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Pump Data

PUMP DATA			
Brand	Ebsray	Impeller Diameter	106 mm
Model	50 WQ12-10-0.75JY(I)	Speed	2900 rpm
Type	Submersible	Diameter Suction	Bell Mount
Serial No.	1912076690	Diameter Discharge	DN50/PN10
Grade	2B	Density	998.3 kg/m ³
Motor	Not stated	Viscosity	1 cst
Motor S/N	Not stated	Power Absorb	0.75 kW
Test Medium	Water	Capacity	12 m ³ /h.

Values of Tolerance Factors

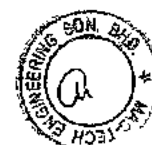
QUANTITY	GRADE 2B, %
Flow rate, tQ	± 8
Pump Total Head, tH	± 5
*Pump Power, tP	± 8
*Pump Efficiency, tη	- 5

Test Results

QUANTITY	GUARANTEED VALUES AT DUTY POINT	TESTED VALUE	TOLERANCE %	DIFFERENCE %	RESULTS
Flow rate, tQ (m ³ /hr)	12	11.93	± 8	- 0.58	Pass.
Pump Total Head, tH (m)	10	9.52	± 5	- 4.80	Pass.
*Pump Power, tP (kW)	0.61	0.64	± 8	+ 4.92	Pass.
*Pump Efficiency, tη (%)	52	48.1	- 5	- 3.9	Pass.

Remarks: (*) - Optional requirement

Note: Refer to Annex C for detail performance test data.



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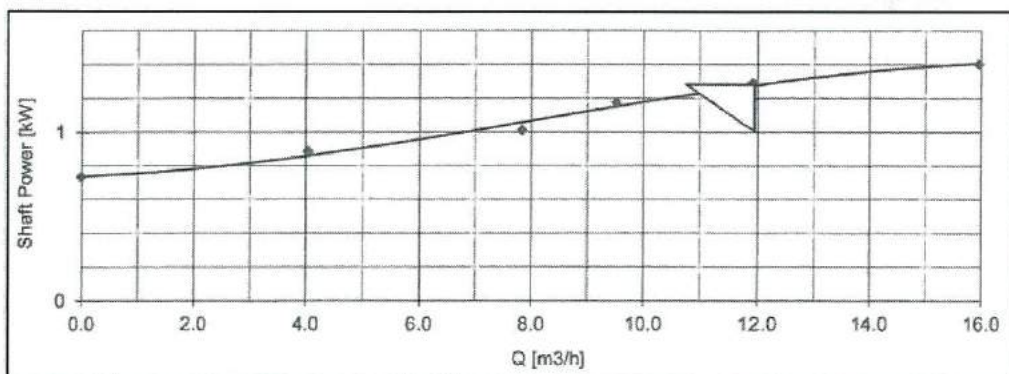
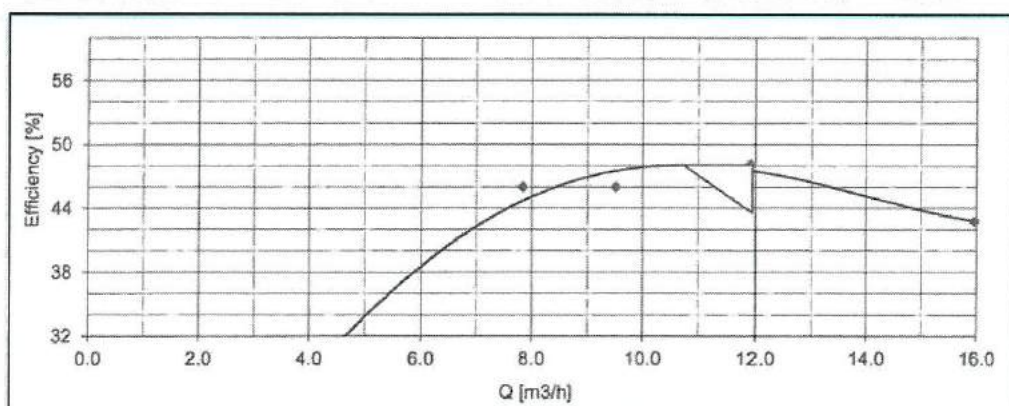
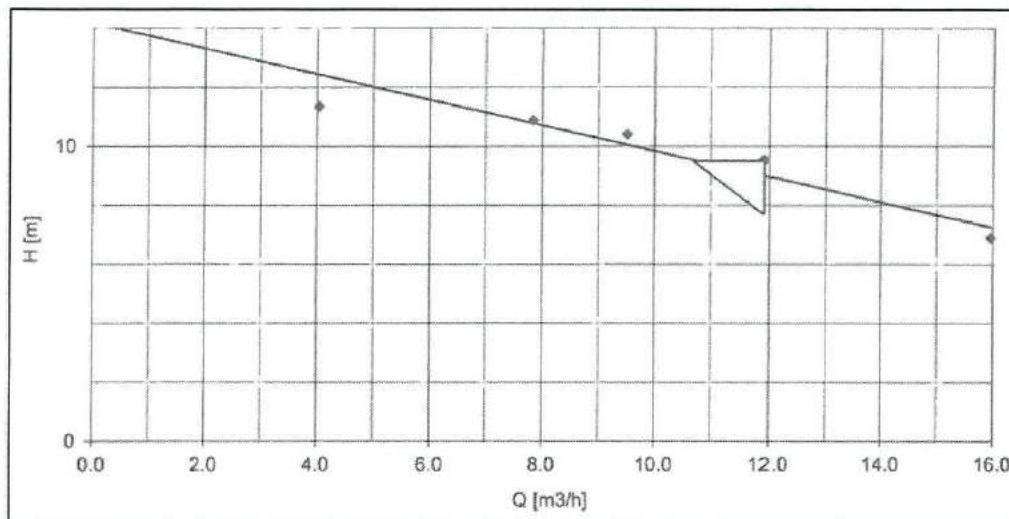
Annex C

No	Test Speed [rpm]	Capacity [m ³ /h]	Suction			Discharge			Total Head [m]	Hydraulic Power [kW]
			Gauge Pressure [barg]	Gauge Height [m]	Velocity Head [m]	Gauge Pressure [barg]	Gauge Height [m]	Velocity Head [m]		
1	2910	0.0	0.00	0.00	0.00	1.34	1.02	0.00	14.68	0.00
2	2910	4.05	0.00	0.00	0.00	1.01	1.02	0.02	11.33	0.13
3	2910	7.85	0.00	0.00	0.00	0.96	1.02	0.06	10.87	0.23
4	2910	9.53	0.00	0.00	0.00	0.91	1.02	0.09	10.39	0.27
5	2910	11.93	0.00	0.00	0.00	0.82	1.02	0.15	9.52	0.31
6	2910	15.97	0.00	0.00	0.00	0.55	1.02	0.26	6.89	0.30

No	Inverter Power Input [kW]	Inverter Efficiency [%]	Motor Power Input [kW]	Motor Voltage [V]	Motor Current [A]	Motor Efficiency [%]	Shaft Power [kW]	Pump Efficiency [%]
1	0.53	95.0	0.47	418.9	1.39	78.00	0.37	0.0
2	0.59	95.0	0.56	418.9	1.41	79.00	0.44	28.3
3	0.67	95.0	0.64	418.8	1.49	79.00	0.51	46.0
4	0.79	95.0	0.72	418.8	1.50	81.50	0.59	46.0
5	0.86	95.0	0.79	420.9	1.50	81.50	0.64	48.1
6	0.93	95.0	0.86	419.6	1.60	81.50	0.70	42.8



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Photograph of tested sample

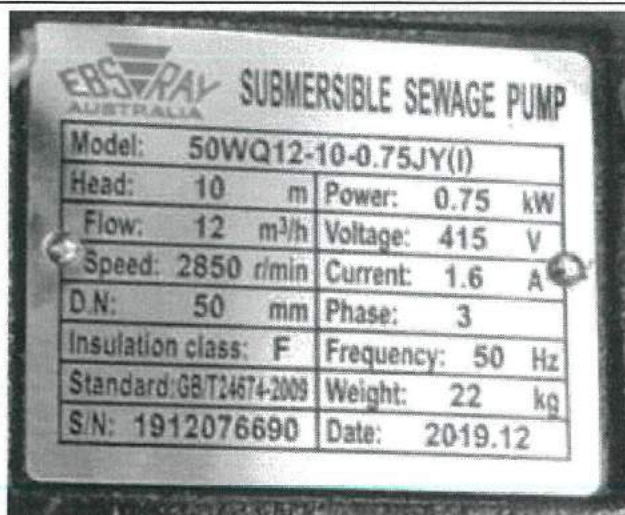


Figure 5: Name plate on pump tested.



Figure 6: Pump tested.



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1. A Test Report will be issued in respect of Testing Services conducted and shall relate only to the sample actually tested. SIRIM QAS International makes no warranty whatsoever and the Applicant shall not represent in any manner that any duplication or mass production of the Product is same as the sample actually tested or that SIRIM QAS International has tested any of the duplicated or mass-produced Product. Measurement uncertainty shall be included in the Test Report when there is no statement of conformity required. When a statement of conformity to a specification or standard is applied, the Simple Acceptance Rule is used. Unless otherwise stated, the Acceptance Rule with Guard Band is used.
2. The Test Report shall not be misused, amended, changed, varied or modified in any manner whatsoever by the Applicant or otherwise.
3. If the Test Report is to be furnished to any third party or to the public, each such Test Report shall be furnished in full, legible and in its entirety.
4. The Test Report shall not be reproduced and shall not in any event be used for any advertising purposes or whatsoever without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International of No 1, Persiaran Dato' Menteri, Building 8, Section 2, P.O. Box 7035, 40700 Shah Alam, Selangor Darul Ehsan.
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6. Subject to consent and written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International, the customer (Applicant/Manufacture/Factory, etc.) may use SIRIM QAS International logo or word on the promotional materials and the Applicant shall only include the phrase, "A sample of this product has been tested by SIRIM QAS International ...(Test Report No) ...(dated) ...(for what test) ...(to which standard)" or such similar words which stress that only the sample was actually tested. This phrase shall only be used for the purpose of product advertisement or product promotion (eg; brochures/flyers/official website). For avoidance of doubt, the statement shall not be used on the sample, packaging of the sample, items and products.
7. In the event there is an investigation from a Government Regulatory Agency concerning the Applicant's Test Report, SIRIM QAS International may disclose the information pertaining to the Test Report for purposes of such investigation.
8. In the event the Applicant is found in breach of this provision, SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries without prejudice to any other rights and remedies may take whatever action necessary including but not limited to:
 - a) Informing and placing a notice in the media;
 - b) Obtaining an injunction from Court (cost on a solicitor-client basis to be borne by the Applicant);
 - c) Refusing to accept any further Product for Testing Services from the Applicant or whosoever related to the Applicant, whether subsidiary or otherwise;
 - d) Instructing the Applicant to withdraw and recall the advertisement, statement or document in question and advertise a clarification and apology to SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries twice in a national publication of SIRIM QAS International's choice at the Applicant's sole cost; and
 - e) Informing or lodging a report pertaining the Applicant's Test Report with the relevant authorities.
9. SIRIM QAS International is committed in supporting an environmentally-friendly business practices by reducing paper consumption, therefore we do not issue any hard copy of Test Report to the Applicant. However, additional certified true copy(ies) or softcopy of the Test Report may be issued upon request by the Applicant upon payment of the relevant fee. The certified true copy(ies) or softcopy of test report shall only be given for test report issued not more than three (3) years from the date of issuance.
10. Issuance of Amendment Report due to the following reasons are chargeable to the Applicant :
 - a) Changes in details of the Applicant name and/or address;
 - b) Changes in details of the Manufacturer's name and/or address;
 - c) Changes in details of the Factory location name and/or address;
 - d) Changes in details of the model and/or type designation
11. However, issuance of Supplementary Report due to the following reasons are FOC :
 - a) Misprints and typo errors;
 - b) Missing technical information as agreed in PP1 form;
 - c) Test data not reported;
 - d) Mistake in reporting of test data
12. Corrections to report shall only be allowed if the date of issuance of the original report has not exceeded 6 months and shall be limited to a maximum 3 times, after either case whichever occurs earlier, an Amendment or a Supplementary Report shall not be issued.

