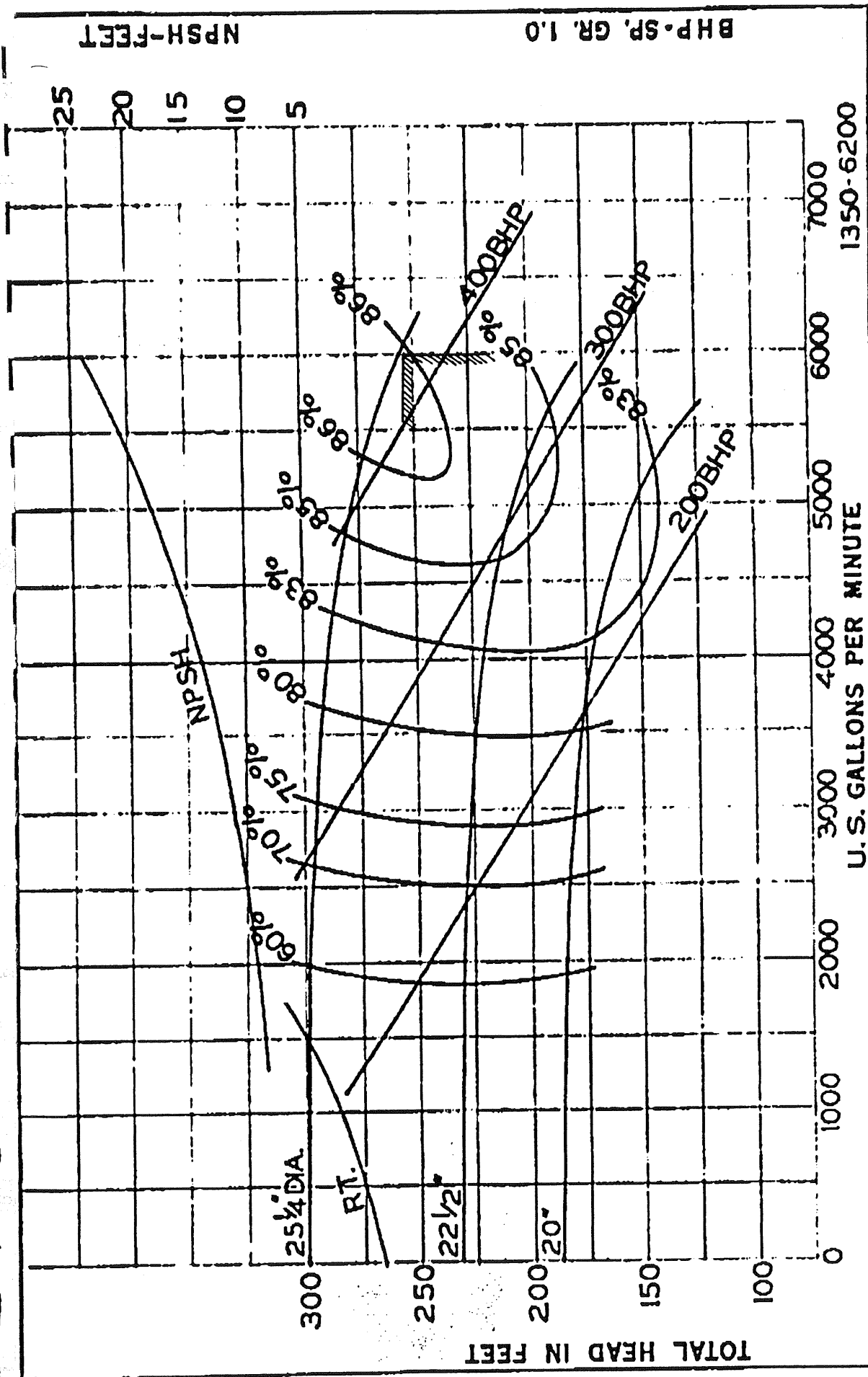
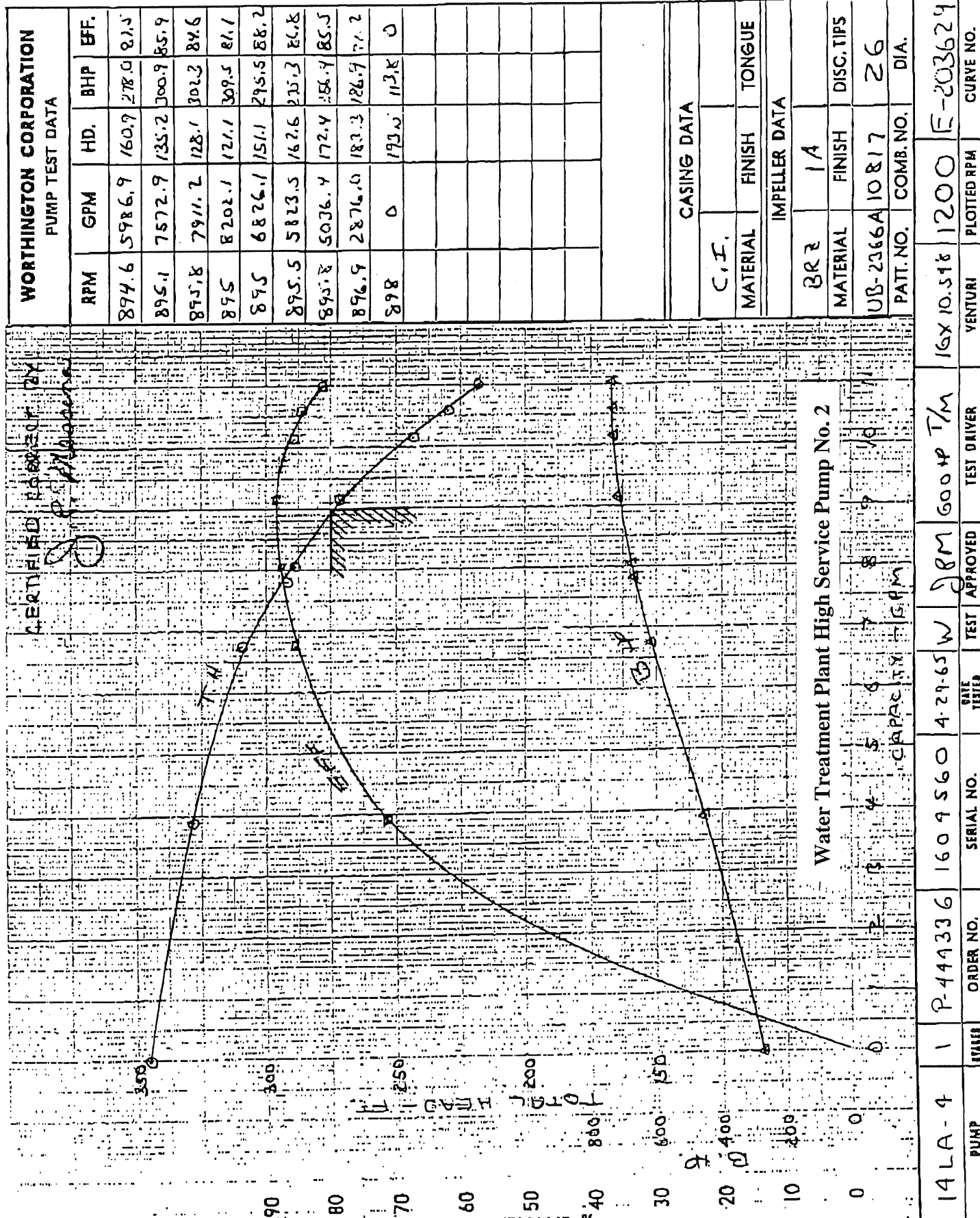


APPENDIX

Pump Curves





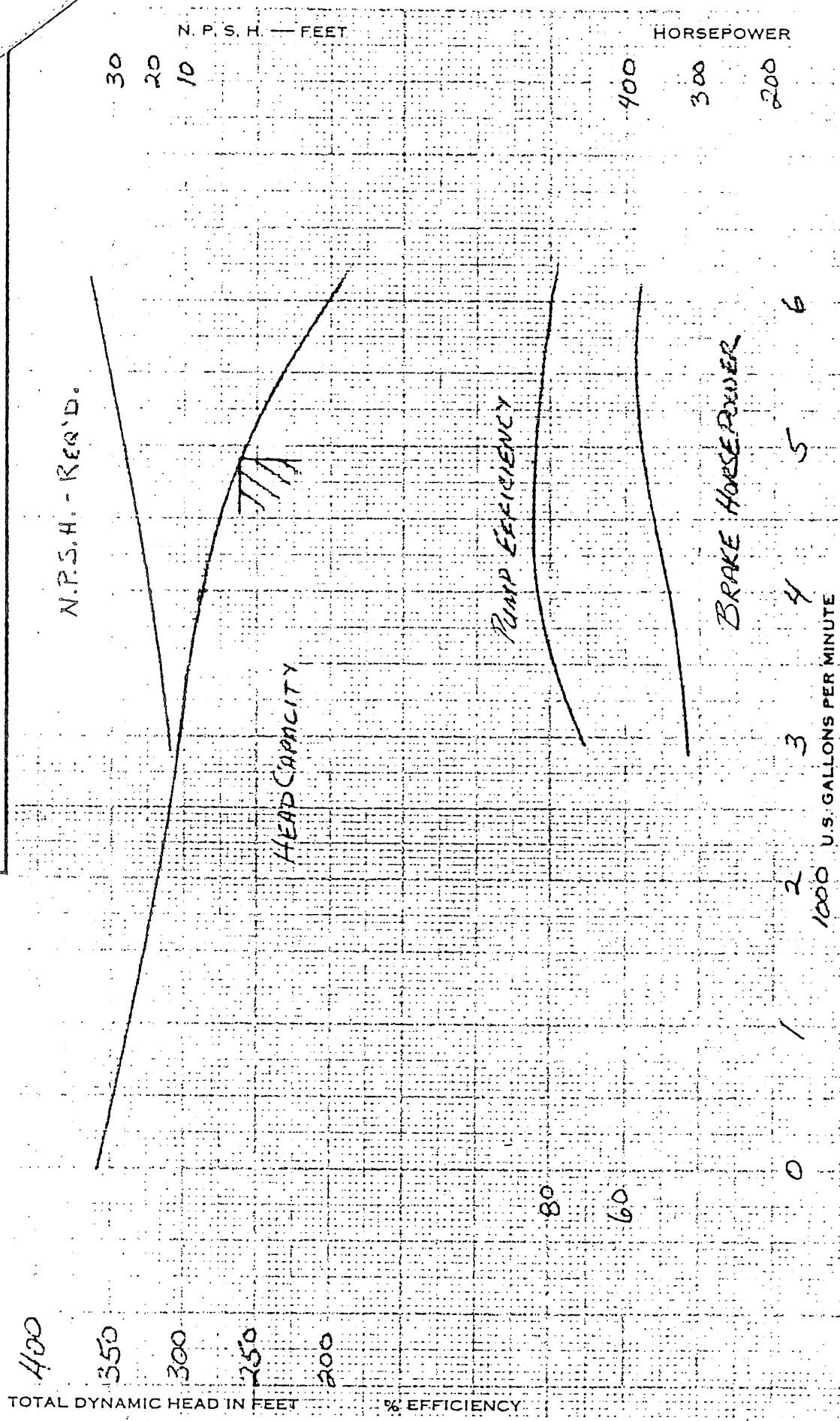
NOTE: SEE COLUMN 1055 RE IT UDE

JO ON NC

2 1103

#3

DEALER
CITY OF SAN ANGELO
REF NO
REF NO HIGH SERVICE



THE CAPACITY, HEAD AND EFFICIENCY GUARANTEE IS FOR THE DESIGNATED POINT ONLY: IT IS BASED ON SHOP TESTS WHEN HANDLING CLEAR, FRESH WATER AT A TEMPERATURE OF NOT OVER 85° F. AND UNDER SUCTION CONDITIONS AS SPECIFIED IN THE CONTRACT.

IMPELLER	20FC
ROWS	CAST IRON
LIQUID	WATER
SP. GR.	1.0
DATE	5/19/67 BY PSC

JOHNSTON PUMP CO.	
VERTICAL PUMPS	
PERFORMANCE 4 STAGE	
20FC TURBINE PUMP	
1145 RPM	
GLENDORA • CALIFORNIA • U. S. A.	

Water Treatment Plant High Service Pump No. 3

NOTE: H. COLUMN LOSSES ARE INCLUDED

JOHNSTON: REF NO. 442

#443

DEALER

REF. NO.

CUSTOMER: CITY OF SAN ANGELO

REF. NO. HIGH SERVICE

TOTAL DYNAMIC HEAD IN FEET

400

350

300

250

200

150

80

60

% EFFICIENCY

40

30

20

10

Z P. S. H. — FEET

N.P.S.H. REQ'D.

HEAD CAPACITY

PUMP EFFICIENCY

BRAKE HORSEPOWER

300

200

HORSEPOWER

12

10

8

4

2

1000 U.S. GALLONS PER MINUTE

THE CAPACITY, HEAD AND EFFICIENCY GUARANTEE IS FOR THE DESIGNATED POINT ONLY: IT IS BASED ON SHOP TESTS WHEN HANDLING CLEAR, FRESH WATER AT A TEMPERATURE OF NOT OVER 85° F. AND UNDER SUCTION CONDITIONS AS SPECIFIED IN THE CONTRACT.

IMPELLER: BRZ. DI. 3.0

BOWLS: CAST IRON

LIQUID: WATER

S.P. GR: 1.0

DATE: 5/19/67 BY: PSC

JOHNSTON PUMP CO.

PERFORMANCE: 3 STAGE

VERTICAL PUMPS



TURNER PUMP

3000

880

RPM

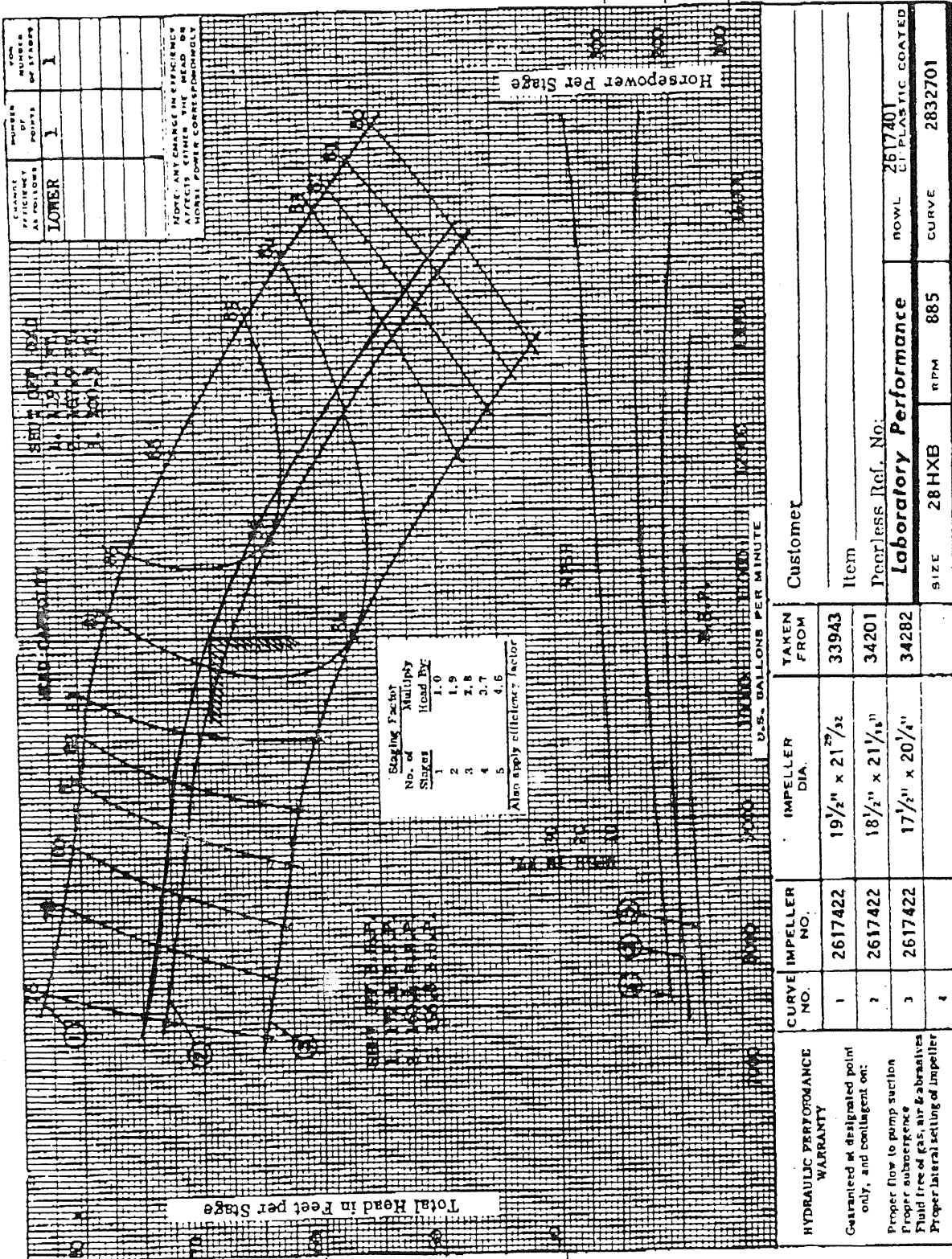
GLENDORA • CALIFORNIA • U.S.A.

Water Treatment Plant High Service Pump No. 4 & 5

VERTICAL TURBINE PUMPS



Horsepower for _____ Stages



Peerless Pumps

Total Head in Feet for _____ Stages

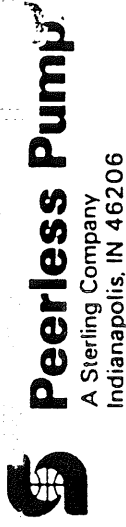
PUMP DESCRIPTION: Driver _____; Head _____; Column _____
 PERFORMANCE: Capacity _____ gpm; Head _____ ft; Eff _____ %; BHP _____
 GUARANTEED FIELD _____

Water Treatment Plant High Service Pump No. 6

HYDRAULIC PERFORMANCE WARRANTY

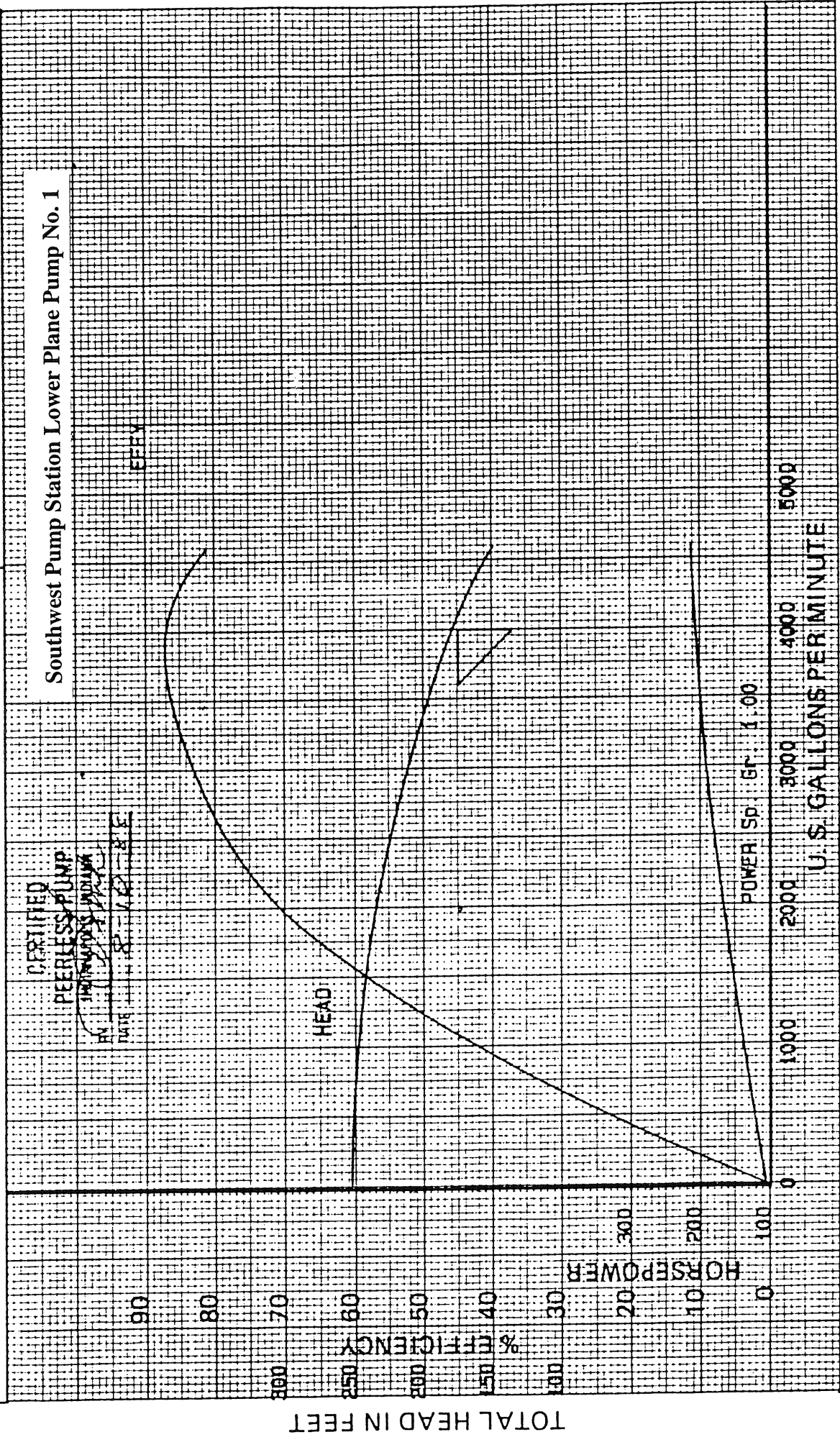
GUARANTEED AT DESIGNATED POINT ONLY AND IS CONTINGENT ON

1. PROPER NPSH OR SUBMERGENCE AVAILABLE.
2. PROPER AND ADEQUATE FLOW TO PUMP SUCTION.
3. FLUID FREE OF GAS, AIR AND ABRASIVE MATTER.
4. IMPELLER WITH PROPER LATERAL ADJUSTMENT. (VERT PUMP ONLY)



CURVE NO. C176838

Southwest Pump Station Lower Plane Pump No. 1



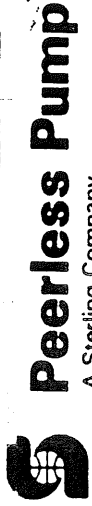
PLOTTED BY JJJ Pump Type: 8AE15 Stages: 1 RPM: 1785 Test No: 176838 Dia: 15.29
 Pump No: 452468 S/O: XH809856 Impeller: 2692769

DATE 8-10-88

CERTIFIED SHOP TEST CURVE

HYDRAULIC PERFORMANCE WARRANTY
GUARANTEED AT DESIGNATED POINT
ONLY AND IS CONTINGENT ON

1. PROPER NPSPH OR SUBMERGENCE . . . 3. FLUID FREE OF GAS, AIR AND
AVAILABLE. ABRASIVE MATTER.
2. PROPER AND ADEQUATE FLOW TO
PUMP SUCTION. 4. IMPELLER WITH PROPER LATERAL
ADJUSTMENT. (VERT PUMP ONLY)



Peerless Pump
A Sterling Company
Indianapolis, IN 46206

CURVE NO. C176837

Southwest Pump Station Lower Plane Pump No. 2

CERTIFIED

PEERLESS PUMP

BY MANUFACTURER

DATE 10/10/88

EFFY

TOTAL HEAD IN FEET

HEAD

% EFFICIENCY

HORSEPOWER

POWER SP. BR. 1.00

U.S. GALLONS PER MINUTE

PLOTTED BY JW Pump Type: 8AE15
Pump No: 452470

Stages: 1 RPM: 1785
S/O: XH809856

Test No: 176837 Dia: 15.29
Impeller: 2692769

DATE 8-10-88

CERTIFIED SHOP TEST CURVE

HYDRAULIC PERFORMANCE WARRANTY
GUARANTEED AT DESIGNATED POINT
ONLY AND IS CONTINGENT ON

1. PROPER NPSP OR SUBMERGENCE AVAILABLE.
2. PROPER AND ADEQUATE FLOW TO PUMP SUCTION.
3. FLUID FREE OF GAS, AIR AND ABRASIVE MATTER.
4. IMPELLER WITH PROPER LATERAL ADJUSTMENT. (VERT PUMP ONLY)



Peerless Pump

A Sterling Company
Indianapolis, IN 46206

Backwards 9/11/6

CURVE NO. C176836

CERTIFIED

PEERLESS PUMP

INDIANAPOLIS, INDIANA

DATE 10-15-88 BY [Signature]

Southwest Pump Station Lower Plane Pump No. 3

EFFICIENCY

HEAD

TOTAL HEAD IN FEET

HORSEPOWER

POWER Sp. Gr. 1.00

U.S. GALLONS PER MINUTE

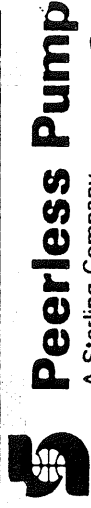
Pump Type: 8AE15
Pump No: 452489

Stages: 1 RPM: 1785
S/O: XH809856

Test No: 176836 Dia: 15.29
Impeller: 2692769

DATE 8-10-88

CERTIFIED SHOP TEST CURVE



HYDRAULIC PERFORMANCE WARRANTY

GUARANTEED AT DESIGNATED POINT ONLY AND IS CONTINGENT ON

1. PROPER NPSH OR SUBMERGENCE AVAILABLE.
2. PROPER AND ADEQUATE FLOW TO PUMP SUCTION.
3. FLUID FREE OF GAS, AIR AND ABRASIVE MATTER.
4. IMPELLER WITH PROPER LATERAL ADJUSTMENT. (VERT PUMP ONLY)

Peerless Pump

A Sterling Company
Indianapolis, IN 46206

Packings 1/2"

CURVE NO. C176732

Southwest Pump Station Upper Plane Pump No. 1

DATE _____
BY _____
IMPELLER TYPE AND CURVE _____
PUMP NO. _____

90

80

70

60

50

40

30

20

10

0

TOTAL HEAD IN FEET

HEAD

300

250

200

150

100

50

0

% EFFICIENCY

HORSEPOWER

POWER Sp. Gr. 1.00

U. S. GALLONS PER MINUTE

2800

Pump Type: 6AE16
Pump No: 452473

PLOTTED BY JJS
DATE 7-22-88

Stages: 1 RPM: 1780
S/O: XH809858
CERTIFIED SHOP TEST CURVE

Test No: 176732
Impeller: 2692932

Dia: 16.00

HYDRAULIC PERFORMANCE WARRANTY
GUARANTEED AT DESIGNATED POINT
ONLY AND IS CONTINGENT ON

1. PROPER NPSP OR SUBMERGENCE AVAILABLE:
2. PROPER AND ADEQUATE FLOW TO PUMP SUCTION.

3. FLUID FREE OF GAS, AIR AND ABRASIVE MATTER.
4. IMPELLER WITH PROPER LATERAL ADJUSTMENT. (VERT PUMP ONLY)



Peerless Pump

A Sterling Company
Indianapolis, IN 46206

PACKING 112

CURVE NO. C177029

Southwest Pump Station Upper Plane Pump No. 2

CERTIFIED

PEERLESS PUMP

DATE 5-17-88

BY [Signature]

EFFY

HEAD

TOTAL HEAD IN FEET

90
80
70
60
50
40
30
20
10
0

HORSEPOWER

POWER Sp. Gr. 1.00
U.S. GALLONS PER MINUTE

PLOTTED BY JJJ
Pump Type: 5AE14
Pump No: 452472

DATE 8-27-88

Stages: 1
S/O: XH809857

RPM: 1775

Test No: 177029

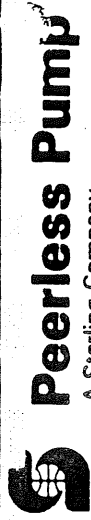
Impeller: 2693456

Dia: 14.00

CERTIFIED SHOP TEST CURVE

HYDRAULIC PERFORMANCE WARRANTY
GUARANTEED AT DESIGNATED POINT
ONLY AND IS CONTINGENT ON

1. PROPER NPSP OR SUBMERGENCE AVAILABLE.
2. PROPER AND ADEQUATE FLOW TO PUMP SUCTION.
3. FLUID FREE OF GAS, AIR AND ABRASIVE MATTER.
4. IMPELLER WITH PROPER LATERAL ADJUSTMENT. (VERT PUMP ONLY)



Peerless Pump

A Sterling Company
Indianapolis, IN 46206

Backings 1/2

CURVE NO. C177031

Southwest Pump Station Upper Plane Pump No. 3

CERTIFIED
PEERLESS PUMP
INDIANAPOLIS, IN
DATE 8-27-88

ENTRY

HEAD

TOTAL HEAD IN FEET

% EFFICIENCY

HORSEPOWER

POWER SP. HP. 1.00

U.S. GALLONS PER MINUTE

PLOTTED BY JJ Pump Type: 5AE14
Pump No: 452471

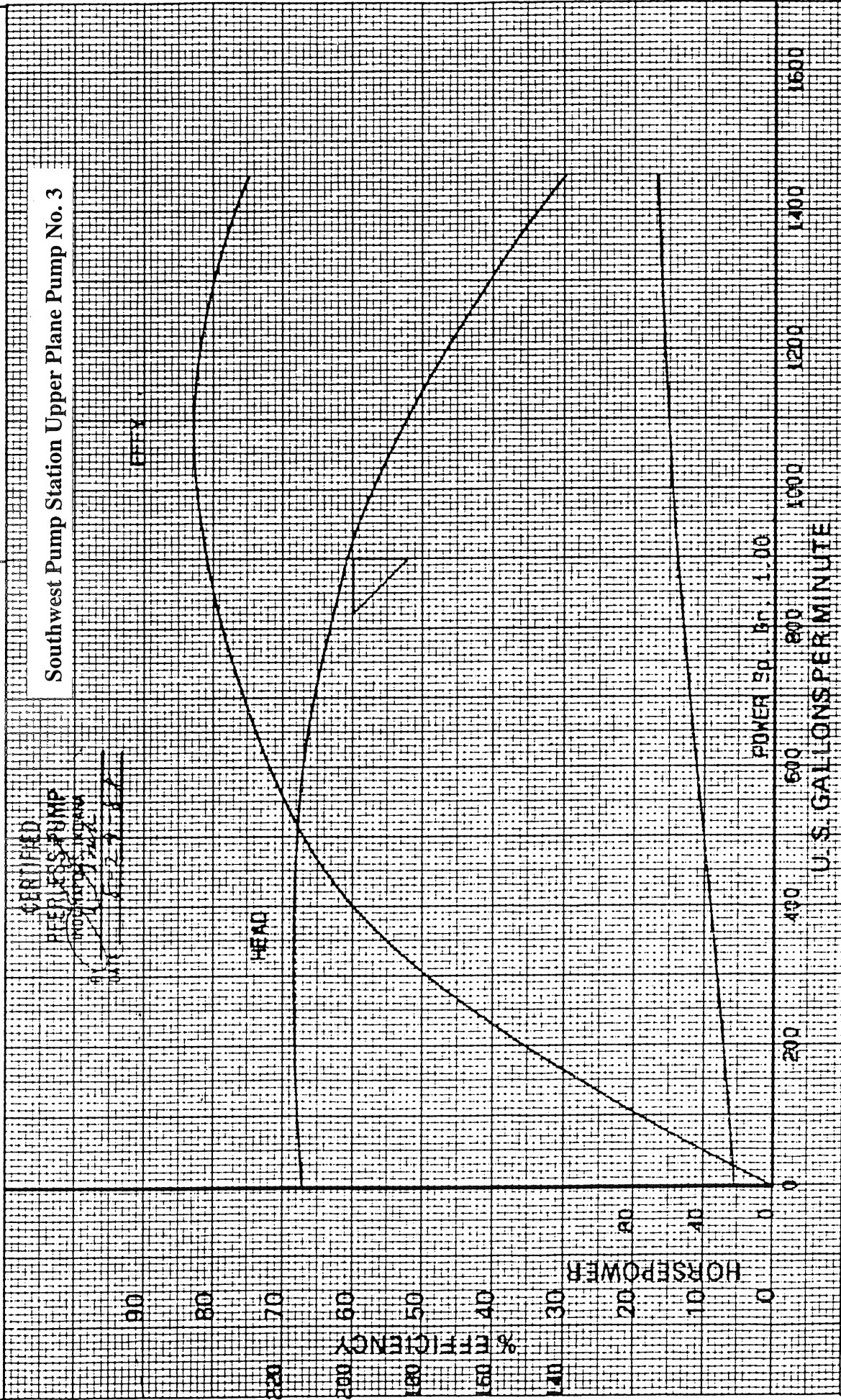
DATE 8-27-88

Stages: 1 RPM: 1775
S/O: XH809857

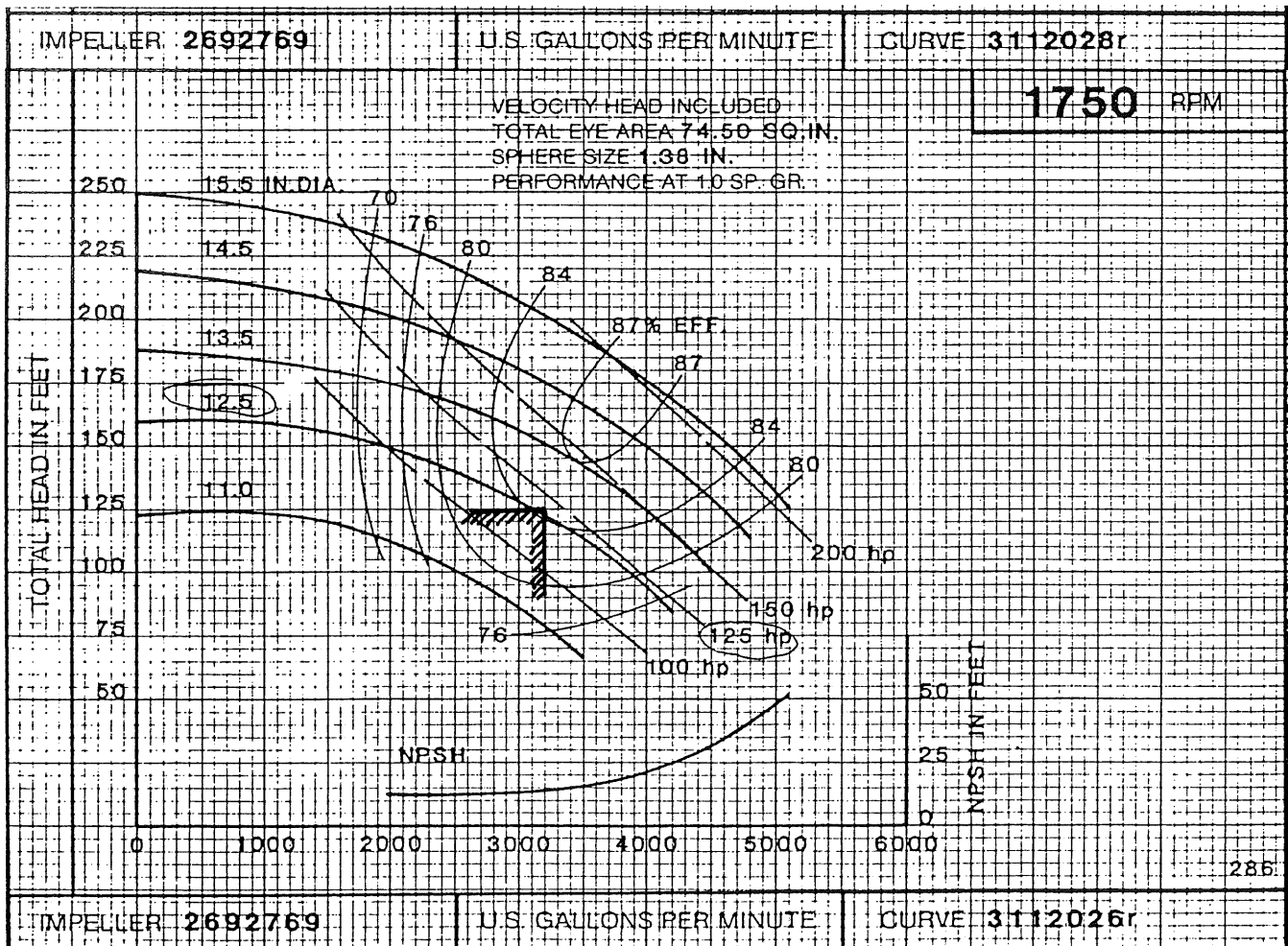
CERTIFIED SHOP TEST CURVE

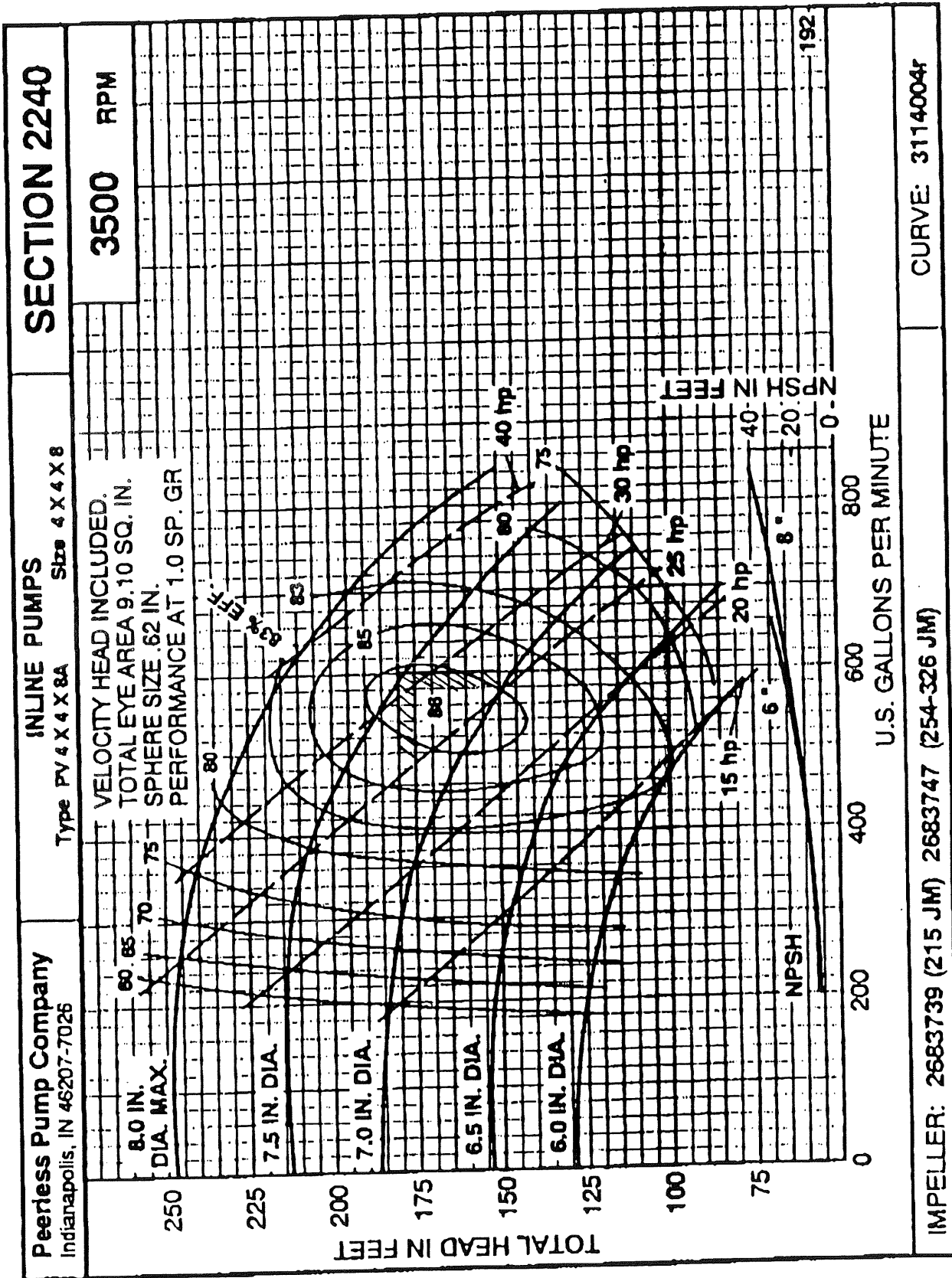
Test No: 177031
Impeller: 2693456

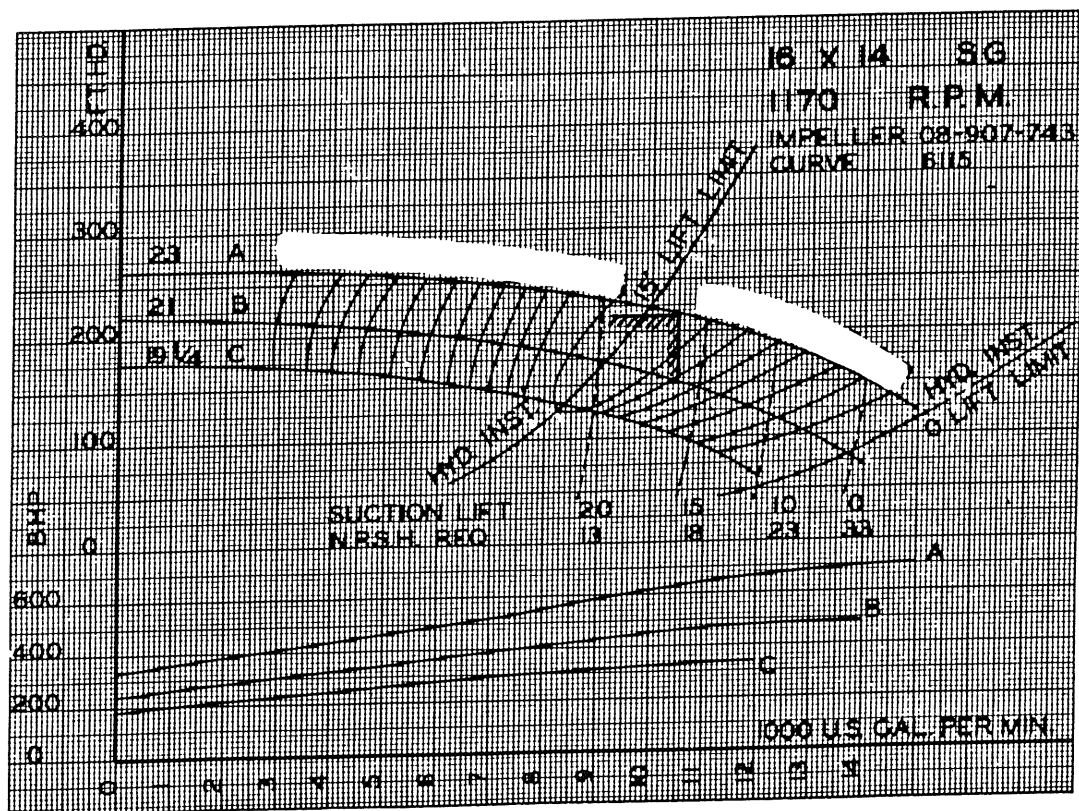
Dia: 14.00



Abilene Pump Station Lower Plane (2) Pumps





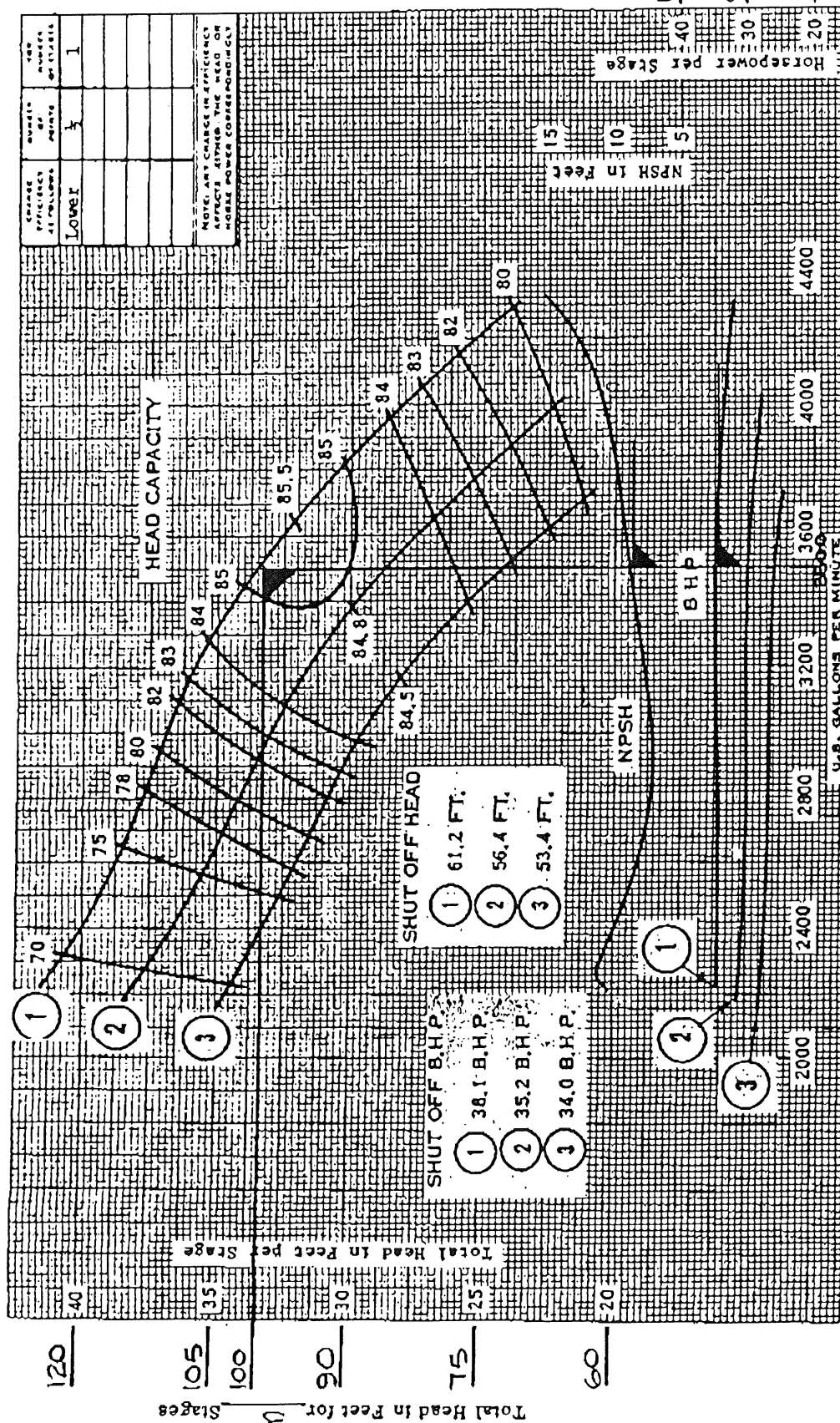
CP 3.1c
Page 19

Section 140
1-78

VEK CAL. TURBINE PUMPS

Peerless Pump
An Indian Head Company

Horsepower for 3 Stages

120
90
60

Customer R. B. BUTLER, INC.

Item VERTICAL TURBINE CAN PUMPS

Peerless Ref. No.

Laboratory Performance

SIZE 16 HH RPM 1185 BOWL 2623393 CIE CURVE 4805904

PUMP DESCRIPTION: Driver 125 HP, 1200 RPM ; Head : Column N/A

GUARANTEED BOWL PERFORMANCE: Capacity 3500 gpm; Head 100 ft; Eff 85 %; BHP 105

Lakeview Pump Station (2) Pumps