

Project Title: Sample Project
 Project ID: 30206
 Project Manger: M.W.

Prepared By: W.T Sheet: 1 of 1
 Checked By: D.W. Date: 2/4/18

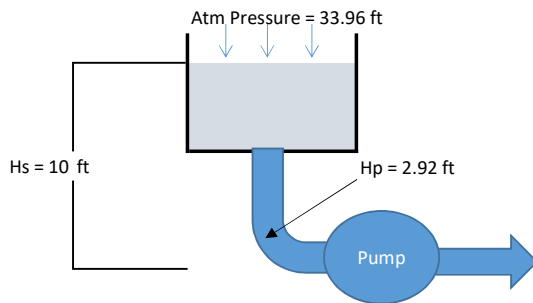
PUMP NPSH - OPEN SYSTEM WITH WATER SOURCE ABOVE PUMP

Project Description

Water at 68F

Operating Conditions

- 1 68F water at sea level
- 2 Atm Pressure = 14.696 psia = 33.96 ft abs
- 3 Vapor Pressure of liquid = 0.339 psia = 0.783 ft abs.



$$NPSH_{AVAILABLE} = H_A \pm H_S - H_P - H_{VP}$$

Net Positive Suction Head - Open System With Water Source Above Pump			
H_A	33.960	ft	Absolute pressure on the surface of the liquid supply level.
H_{VP}	0.783	ft	Vapor pressure of liquid at the temperature being pumped
H_S	10.000	ft	Static height that liquid supply level is above or below the pump centerline
H_P	2.920	ft	Suction line friction losses

$NPSHA = 33.96 \text{ ft} - 0.783 \text{ ft} - 10 \text{ ft} - 2.92 \text{ ft}$

$NPSHA = 40.26 \text{ ft}$

Notes:

Preliminary Estimates