Pump Station Drawdown Test

Circular Wet Well

Pump Station Name: _____

SC DHEC Project Name: _____

Date: _____ **SC DHEC Permit Number:** _____

Contractor: _____

Engineering Firm: _____

Pump Number	Start Depth (in.)	Stop Depth (in.)	Volume (gallons)	Test Time (min.)	Pumping Rate (gpm)	Gauge Pressure (psig)	Gauge Elevation (MSL)	Wet Well Water Surface (MSL)	Total Dynamic Head (ft.)

Wet Well Volume Pumped

$$V = 7.48\frac{gal}{ft^3} \times 0.785D^2 \times (E_1 - E_2)$$

V = Volumed pumped (gal)
D = Wet well diameter (ft)
E_1 = Pump start elevation (ft)
E_2 = Pump stop elevation (ft)

Pumping Rate

$$Q = \frac{V}{T}$$

Q = Pumping rate (gpm)
V = Volume pumped (gal)
T = Test rate (min)

Total Dynamic Head (TDH)

$$TDH = (Z_G - Z_W) + P\frac{144\frac{in^2}{ft^2}}{62.4\frac{lb}{cf}}$$

TDH = Total pumping head (ft)
Z_G = Gauge elevation (MSL)
Z_W = Wet well water elevation (MSL)
P = Gauge pressure (psig)

Contractor Representative: _____ **Date:** _____

Engineer Representative: _____ **Date:** _____

OJRSA Representative: _____ **Date:** _____