PACIFIC GAS AND ELECTRIC COMPANY

PUMP TEST REPORT

Coast Valleys Division Monterey District. Loc. No. 90388

Date 8/22/50 Acct. No. C45

Name Harry Hunt

Address 490 Calle Principal, Monterey

Plant Location 0.1 mi. W/O Highway #1, 50' W/O Big Sur River

EQUIPMENT

METER No. 38656 H. P. Input = Meter R. P. M. x 2.145

MOTOR Fairbanks-Horse H. P 60 Volts 440 Rated R. P. M. 1765 Serial No. 594943

PUMP Fairbanks-Horse Type Horizontal Centrifugal No. 739675

Reconditioned by Drive Direct

TEST RESULTS

Standing Water Level Below Surface of Ground		* Ft.
~~Standing Water Level Below Center of Increase in head variable~~		* Ft.
~~Draw Down from~~ Standing to Pumping Level ~~Suction Line~~		8.91 Ft.
Pumping Water Level Below Center of ~~Head~~ Shaft		27.00 Ft.
~~Discharge~~ Level Above Center of ~~Head~~ Shaft		61.00 Ft.
TOTAL LIFT (Water to Water)		96.91 Ft.
WATER PUMPED		1930 G. P. M.
Yield of Well (G. P. M. per foot Draw Down)		210 GPM/Ft.
Water Pumped in 24 Hours		8.54 Ac. Ft.
Water Temperature		60 ° F.
Measured Speed		1765 R. P. M.
HORSEPOWER INPUT TO MOTOR		74.6 H. P.
Kilowatt Input to Motor		55.6 KW.
KILOWATT HRS. PER AC. FT. OF WATER PUMPED		156 KWH/A. F.
~~Pump & Motor~~ OVERALL PLANT EFFICIENCY		63 %

REMARKS: Items marked * do not apply to this type of test.
Pump and motor efficiency of 63% is very satisfactory.
The water was standing at 6.5 feet below cement lease before starting pump.
The draw down was 9.2' = 15.2' below base - actual measurement with sounding line.

W. E. O'Brien
Test Engineer

745 11-57 8M SETS

PACIFIC GAS AND ELECTRIC COMPANY

PUMP TEST REPORT

Coast Valleys Division Monterey District. Loc. No. 90358 A

Date 11-2-60 Acct. No. 4845 4445

Name El Sur Ranch

Address Little Sur, California

Plant Location 50' n Big Sur River 1 mi w/ Hwy #1

EQUIPMENT

METER No. 38656 H. P. Input = Meter R. P. M. x

MOTOR Fairbanks Morse H. P. 60 Volts 440 Rated R. P. M. 1765 Serial No. 594943

PUMP " " Type Horizontal Centrifugal 1 Stage No. 73975

Reconditioned by Drive Direct

TEST RESULTS

Increase in Velocity Head		5.1	Ft.
Standing Water Level Below Center of		-	Ft.
Draw Down from Standing to Pumping Level		-	Ft.
Suction Lift			
Water level Below Center of Shaft		23.2	Ft.
Discharge Level Above Center of "		66.8	Ft.
TOTAL LIFT (Water to Water)		95.1	Ft.
WATER PUMPED		1930	G. P. M.
Yield of Well (G. P. M. per foot Draw Down)		227	GPM/Ft.
Water Pumped in 24 Hours		8.53	Ac. Ft.
Water Temperature		-	° F.
Measured Speed		-	R. P. M.
HORSEPOWER INPUT TO MOTOR		73.8	H. P.
Kilowatt Input to Motor		55	KW.
KILOWATT HRS. PER AC. FT. OF WATER PUMPED		155	KWH/A.F.
OVERALL PLANT EFFICIENCY		63	%

REMARKS: Under the conditions of the test the motor was overloaded about 11%.

The pumping water level from concrete base was 16.5 ft.
The standing water from concrete base was 8 ft.

Garth Conlan Test Engineer

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PG&E AGRICULTURAL SERVICES
PUMP TEST REPORT

PG&E PLANT ID: 96274
TEST BY: RAYMOND RATHS
H.P.: 80.0
MOTOR MAKE: FAIRBANKS-MORSE
LOCATION: OLD WELL PUMP.

TEST DATE: 07/27/92
PUMP MAKE: A
PUMP TYPE: CENTRIFUGAL

CUSTOMER MAILING ADDRESS
JAMES J. HILL III
ATTN: JAMES HILL III
BOX 1588
MONTEREY, CA 93942

ACCOUNT INFORMATION
ACCOUNT NO. VBM-92-14802
CONTROL NO. 1059240-A
METER NO. R69932
ENERGY USAGE: 87800 KWH/YR
ENERGY COST: 6.24 CENTS/KWH

TEST RESULTS

RUN NUMBER	1	2
STANDING WATER LEVEL(FT)	8.6	8.6
DRAWDOWN(FT)	6.5	9.1
PUMPING WATER LEVEL(FT)	15.0	17.8
DISCHARGE LEVEL(FT)	131.7	121.8
DISCHARGE PRESSURE AT GAUGE(PSI)	57.0	52.5
TOTAL LIFT(FT)	148.7	138.9
PG&E WATER FLOW RATE(GPM)	1409	1643
WELL YIELD	216.8	180.5
ACRE FEET PER 24 HOURS	6.2	7.3
HORSEPOWER INPUT TO MOTOR	67.6	71.3
PERCENT OF RATED MOTOR LOAD	101	107
KILOWATT INPUT TO MOTOR	50.4	53.2
KILOWATT HOURS PER ACRE-FOOT	194.3	175.9
OVERALL PLANT EFFICIENCY	77.1	80.8

1409 1643

old well more efficient pump to top lateral

TEST REMARKS
-THE OVERALL PLANT EFFICIENCY IS EXCELLENT BASED ON RUN NUMBER 1'S NORMAL OPERATING CONDITION.
-GALLONS PER MINUTE ESTIMATED DUE TO POOR HYDRAULIC TEST SECTION.
-TEST RESULTS MAY BE IMPAIRED DUE TO A POOR HYDRAULIC SECTION.
-RUN #1 TO #4 LATERAL. RUN #2 TO TOP LATERAL.

old pump

175.9 to 194.3 KW-hr/ac-ft

specifications
138 ft 1400 gpm
100 ft 1850 gpm

Marion

PG&E AGRICULTURAL SERVICES
PUMP TEST REPORT

PG&E PLANT ID: 98274
TEST BY: RAYMOND RATHS
H.P.: 50.0
MOTOR MAKE: GE
LOCATION: NEW WELL.

TEST DATE: 07/27/92
PUMP MAKE: PEERLESS
PUMP TYPE: TURBINE

New Pump

CUSTOMER MAILING ADDRESS
JAMES J. HILL III
ATTN: JAMES HILL III
BOX 1588
MONTEREY, CA 93942

ACCOUNT INFORMATION
ACCOUNT NO. VEH-32-14802
CONTROL NO. 1058240-B
METER NO. RS8692
ENERGY USAGE: 73163 KWH/YR
ENERGY COST: 8.24 CENTS/KWH

TEST RESULTS

RUN NUMBER	1	2
STANDING WATER LEVEL(FT)	7.8	7.9
DRAWDOWN(FT)	5.6	3.4
PUMPING WATER LEVEL(FT)	13.5	11.3
DISCHARGE LEVEL(FT)	56.4	80.8
DISCHARGE PRESSURE AT GAUGE(PSI)	24.0	35.0
TOTAL LIFT(FT)	68.9	92.1
PG&E WATER FLOW RATE(GPM)	1620	1061
WELL YIELD	271.4	312.1
ACRE FEET PER 24 HOURS	6.7	4.7
HORSEPOWER INPUT TO MOTOR	43.2	37.1
PERCENT OF RATED MOTOR LOAD	78	67
KILOWATT INPUT TO MOTOR	32.2	27.7
KILOWATT HOURS PER ACRE-FOOT	115.1	141.6
OVERALL PLANT EFFICIENCY	61.3	66.4

1620 1061

115.1 to 141.6 KW-Hr-ft

TEST REMARKS

-THE OVERALL PLANT EFFICIENCY IS GOOD BASED ON RUN NUMBER 1'S NORMAL OPERATING CONDITION.
-GALLONS PER MINUTE ESTIMATED DUE TO POOR HYDRAULIC TEST SECTION.
-TEST RESULTS MAY BE IMPAIRED DUE TO A POOR HYDRAULIC SECTION.
-RUN #1 TO LOWEST POINT. RUN #2 TO #4 LOCATION.

POTENTIAL SAVINGS

THE SAVINGS BELOW ARE POSSIBLE IF THE OVERALL EFFICIENCY OF YOUR PUMPING PLANT WOULD BE IMPROVED TO THE LEVEL INDICATED BELOW. THE CALCULATIONS BELOW ARE BASED ON NORMAL RUN NUMBER 1.

	PRESENT CONDITIONS	ESTIMATE AFTER REPAIRS	POTENTIAL SAVINGS
OVERALL PLANT EFFICIENCY (%)	61.3	61.9	-
ANNUAL ENERGY USED (KWH)	73183	72486	697
ANNUAL COST ($)	4585	4522	43
ANNUAL OPERATING HOURS	2272	2242	30
WATER FLOW RATE (GPM)	1520	1540	20
TOTAL LIFT (FT)	68.9	99.0	-
% OF RATED MOTOR LOAD	78	100	-
KILOWATT HOURS PER ACRE-FOOT	115.1	114.0	1.1
ANNUAL ACRE-FOOT PUMPED	636.6	635.6	-

Irrigation Well - El Sur Ranch

Pump Test - 12 April 1967

Meter #39656 H.P. Input equal to Meter R.P.M. times 2.145

Motor - Fairbanks Morse 60 Serial 594943

Pump - " " 6 inch Serial 739675

Engineer - Don Dexter Gilroy, Calif.

Static Water Level 6 Feet below concrete base

Lateral	Pumping Level	Suction Head	Pressure Head	Total Head	Velocity	Flow G.P.M.	Input H.P.	Plant Eff.
Lowest	17 ft.	22.5ft.	46 ft.	69.5'	9.2 ft./sec.	2000	71	49%
#5	16'	23'	62'	85'	7.6'/sec	1860	73	53%
#4	16'	23'	80.5'	103.5'	7.5'/sec	1830	77	62%
Highest	14'	18.5'	115'	133.5'	6,1'/sec	1490	71	70%

Note: Well was not apparently taxed at any time during test

Pump did not surge or break suction at any time

Meter was overloaded more than 10% at #4 lateral

Pumping levels were not extreme for this pump at time of test

however Suctions were at extremes indicating high friction

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