

Company: Bonneville Power Administration

Name:

Date: 11/26/2006

**Pump:**

Size: 8"5823
 Type: 5800-HSC
 Synch speed: 1200 rpm
 Curve: 230806F
 Specific Speeds:
 Dimensions:
 Speed: 1175 rpm
 Dia: 14.5 in
 Impeller: D8A1F
 Ns: 1720
 Nss: 12450
 Suction: 10 in
 Discharge: 8 in

Pump Limits:

Temperature: 160 °F
 Pressure: 175 psi g
 Sphere size: 0.94 in
 Power: --- hp
 Eye area: --- in²

Search Criteria:

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

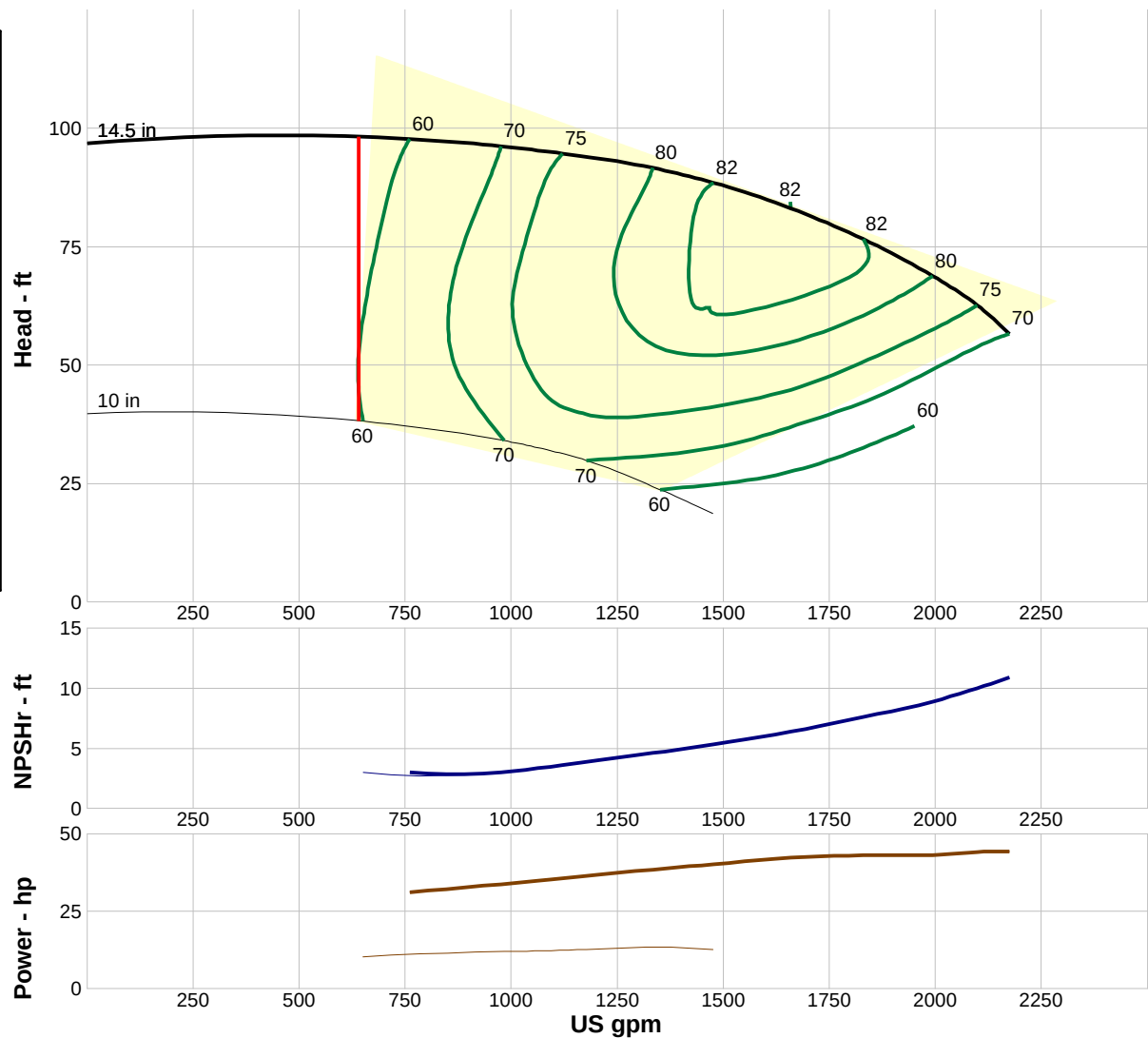
Fluid:

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
 Size: 50 hp
 Speed: 1200
 Frame: 365T

---- Data Point ----	
Flow:	1658 US gpm
Head:	83.1 ft
Eff:	82%
Power:	42.4 hp
NPSHr:	6.4 ft
---- Design Curve ----	
Shutoff head:	96.8 ft
Shutoff dP:	41.8 psi
Min flow:	640 US gpm
BEP:	82% @ 1658 US gpm
NOL power:	44.4 hp @ 2174 US gpm
-- Max Curve --	
Max power:	44.4 hp @ 2174 US gpm

**Performance Evaluation:**

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
2087	1175	63.3	76	44.1	9.91
1739	1175	80	82	42.7	6.99
1391	1175	90.4	81	39.2	4.91
1043	1175	95.5	72	34.7	3.3
696	1175	97.6	57	30.5	3