

CONFIDENTIAL/PROPRIETARY INFORMATION

Ralph Heringer
Rec Dist 2028 Bacon Island
P O Box 4005
Stockton, CA 95204

Wednesday, Jan 06, 2021

SUBJECT: PUMPING COST ANALYSIS
HP: 75.00 Plant: West Pump 1
PUMP TEST REFERENCE NUMBER: PT-24633
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 Jan 05 2021 and information provided by you during the pump test.

It is recommended and assumed that:

- **Overall plant efficiency can be improved to: 66%**
- **Water requirements will be the same as for the past year**
- **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 | 68 | 56.6 | 11.40 |
| Estimated Total kWh | 75,202 | 62,560 | 12,642 |
| Average Cost per kWh | \$0.18 | \$0.18 | |
| Average Cost per hour | \$13.88 | \$12.62 | \$1.26 |
| Cost Per Acre Ft. | \$12.55 | \$10.44 | \$2.11 |
| Estimated Acre Ft. Per Year | 1,106.27 | 1,106.27 | |
| Run Hours | 1,000.00 | 1,000.00 | |
| Overall Plant Efficiency | 54.9% | 66% | |
| Estimated Total Annual Cost | \$13,883.81 | \$11,549.82 | \$2,333.99 |

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

Agricultural and Domestic Pump Test Report

Rec Dist 2028 Bacon Island - West Pump 1 - Run 1

Latitude: 37.97923
Test Date: Jan 05 2021

Longitude: -121.57063
Tester: Bill Power

Elevation: -7
Nameplate HP: 75.00

| Customer Information | Power Company Data | Equipment Data |
|--|--|---|
| Rec Dist 2028 Bacon Island P O Box 4005 Stockton, CA 95204 Contact: Ralph Heringer Cell: 916-777-6091 | PG&E Meter #: 1010076943 Rate Schedule: AG5B Average Cost: \$0.18 | Motor Make: General Electric Volts/Amps: 440V/91.00A Serial #: TFJ679947 Pump Make: No Name Plate Pump Type: Mix Flow Drive Type: Electric Motor Gearhead Make: |

| Hydraulic Data | Flow Data |
|---|--|
| Pumping Water Level (PWL): 18.00 ft Discharge Pressure: 8.00 lb/sqft Discharge Level: 18.48 ft Total Lift: 36.48 ft Water Source: Canal | Run Number: 1 of 1 Measured Flow: 6008 gpm Customer Flow: 0 gpm Flow Velocity: 4.52 ft/sec Acre Feet per 24 Hr: 26.58 Cubic Feet Per Second (CFS): 13.38 ft |

| Power Data |
|---|
| Horsepower Input to Motor: 100.8 hp Brake Horsepower: 90.72 hp Kilowatt Input to Motor: 75.2 kW Energy Cost: \$13.88/hr Nameplate RPM: 1175 rpm VFD: 0 hz |
| Percent of Rated Motor Load: 121% Kilowatt Hours per Acre Foot: 67.98 Cost to Pump an Acre Foot: \$12.55 Overall Plant Efficiency: 54.9% Water Horsepower: 55.35 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. |
| This pump has an adequate test section. |
| This pump did not have a flow meter. |
| Based on information obtained at the time the test was performed, this test represents the pumps standard operating conditions. |
| HPI measured with direct read KWI. |
| Overall efficiency of this plant is considered to be low assuming this run represents plant's normal operating condition. |

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Pump Name: West Pump 1

HYDRAULIC TEST RESULTS

PT-24633

Test Date: Jan 05 2021

Tester: Bill Power

Meter #: 1010076943

Annual Run Hrs: 1000

Utility: PG&E

Rate Sched: AG5B

Avg Cost kWh: \$0.18

Meter kWh: 1.80

Meter Const: 80

Motor Make: General Electric

Volts: 440

Gearhead Make:

Pump Make: No Name Plate

Water Source: Canal

Motor Serial: TFJ679947

Amps: 91.00

Nameplate RPM: 1175

Pump Type: Mix Flow

Horsepower: 75.00

Drive Type: Electric Motor

Pipe Diameter: 23.31

Results

Test 1

| | |
|-------------------------------------|--------------|
| Discharge Pressure, PSI | 8.00 |
| Standing Water Level, Feet | 0.00 |
| Recovered Water Level | 0.00 |
| Drawdown, Feet | 18 |
| Discharge Head, Feet | 18.48 |
| Pumping Water Level, Feet | 18.00 |
| Total Measured Head, Feet | 18.48 |
| Measured GPM | 6008.00 |
| Customer Meter, GPM | |
| Well Yield, GPM/ft Drawdown | 333.78 |
| Acre Feet Pumped in 24 Hours | 26.58 |
| kW Input to Motor | 75.2 |
| HP Input to Motor | 100.8 |
| Motor Load % | 121 |
| Measured Speed of Pump, RPM | |
| VFD, Hz: | |
| kWh per Acre Foot | 67.98 |
| Overall Plant Efficiency (%) | 54.9 |
| Energy Cost per Hour | 13.88 |
| Water Horsepower, hp | 55.35 |
| Flow Velocity, ft/sec | 4.52 |