

WATER MEASUREMENT

HOUR METER REPORT FORM

DATE: _____

WATER RIGHT OWNER=S NAME: _____

NO: _____

LOCATION: _____

USER INFORMATION: _____

MEASUREMENTS REQUIRED: _____

TYPE OF DEVICE USED: _____

A DATE	B TIME	C HOUR METER (HOURS)	D PERIOD OF OPERATION (HOURS)	E VOLUME USED (AF)
F. ≅ TOTAL VOLUME USED THIS YEAR				

G. AVERAGE SYSTEM FLOW RATE _____ (Circle one: GPM or CFS)

H. CHANGES IN SYSTEM FROM LAST YEAR _____

WATER MEASUREMENT HOUR METER REPORT FORM

INSTRUCTIONS FOR USING HOUR METER REPORT FORM

The purpose of the *HOUR METER REPORT FORM* is to record system information and hour meter observations that will allow one to determine the volume of water diverted. Most electric drive center pivot laterals are or can be equipped with an hour meter. Observing the intervals of time that a pump operates and determining an average flow rate, the pumped volume can be calculated.

LINE G: It is important to measure the average flow rate of your system. Record this value on Line G.

LINE H: When reporting changes in the system, identify those changes that will affect the average flow rate of the system. Please be reminded that changes in your system can affect the average flow rate. Typical changes that should be noted include:

- 4 Changing sprinkler nozzles, pumps, or motors;
- 4 Replacing main lines or laterals with different pipe sizes or material;
- 4 Reconfiguring the system;
- 4 Adding or deleting the amount of irrigated acreage;
- 4 Changing the type of end gun.

An explanation for each observation that is recorded on the *HOUR METER REPORT FORM* is given below.

COLUMN A & B - DATE & TIME

Record the date and time of the hour meter readings.

COLUMN C - HOUR METER

Record the accumulated number of hours shown on the meter.

COLUMN D - PERIOD OF OPERATION (HOURS)

Subtract the current hour meter value from the previous hour meter observation.

COLUMN E - VOLUME USED (AF)

Calculate the average flow rate and the period of time that water is diverted. The formulas below can be used to calculate the volume.

$$\text{System Flow Rate in GPM} \times \text{Period of Operation in Hours} \times 0.00018 = \text{Volume in AF}$$

$$\text{System Flow Rate in CFS} \times \text{Period of Operation in Hours} \times 0.0825 = \text{Volume in AF}$$

LINE F: TOTAL VOLUME USED THIS YEAR

Total the amounts in Column E, VOLUME USED. Enter this number on Line F, TOTAL VOLUME USED THIS YEAR.