Here's another method, since you already have the instrumentation necessary for the test:

1. Select a pressure cylinder to fill with oxygen. Should be capable of handling 500 psi. Also, it must be a cylinder with a known internal volume.

2. IMPORTANT!!! Bury the cylinder in sand or water, just in case is explodes, to contain any fragments. IMPORTANT!!!

3. Empty all gas from the cylinder and allow it reach atmospheric pressure.

4. Connect the oxygen line from your orifice to the cylinder. Put a pressure transducer in-line, so that it measures the pressure in the receiving cylinder. A thermocouple would be nice, too, so we know the final gas temperature in the receiving cylinder. Not essentail, there's a way around this, see next.

5. Open the ball valve and measure the time required to raise the internal pressure in the receiving cylinder from atmospheric to 500 psig. Since volumetric flow through the orifice is choked at pressure ratios above ~2:1 then you'll have constant flow rate as long as the upstream pressure above the orifice is >1000 psig. If no thermocouple is available to measure the receiving cylinder's gas temperature, then just let the cylinder sit long enough for the gas to reach room temperature and then read the final pressure in the cylinder for use in the following calculations.

6. Calculate the oxygen flow rate as follows:
P1*V1/T1 = P2*V2/T2
or
V2 = P1*V1*T2/(T1*P2)
where P1= initial pressure in the receiving cylinder = 14.7 psia
P2= final pressure in the receiving cylinder = 500 psig + 14.7 psia = 514.7 psia
V1= known internal volume of receiving cylinder
V2= volume of gas added to receiving cylinder, at 14.7 psia
T1= internal temperature of recieving cylinder when empty
T2= internal temperature of receiving cylinder when full then Vdot = (V2-V1)/time

Example:
Suppose we were to use a standard 80 ft3 oxygen welding cylinder. If it holds 80 ft3 of oxygen @ 2800 psi then the actual internal volume of the cylinder is:
(2800psig + 14.7 psia)*V1/T1 = 14.7 psia * 80 ft3/T2 assume T1=T2
V1 = 14.7 * 80/(2800 + 14.7)
V1 = 0.418 ft3

Filling a 0.418 ft3 cylinder to 500 psig will hold the equivalent of
(500psig + 14.7 psia) * 0.418ft3 = 14.7psia * V2 assume T1=T2
V2 = (500+14.7) * 0.418/14.7
V2 = 14.6 ft3 of oxygen

so the time to fill the cylinder to 500 psig would be:
time = (V2-V1)/Vdot
time = 14.6 ft3 - 0.418 ft3/35 cfm
time = 0.406 minutes = 24.4 seconds

24 seconds is long enough that the transient effects of opening and closing valves will be miniscule.