

Company: PumpTech co
Name: Kolby Cazier
Date: 6/8/2011

TGKC-0113
Clinton Aston
100 HP Deep well



Pump:

Size: 12MC (5 stage)
Type: Vertical
Synch speed: 1800 rpm
Curve: 122910
Specific Speeds:
Dimensions:
Vertical Turbine:
Speed: 1770 rpm
Dia: 9.01 in
Impeller: 12MC SS ENCL.
Ns: ---
Nss: ---
Suction: 10 in
Discharge: 10 in
Bowl size: 12 in
Max lateral: 0.625 in
Thrust K factor: 12 lb/ft

Search Criteria:

Flow: 1500 US gpm Head: 220 ft

Fluid:

Water
Density: 62.25 lb/ft³
Viscosity: 1.105 cP
NPSHa: ---
Temperature: 60 °F
Vapor pressure: 0.2563 psi a
Atm pressure: 14.7 psi a

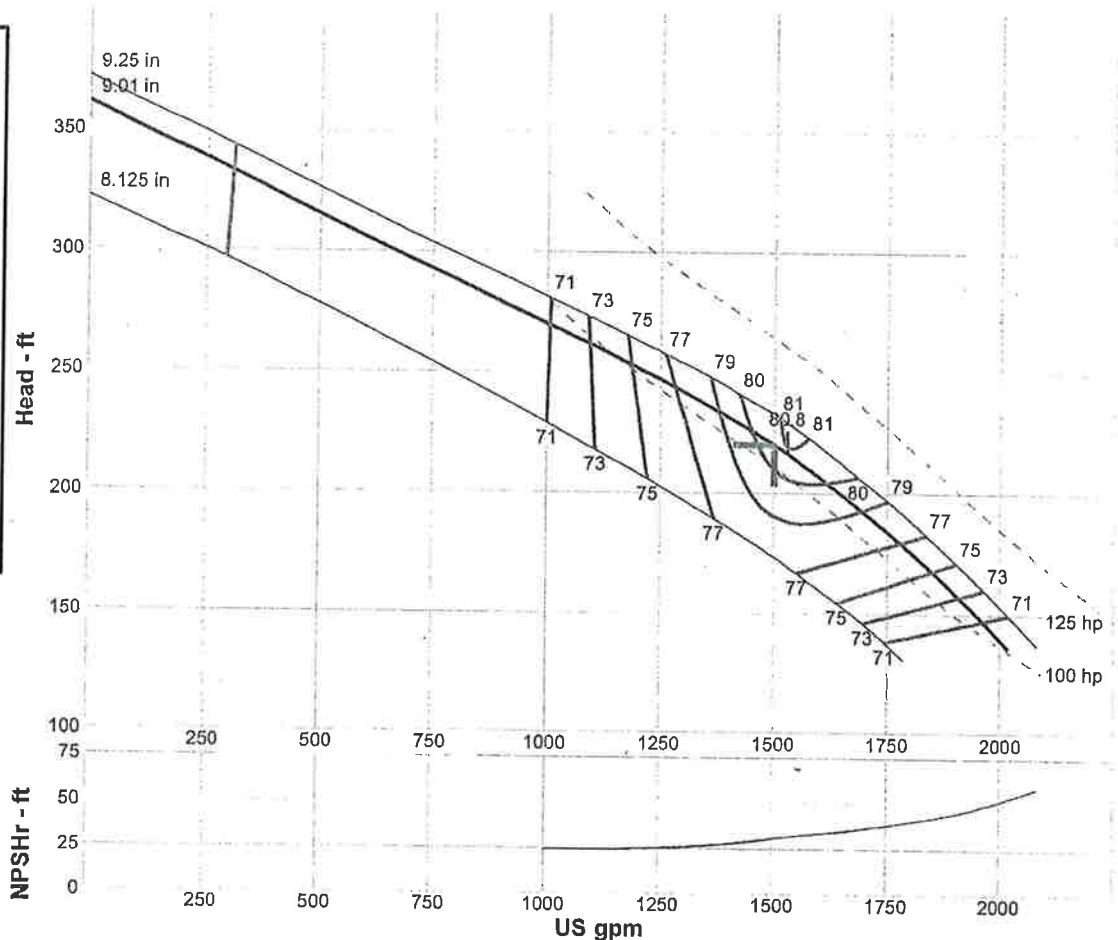
Motor:

Standard: NEMA
Enclosure: TEFC
Size: 125 hp
Speed: 1800
Frame: 444T
Sizing criteria: Max Power on Design Curve

Pump Limits:

Temperature: 140 °F
Pressure: 355 psi g
Sphere size: 0.75 in
Power: 350 hp
Eye area: 26.2 in²

Data Point	
Flow:	1500 US gpm
Head:	220 ft
Eff:	80.5%
Power:	103 hp
NPSHr:	---
Design Curve	
Shutoff head:	362 ft
Shutoff dP:	156 psi
Min flow:	306 US gpm
BEP:	80.8% @ 1528 US gpm
NOL power:	105 hp @ 1777 US gpm
Max Curve	
Max power:	110 hp @ 1750 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
1800	1770	176	76.4	104	---
1500	1770	220	80.5	103	---
1200	1770	252	75.3	101	---
900	1770	279	68.6	93.3	---
600	1770	307	61.8	84.4	---

