

getting power rather than drill - will
call - N/A - too expensive

GENERAL INFO

CONV DATE: 7/1/97

NAME: Carolyn Martell

PHONE #: 459-7017

PERMIT #: 63-11336

LOCATION OF WELL:

CASING SIZE:

HP:

DYNAMIC:

STATIC:

DEPTH:

PSI:

ACRES IRRIGATED: 80

SPRINKLER INFO:

TYPE:

SIZE:

LENGTH:

OPERATING:

STOCK:

DOMESTICS:

OTHER USES:

OTHER RTS USED:

Wilder Irrig water

DIRECTIONS:

Rocky Mtn

EXAM DATE:

MARTELL Farms, Inc.

Date April 1994

10:11 Gearhead Drive

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Supersedes All previous catalog materials

1.56c.p.

2 Stg (1 B Trim)

700 GPM 90' TDH

CURVE data



No. Stages	Eff. Change	MATERIAL	Eff. Change
1	-4	IMP. - C.I.	-2
2	-2	IMP. - NI-RI	-1
3	-1	BOWL - BRZ.	-1
4	0	BOWL - NI-R.	-1

11 BEH

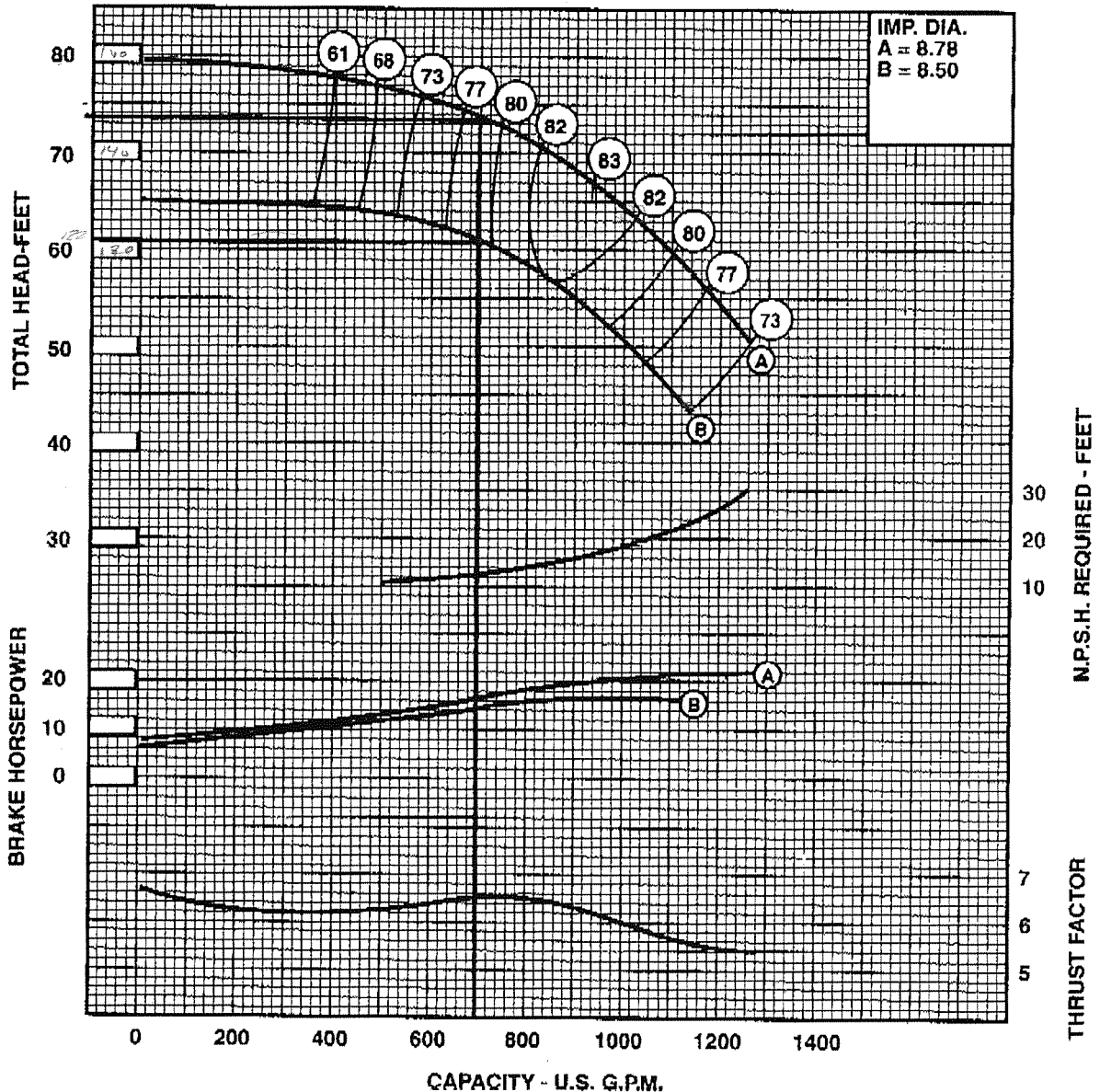
1770

R.P.M.

SINGLE STAGE LAB PERFORMANCE WITH STANDARD MATERIALS. EFFICIENCY SHOWN FOR 4 OR MORE STAGES. HORSE POWER SHOWN FOR ONE STAGE BASED ON 4 STAGE EFFICIENCY. CORRECTIONS SHOULD BE MADE FOR STAGES AND MATERIAL.

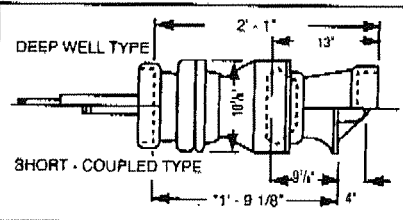
ONE STAGE (2) STAGES

PUMP PERFORMANCE



Imp # 55B19

EYE AREA - SQ. IN.	= 15.11	IMPELLER WT. - LBS.	= 12.7
WR ² PER IMPELLER LB.-FT. ²	= 0.74	ONE STAGE WT. - LBS.	= 186
MAX. SPHERE SIZE	= --	ADD'L STAGE WT. - LBS.	= 74
MAX. NO. STD. STAGES	= 10	IMPELLER NUMBER	= --
MAX. OPERATING - P.S.I.	= 430	DISCH. - IN.	= 8
STD. LATERAL - IN.	= 0.56	SUCTION - IN.	= 8
STD. SHAFT DIA. - IN.	= 1.500	MAX. LATERAL - IN.	= --
MAX. SHAFT DIA. - IN.	= --	BOWL CONN. FLANGED - COLLET	= --
MIN. SUBMERGENCE - IN.	= 25	ADD 9 3/4" PER ADDITIONAL STAGE.	= --



Curves reflect typical performance. refer to factory for certification.

90' is below 2 stage design
but because she is running
the system with a variable
speed motor, a reduction
in speed below the design
seems reasonable

with tractor,
controlling RPM's or cutting
back RPM's acts like trimming
pump, which occurs in the
logical direction and is

not beyond the design of the
pump - doable according
to the pump curve

(per Scott King 1/7/04)

Did ~~least~~ use old tractor

Did shaft get switched on gear drive for PTO

Does tractor have 1000 or 540 PTO

OLD TRACTOR 540 RPM
NEW TRACTOR max RPM's = 1000 RPM
Pump curve Based on 1770 RPM

Gear Box Ratio = 10:11

TOT is listed at 90'

2 Stage Pump

Pump curve Based per stage 50
90' TDH / 2 stages = 45 TDH / stage.

AT 45' HEAD FOR 1770 RPM ON "B" IMPELLER
Capacity is 1100 gpm per curve

using AFFINITY LAW

new capacity = old capacity $\left(\frac{\text{NEW SPEED}}{\text{OLD SPEED}} \right)$

NEW TRACTOR
New capacity = 1100 gpm (per pump curve) $\left(\frac{1000 \text{ RPM TRACTOR SPEED}}{1770 \text{ RPM PUMP CURVE SPEED}} \right)$

new capacity = 621.5 gpm

OLD TRACTOR

new capacity = 1100 gpm $\left(\frac{540}{1770} \right)$

new capacity = 335.6 gpm