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Customer Document title:

# **Mechanical Run Test Report**

Flowserve Document title: Mechanical Run Test Report
Flowserve Document No.: 1400944-012-4000-01

Document Revision No.: 0

Flowserve Order No.: 1400944

Flowserve Serial No.: 1400944CHP012A/D

Pump Type/Size: MARK 3 STANDARD / 2K4X3-10RV

Quantity: 4

Customer Name: DESMET BALLESTRA NORTH AMERICA

DESMET TAG#: P682B.1/1, World Energy TAG#: 19-P-765A, DESMET TAG#: P682B.1/2,

Customer Tag No: World Energy TAG#: 19-P-765B, DESMET TAG#: P682B.2/1, World Energy TAG#: 19-P-

865A, DESMET TAG#: P682B.2/2, World Energy TAG#: 19-P-865B

Customer PO No.: 28493

End User: DESMET BALLESTRA NORTH AMERICA

Please complete and ret	urn:		
Document Reviewed by:		Document Reviewed date:	
□ APPROVED. NO ACTION REQU □ APPROVED. RE-SUBMIT AS FIN □ APPROVED WITH COMMENTS □ REJECTED. CORRECT AND RE-S □ FOR INFORMATION. REVIEW N □ AS-BUILT	<b>IAL.</b> . DOCUMENT WILL BE MODIFIED AND RESUBMITT UBMIT FOR APPROVAL.	TED AS FINAL.	

- Return any documents sent for review with your comments by the stated return date. All documents not returned two weeks after requested Return date will be considered <u>Approved</u>, no action.
- Purchaser's comments and/or corrections within the scope of contract will be made on the first completed document submitted by Flowserve Corp. and returned.
- Corrections, alterations, additions and/or modifications outside scope of contract or made after first submittal may require an additional engineering service charge.
- Items conditionally approved or with deferred approval by purchaser must be specifically stated otherwise delivery may be affected.

Ī	Rev	Revision Description	Released	Release Date
I		Final	Morris, Tamika	31-May-22



## 1 Hour Mechanical Run Test

### **ORDER INFORMATION**

#### 1400944 12 Order no: Serial no. 1400944CHP017B DESMET BALLESTRA NORTH Customer **AMERICA** Customer P.O. 28493 DESMET TAG#: PW503E.2/2, CUSTOMER TAG#: 19-P-875B Pump Tag No. Tested by G. BAILEY Witnessed by Date 5/24/2020 3135912B Curve no.

#### **TECHNICAL INFORMATION**

Model	MARK 3
Size	2K4X3-10RV
lmp. dia (ln.)	8.25
Open/Closed	CLOSED
Imp. matl.	D4
Case matl.	D4
# of Stages	N/A
Lubrication	OIL
Seal Type	MECH.

#### **GUARANTEED CONDITIONS OF SERVICE**

RPM	Flow (GPM)	Total Head (Ft)	NPSHR (Ft)	Sp. Gr.	Visc. (cP)	Temp. (F)
3550	468.1	251	11.0	.888	13.35	171

#### **TEST CONDITIONS**

RPM	Flow (GPM)	Total Head (Ft)	NPSHA (Ft)	Sp. Gr.	Visc. (CPU)	Amb.(F)
3583	469	252	35.6	1.00	1.00	73

#### **TEST DATA POINTS**

	1	2	3	4	5	6	7	8	9	10	11	12	13
Duration (Min.)	0	10	20	30	40	50	60						
Flow (gpm)	469	470	469	469	470	469	469						
TDH (feet)	252	251	252	252	252	252	252						
Pump speed (rpm)	3583	3583	3583	3584	3583	3585	3584						
Power (BHP)	38	39	38	38	38	39	38						
Ambient Temp (°F)	73	73	75	73	73	73	73						
Brg Hsg Temp (°F)	102	103	104	107	112	119	121						
Water Temp (°F)	85	85	85	86	86	86	86						

Acceptance Criteria							
Smooth operation confirmed: no indication of mechanical defect is detected							
For 5 minutes after shutdown, suction pressure is maintained and no leakage is detected							
Flow rate stayed within +/-5% of rated							
Bearing housing temperature did not exceed 180°F for Oil/Oil Mist or 200°F for Grease lubrication							
Input (line) power did not exceed the rating of the job motor, if applicable							
Vibration reading at the end of run Vibration readings: IBH/IBV/OBH/OBV/OBA in in/sec RMS	.05	.06	.06	.06	.08		
Vibrations readings as shown above are compliant	with ANS	SI/HI 9.6.4	specifica	tions	GB		