐ DRIVER MFR ☐ PURCHASER
☒ COUPLING PER API 671

BASEPLATES (API DESIGN)

- ☒ BY PUMP MANUFACTURER
☐ SUITABLE FOR EPOXY GROUT
☐ EXTENDED FOR
☒ SUBSOLE PLATE BY PUMP MANUFACTURER
☒ DRAIN RIM ☒ DRAIN-PAN

MATERIAL (REFER NOTE 1 & 2)

- ☒ CASING
☒ END PLATES
☒ STATOR ROTOR(S)
☐ VANES NA
☒ SHAFT
☒ SLEEVE(S)
☐ GLAND(S)
☒ BEARING HOUSING
☒ MECHANICAL SEAL HOUSING
☐ COUPLING DIAPHRAGMS

REMARKS:

Casing shall be carbon steel with corrosion allowance of 4-5 mm.(HOLD)

Liner / Process fluid contact part material shall be Super Duplex

Stainless Steel. (HOLD)

BEARINGS AND LUBRICATION

- BEARING TYPE NUMBER
☐ RADIAL
☐ THRUST
☐ REVIEW AND APPROVE THRUST BEARING SIZE

LUBRICATION:

- ☐ PUMPED FLUID ☐ FLOOD ☐ RING OIL
☐ EXTERNAL ☐ PURGE OIL MIST ☐ PURE OIL MIST
☐ CONSTANT LEVEL OILER PREFERENCE (SEE REMARKS)
☒ PRESSURE LUBE SYSTEM ☐ API-610 ☐ API-614
☐ OIL VISC. ISO GRADE _____
☐ OIL HEATER REQ'D ☐ ELECTRIC ☐ STEAM
☐ OIL PRESS TO BE GREATER THAN COOLANT PRESS

REMARKS:

ABOVE DATA TO BE COMPLETED BY VENDOR.

A P & ID FOR AUXILIARIES IS TO BE FURNISHED BY VENDOR.



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REV. A

DATE 07/07/2026

CLIENT: DPOC

LOCATION

SOUTH SUDAN

SERVICE ORDER NO.: DPOC-4930H-SO-09

TAG: MOL-OGM6-P-0601A/B

SERVICE:

MULTIPHASE PUMP

MANUFACTURER:

SIZE:

RFQ No.:

PO No.:

ORIENTATION:

PACKING SEAL

SEAL DATA

☐ SEE ATTACHED API-682 SEAL DATA SHEET☒ NON-API 682 SEAL☐ APPENDIX H SEAL CODE _____ BY VENDOR _____☒ SEAL MANUFACTURER _____☐ SIZE _____☒ TYPE _____☐ MANUFACTURER CODE _____

SEAL CHAMBER DATA

☐ TEMPERATURE _____ 0~180 °C☐ PRESSURE _____ 4000 kPag☐ FLOW _____ m³/h☐ SEAL CHAMBER SIZE _____☐ TOTAL LENGTH _____ mm ☐ CLEAR LENGTH _____ mm

SEAL CONSTRUCTION

☐ SLEEVE MATERIAL _____ 1.4404, AISI 316L☐ GLAND MATERIAL _____ 1.4404, AISI 316L☐ AUX. SEAL DEVICE _____☐ JACKET REQUIRED

GLAND TAPS

☐ FLUSH (F) ☐ DRAIN (D) ☐ BARRIER/BUFFER (B)☐ QUENCH (Q) ☐ COOLING (C) ☐ LUBRICATION (G)☐ HEATING (H) ☐ LEAKAGE ☐ PUMPED FLUID (P)☐ BALANCE FLUID (E) ☐ EXTERNAL FLUID INJECTION (X)

SEAL FLUIDS REQUIREMENT AND AVAILABLE FLUSH LIQUID:

VENDOR SHALL RECOMMEND A SUITABLE SEAL BARRIER LIQUID.

☐ SUPPLY TEMPERATURE MIN. _____ °C

MAX. _____ °C

☐ RELATIVE DENSITY (SPEC. GRAVITY) _____ @ _____ °C☐ NAME OF FLUID _____☐ SPECIFIC HEAT, Cp _____ kJ/kg °C☐ VAPOR PRESSURE _____ kPa abs @ _____ °C☐ HAZARDOUS ☐ FLAMMABLE ☐ OTHER _____☐ FLOW RATE MIN. _____ m³/hMAX. _____ m³/h☐ PRESSURE REQUIRED MIN. _____ kPa

MAX. _____ kPa

☐ TEMPERATURE REQUIRED MIN. _____ °C

MAX. _____ °C

BARRIER/BUFFER FLUID

☐ SUPPLY TEMPERATURE MIN. _____ °C

MAX. _____ °C

☐ RELATIVE DENSITY (SPECIFIC GRAVITY) _____ @ _____ °C☐ NAME OF FLUID _____☐ VAPOR PRESSURE _____ kPa abs @ _____ °C☐ HAZARDOUS ☐ FLAMMABLE ☐ OTHER _____☐ FLOW RATE MIN. _____ m³/hMAX. _____ m³/h☐ PRESSURE REQUIRED MIN. _____ kPa

MAX. _____ kPa

☐ TEMPERATURE REQUIRED MIN. _____ °C

MAX. _____ °C

QUENCHING FLUID

☐ NAME OF FLUID _____☐ FLOW RATE _____ m³/h

SEAL FLUSH PIPING:

☐ SEAL FLUSH PIPING PLAN☐ TUBING☐ CARBON STEEL☒ PIPE☐ STAINLESS STEEL☐ AUXILIARY FLUSH PIPING PLAN☐ TUBING☐ CARBON STEEL☐ PIPE☐ STAINLESS STEEL

PIPING ASSEMBLY

☐ THREADED☐ UNIONS☐ SOCKET WELDED☐ FLANGED☐ TUBE TYPE FITTINGS☐ PRESSURE SWITCH (PLAN 52/53) TYPE _____☐ PRESSURE GAUGE (PLAN 52/53)☐ LEVEL SWITCH (PLAN 52/53) TYPE _____☐ LEVEL GAUGE (PLAN 52/53)☐ TEMP INDICATOR (PLANS 21, 22, 23, 32, 41)☐ HEAT EXCHANGER (PLAN 52/53)

REMARKS

VENDOR SHALL RECOMMEND PACKING SEAL REQUIRED

BY COMPLETING THIS PORTION OF DATA SHEET GIVING

DETAILS OF THE AUXILIARIES.

PACKING DATA:

MANUFACTURER _____ N.A.

TYPE _____

SIZE _____ NO. OF RINGS _____

☐ PACKING INJECTION REQUIRED☐ FLOW _____ m³/h @ _____ °C☐ LANTERN RING _____

STEAM AND COOLING WATER PIPING

☐ COOLING WATER PIPING PLAN _____☐ COOLING WATER REQUIREMENTSSEAL JACKET/BRG HSG. _____ m³/h @ _____ kPaSEAL HEAT EXCHANGER _____ m³/h @ _____ kPaQUENCH _____ m³/h @ _____ kPaTOTAL COOLING WATER _____ m³/h☐ STEAM PIPING ☐ TUBING ☐ PIPE

REMARKS

AIR COOLING SHALL BE OFFERED FOR THE HEAT EXCHANGER,
OUTLINED IN THE AUXILIARY SYSTEM.

INSTRUMENTATION

VIBRATION:

☒ VIBRATION TRANSMITTERS ☐ TRANSDUCER☐ PROVISION FOR MOUNTING ONLY ☒ VENDOR RECOMENDATION☐ FLAT SURFACE REQ'D☒ API 670 DATA SHEET (TO BE FURNISHED BY VENDOR)☐ MONITORS AND CABLES

REMARKS

Packing seal is performed by Owner. Vendor is responsible for the selection of packing seal for the specified service.

Vendor shall furnish the packing seal details with the bid.

NOTE:

☐ BY PURCHASER☐ BY VENDOR

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MANUFACTURER: _____		SIZE: _____	
RFQ No.: _____		PO No.: _____	
ORIENTATION: _____			

INSTRUMENTATION (CONTINUED) TEMPERATURE AND PRESSURE ☒ RADIAL BRG METAL TEMP ☒ THRUST BRG METAL TEMP ☐ PROVISION FOR INSTRUMENTS ONLY ☒ API 670 DATA SHEET (TO BE FURNISHED BY VENDOR) ☐ TEMP GAUGES (WITH THERMOWELLS) OTHER _____ RTD _____ ☒ PRESS. GAUGE TYPE INDICATING TRANSMITTERS & GAUGES LOCATION _____ SUCTION & DISCHARGE _____ REMARKS: VENDOR SHALL RECOMMEND TEMPERATURE & VIBRATION MONITORING INSTRUMENTS.	SURFACE PREPARATION AND PAINT (CONTINUED) SHIPMENT ☐ DOMESTIC ☒ EXPORT ☐ EXPORT BOXING REQUIRED ☒ OUTDOOR STORAGE MORE THAN 6 MONTHS SPARE ROTOR ASSEMBLY PACKAGED FOR: ☐ HORIZONTAL STORAGE ☐ VERTICAL STORAGE ☐ TYPE OF SHIPPING PREPARATION _____ REMARKS PAINTING OF EXPOSED CARBON STEEL PARTS SHALL BE TO OWNER'S SPECIFICATION DPOC-SP-MEC-013 & DPOC-SP-CIV-019.
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MOTOR DRIVE (NOTE-2) ☒ MANUFACTURER _____ ☐ _____ kW ☐ _____ rpm ☒ HORIZONTAL ☐ VERTICAL ☐ FRAME ☒ SERVICE FACTOR _____ 2.5 ☒ VOLTS/PHASE/HERTZ 400V±10% / 3 Phase / 50 Hz ±5% ☒ TYPE _____ ☒ ENCLOSURE IP 55/EXPLOSION PROOF ☐ MINI. STARTING VOLTAGE 400V ☐ TEMPERATURE RISE _____ ☒ FULL LOAD AMPS _____ ☒ LOCKED ROTOR AMPS _____ ☒ INSULATION _____ ☒ STARTING METHOD VFD ☒ LUBE _____ ☐ VERTICAL THRUST CAPACITY UP _____ N DOWN _____ N BEARINGS ☐ RADIAL TYPE _____ NUMBER _____ ☐ THRUST TYPE _____ NUMBER _____	WEIGHTS MOTOR DRIVEN WEIGHT OF PUMP _____ kg WEIGHT OF BASEPLATE _____ kg WEIGHT OF MOTOR _____ kg WEIGHT OF GEAR _____ kg TOTAL MASS _____ kg TURBINE DRIVEN WEIGHT OF BASEPLATE NA kg WEIGHT OF TURBINE _____ kg WEIGHT OF GEAR _____ kg TOTAL WEIGHT _____ kg REMARKS _____
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SURFACE PREPARATION AND PAINT ☐ MANUFACTURER'S STANDARD ☒ OTHER PLEASE REFER DPOC SPECIFICATION DPOC-SP-MEC-013 & DPOC-SP-CIV-019. PUMP ☐ SURFACE PREPARATION _____ ☐ PRIMER _____ ☐ FINISH COAT _____ BASEPLATE ☐ SURFACE PREPARATION _____ ☐ PRIMER _____ ☐ FINISH COAT _____	OTHER PURCHASER REQUIREMENTS ☒ COORDINATION MEETING REQUIRED ☒ REVIEW FOUNDATION DRAWINGS ☒ REVIEW PIPING DRAWINGS ☒ OBSERVE PIPING CHECKS ☒ OBSERVE INITIAL ALIGNMENT CHECK ☒ CHECK ALIGNMENT AT OPERATING TEMPERATURE ☒ CONNECTION DESIGN APPROVAL ☐ RIGGING DEVICE REQ'D FOR TYPE OH3 PUMP ☐ HYDRODYNAMIC THRUST BRG SIZE REVIEW REQ'D ☐ LATERAL ANALYSIS REQUIRED ☒ ROTOR DYNAMIC BALANCE ☒ MOUNT SEAL RESERVOIR OFF BASEPLATE ☒ INSTALLATION LIST IN PROPOSAL ☐ SPARE ROTOR VERTICAL STORAGE ☐ TORSIONAL ANALYSIS/REPORT ☒ PROGRESS REPORTS REQUIRED REMARKS _____
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REMARKS: NOTES: _____ _____ _____ 1. VENDOR SHALL FURNISH TOPOLOGY/ SINGLE LINE DIAGRAM INDICATING MAJOR COMPONENTS, PROTECTION, CONTROL, METERING & DIMENSIONAL DRAWING & CONTROL PHILOSOPHY FOR THE PUMP. PUMP CONTROLS SHOULD BE EXPLAINED FOR TRANSIENT CONDITIONS (FOR SHORT PERIODS) & FOR LONG TERM CHANGING WELL HEAD DATA. 2. THE MOTOR SHALL MEET ALL THE REQUIREMENTS OF DPOC SPECIFICATION. DPOC-SP-ELE-003 FOR ELECTRIC MOTORS RATED UP TO 150KW OR DPOC-SP-ELE-004 FOR INDUCTION MOTORS 150KW AND LARGER.	SPARE PARTS ☒ START-UP ☒ NORMAL MAINTENANCE ☐ SPECIFY VENDOR TO FURNISH FILLED IN SPIR FORM INCLUDED IN THE REQUISITION.
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NOTE: ☐ BY PURCHASER ☐ BY VENDOR



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REV. A

DATE 07/07/2026

CLIENT: DPOC

LOCATION

SOUTH SUDAN

SERVICE ORDER NO.: DPOC-4930H-SO-09

TAG: MOL-OGM6-P-0601A/B

MULTIPHASE PUMP

MANUFACTURER:

SIZE:

RFQ No.:

PO No.:

ORIENTATION:

QA INSPECTION AND TEST

REMARKS

- REVIEW VENDORS QA PROGRAM
- PERFORMANCE CURVE APPROVAL
- SHOP INSPECTION
- ☐ TEST WITH SUBSTITUTE SEAL

NOTE-1. DURING THE PERFORMANCE TEST AT VENDOR'S WORKS FOLLOWING GUARANTEED PERFORMANCE PARAMETERS ARE TO BE VERIFIED & WITNESSED BY PURCHASER AND/OR THIRD PARTY INSPECTOR.

* RATED OPERATING CONDITIONS AT VARYING SPEED, FLOW, DIFF. PRESSURE, GVF & 100% WATER.

* NOISE & VIBRATION TEST.

* PERFORMANCE OF AUXILIARIES.

* RATED POWER CONSUMPTION OF DRIVES.

* EFFICIENCY OF PUMP.

* BEARING TEMPERATURES.

* SIMULATION TEST FOR CONTROL PANEL.

TESTS

NON-WIT. WIT. OBSERV.

- | | | | |
|---|----------------------------------|----------------------------------|-----------------------|
| HYDROSTATIC | ☐ | ☒ | ☐ |
| PERFORMANCE | ☐ | ☒ | ☐ |
| NPSH | ☐ | ☒ | ☐ |
| COMPLETE UNIT STRING TEST | ☐ | ☒ | ☐ |
| SOUND LEVEL TEST | ☐ | ☒ | ☐ |
| ☐ CLEANLINESS PRIOR TO | | | |
| FINAL ASSEMBLY | ☒ | ☐ | ☐ |
| ☐ NOZZLE LOAD TEST | ☐ | ☐ | ☐ |
| ☐ BRG HSG RESONANCE TEST | ☒ | ☐ | ☐ |
| ☐ REMOVE/INSPECT HYDRODYNAMIC | | | |
| BEARINGS AFTER TEST | ☒ | ☐ | ☐ |
| ☐ AUX. EQUIPMENT TEST | ☐ | ☒ | ☐ |
| ☐ COOLER H.E. & PUMPS | ☐ | ☒ | ☐ |
| ☐ AIR COOLED H.E. | ☐ | ☒ | ☐ |
| ☐ MATERIAL CERTIFICATION REQUIRED | | | |
| ● CASING ● ROTOR ● SHAFT | | | |
| ☐ OTHER | | | |
| ☐ CASTING REPAIR PROCEDURE APPROVAL REQ'D | | | |
| ☐ INSPECTION REQUIRED FOR CONNECTION WELDS | | | |
| ☐ MAG PARTICLE ☐ LIQUID PENETRANT | | | |
| ☐ RADIOGRAPHY ☐ ULTRASONIC | | | |
| ☐ INSPECTION REQUIRED FOR CASTINGS | | | |
| ☐ MAG PARTICLE ☐ LIQUID PENETRANT | | | |
| ☐ RADIOGRAPHY ☐ ULTRASONIC | | | |
| ☐ ADDITIONAL INSPECTION REQUIRED FOR: | | | |
| ☐ MAG PARTICLE ☐ LIQUID PENETRANT | | | |
| ☐ RADIOGRAPHY ☐ ULTRASONIC | | | |
| ☐ ALTERNATE ACCEPTANCE CRITERIA | | | |
| ● HARDNESS TEST REQUIRED FOR WELDS & HEAT EFFECTED ZONES | | | |
| ROTOR | | | |
| ☐ WETTING AGENT HYDROTEST | | | |
| ● VENDOR SUBMIT TEST PROCEDURES | | | |
| ● RECORD FINAL ASSEMBLY RUNNING CLEARANCES | | | |
| ☐ INSPECTION CHECK-LIST | | | |

TOLERANCES ON MEASURED PARAMETERS WILL BE BASED ON RELEVANT API STANDARD. ALTERNATIVELY VENDOR MAY STATE THEIR TOLERANCES ON VARIOUS PARAMETERS.

2. VENDOR SHALL SUPPLY THIS PUMP AS A COMPLETE SKID MOUNTED PACKAGE TO INCLUDE, BUT NOT LIMIT TO THE FOLLOWING:

* HORIZONTAL MULTIPHASE PUMP(S) WITH ELECTRIC DRIVE MOTOR(S)

* COUPLING WITH COUPLING GUARDS (NON SPARKING TYPE)

* PUMP AUXILIARIES SUCH AS LUBRICATION SYSTEM & SEAL OIL SYSTEM.

* PACKING SEALING SYSTEM WITH AUXILIARY PIPING & ACCESSORIES (MOUNTED ON SKID).

* COMMON SKID FOR MPP, DRIVE MOTOR & AUXILIARIES.

* ALL SAFETY INSTRUMENTS & DEVICES FOR SAFE OPERATION OF THE PUMPS.

* ALL INTERCONNECTED PIPING, FITTINGS & VALVES WITH INSTRUMENTS MOUNTED ON IT FOR PROCESS & UTILITIES WITHIN THE SKID LIMITS.

* ALL HOLDING DOWN BOLTS.

* MPP VARIABLE SPEED DRIVE SYSTEM WITH CONTROL PANEL SUITABLE FOR SAFE AREA LOCATION.

* FIRST FILL OF LUBRICANTS.

* ALL INSTRUMENTATION & CONTROL CABLING, INCLUDING SKID EDGE JUNCTION BOXES.

* PERMANENT & TEMPORARY SUCTION STRAINER.

* VENDOR SHALL FURNISH A MPP PACKAGE P&ID GIVING DETAILS OF THE PACKAGE SCOPE OF SUPPLY.

REMARKS

3. AS A MINIMUM VENDOR SHALL SUBMIT THE FOLLOWING DATA ALONG WITH THE TECHNICAL BID :

* TECHNICAL OFFER WITH DESCRIPTION OF MPP MODEL & SELECTION CRITERIA.

* PERFORMANCE CURVES COVERING MINIMUM & MAXIMUM SPEED.

* MPP COMBINED EFFICIENCY CURVES AT VARIOUS GVF's FOR THE OPERATING PARAMETERS INDICATED.

* VENDOR'S SCOPE OF SUPPLY & SERVICES.

* DETAILS OF PACKING SEAL SYSTEM.

* DETAILS OF OTHER AUXILIARIES OFFERED.

* CONTROL PHILOSOPHY FOR MPP.

* DETAILS OF VARIABLE FREQUENCY DRIVE SYSTEM OR OTHER SPEED CONTROL DEVICES (FOR EXAMPLE TURBO FLUID COUPLING).

* IMPACT ON PUMP'S PERFORMANCE WITH VARYING GVF AT PUMP SUCTION.

* RELIABILITY & AVAILABILITY DATA.

* DETAILS OF THE HV MOTOR.

* THIS DATA SHEET COMPLETED.

4. Applicable DPOC Specifications: DPOC-SP-MEC-018, 004, 005, 013, DPOC-SP-ELE-004, DPOC-SP-CIV-019, DPOC-SPINT-008, 010, 021, 022.

5. The pumps shall be inspected by Third Party.

NOTE:

☐ BY PURCHASER☐ BY VENDOR



DATE	07/07/2026
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SOUTH SUDAN

TAG: MOL-OGM6-P-0601A/B

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SIZE:

ORIENTATION:

LINE NO.		10"-C0-3P-1522-40H-ET	10"-C0-3P-1524-40H-ET	
FLUID		CRUDE OIL	CRUDE OIL	
SERVICE		SWEET	SWEET	
MAXIMUM FLOW	m3/h	125	125	
MINIMUM FLOW	m3/h	-	-	
NORMAL FLOW	m3/h	110	110	
OPER. PRESSURE	kPag	800	800	
OPER. TEMPERATURE	°C	55	55	
DENSITY @50 °C	kg / m3	945	945	
VISCOSITY	cP	900 @ 50°C	900 @ 50°C	
CORROSIVE CONTAMINANTS		CRUDE OIL	CRUDE OIL	
CORROSION ALLOWANCE	mm	--	--	
QUANTITY		1	1	
P & ID NO.		MOL-FSF(4930H09)(OGM)-PID-2102	MOL-FSF(4930H09)(OGM)-PID-2102	

TYPE		CONICAL	CONICAL	
DESIGN PRESSURE	kPag	350	350	
DESIGN TEMPERATURE	°C	85	85	
MIN. DESIGN METAL TEMP.	°C	10	10	
SIZE		10"	10"	
SIEVE MATERIAL		ASTM A 182 F316L/A351 CF8M		
MESH SIZE		5	5	
ALLOWABLE PRESSURE DROP:	kPa	2 (note2)	2 (note2)	
PIPE SCHEDULE/MATERIAL		SCH.40 / ASTM A106 GR. B	SCH.40 / ASTM A106 GR. B	
SHOP HYDRO TEST		YES (Min. 1.5 Times Design Pressure)		

2.VENDOR TO SPECIFY THE DETAIL DATA AND IT SHOULD BE AS MINIMUM AS POSSIBLE.

[illegible]