

Company: Bonneville Power Administration

Name:

Date: 11/26/2006



Pump:

Size: 8"5821 (A)
 Type: 5800-HSC
 Synch speed: 1800 rpm
 Curve: 210804A
 Specific Speeds:
 Dimensions:
 Speed: 1770 rpm
 Dia: 9.25 in
 Impeller: D8C1A
 Ns: 3579
 Nss: 11269
 Suction: 10 in
 Discharge: 8 in

Pump Limits:

Temperature: 160 °F
 Pressure: 175 psi g
 Sphere size: 0.69 in
 Power: --- hp
 Eye area: --- in²

Search Criteria:

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

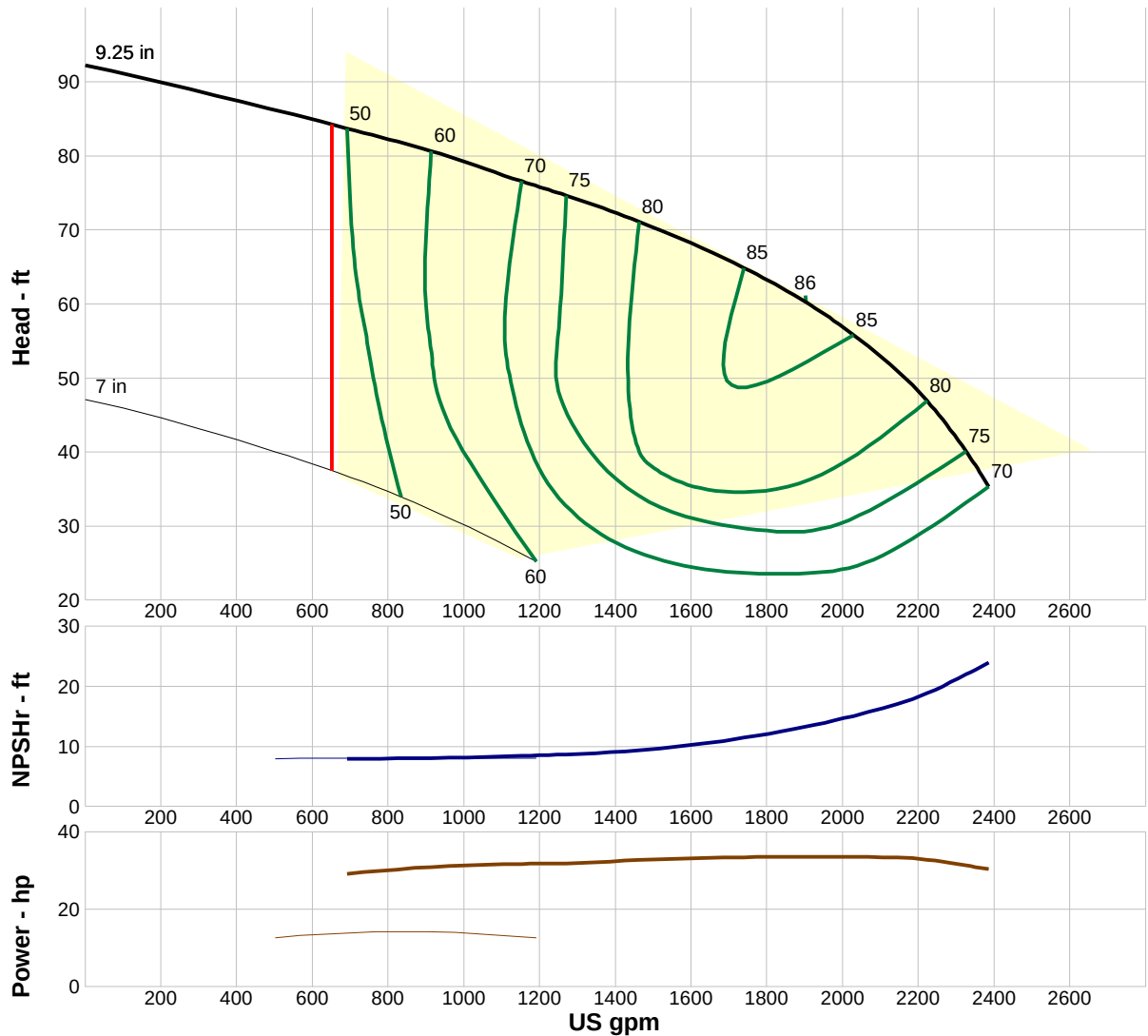
Fluid:

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: 40 hp
 Speed: 1800
 Frame: 324T

---- Data Point ----	
Flow:	1902 US gpm
Head:	60.3 ft
Eff:	86%
Power:	33.6 hp
NPSHr:	13.3 ft
---- Design Curve ----	
Shutoff head:	92.3 ft
Shutoff dP:	39.9 psi
Min flow:	650 US gpm
BEP:	86% @ 1902 US gpm
NOL power:	33.6 hp @ 1902 US gpm
-- Max Curve --	
Max power:	33.6 hp @ 1902 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
2290	1770	42.4	77	31.9	20.9
1908	1770	60	86	33.6	13.4
1526	1770	69.7	81	33	9.85
1145	1770	76.7	70	31.8	8.42
763	1770	82.7	53	29.8	8.02