CE3105 Mechanics of Fluids Laboratory Department of Civil Engineering Texas Tech University Experiment: Two-Stage Centrifugal Pump Characteristics - Data Sheet Date of Experiment:, Name:.........

Experimental Data:

celsius Temperature of water, T=

Water density, $\rho = (lb/ft^3)$ Gravity, g= 32.2 (ft/s^2)

Single pump Test:

u			
\mathbf{W}_2			
ô			
H			
\mathbf{W}_1			
$\Delta ext{ P} ext{Torque} ext{Pump 1 Speed} ext{W}_1 ext{H} ext{Q}$	(1,1)		
Torque			
ΔP			
\mathbf{P}_4			
\mathbf{P}_3			
${f P}_2$			

Instructor's Signature

Series pump Test:

	_	_		
h				
\mathbf{W}_2				
9				
H				
$\frac{\text{Pump2}}{\text{W}_1}$				
$\frac{\text{Pump1}}{\text{W}_1}$				
$egin{aligned} ext{Pump 2 Speed} \ (ext{N}_2) \end{aligned}$				
$oxed{ \left(egin{array}{c c c c c c c c c c c c c c c c c c c $				
Torque (2)				
$egin{array}{ c c c c c c c c c c c c c c c c c c c$				
ΔP				
\mathbf{P}_4				
\mathbf{P}_3				
\mathbf{P}_2				

Parallel pump Test:

h				
\mathbf{W}_2				
တ				
H				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	\mathbf{W}_1			
Pump1	W 1			
Pump2	${f Speed} \ ({f N}_2)$			
Pump1	$\mathbf{Speed} \ (\mathbf{N}_1)$			
Torque	$egin{array}{c c} egin{array}{c c} egin{array}{c} \egin{array}{c} \egin{array}{c} \egin{array}{c} \egin{array}{c} ar$			
Torque	(1)			
ΔP				
\mathbf{P}_4				
$f{P}_2 \mid f{P}_3 \mid {f Avg. \ Inlet} \mid f{P}_4 \mid \Delta f{P}$	Fressure			
\mathbf{P}_3				
\mathbf{P}_2				

Instructor's Signature