

CONFIDENTIAL/PROPRIETARY INFORMATION

JOHN DUE
DUE FARMS
14251 LONE TREE RD.
ESCALON, CA 95320

Tuesday, July 19, 2016

SUBJECT: PUMPING COST ANALYSIS
HP: 15.0 Plant: CREEK PUMP
PUMP TEST REFERENCE NUMBER: 11324

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 7/18/2016 and information provided by you during the pump test.

It is recommended and assumed that:

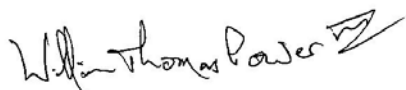
1. Overall plant efficiency can be improved to: 60.0%
2. Water requirements will be the same as for the past year.
3. All operating conditions (annual hours of operation, head above, and water pumping level) will remain the same as they were at the time of the pump test.

	EXISTING PLANT EFFICIENCY	IMPROVED PLANT EFFICIENCY	SAVINGS
kWh/AF	33.8	23.6	10.2
Estimated Total kWh	12226	8544	3682
Average Cost per kWh:	\$0.14		
Average Cost per hour:	\$1.71	\$1.20	\$0.52
Cost Per Acre Ft.:	\$4.73	\$3.31	\$1.43
Estimated Acre Ft. Per Year :	361.7	361.7	
Overall Plant Efficiency:	41.9%	60.0%	
Estimated Total Annual Cost:	\$1,711.69	\$1,196.17	\$515.52

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

Power Services, Inc.

Agricultural and Domestic Pump Test Report

Plant Location: Creek Pump

GPS Coordinates: Lat 37 N 83602 Long -121 W 13137

Test Date: 7/18/2016 Tester: Bill Power

CUSTOMER INFORMATION		POWER COMPANY DATA		EQUIPMENT DATA	
Due Farms 14251 Lone Tree Rd. Escalon, CA 95320 John Due Phone: (209) 982-0443 Fax: Cell:		PG & E Meter #: Rate Schedule: AG5B Average Cost: 0.14 State Well #: 11324		HP: 15 Make: General Electric Serial Number: PDJ6751664 Voltage: 440 Amps: 19.6 Pump Type: Propeller Pump Make: No Name Plate	
HYDRAULIC DATA		FLOW DATA			
Standing Level	0.0 ft	Run Number: 1 Of 1			
Recovered Level	0.0 ft	Measured Flow 1962 gpm			
Pumping Water Level	4.6 ft	Customer Flow 0 gpm			
Drawdown	0.0 ft	2.8 m g/day			
Discharge Pressure	4.0 psi	Flow Velocity 5.993			
Discharge Level	9.2 ft	Acre Feet per 24 Hr: 8.7			
Total Lift	13.8 ft	Cubic Feet per Second (CFS): 4.4			
Well Yield	0.0 gpm/ft				
Water Source	River				
POWER DATA					
Horsepower Input to Motor:	16.35	Percent of Rated Motor Load (%):		95.2	
Brake Horsepower:	14.28	Kilowatt Hours per Acre Foot:		33.77	
Kilowatt Input to Motor:	12.20	Cost to Pump an Acre Foot:		\$4.73	
Energy Cost (\$/Hours)	\$1.71	Overall Plant Efficiency (%):		41.93	
Name Plate RPM:	1755	Water Horsepower:		6.86	
Measured RPM:	0	Bowl Efficiency:		48.03	
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. Cost Analysis page is based on 1000 run time hours. Your savings may differ based on pumps actual usage.					
Elevation = 58 ft					
Power Hydrodynamics, Inc 209 527-2908 / 800 808-9283					