

## CONFIDENTIAL/PROPRIETARY INFORMATION

Ralph Heringer  
Rec Dist 2026 Webb Tract  
P O Box 4005  
Stockton, CA 95204

Monday, November 30, 2020

SUBJECT: PUMPING COST ANALYSIS  
HP: 150.00 Plant: Main Station Pump 1  
PUMP TEST REFERENCE NUMBER: PT-24588  
PUMP TEST RUN: Run 1

The following Pumping Cost Analysis is presented as an aid to your cost accounting. This analysis is an estimate prepared from operating criteria supplied from the pump test performed Nov 27th 2020 and information provided by you during the pump test.

It is recommended and assumed that:

1. Overall plant efficiency can be improved to: 69%
2. Water requirements will be the same as for the past year.
3. All operating conditions (annual hours of operation, discharge head, and water pumping level) will remain the same as they were at the time of the pump test.

	EXISTING PLANT EFFICIENCY	IMPROVED PLANT EFFICIENCY	SAVINGS
kWh/AF	64.3	35.5	28.9
Estimated Total kWh	102,403	56,476	45,927
Average Cost per kWh	\$0.18	\$0.18	
Average Cost per hour	\$18.91	\$24.70	*
Cost Per Acre Ft.	\$11.88	\$6.55	\$5.33
Estimated Acre Ft. Per Year	1,591.65	1,591.65	
Run Hours	1,000.00	1,000.00	
Overall Plant Efficiency	38.1%	69%	
Estimated Total Annual Cost	\$18,905.61	\$10,426.60	\$8,479.01

It is sincerely hoped that this information will prove helpful to you, and that your concerns over maintaining optimum pumping efficiency will be continued.

If you have any questions, please contact Bill Power at (209) 527-2908.

Regards,

William Thomas Power, III

Enclosures



Report ID: PT-24588

6301 Bearden Lane  
Modesto, CA 95357  
209.527.2908 / 800.808.9283  
209.527.2921 fax  
www.powerhydrodynamics.com

## Agricultural and Domestic Pump Test Report Rec Dist 2026 Webb Tract - Main Station Pump 1 - Run 1

Latitude: 38.6272W  
Test Date: Nov 27th 2020

Longitude: -121.60255N  
Tester: Bill Power

Elevation: -8 ft  
Nameplate HP: 150.00 hp

### Customer Information

#### Rec Dist 2026 Webb Tract

P O Box 4005  
Stockton, CA 95204  
Contact: Ralph Heringer  
Phone: 916-777-6091

### Power Company Data

#### PG&E

Meter #: 1009945196  
Rate Schedule: AG5B  
Average Cost: \$0.18

### Equipment Data

Motor Make: U.S.  
Volts/Amps: 460V/175A  
Serial#: U032012898-0001R0001  
Pump Make: Peerless  
Pump Type: Mix Flow  
Drive Type: Electric Motor  
Gearhead Make:

### Hydraulic Data

Standing Water Level (SWL): 0.00 ft  
Recovered Water Level (RWL): 0.00 ft  
Pumping Water Level (PWL): 17.00 ft  
Drawdown: 0 ft  
Discharge Pressure: 3.00 lb/sqft  
Discharge Level: 6.93 ft  
Total Lift: 23.93 ft  
Well Yield: 0 gpm/ft  
Water Source: Canal

### Flow Data

Run Number: 1 of 1  
Measured Flow: 8644 gpm  
Customer Flow: 0 gpm  
Flow Velocity: 4.09 ft/sec  
Acre Feet per 24 Hr: 38.25  
Cubic Feet Per Second (CFS): 19.25 ft  
Discharge Pressure: 3 psi

### Power Data

Horsepower Input to Motor: 137.27 hp  
Brake Horsepower: 126.28 hp  
Kilowatt Input to Motor: 102.4 kW  
Energy Cost: \$18.91/hr  
Name Plate RPM: 1185 rpm

Percent of Rated Motor Load: 84%  
Kilowatt Hours per Acre Foot: 64.34  
Cost to Pump an Acre Foot: \$11.88  
**Overall Plant Efficiency: 38.05%**  
Water Horsepower: 52.24 hp  
Run Hours: 1000

### Remarks

All results are based on conditions during the time of the test. If these conditions vary from the normal operation of your pump, the results shown may not describe the pump's normal performance.

Overall efficiency of this plant is considered to be very low assuming this run represents plant's normal operating condition.

This pump has an adequate test section.

This pump did not have a flow meter.

HPI measured with direct read KWI.

Based on information obtained at the time the test was performed, this test represents the pumps standard operating conditions.