

Power Services, Inc.

Agricultural and Domestic Pump Test Report

Plant Location: Pump # 1

GPS Coordinates: Lat 38 N 04.648 Long 121 W 44.936

Test Date: 3/26/2008 Tester: Bill Power

CUSTOMER INFORMATION	POWER COMPANY DATA	EQUIPMENT DATA
Reclamation District #341 18419 State Hwy 160 Rio Vista, CA 94571 Gene Peck Phone: (916) 777-4244 Fax: Cell: (916) 826-8410	PG & E Meter #: 7426R8 Rate Schedule: AG4B Average Cost: 0.16 State Well #: 000131	HP: 60 Make: Fairbanks-Morse Serial Number: F104760 Voltage: 440 Amps: 72 Pump Type: Propeller Pump Make: Fairbanks-Morse
HYDRAULIC DATA	FLOW DATA	
Standing Level 0.0 ft Recovered Level 0.0 ft Pumping Water Level 9.9 ft Drawdown 0.0 ft Discharge Pressure 4.8 psi Discharge Level 11.0 ft Total Lift 20.9 ft Well Yield 0.0 gpm/ft Water Source Canal	Run Number: 1 Of 1 Measured Flow 6606 gpm Customer Flow 0 gpm 9.5 m g/day Flow Velocity 4.937 Acre Feet per 24 Hr: 29.2 Cubic Feet per Second (CFS): 14.7	

POWER DATA

Horsepower Input to Motor: 66.41	Percent of Rated Motor Load (%): 100.2
Brake Horsepower: 60.10	Kilowatt Hours per Acre Foot: 40.73
Kilowatt Input to Motor: 49.54	Cost to Pump an Acre Foot: \$6.52
Energy Cost (\$/Hours) \$7.94	Overall Plant Efficiency (%): 52.43
Name Plate RPM: 1175	Water Horsepower: 34.82
Measured RPM: 0	Bowl Efficiency: 57.93

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.

Power Services, Inc.

Agricultural and Domestic Pump Test Report

Plant Location: Pump # 2
GPS Coordinates: Lat 38 N 03.455 Long 121 W 47.017
Test Date: 3/26/2008 Tester: Bill Power

CUSTOMER INFORMATION

Reclamation District #341
18419 State Hwy 160
Rio Vista, CA 94571
Gene Peck
Phone: (916) 777-4244
Fax:
Cell: (916) 826-8410

POWER COMPANY DATA

PG & E
Meter #: 36367R
Rate Schedule: AG4B
Average Cost: 0.16
State Well #: 000132

EQUIPMENT DATA

HP: 100 Make: General Electric
Serial Number:
Voltage: 440 Amps: 128
Pump Type: Propeller
Pump Make: Byron Jackson

HYDRAULIC DATA

Standing Level 0.0 ft
Recovered Level 0.0 ft
Pumping Water Level 7.8 ft
Drawdown 0.0 ft
Discharge Pressure 5.3 psi
Discharge Level 12.1 ft
Total Lift 19.9 ft
Well Yield 0.0 gpm/ft
Water Source Canal

FLOW DATA

Run Number: 1 Of 1
Measured Flow 12646 gpm
Customer Flow 0 gpm
18.2 m g/day
Flow Velocity 9.451
Acre Feet per 24 Hr: 56.0
Cubic Feet per Second (CFS): 28.2

POWER DATA

Horsepower Input to Motor:	127.93	Percent of Rated Motor Load (%):	116.4
Brake Horsepower:	116.42	Kilowatt Hours per Acre Foot:	40.99
Kilowatt Input to Motor:	95.44	Cost to Pump an Acre Foot:	\$6.56
Energy Cost (\$/Hours)	\$15.29	Overall Plant Efficiency (%):	49.74
Name Plate RPM:	1190	Water Horsepower:	63.64
Measured RPM:	0	Bowl Efficiency:	54.66

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.

Power Services, Inc.

Agricultural and Domestic Pump Test Report

Plant Location: Pump # 3 A

GPS Coordinates: Lat 38 N 02.865 Long 121 W 43.654

Test Date: 3/26/2008 Tester: Bill Power

CUSTOMER INFORMATION

Reclamation District #341
18419 State Hwy 160
Rio Vista, CA 94571
Gene Peck
Phone: (916) 777-4244
Fax:
Cell: (916) 826-8410

POWER COMPANY DATA

PG & E
Meter #: 0M8413
Rate Schedule: AG4B
Average Cost: 0.16
State Well #: 000133

EQUIPMENT DATA

HP: 125 Make: U.S.
Serial Number:
20058500-100R-01
Voltage: 460 Amps: 158
Pump Type: Mix Flow
Pump Make: Prime

HYDRAULIC DATA

Standing Level	0.0 ft
Recovered Level	0.0 ft
Pumping Water Level	9.1 ft
Drawdown	0.0 ft
Discharge Pressure	7.3 psi
Discharge Level	16.7 ft
Total Lift	25.8 ft
Well Yield	0.0 gpm/ft
Water Source	Canal

FLOW DATA

Run Number:	1	Of	1
Measured Flow	13701	gpm	
Customer Flow	0	gpm	
	19.7	m g/day	
Flow Velocity	6.348		
Acre Feet per 24 Hr:			60.6
Cubic Feet per Second (CFS):			30.5

POWER DATA

Horsepower Input to Motor:	122.52	Percent of Rated Motor Load (%):	92.6
Brake Horsepower:	115.78	Kilowatt Hours per Acre Foot:	36.23
Kilowatt Input to Motor:	91.40	Cost to Pump an Acre Foot:	\$5.80
Energy Cost (\$/Hours)	\$14.64	Overall Plant Efficiency (%):	72.99
Name Plate RPM:	890	Water Horsepower:	89.43
Measured RPM:	0	Bowl Efficiency:	77.24

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 good assuming this run represents plant's normal operating condition.

This pump has an adequate test section.

This pump did not have a flow meter.

Power Services, Inc.

Agricultural and Domestic Pump Test Report

Plant Location: Pump # 3 B

GPS Coordinates: Lat 38 N 02.866 Long 121 W 42.654

Test Date: 3/26/2008 Tester: Bill Power

CUSTOMER INFORMATION

Reclamation District #341
18419 State Hwy 160
Rio Vista, CA 94571
Gene Peck
Phone: (916) 777-4244
Fax:
Cell: (916) 826-8410

POWER COMPANY DATA

PG & E
Meter #: 0M8413
Rate Schedule: AG4B
Average Cost: 0.16
State Well #: 000134

EQUIPMENT DATA

HP: 100 Make: General Electric
Serial Number:
DPJ405133
Voltage: 460 Amps: 125
Pump Type: Mix Flow
Pump Make: Delta

HYDRAULIC DATA

Standing Level	0.0 ft
Recovered Level	0.0 ft
Pumping Water Level	15.5 ft
Drawdown	0.0 ft
Discharge Pressure	5.8 psl
Discharge Level	13.3 ft
Total Lift	28.8 ft
Well Yield	0.0 gpm/ft
Water Source	Canal

FLOW DATA

Run Number:	1	Of	1
Measured Flow	10047	gpm	
Customer Flow	0	gpm	
	14.5	m g/day	
Flow Velocity	4.655		
Acre Feet per 24 Hr:			44.5
Cubic Feet per Second (CFS):			22.4

POWER DATA

Horsepower Input to Motor:	109.65	Percent of Rated Motor Load (%):	99.8
Brake Horsepower:	99.78	Kilowatt Hours per Acre Foot:	44.22
Kilowatt Input to Motor:	81.80	Cost to Pump an Acre Foot:	\$7.07
Energy Cost (\$/Hours)	\$13.10	Overall Plant Efficiency (%):	66.60
Name Plate RPM:	880	Water Horsepower:	73.02
Measured RPM:	0	Bowl Efficiency:	73.19

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 good assuming this run represents plant's normal operating condition.

This pump has an adequate test section.

This pump did not have a flow meter.

Power Services, Inc.

Agricultural and Domestic Pump Test Report

Plant Location: Pump # 4

GPS Coordinates: Lat 38 N 04.483 Long 121 W 41.189

Test Date: 3/26/2008 Tester: Bill Power

CUSTOMER INFORMATION

Reclamation District #341
18419 State Hwy 160
Rio Vista, CA 94571
Gene Peck
Phone: (916) 777-4244
Fax:
Cell: (916) 826-8410

POWER COMPANY DATA

PG & E
Meter #: 47940R
Rate Schedule: AG5B
Average Cost: 0.10
State Well #: 000129

EQUIPMENT DATA

HP: 40 Make: Fairbanks-Morse
Serial Number:
F439684
Voltage: 460 Amps: 49.5
Pump Type: Mix Flow
Pump Make: Fairbanks-Morse

HYDRAULIC DATA

Standing Level 0.0 ft
Recovered Level 0.0 ft
Pumping Water Level 11.0 ft
Drawdown 0.0 ft
Discharge Pressure 7.0 psi
Discharge Level 16.2 ft
Total Lift 27.2 ft
Well Yield 0.0 gpm/ft
Water Source Canal

FLOW DATA

Run Number: 1 Of 1
Measured Flow 3562 gpm
Customer Flow 0 gpm
5.1 m g/day
Flow Velocity 2.327
Acre Feet per 24 Hr: 15.8
Cubic Feet per Second (CFS): 7.9

POWER DATA

Horsepower Input to Motor:	38.87	Percent of Rated Motor Load (%):	87.7
Brake Horsepower:	35.10	Kilowatt Hours per Acre Foot:	44.21
Kilowatt Input to Motor:	29.00	Cost to Pump an Acre Foot:	\$4.42
Energy Cost (\$/Hours)	\$2.90	Overall Plant Efficiency (%):	62.87
Name Plate RPM:	1175	Water Horsepower:	24.44
Measured RPM:	0	Bowl Efficiency:	69.63

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 good assuming this run represents plant's normal operating condition.

This pump has an adequate test section.

This pump did not have a flow meter.

Power Services, Inc.

Agricultural and Domestic Pump Test Report

Plant Location: Pump # 5

GPS Coordinates: Lat 38 N 05.135 Long 121 W 41.387

Test Date: 3/26/2008 Tester: Bill Power

CUSTOMER INFORMATION	POWER COMPANY DATA	EQUIPMENT DATA
Reclamation District #341 18419 State Hwy 160 Rio Vista, CA 94571 Gene Peck Phone: (916) 777-4244 Fax: Cell: (916) 826-8410	PG & E Meter #: 36521R Rate Schedule: AG5B Average Cost: 0.10 State Well #: 000130	HP: 100 Make: U.S. Serial Number: 11270 Voltage: 480 Amps: 125 Pump Type: Mix Flow Pump Make: Prime

HYDRAULIC DATA	FLOW DATA
Standing Level 0.0 ft Recovered Level 0.0 ft Pumping Water Level 7.2 ft Drawdown 0.0 ft Discharge Pressure 8.3 psi Discharge Level 19.1 ft Total Lift 26.3 ft Well Yield 0.0 gpm/ft Water Source Canal	Run Number: 1 Of 1 Measured Flow 9162 gpm Customer Flow 0 gpm 13.2 m g/day Flow Velocity 4.373 Acre Feet per 24 Hr: 40.5 Cubic Feet per Second (CFS): 20.4

POWER DATA		
Horsepower Input to Motor: 108.00	Percent of Rated Motor Load (%):	98.3
Brake Horsepower: 98.28	Kilowatt Hours per Acre Foot:	47.76
Kilowatt Input to Motor: 80.57	Cost to Pump an Acre Foot:	\$4.78
Energy Cost (\$/Hours) \$8.07	Overall Plant Efficiency (%):	56.25
Name Plate RPM: 720	Water Horsepower:	60.75
Measured RPM: 0	Bowl Efficiency:	61.81

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.