

Company: Bonneville Power Administration

Name:

Date: 11/25/2006



Pump:

Size: 7SS80 (1 stage)
 Type: Submersible
 Synch speed: 3450 rpm
 Curve: 7SS80
 Specific Speeds:
 Dimensions:
 Speed: 3450 rpm
 Dia: 6 in
 Impeller:
 Ns: 3450
 Nss: ---
 Suction: --- in
 Discharge: --- in

Search Criteria:

Flow: --- US gpm Head: --- ft

Fluid:

Water
 Density: 62.25 lb/ft³
 Viscosity: 1.105 cP
 NPSHa: --- ft
 Temperature: 60 °F
 Vapor pressure: 0.2563 psi a
 Atm pressure: 14.7 psi a

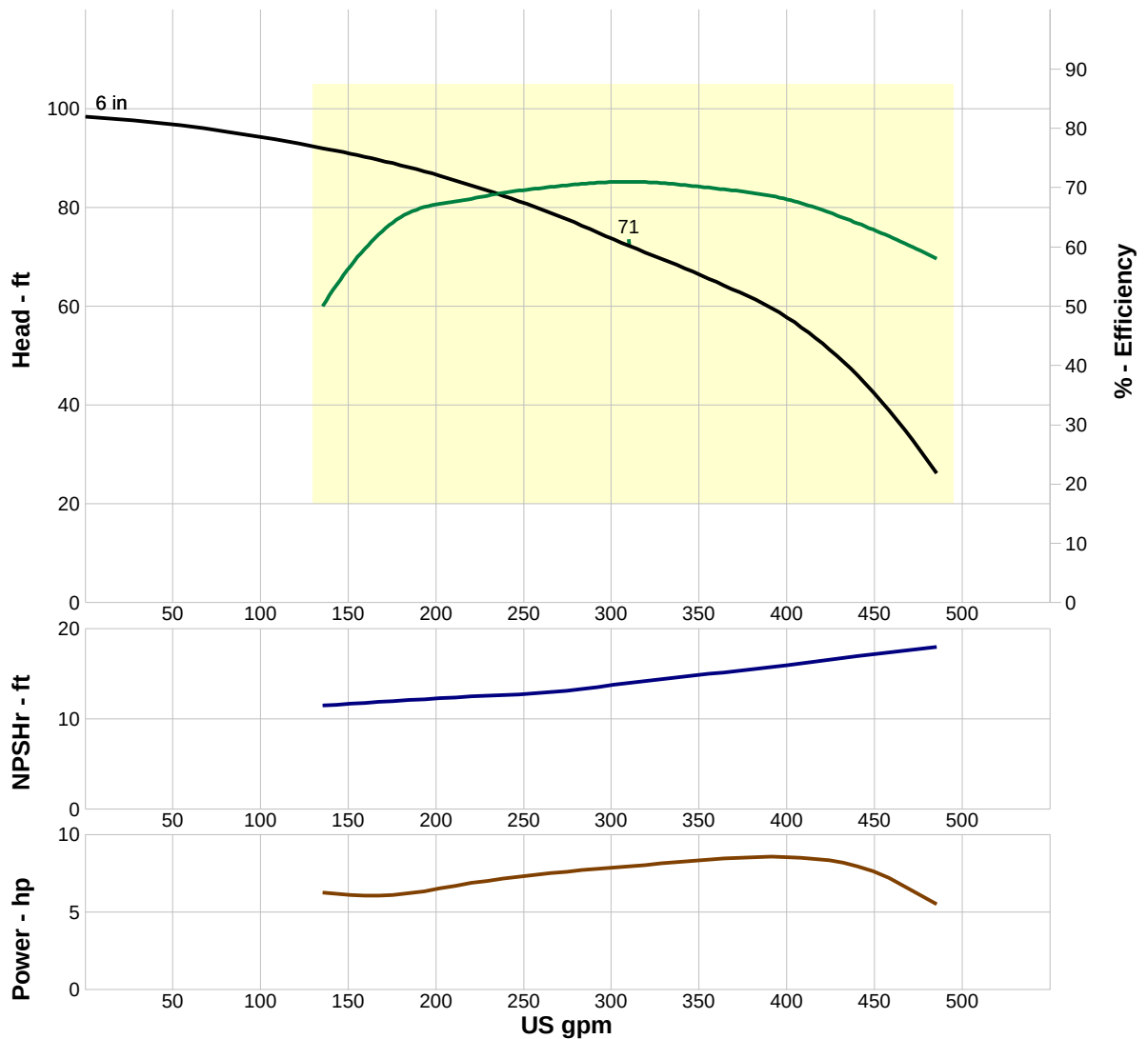
Motor:

Standard: NEMA
 Enclosure: TEFC
 Sizing criteria: Max Power on Design Curve
 --- hp
 Speed: ---
 Frame: ---

Pump Limits:

Temperature: 140 °F
 Pressure: 540 psi g
 Sphere size: 1.5 in
 Power: --- hp
 Eye area: --- in²

---- Data Point ----	
Flow:	310 US gpm
Head:	72.2 ft
Eff:	71%
Power:	7.96 hp
NPSHr:	14 ft
---- Design Curve ----	
Shutoff head:	98.4 ft
Shutoff dP:	42.5 psi
Min flow:	62 US gpm
BEP:	71% @ 310 US gpm
NOL power:	8.57 hp @ 400 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
466	3450	34.6	60.5	6.57	17.6
388	3450	59.8	68.5	8.53	15.7
310	3450	72.2	71	7.96	14
233	3450	82.9	68.7	7.08	12.6
155	3450	90.5	57	6.2	11.8