

CERTIFICATE OF OFFICIAL TEST

SULZER (UK) PUMPS LTD MANOR MILL LANE LEEDS LS11 8BR

SULZER

PUMP DIVISION

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OFFICIAL STRING TEST SHEET T1B

DATE: 28-09-93

PTC No.: 4-104-448655

CLIENT : ELF AQUITAINE NORGE A/S
 ORDER No./Ref : FF-22-26-1015
 ENQUIRER : ELF AQUITAINE
 PROJECT/SITE : FROY TIE IN
 SERVICE : CRUDE OIL EXPORT
 ITEM/TAG No. : CP 605 A

DESIGN DUTY :--
 QUANTITY : 417 m³/h
 TOTAL HEAD : 837 m
 ABSORBED POWER : 939 kW
 EFFICIENCY : 82.0 %

SITE CONDITIONS :--
 SPEED : 2978 r/min
 SPECIFIC GRAVITY : 0.810
 TEMPERATURE : 35 C
 ABSORBED POWER : 939 kW

TEST DRIVER :--
 MOTOR : CONTRACT
 MOTOR REF. :
 SPEED : 2978 r/min
 RATING : 1100 kW
 EFFICIENCY : 5/4 FL FULL 3/4FL 1/2FL
 96.00 96.20 95.80

QUANTITY MEASUREMENT - TEST METER : 150 mm
 TEST METER CONSTANT : 0.000
 FLOWMETER CONSTANT : 1.00

HEAD MEASUREMENT - DISCHARGE : BOURDON
 - SUCTION : BOURDON
 DISCHARGE PRESSURE TAPPING DIA. : 150 mm
 SUCTION PRESSURE TAPPING DIA. : 200 mm

ELECTRICAL FACTORS :-- VOLTS : 1.00
 - AMPS : 1.00
 - WATTS : 1000.0

GAUGE LEVEL CORRECTION : 0.00 m
 UNMEASURED HEAD LOSS (at duty) : 0.00 m
 THRUST BEARING LOSS : 0.00 kW
 SHAFT/TRANSMISSION LOSSES : 0.00 kW

TIME	WATER SPEC. TEMP. (test)	ORIFICE TEMP. (CORR'N)	QUANTITY MEASUREMENT	HEAD MEASUREMENT			SPEED	POWER MEASUREMENT			GROSS INPUT POWER	PUMP OUTPUT	PUMP EFFY	CORRECTED SPEED	SITE CONDITIONS	REMARKS											
				SUCT. GAUGE	DEL'Y GAUGE	VEL'Y HEAD		UNM'D HEAD	TOTAL HEAD	LOSS							HEAD	VOLTS	AMPS	WATTS	WATTS	WATTS	WATTS	WATTS	WATTS		
10.35	1.0044	1.0044	520	14.2	680	2.33	0.00	674	2980	15706	141	449	807	1256	96.00	1206	1206	1206	946.7	78.5	75.4	1.33	520	673.6	986.4	78.3	
10.25	1.0036	1.0036	460	11.2	780	1.82	0.00	777	2980	15712	138	438	789	1227	96.00	1178	1178	1178	966.0	82.0	78.7	1.27	460	775.7	961.2	81.9	
9.30	1.0040	1.0040	417	11.0	845	1.50	0.00	943	2980	15712	134	428	765	1193	96.00	1145	1145	1145	949.4	82.9	79.6	1.26	417	841.6	935.4	82.8	
9.40	1.0044	1.0044	346	11.0	950	1.03	0.00	949	2981	15726	125	398	715	1113	96.00	1068	1068	1068	886.3	83.0	79.6	1.26	346	947.1	872.8	82.8	
9.50	1.0042	1.0042	260	11.0	1010	0.59	0.00	1009	2984	15736	111	352	636	988	96.08	949	949	949	708.2	74.6	71.7	1.40	259	1004.6	773.4	74.4	
10.00	1.0040	1.0040	180	11.5	1017	0.28	0.00	1015	2983	15747	97	303	559	862	96.17	829	829	829	493.3	59.5	57.2	1.75	180	1011.1	676.6	59.3	
10.10	1.0034	1.0034	108	11.1	1040	0.10	0.00	1037	2988	15768	84	252	485	737	96.07	708	708	708	302.8	42.8	41.1	2.43	108	1029.8	574.0	42.6	
10.20	1.0024	1.0024	62	11.6	1075	0.03	0.00	1069	2991	15782	78	223	446	669	95.97	642	642	642	179.7	28.0	26.9	3.72	62	1060.2	516.0	28.0	

PRESENT AT TEST

CERTIFIED BY



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