

Company: Bonneville Power Administration

Name:

Date: 11/25/2006



Pump:

Size: 18HH-2C (1 stage)
 Type: Vertical
 Synch speed: 1160 rpm
 Curve: 18HH-2C
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 1160 rpm
 Dia: 14 in
 Impeller:
 Ns: 1160
 Nss: ---
 Suction: 12 in
 Discharge: 12 in
 Bowl size: 18 in
 Max lateral: 0.469 in
 Thrust K factor: 35 lb/ft

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

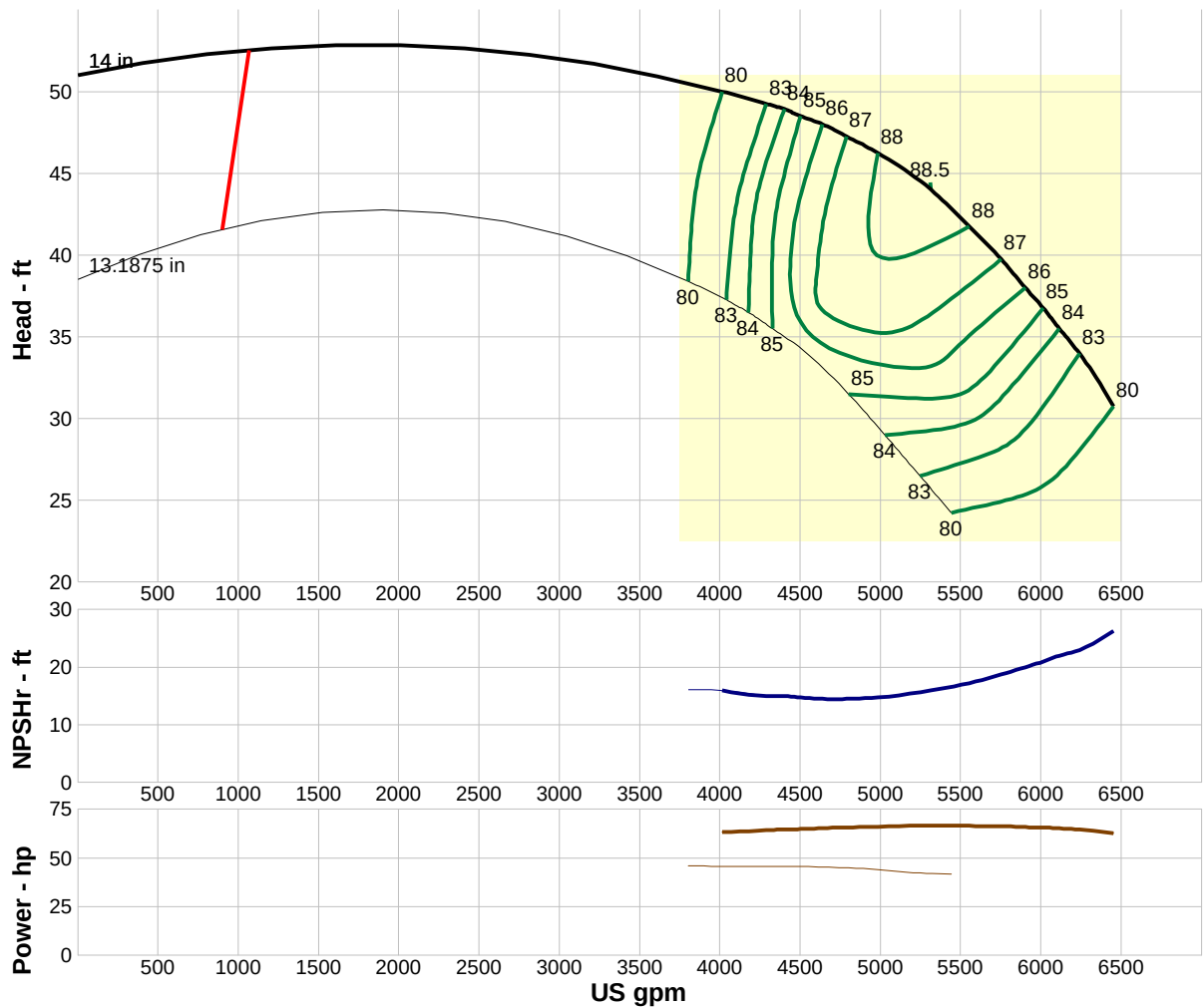
Motor:

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

Pump Limits:

Temperature: 140 °F
 Pressure: 314 psi g
 Sphere size: 0.875 in
 Power: 1000 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	5313 US gpm
Head:	44 ft
Eff:	88.5%
Power:	66.7 hp
NPSHr:	16 ft
---- Design Curve ----	
Shutoff head:	51 ft
Shutoff dP:	22 psi
Min flow:	1063 US gpm
BEP:	88.5% @ 5313 US gpm
NOL power:	66.7 hp @ 5313 US gpm
-- Max Curve --	
Max power:	66.7 hp @ 5313 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
6192	1160	34.5	83.4	64.8	22.6
5160	1160	45	88.3	66.4	15.4
4128	1160	49.7	81.3	63.7	15.6
3096	1160	50.2	70	60.3	19.3
2064	1160	50.5	58.7	56.8	23.1