Water System Capacity Calculation Scenario 5 – Fast & Furious Rest Stop

PWS Type: Community, NTNC, or TNC? TNC

The estimated maximum number of vehicles served at this UDOT rest stop is 1,600 on a peak day.

1. Indoor Water Use

Number of Residential Connections = 0

Number of other connections = 1,600 vehicles on a peak day (Table 510-1 Roadway Rest Stop) => Peak day demand = 7 gpd per vehicle => Total peak day demand = 11,200 gallons per day = 14 equivalent residential connections (ERCs) 7 gpd per vehicle x 1,600 vehicles =11,200 gpd 11,200 gpd / 800 gpd per ERC => 14 ERCs

2. Outdoor Water Use

Located in Box Elder County near Promontory => Map Zone 4 Total irrigated acreage = 0 acres

3. Fire Flow Requirements

Fire suppression flow not required. Local fire authority name _____ Contact Info _____

4. Existing source capacity = 15 gpm

5. Existing storage capacity = <u>3,000</u> gallons (assuming 6,000-gallon hydropneumatic tank with 50% bladder capacity) (Calc1) 6,000 gallons x 50% = 3,000 gallons of storage capacity

(What if this is an unpressurized 6,000-gallon steel tank?) (Calc2) 6,000 gallons of storage capacity