



Company: Bonneville Power Administration

Name:

Date: 11/25/2006

Pump:

Size: 10HXH (1 stage)
 Type: Vertical
 Synch speed: 3450 rpm
 Curve: 10HXH
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 3450 rpm
 Dia: 8.25 in
 Impeller:
 Ns: 3450
 Nss: ---
 Suction: 6 in
 Discharge: 6 in
 Bowl size: 9.875 in
 Max lateral: 0.75 in
 Thrust K factor: 10.3 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

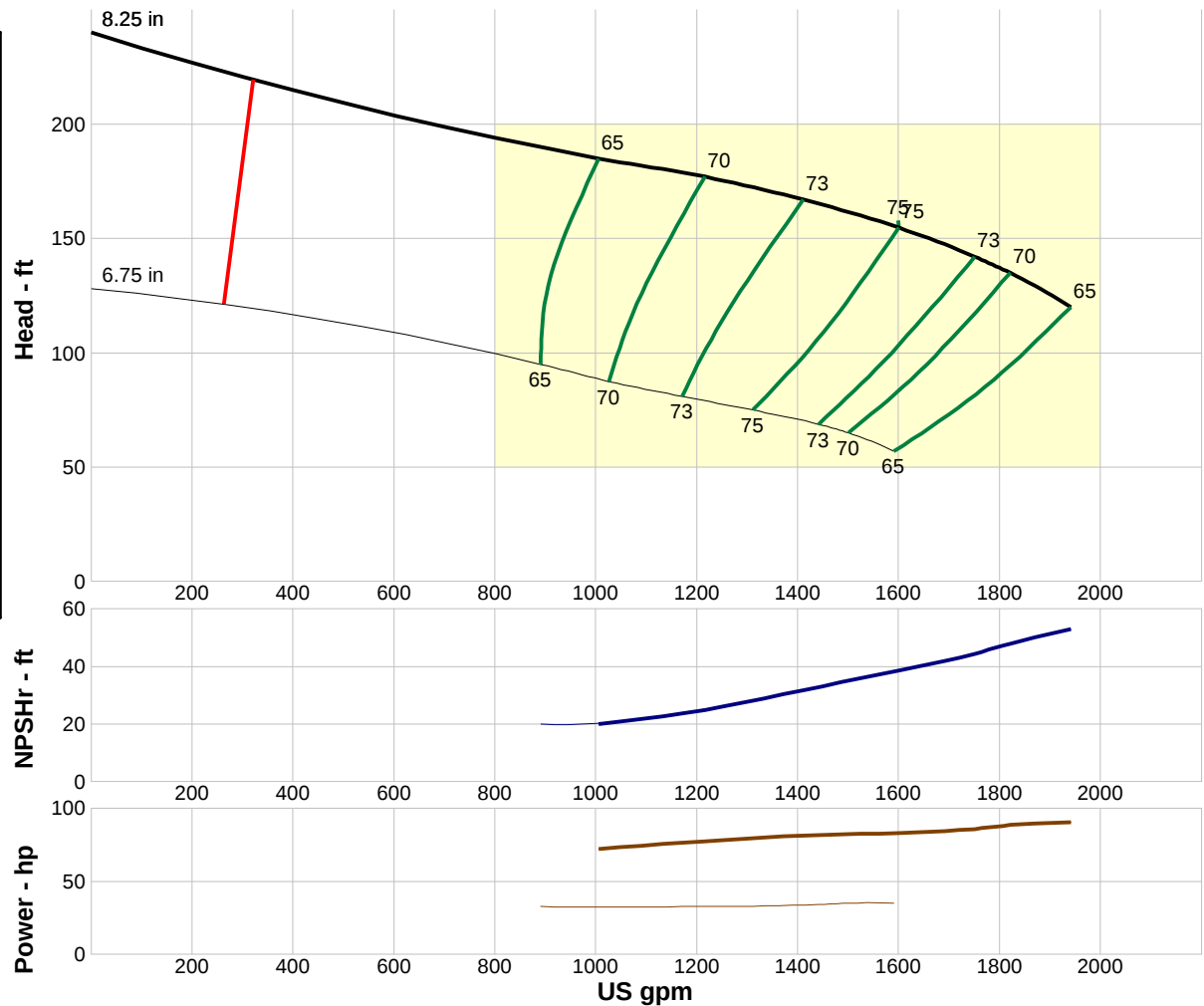
Motor:

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

Pump Limits:

Temperature: 140 °F
 Pressure: 455 psi g
 Sphere size: 0.875 in
 Power: 150 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	1600 US gpm
Head:	155 ft
Eff:	75%
Power:	83.3 hp
NPSHr:	38.7 ft
---- Design Curve ----	
Shutoff head:	240 ft
Shutoff dP:	104 psi
Min flow:	320 US gpm
BEP:	75% @ 1600 US gpm
NOL power:	90.4 hp @ 1940 US gpm
-- Max Curve --	
Max power:	90.4 hp @ 1940 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
1862	3450	130	68.2	89.3	49.8
1552	3450	158	74.5	82.9	37
1242	3450	176	70.4	78.1	25.9
931	3450	189	63.2	70.3	18.2
621	3450	206	55.9	62.5	10.9