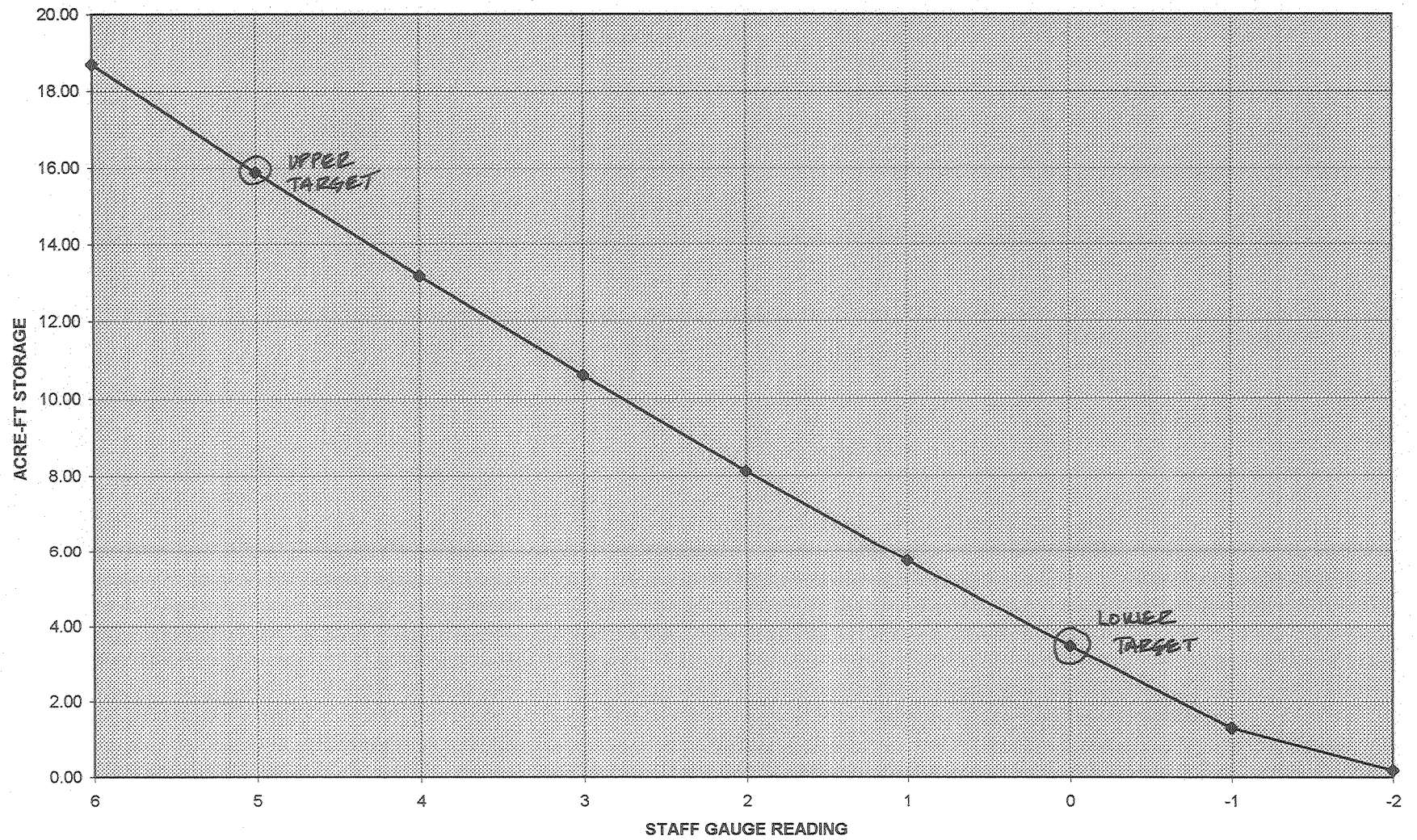


8 RESERVOIR STAGE STORAGE

STAFF GAUGE = FLOW (GPM)	5'		4.5'		4'		3.5'		3'		2.5'		2'		1.5'		1'		0.5'		0'	
	RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)	
	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN
100	670	0	597	73	524	146	454	215	384	285	317	352	250	419	186	483	122	547	61	608	0	670
200	335	0	298	36	262	73	227	106	192	143	159	176	125	210	93	242	61	274	31	304	0	335
300	223	0	199	24	175	49	151	72	128	95	106	117	83	140	62	161	41	182	20	203	0	223
400	167	0	149	18	131	36	114	54	96	71	79	88	63	105	47	121	31	137	15	152	0	167
500	134	0	119	15	105	29	91	43	77	57	63	70	50	84	37	97	24	109	12	122	0	134
600	112	0	99	12	87	24	76	36	64	48	53	59	42	70	31	81	20	91	10	101	0	112
700	96	0	85	10	75	21	65	31	55	41	45	50	36	60	27	69	17	78	9	87	0	96
800	84	0	75	9	66	18	57	27	48	36	40	44	31	52	23	60	15	66	8	76	0	84
900	74	0	66	8	58	16	50	24	43	32	35	39	28	47	21	54	14	61	7	68	0	74
1000	67	0	60	7	52	15	45	22	38	29	32	35	25	42	19	48	12	55	6	61	0	67
1100	61	0	54	7	48	13	41	20	35	26	29	32	23	38	17	44	11	50	6	55	0	61
1200	56	0	50	6	44	12	38	18	32	24	26	29	21	35	16	40	10	46	5	51	0	56
1300	52	0	46	6	40	11	35	17	30	22	24	27	19	32	14	37	9	42	5	47	0	52

STAGE STORAGE CURVE #8 RESERVOIR



FLows VERSES TIME GRAPH FOR SYSTEM #8 RESERVOIR

STAFF GAUGE = FLOW (GPM)	6' RUN TIME (HRS)		5.5' RUN TIME (HRS)		5' RUN TIME (HRS)		4.5' RUN TIME (HRS)		4' RUN TIME (HRS)		3.5' RUN TIME (HRS)		3' RUN TIME
	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
100	972	0	896	76	820	152	747	224	675	297	605	367	535
200	486	0	448	38	410	76	374	112	337	149	302	184	267
300	324	0	299	25	273	51	249	75	225	99	202	122	178
400	243	0	224	19	205	38	187	56	169	74	151	92	134
500	194	0	179	15	164	30	149	45	135	59	121	73	107
600	162	0	149	13	137	25	125	37	112	50	101	61	89
700	139	0	128	11	117	22	107	32	96	42	86	52	76
800	121	0	112	9	103	19	93	28	84	37	76	46	67
900	108	0	100	8	91	17	83	25	75	33	67	41	59
1000	97	0	90	8	82	15	75	22	67	30	60	37	53
1100	88	0	81	7	75	14	68	20	61	27	55	33	49
1200	81	0	75	6	68	13	62	19	56	25	50	31	45
1300	75	0	69	6	63	12	57	17	52	23	47	28	41

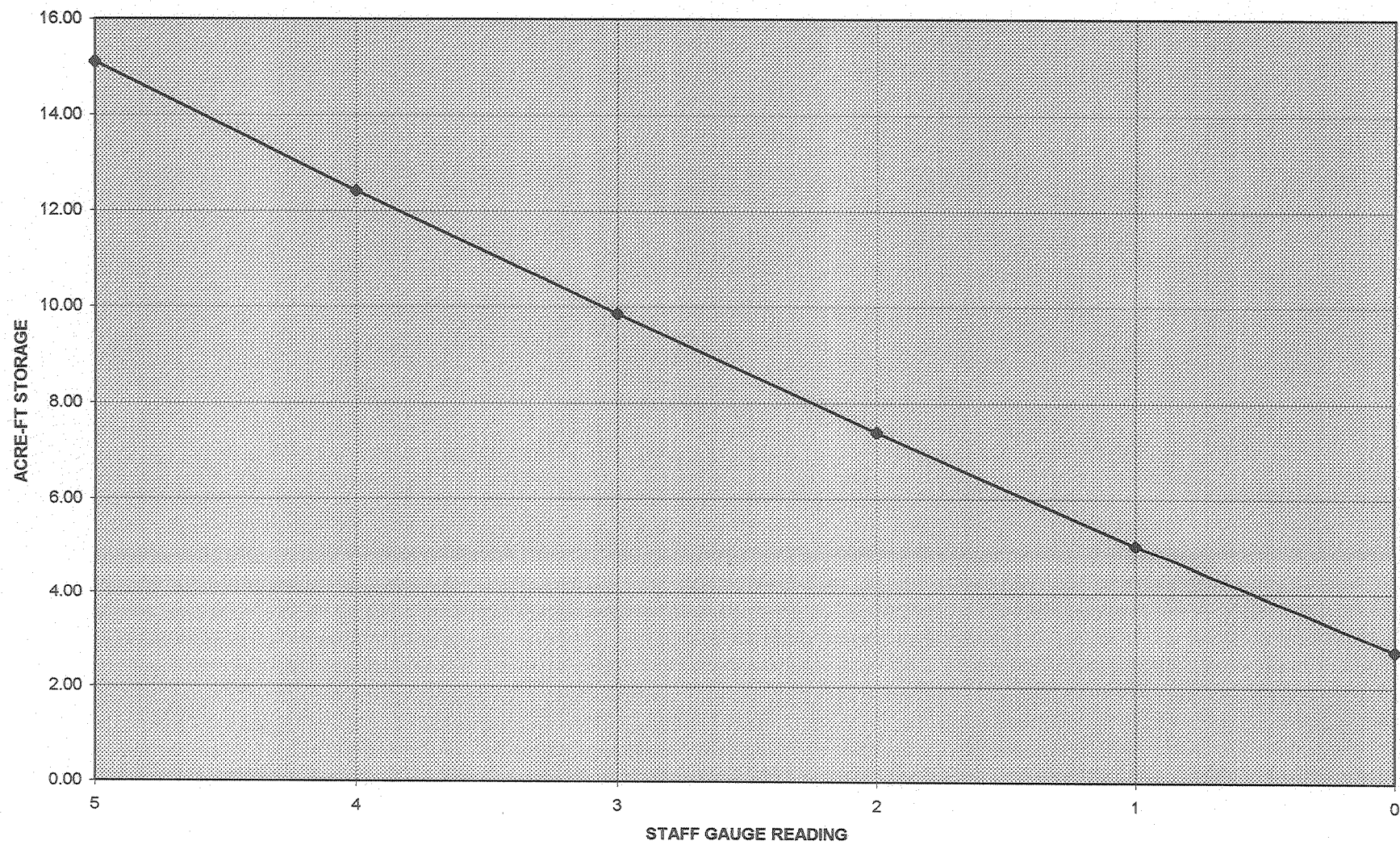
FLows VERSES TIME GRAPH FOR SYSTEM #8 RESERVOIR

(HRS)	2.5'		2'		1.5'		1'		0.5'		0'		-.05'
	RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
437	468	504	401	571	337	635	273	699	212	760	150	821	103
218	234	252	200	285	168	317	136	349	106	380	75	411	52
146	156	168	134	190	112	212	91	233	71	253	50	274	34
109	117	126	100	143	84	159	68	175	53	190	38	205	26
87	94	101	80	114	67	127	55	140	42	152	30	164	21
73	78	84	67	95	56	106	45	116	35	127	25	137	17
62	67	72	57	82	48	91	39	100	30	109	21	117	15
55	58	63	50	71	42	79	34	87	26	95	19	103	13
49	52	56	45	63	37	71	30	78	24	84	17	91	11
44	47	50	40	57	34	63	27	70	21	76	15	82	10
40	43	46	36	52	31	58	25	64	19	69	14	75	9
36	39	42	33	48	28	53	23	58	18	63	13	68	9
34	36	39	31	44	26	49	21	54	16	58	12	63	8

FLows VERSES TIME GRAPH FOR SYSTEM #8 RESERVOIR

(HRS)	-1.0'		-1.5'		-2.0'		-2.5	
	RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)		RUN TIME (HRS)	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN
868	56	915	33	938	10	962	0	972
434	28	458	17	469	5	481	0	486
289	19	305	11	313	3	321	0	324
217	14	229	8	235	3	240	0	243
174	11	183	7	188	2	192	0	194
145	9	153	6	156	2	160	0	162
124	8	131	5	134	1	137	0	139
109	7	114	4	117	1	120	0	121
96	6	102	4	104	1	107	0	108
87	6	92	3	94	1	96	0	97
79	5	83	3	85	1	87	0	88
72	5	76	3	78	1	80	0	81
67	4	70	3	72	1	74	0	75

STAGE STORAGE CURVE #8 RESERVOIR



**ORANGE COVE IRRIGATION DISTRICT
TURN-OUT #8 OPERATIONAL CHART
APRIL 5, 1996**

This chart is to be used to determine which pump(s) should be running for any given system demand. If the demand is near the top of consider stepping up one pump combination. For example, if the demand is 1100 GPM consider using pump #2 rather than pump #1. The time of year and future demand should be used to make this decision. If it is the hot part of the water season and demand is going up then use the next larger pump. Conversely if it is early or late in the season and demand is going down the larger pump would probably not be needed.

To use the chart, first determine system demand and then find the pump combination that matches demand.

DEMAND FLOW RANGE (GPM)	PUMP COMBINATION
0-1100	1
1100-1900	2
1900-3200	1,2
3200-3400	3
3400-4300	4
4300-4700	1,3
4700-5500	2,3
5500-5700	1,4
5700-6400	2,4
6400-6800	1,2,3
6800-7700	1,2,4
7700-7900	3,4
7900-9200	1,3,4
9200-10000	2,3,4
10000-11500	1,2,3,4

NOTE:

RESERVOIR TARGETS
ARE: 54.5' } BETWEEN
0 + 5' }
4-1-97

T.O. PRESSURE TARGET
25 PSI TO 30 PSI
H.P. TARGET (HIGH POINT)
5 PSI TO 10 PSI

MODEL 5RB

1800 & 1200 RPM

OUS IMPELLER

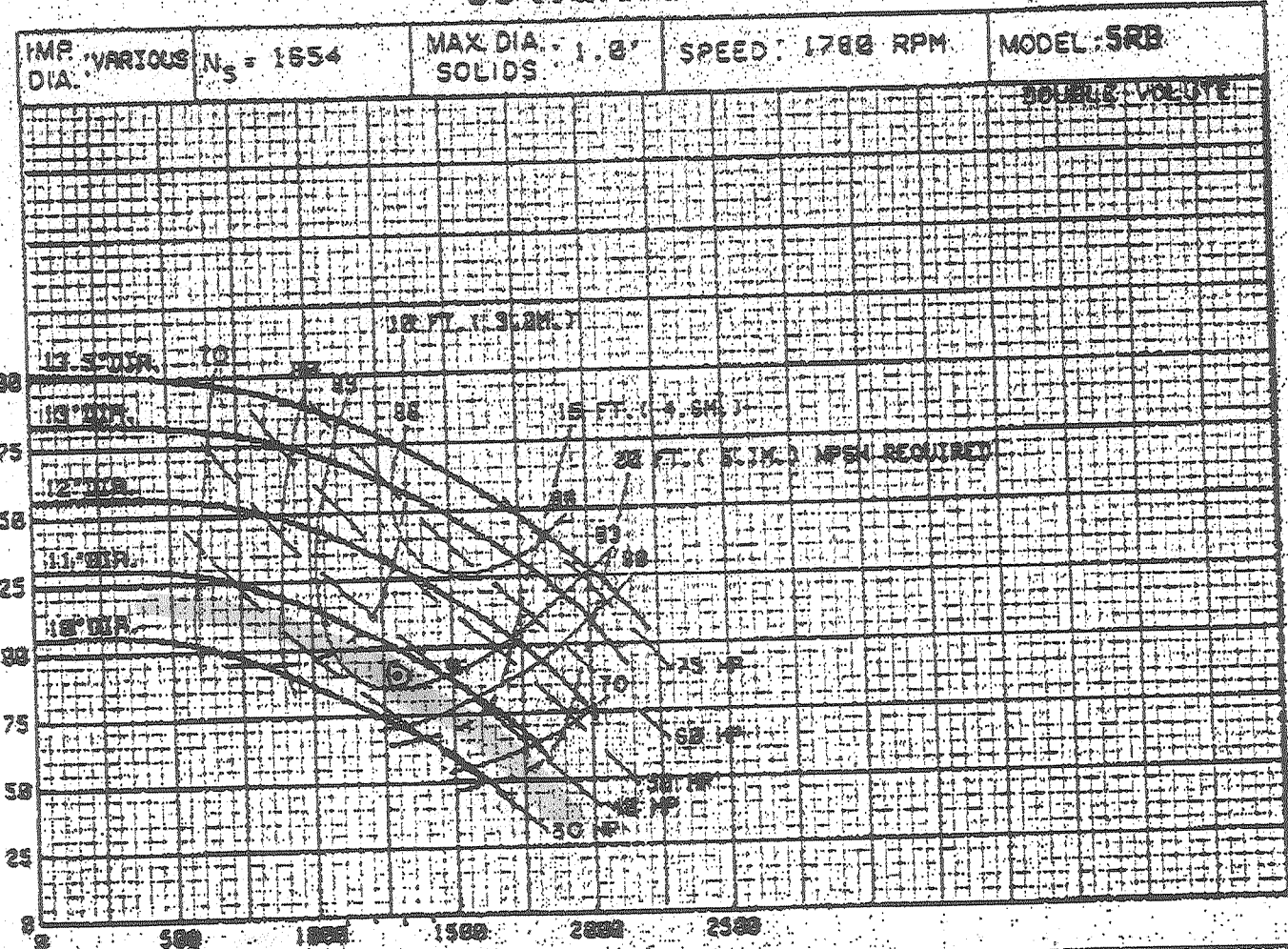
60 HERTZ

40 HP - 5RB - 40-4
1300 GPM @ 90' = 39 FSI
NPSH REQUIRED = 15' (33'-15'-2'-.6) = 17.4'

#8 Turn Out

Performances shown are for close coupled electric configuration with packing. Other styles may require horsepower and/or performance adjustments.

TOTAL HEAD
FEET



FT. x .305 = METERS
GPM x .227 = CUBIC METERS PER HOUR

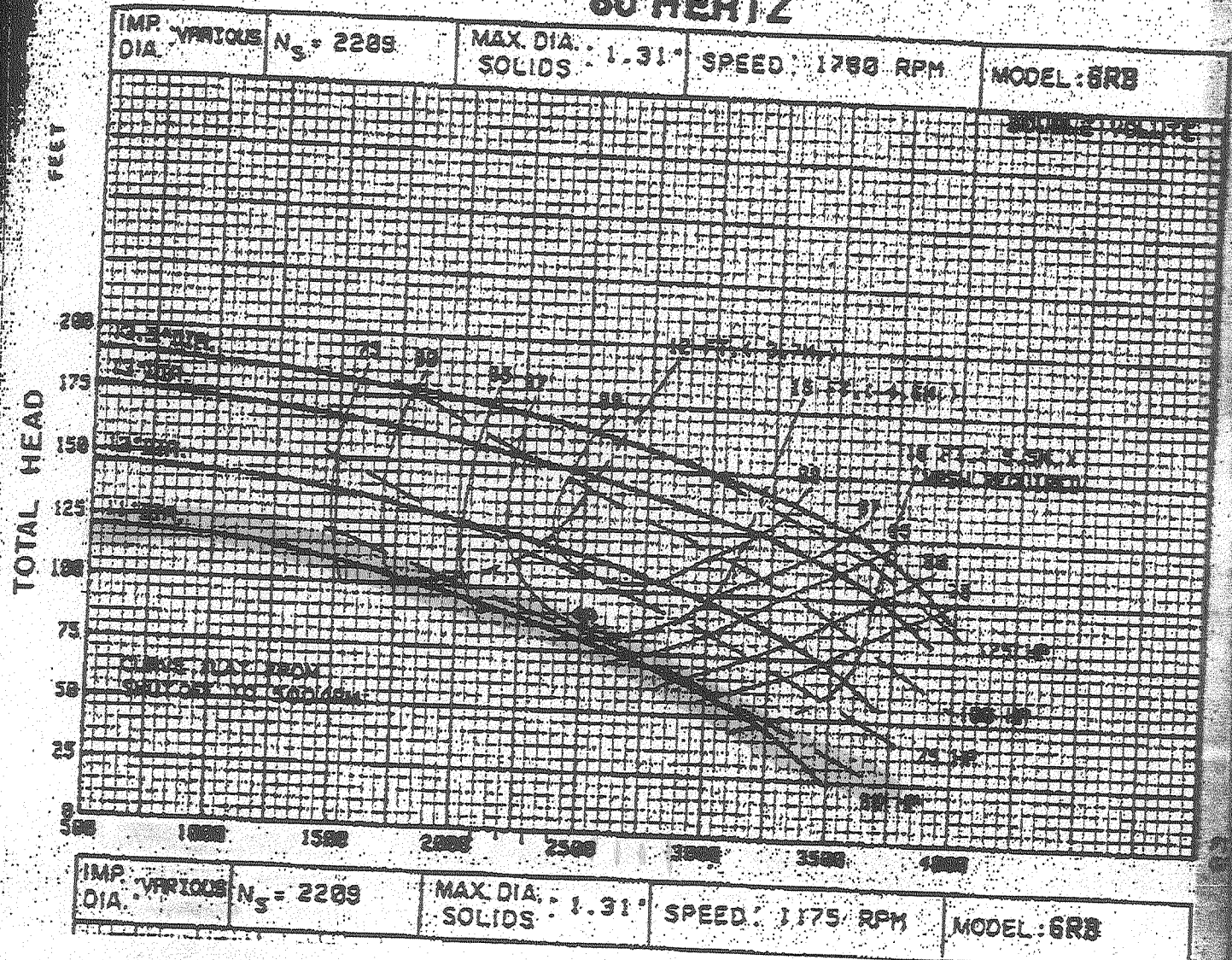
IMP. VARIOUS DIA.	$N_s = 1654$	MAX. DIA. SOLIDS 1.0"	SPEED: 1175 RPM	MODEL: 5RB
DOUBLE VOLUME				

#8 TDR - OUT

MODEL 6RB

2: 60 HP - 6RB - 40 - 4
 2100 GPM @ 90' = 39 PSI
 NPSH REQUIRED = 13' (33' - 13' - 2' - .6') = 17.4'

60 HERTZ

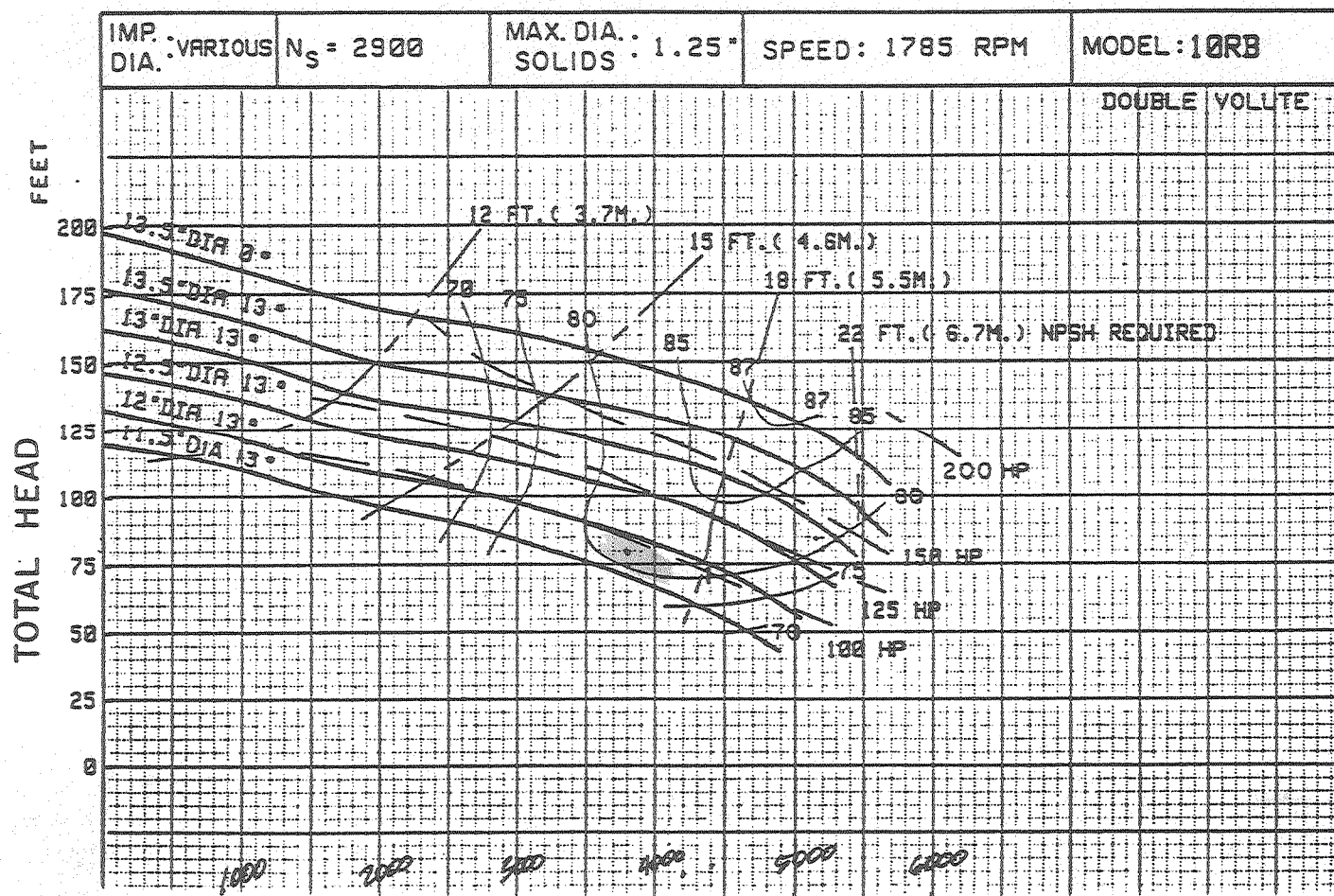


100 HP - 10RB - 100-4
 3600 GPM @ 90' = 39 PSI
 NPSH REQUIRED = 17' (25'-24'-2-.6) = 13.4'

175 gpm @ 8
 3780 gpm @ 80

#8 TURN-OUT

MODEL 10RB **SPEED 1800 & 1200 RPM** **VARIOUS IMPELLER** **60 HERTZ**



Performances shown are for close coupled electric configuration with packing. Other styles may require horsepower and/or performance adjustments.

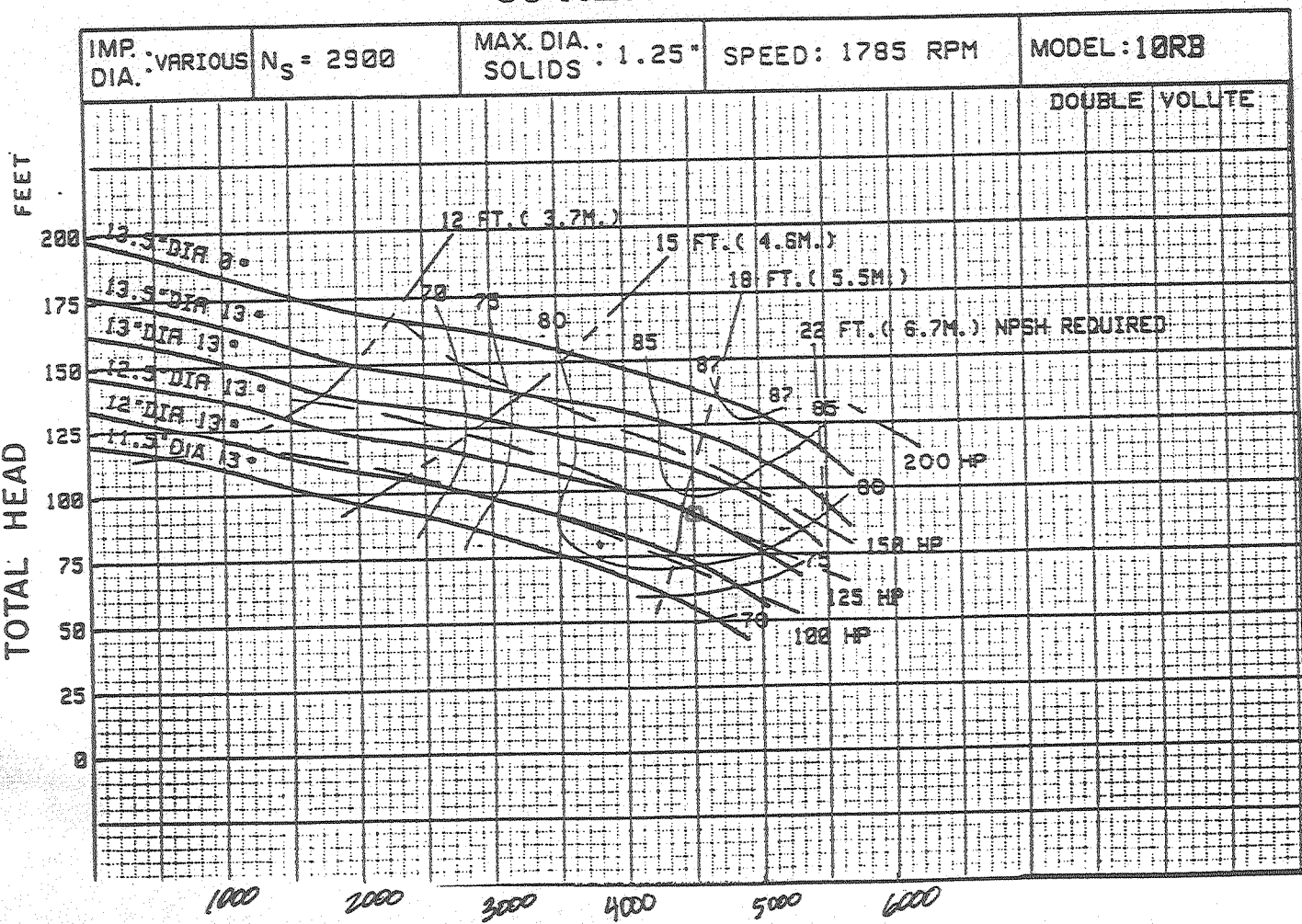
T.O. # 8 :

125 HP - 10RB - 124 - 4
 4500 GPM @ 90' = 39 PSI
 NPSH REQUIRED = 20' (55' - 20' - 2' - 1.6') = 10.4'
 B.P. = NPSH - H_s - V.P. = 10.4' - 20' - 0' = -9.6'

3780 GPM @ 80'

#8 TURN OUT

MODEL 10RB SPEED 1800 & 1200 RPM VARIOUS IMPELLER 60 HERTZ



Performances shown are for close coupled electric configuration with packing. Other styles may require horsepower and/or performance adjustments.

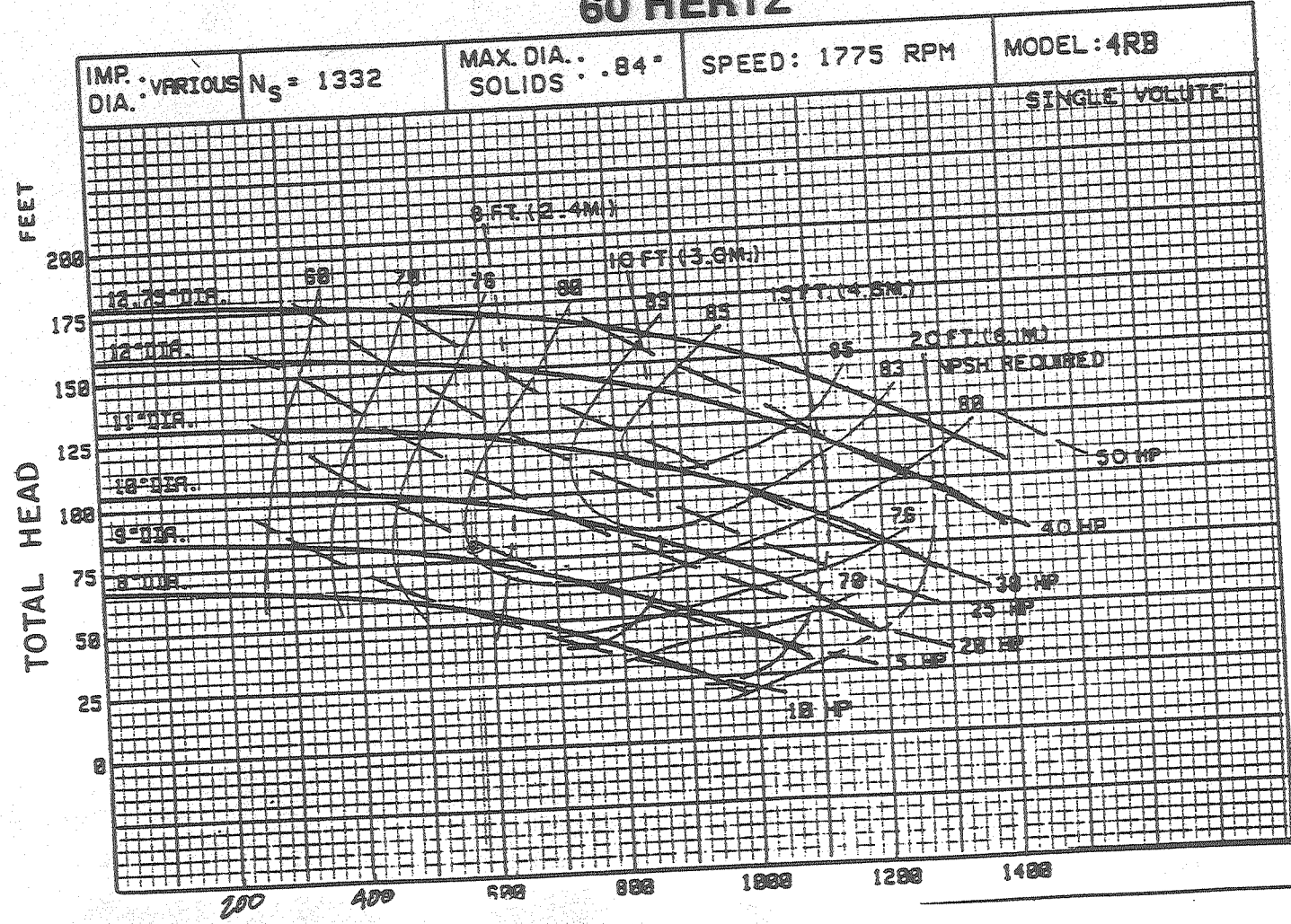
#8 BOOSTER STATION

75 gpm 80' 80
630 gpm 80'

MODEL 4RB

20 HP - 4 RB 20-6
630 GPM @ 80' = 35 PSI

60 HERTZ



Performances shown are for close coupled electric configuration with packing. Other styles may require horsepower and/or performance adjustments.

FT. x 305 = METERS
GPM x 227 = CUBIC METERS PER HOUR

#8 BOOSTER STATION

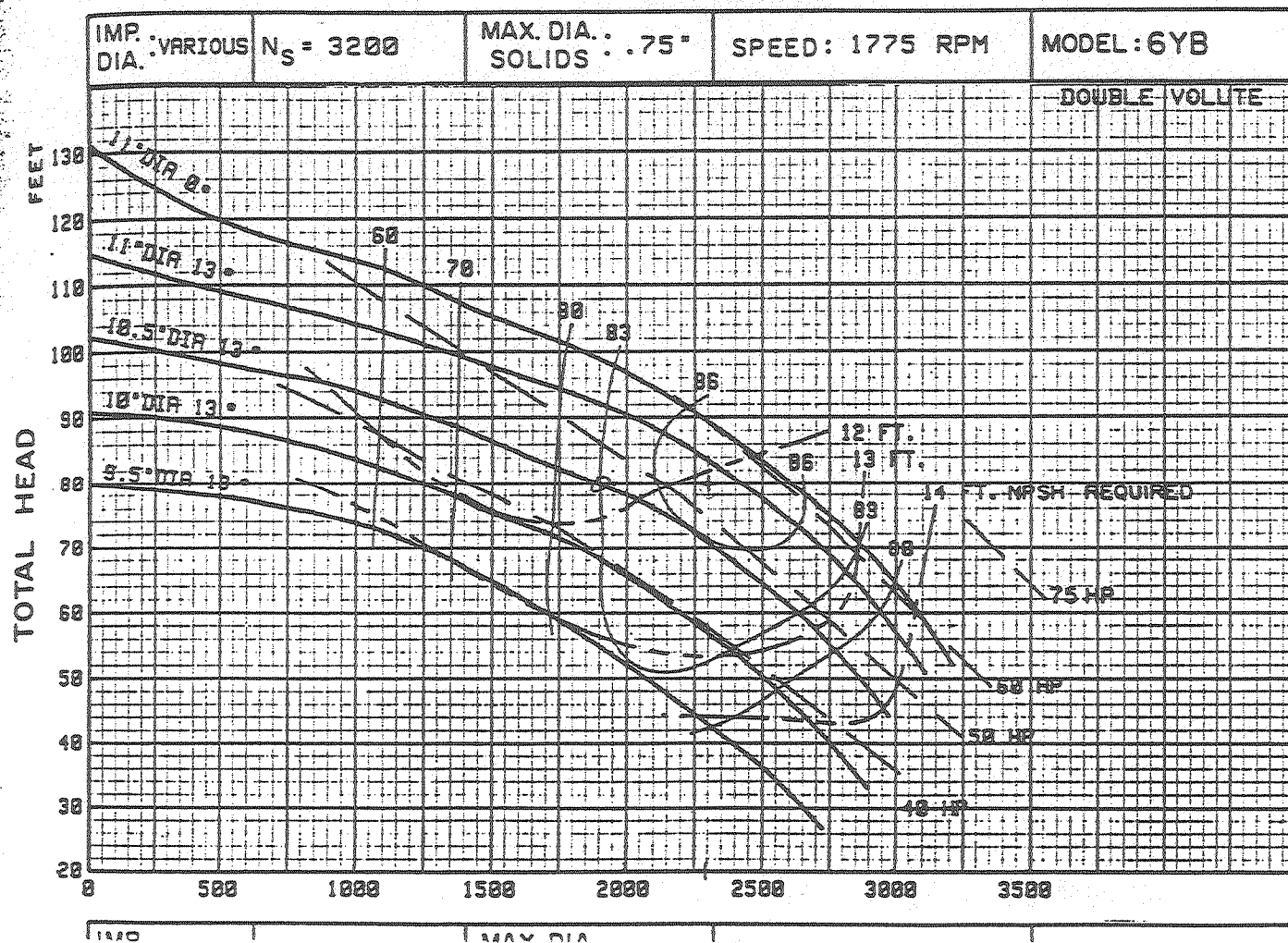
2300 gpm

MODEL 6YB

1890 gpm

50 HP - 6YB 50-4
1890 gpm @ 80' = 35 PSI

60 HERTZ



Performances shown are for close coupled electric configuration with packing. Other styles may require horsepower and/or performance adjustments.

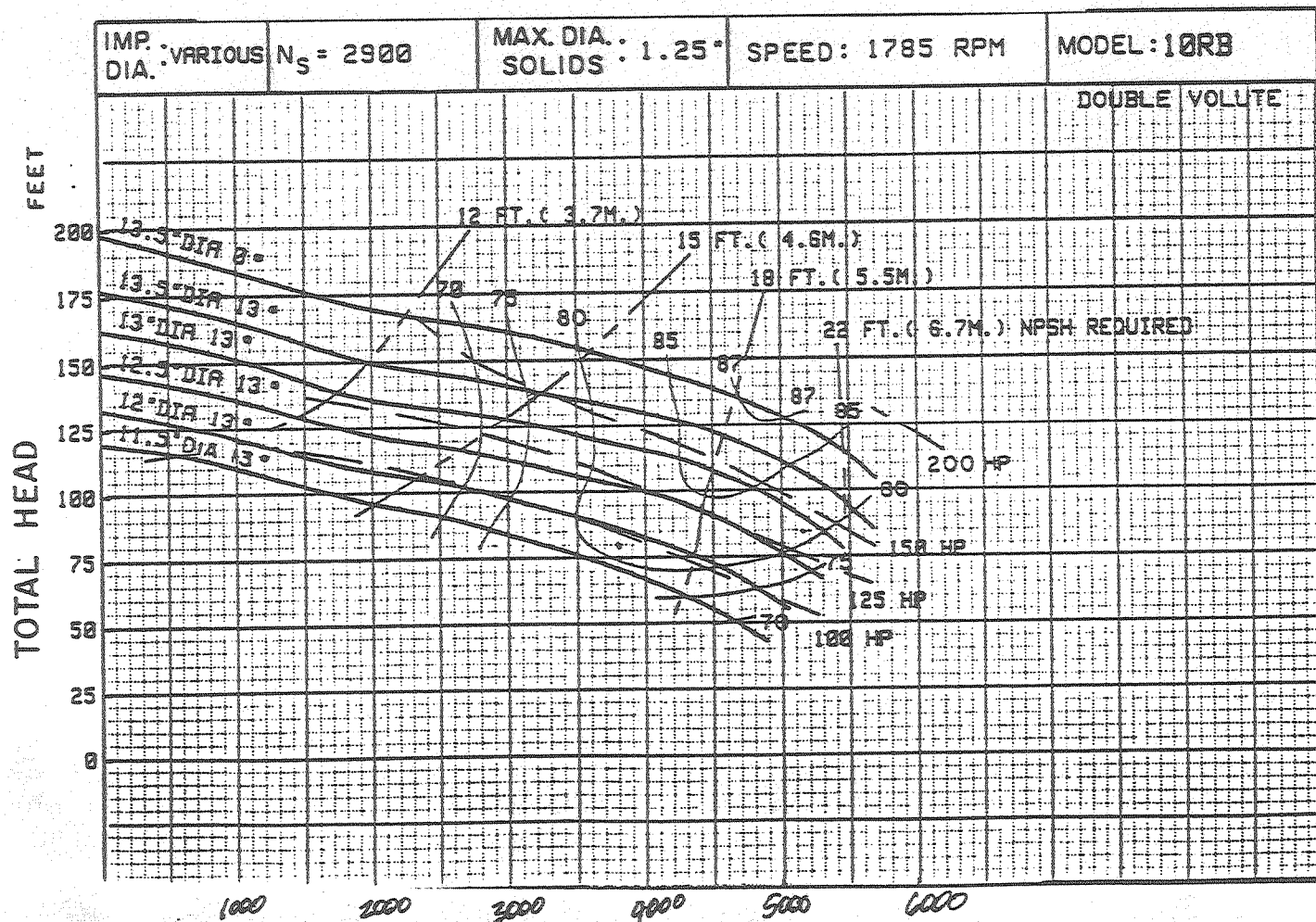
FT. x .305 = METERS
GPM x .227 = CUBIC METERS PER HOUR

#8 BOOSTER STATION

MODEL 10RB

#8 BOOSTER STATION :

100 HP - 10RB - 100 4
3780 GPM @ 80' = 35 PSI



Performances shown are for close coupled electric configuration with packing. Other styles may require horsepower and/or performance adjustments.

Pump Performance Datasheet

Customer	:		Quote number	:	
Customer reference	:		Size	:	3 x 4 x 9 M (B3ZPM)
Item number	:	Default	Stages	:	1
Service	:		Based on curve number	:	5021
Quantity	:	1	Date last saved	:	02 Sep 2019 1:05 PM
Operating Conditions			Liquid		
Flow, rated	:	500.0 USgpm	Liquid type	:	--Water
Differential head / pressure, rated (requested)	:	75.00 ft	Additional liquid description	:	
Differential head / pressure, rated (actual)	:	75.18 ft	Solids diameter, max	:	0.00 in
Suction pressure, rated / max	:	0.00 / 0.00 psi.g	Solids concentration, by volume	:	0.00 %
NPSH available, rated	:	Ample	Temperature, max	:	68.00 deg F
Frequency	:	60 Hz	Fluid density, rated / max	:	1.000 / 1.000 SG
Performance			Viscosity, rated	:	1.00 cP
Speed, rated	:	1750 rpm	Vapor pressure, rated	:	0.00 psi.a
Impeller diameter, rated	:	9.00 in	Material		
Impeller diameter, maximum	:	9.00 in	Material selected	:	Not specified
Impeller diameter, minimum	:	6.06 in	Pressure Data		
Efficiency	:	81.45 %	Maximum working pressure	:	39.07 psi.g
NPSH required / margin required	:	12.89 / 0.00 ft	Maximum allowable working pressure	:	215.0 psi.g
Ns (imp. eye flow) / Nss (imp. eye flow)	:	1,411 / 6,058 US Units	Maximum allowable suction pressure	:	N/A
MCSF	:	181.5 USgpm	Hydrostatic test pressure	:	N/A
Head, maximum, rated diameter	:	90.24 ft	Driver & Power Data (@Max density)		
Head rise to shutoff	:	19.89 %	Driver sizing specification	:	Rated power
Flow, best eff. point	:	453.8 USgpm	Margin over specification	:	0.00 %
Flow ratio, rated / BEP	:	110.19 %	Service factor	:	1.25
Diameter ratio (rated / max)	:	100.00 %	Power, hydraulic	:	9.47 hp
Head ratio (rated dia / max dia)	:	99.79 %	Power, rated	:	11.63 hp
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	:	1.00 / 1.00 / 1.00 / 1.00	Power, maximum, rated diameter	:	14.04 hp
Selection status	:	Acceptable	Minimum recommended motor rating	:	15.00 hp / 11.19 kW

