

Edl, Michele

From: Kristin Moore [kmoore@rockymountainenvironmental.com]
Sent: Friday, December 05, 2008 2:55 PM
To: Edl, Michele; 'Doug Self'; 'Jason Linford'
Subject: pump data
Attachments: driggs_lionswell_pumpdata.pdf

Here is some data on the Lions well that I received from Pump Tech, the pump supplier. They just barely found it this week.

Kristin Moore

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12/5/2008

City of Driggs: 60 HP Submersible Well Pump

Bowl Assembly:	American Turbine model 10-M-55, 6 stages
Design Conditions:	600 GPM @ 250' TDH
Column Size/Depth:	8" 250' setting
Pitless Adapter:	Maass Midwest model MBHDS16188P8NPT
Wire: Size/Length:	AWG#2, 3 conductor w/ground, 260'
Motor:	10" Hitachi 60 HP submersible, 1800 RPM, 3ph/60cy/460v
Check Valve:	(1) 8" located 20' up from bowl unit
Date Installed:	August 18, 1993
Prime Contractor:	Zollinger Construction, Rexburg, Idaho
Supplier:	PumpTech Company, Inc. 4444 So. Yellowstone Hwy. Idaho Falls, Idaho 83402 Phone: 208-529-6868



SUBMERSIBLE Performance Curves

10-M-55

1760 RPM

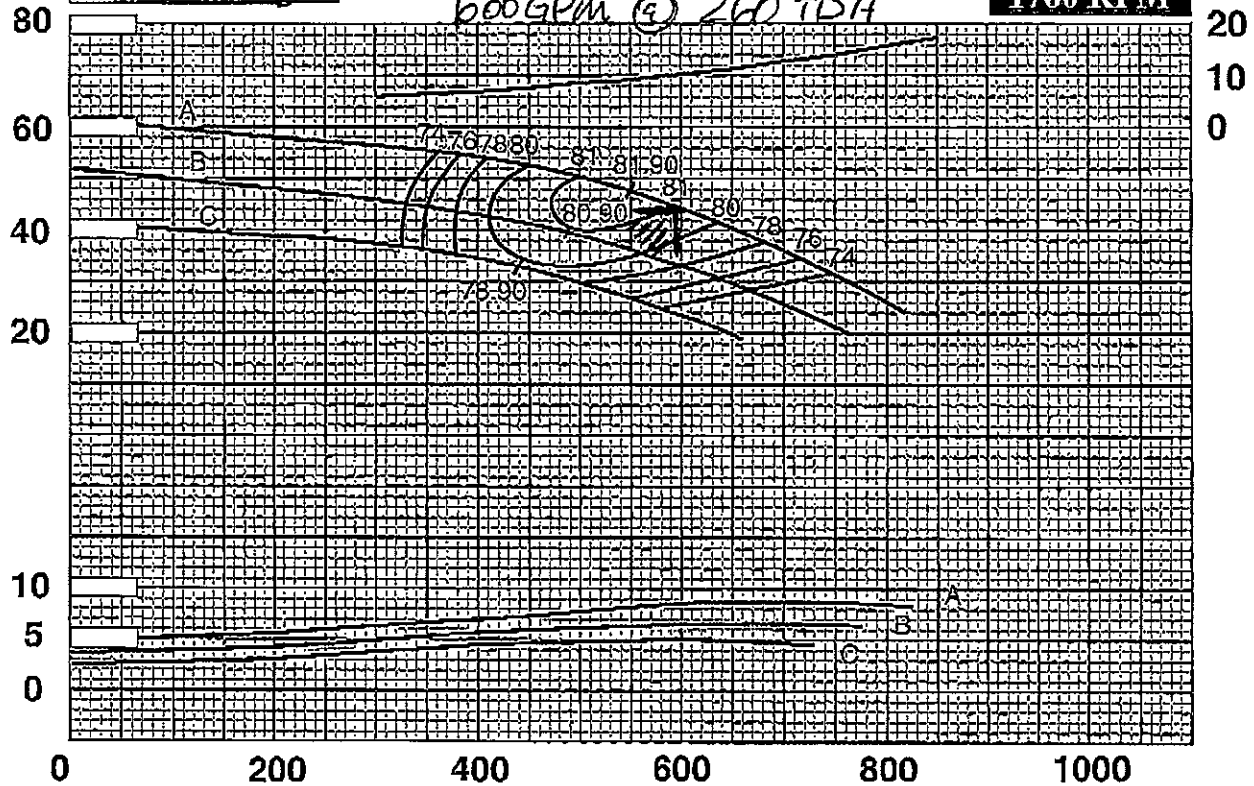
Number of Stages Required: 6

600 GPM @ 260' TDH

HEAD IN FEET

HORSEPOWER

N.P.S.H.



CAPACITY IN U.S. G.P.M.

Impeller Data

Impeller Number	10-M-55
Type	Enclosed
Diameter: A=	7.850 "
B=	7.350 "
C=	6.850 "
Thrust Constant (K)	5.5 pounds/foot of head
Impeller Weight	9.7 #
Number of Vanes	6
Specific Speed (Ns)	2242
Effective Eye Area	12.65 square inches
W(r sq.)	.790 lbs. -ft. sq.
Eye Fluid Velocity	0.02 ft./sec./g.p.m.
Peripheral Velocity	7.679 ft./sec./inch of impeller diameter

Efficiency Correction for Impeller Data

Number of Stages	1	2	3	4	5
Deduct No. Points	4	3	2	1	0

Bowl Data

Bowl Number	10-M
Connection Type	Bolted
Outside Diameter: nominal	9.937 "
minimum	9.625 "
Column Pipe Size: standard	8 "
maximum	10 "
Suction Pipe Size: standard	8 "
maximum	8 "
Shaft Size: standard	1.5 "
maximum	1.5 "
Lateral: standard	.750 "
maximum	1.000 "
Shaft Bearing Clearance	.010 "
Impeller Skirt Clearance	.015 "
Maximum Sphere Size	.820 "
Maximum No. Stages (std. const.)	27
Maximum Head (with full nominal bowl diameter) (1.0 S.G.)	800 ft.

General Data

Lengths	
Column Adapter	1.500 "
Discharge Case	4.000 "
Bowl	3.500 "
Suction Case	8.750 "
Suction Bell	6.500 "
Submersible Motor Adapter	12.875 "
Approximate Shipping Weights	
First Stage	164 #
Additional Stage	61 #
Miscellaneous	
Hub Projection on Bell Suction	2.250 "
Cable Guard Height	.500 "
Distance From Impeller Eye to Bottom of Bell Suction	6.625 "

Operational	
Minimum Required Submergence	CONSULT FACTORY
Standard Construction Materials	
Bowl	A48-30 c. i. (porcelain)
Impeller	C83800 br.
Bowl Shaft	416 stainless steel
Shaft Coupling	C1215 steel
Lock Collar	C1215 steel
Cap Screw	grade 5
Bowl Bearing	C84400 br./buna-N A40
Suction/Submersible Motor Adapter Bearing	C84400 br.
Throttle Bearing	C84400 br.
Sand Collar	polyethylene
Column Adapter/Discharge Case/Suction Case	A48-30 c. i.
Submersible Motor Adapter	A48-30 c. i.
Tube Adapter	cl. 65-45-12 ductile iron



SUBMERSIBLE Performance Curves

10-M-55

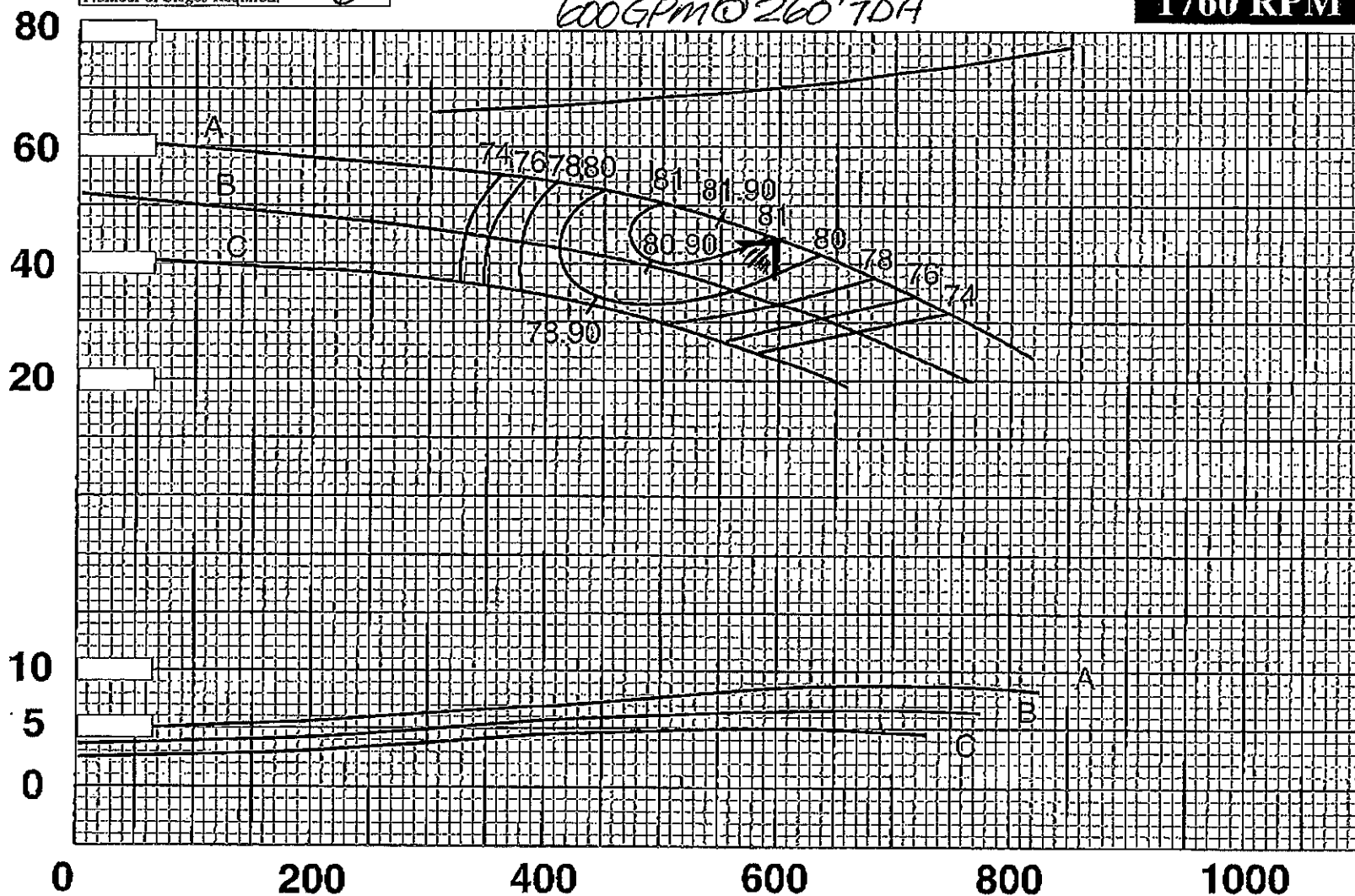
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