Power Services, Inc.

6301 Bearden Lane
Modesto, CA 95357
209.527.2908 / 800.808.9283
209.527.2921 fax
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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: 75.00 Plant: Main Station Pump 2
PUMP TEST REFERENCE NUMBER: PT-24587
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: 66%**
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	61.3	44.3	17.1
Estimated Total kWh	46,401	33,477	12,924
Average Cost per kWh	$0.18	$0.18	
Average Cost per hour	$8.57	$12.49	*
Cost Per Acre Ft.	$11.33	$8.17	$3.15
Estimated Acre Ft. Per Year	756.42	756.42	
Run Hours	1,000.00	1,000.00	
Overall Plant Efficiency	47.6%	66%	
Estimated Total Annual Cost	$8,566.60	$6,180.55	$2,386.06

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

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Report ID: PT-24587

Agricultural and Domestic Pump Test Report
Rec Dist 2026 Webb Tract - Main Station Pump 2 - Run 1

Latitude: 38.6271W | Longitude: -121.60256N | Elevation: -8 ft
Test Date: Nov 27th 2020 | Tester: Bill Power | Nameplate HP: 75.00 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: Fairbanks-Morse
Volts/Amps: 440V/95A
Serial#: F351591
Pump Make: Fairbanks-Morse
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: 5.00 lb/sqft
Discharge Level: 11.55 ft
Total Lift: 28.55 ft
Well Yield: 0 gpm/ft
Water Source: Canal

Flow Data

Run Number: 1 of 1
Measured Flow: 4108 gpm
Customer Flow: 0 gpm
Flow Velocity: 3.14 ft/sec
Acre Feet per 24 Hr: 18.18
Cubic Feet Per Second (CFS): 9.15 ft
Discharge Pressure: 5 psi

Power Data

Horsepower Input to Motor: 62.2 hp
Brake Horsepower: 56.6 hp
Kilowatt Input to Motor: 46.4 kW
Energy Cost: $8.57/hr
Name Plate RPM: 885 rpm

Percent of Rated Motor Load: 75%
Kilowatt Hours per Acre Foot: 61.34
Cost to Pump an Acre Foot: $11.33
Overall Plant Efficiency: 47.62%
Water Horsepower: 29.62 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 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.

Run 1 observations: Appears to have a broken siphon.