



Company: Bonneville Power Administration

Name:

Date: 11/25/2006

Pump:

Size: 16PS (1 stage)
 Type: Vertical
 Synch speed: 1160 rpm
 Curve: 16PS
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 1160 rpm
 Dia: 13.187 in
 Impeller:
 Ns: 1160
 Nss: ---
 Suction: 12 in
 Discharge: 12 in
 Bowl size: 15.25 in
 Max lateral: 0.875 in
 Thrust K factor: 35.35 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

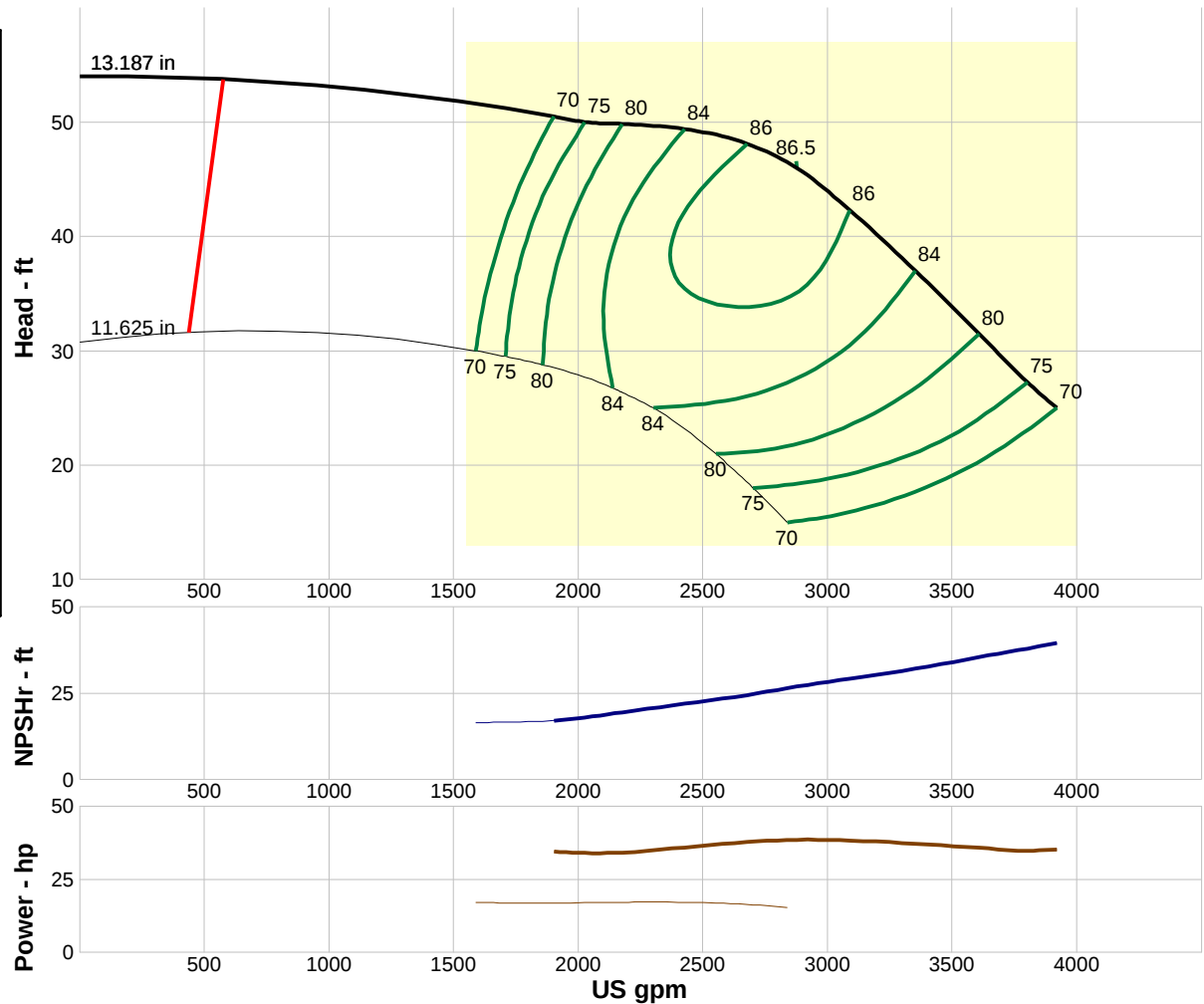
Motor:

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

Pump Limits:

Temperature: 140 °F
 Pressure: 457 psi g
 Sphere size: 1.218 in
 Power: 500 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	2875 US gpm
Head:	46 ft
Eff:	86.5%
Power:	38.6 hp
NPSHr:	27 ft
---- Design Curve ----	
Shutoff head:	54 ft
Shutoff dP:	23.3 psi
Min flow:	575 US gpm
BEP:	86.5% @ 2875 US gpm
NOL power:	40.2 hp @ 575 US gpm
-- Max Curve --	
Max power:	40.2 hp @ 575 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
3762	1160	28.1	76	35.1	37.5
3135	1160	41.3	85.6	38.2	29.8
2508	1160	49	84.7	36.6	22.8
1881	1160	50.5	69.2	34.7	16.8
1254	1160	51.7	44.2	37.3	11.8