

Company: Bonneville Power Administration

Name:

Date: 11/26/2006



Pump:

Size: 6"5822
 Type: 5800-HSC
 Synch speed: 1800 rpm
 Curve: 220604F
 Specific Speeds:
 Dimensions:
 Speed: 1780 rpm
 Dia: 12 in
 Impeller: D6B1F
 Ns: 1722
 Nss: 10869
 Suction: 8 in
 Discharge: 6 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

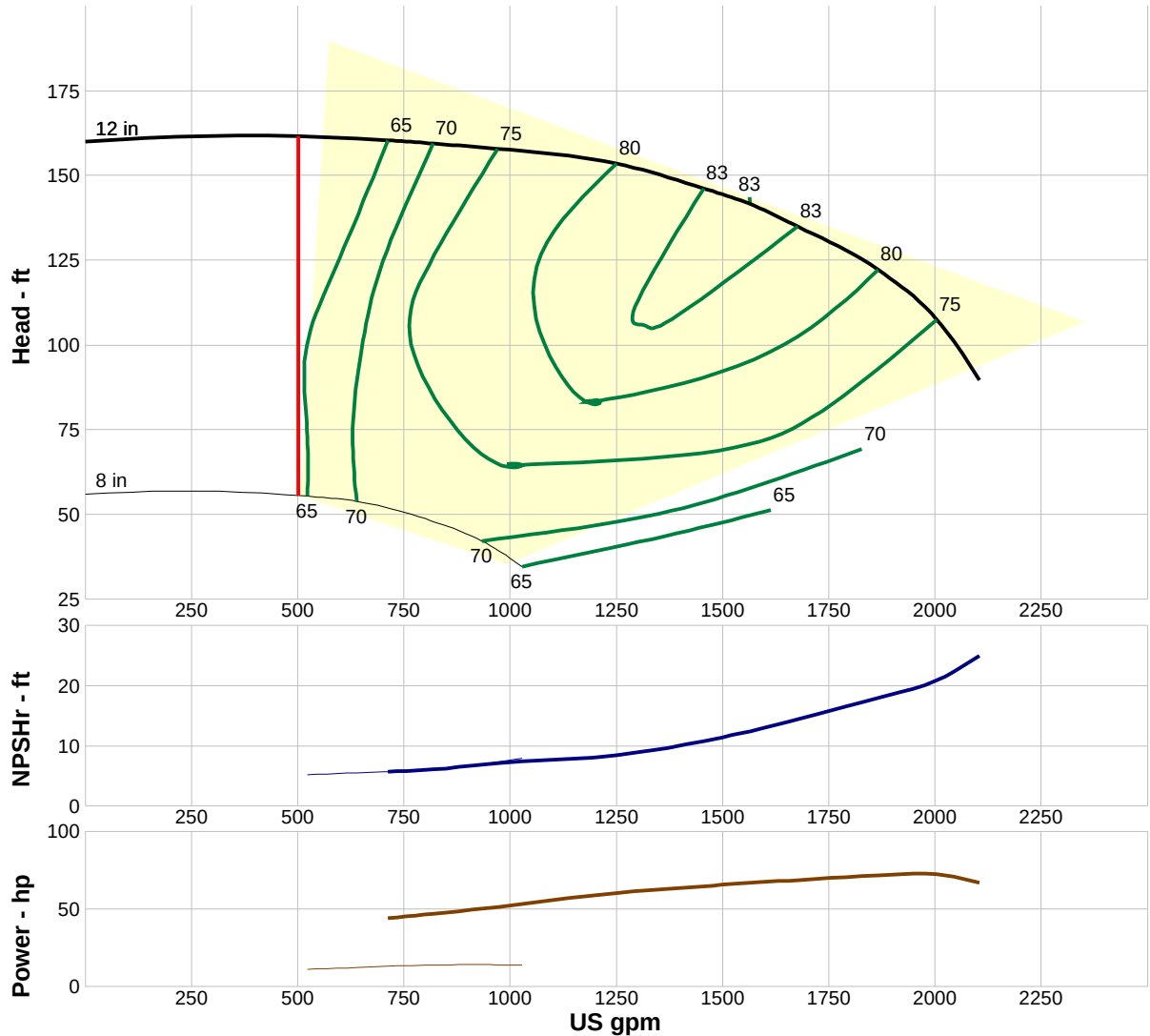
Motor:

Standard: NEMA
 Enclosure: TEFC
 Sizing criteria: Max Power on Design Curve
 Size: 75 hp
 Speed: 1800
 Frame: 365T

Pump Limits:

Temperature: 160 °F
 Pressure: 175 psi g
 Sphere size: 0.81 in
 Power: --- hp
 Eye area: --- in²

---- Data Point ----	
Flow:	1563 US gpm
Head:	142 ft
Eff:	83%
Power:	67.3 hp
NPSHr:	12.4 ft
---- Design Curve ----	
Shutoff head:	160 ft
Shutoff dP:	69.2 psi
Min flow:	500 US gpm
BEP:	83% @ 1563 US gpm
NOL power:	72.5 hp @ 2003 US gpm
-- Max Curve --	
Max power:	72.5 hp @ 2003 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
2018	1780	105	74	71.7	21.5
1682	1780	134	83	68.9	14.5
1346	1780	150	81	62.5	9.56
1009	1780	157	76	52.8	7.35
673	1780	160	63	43.3	5.61