

DATE 6-19-00

PWSID 04-67-043

WELL # 707

WELL NAME Holcomb Blvd 707

BLDG. 707

CODE G

AVAILABILITY P

LOCATION Rock road off
Breaster Blvd.

LATITUDE 34.71104

LONGITUDE -77.36178

WELL DIAMETER 10"

WELL DEPTH 130'

SCREEN INTERVAL 80' + 130'

YIELD 157 GPM

STATIC LEVEL 29'

PUMPING LEVEL 75'

PUMP TYPE Vertical Turbine

MOTOR HP 10

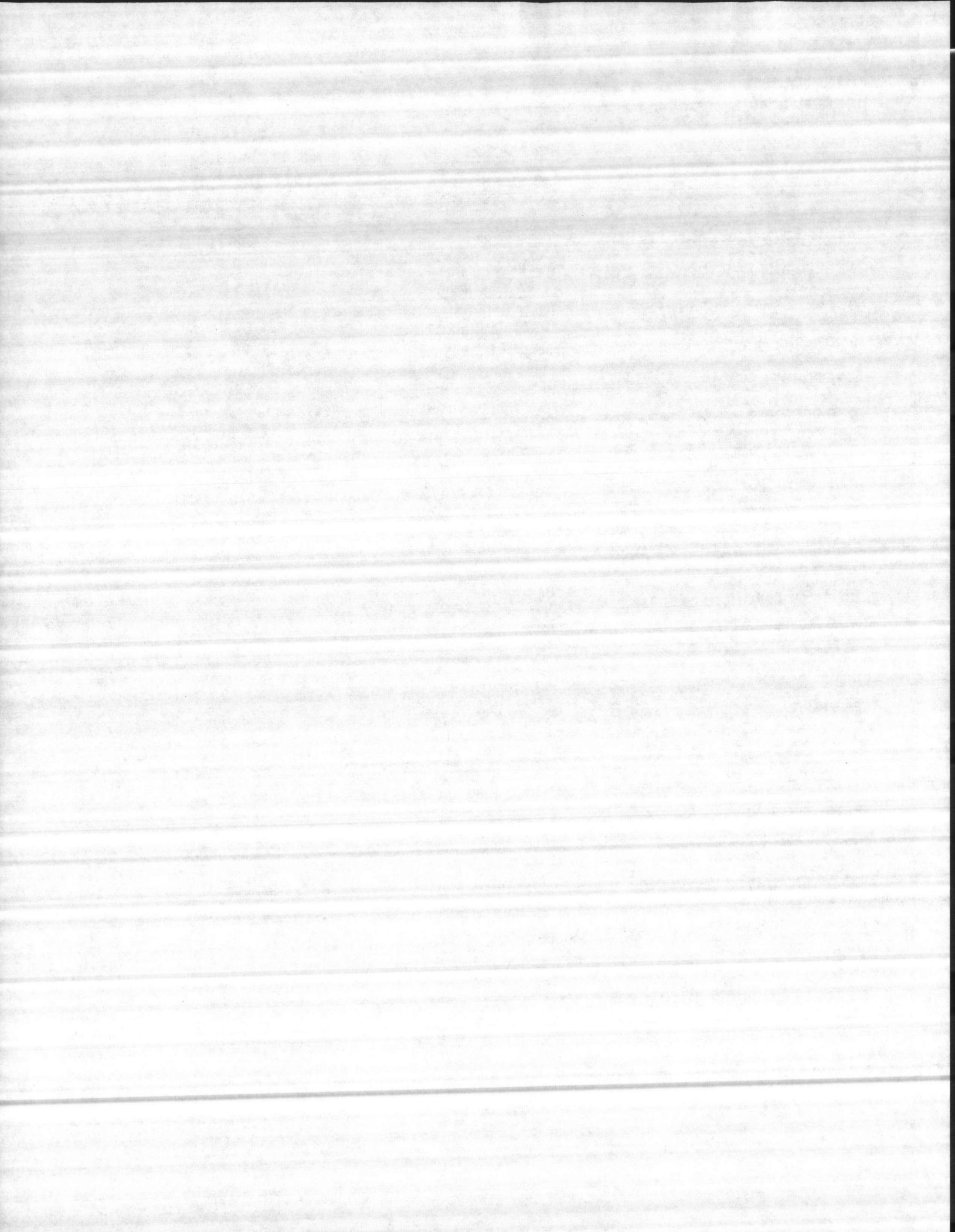
INTAKE DEPTH 85'

DESIGN CAPACITY 200 GPM x

ACTUAL GPM 133 GPM

SIZE OF CONCRETE SLAB 32 1/2" x 31 1/2"

HEIGHT OF CASING 19"



SOURCE INFORMATION GROUND WATER

Date Form Completed

M M D D Y Y
0 1 2 6 9 5

PWSID
0
4
6
7
0
4
3

Owner Assigned
Source Code

Well Name (If purchase, name of system)

707 H01C0mb B1vd 707

Code

G

G=Ground
W=Purchase/G
Y=G w/direct influence
Z=W w/direct influence

If Purchase, seller ID#

Source Begin Date

Source exempt—
SWTR? Y N

Direct Influence Date

Availability

P
P=Permanent
E=Emergency
S=Seasonal
I=Interim
O=Other

Location of well within the system (If purchase, location of master meter)

Rock Rd off of Brewster Blvd

Latitude (N)

Longitude (W)

How Determined

GPS Data

No. of Sats. Locked on

3 4 4 2 4 5

0 7 7 2 1 4 4 1

G=GPS
 M=Map
 S=Surveyed

Q# or
DOP # 3

5

(If purchase, use seller's primary source lat/long)

Vulnerable (VOCs) Y N

Assessment Date

M M D D Y Y

ENTRY POINT INFORMATION

Use Code

Availability

Owner Assigned
Entry Point Code

Entry Point Name

C
C=Ground/Permanent
D=Ground/non-permanent

P
P=Year-round
E=Emergency
S=Seasonal
I=Interim
O=Other

200

~~H8707~~ MCA H01C0MB B1VD WTP

Location:

Well Site: Owned or controlled? Y (Y,N) Control Area (100' radius)? Y (Y,N) If no, explain: _____

Sources of pollution/distance: woods

Surface water within 200'? Y N If yes, actual distance feet If yes, bact. samples collected? _____ (Y,N)

Adequate slope? Y (Y,N) Flooding? N (Y,N) Maintenance: OK

Well House: Free of stored materials? Y (Y,N) Properly drained? Y (Y,N) Locked? Y (Y,N)

Condition of house: OK Type of freeze protection: Elec Heat

Well: Diameter: 10" Type: Hand Packed Yield (gpm): 260 Properly sealed? Y (Y,N)

Properly vented? _____ (Y,N) Casing depth 50 ft. (If unknown, put 'UNK') Well depth: 130' Meter available? Y (Y,N)

Concrete slab adequate? _____ (Y,N) If no, explain: well not in center of slab Size: 12x12

Size of blow-off: 4" Sample tap: Before treatment? Y (Y,N) After treatment? _____ (Y,N)

Pumps: Capacity: GPM: 50 HP: 10 Pump intake depth: 85 Auxiliary Power? Y (Y,N)

Type pump: Vertical Turbine Height above floor (pump/casing): 19"

Storage at well site: Elev: Hydro: Ground:

If hydroautomatic, air volume control? _____ (Y,N) Safety valves? _____ (Y,N) Coded? _____ (Y,N)

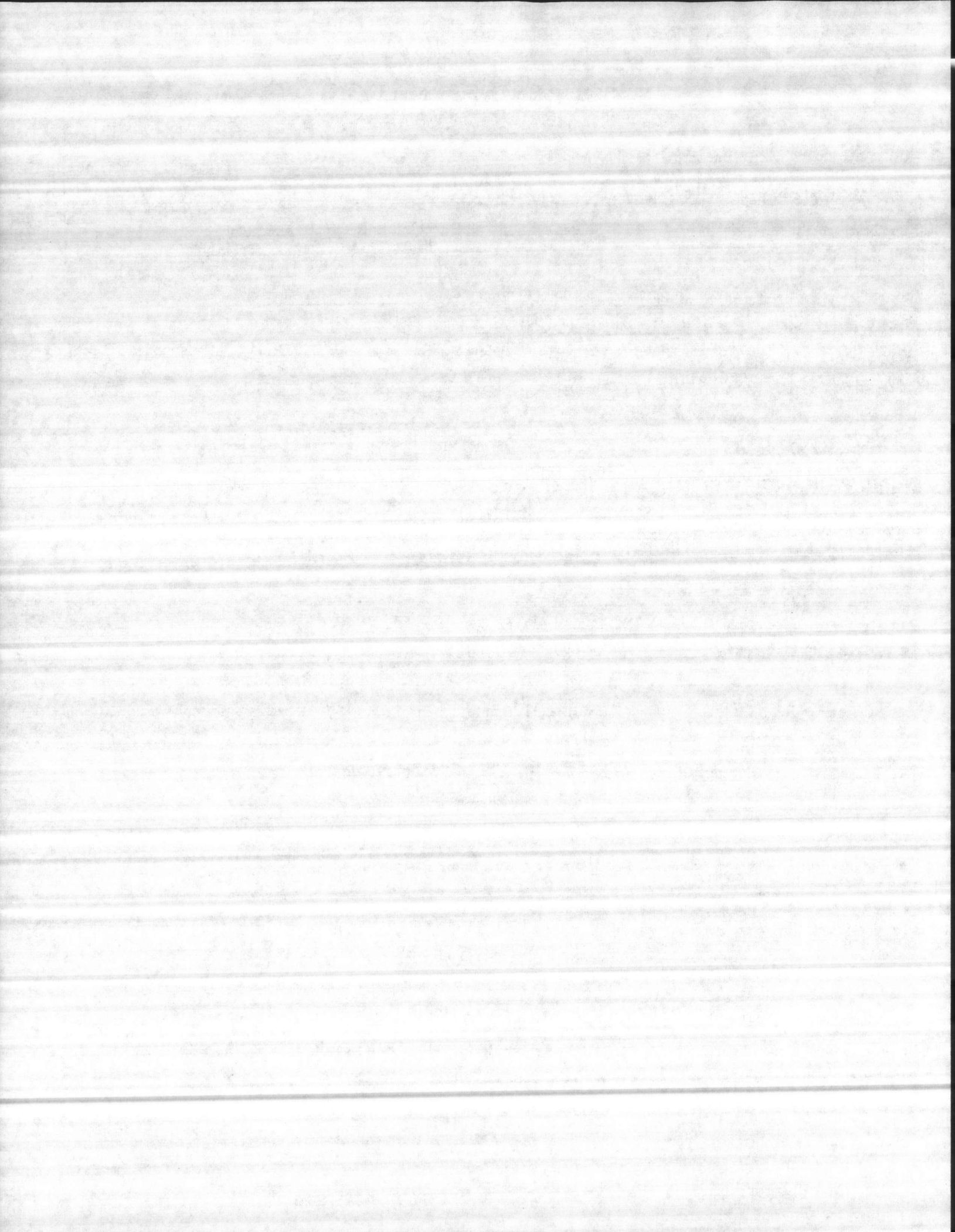
High service pumps: 1. _____ gpm _____ hp 2. _____ gpm _____ hp 3. _____ gpm _____ hp Auxiliary Power? _____ (Y,N)

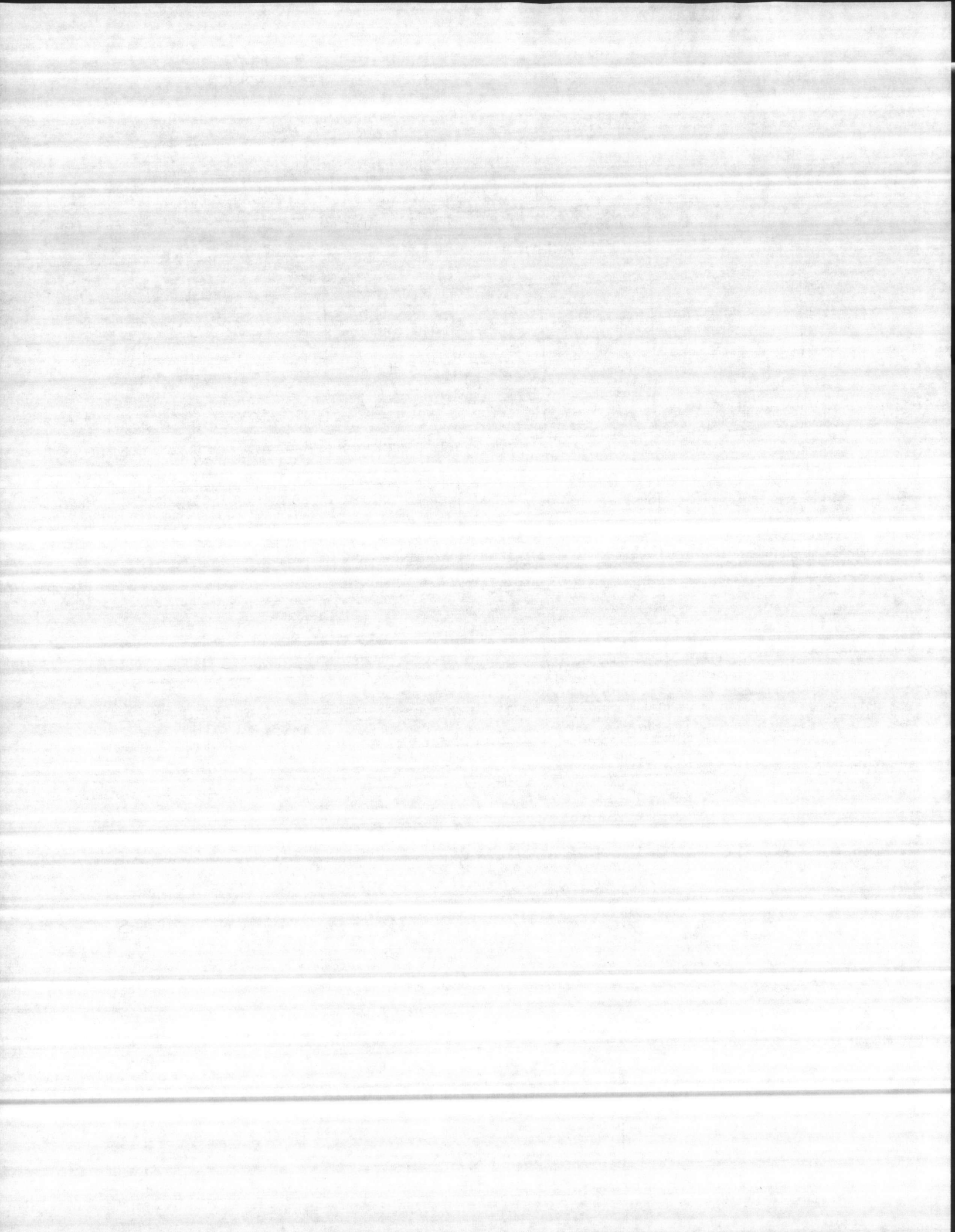
Is the water treated at this well? Y N If yes, complete back of form.

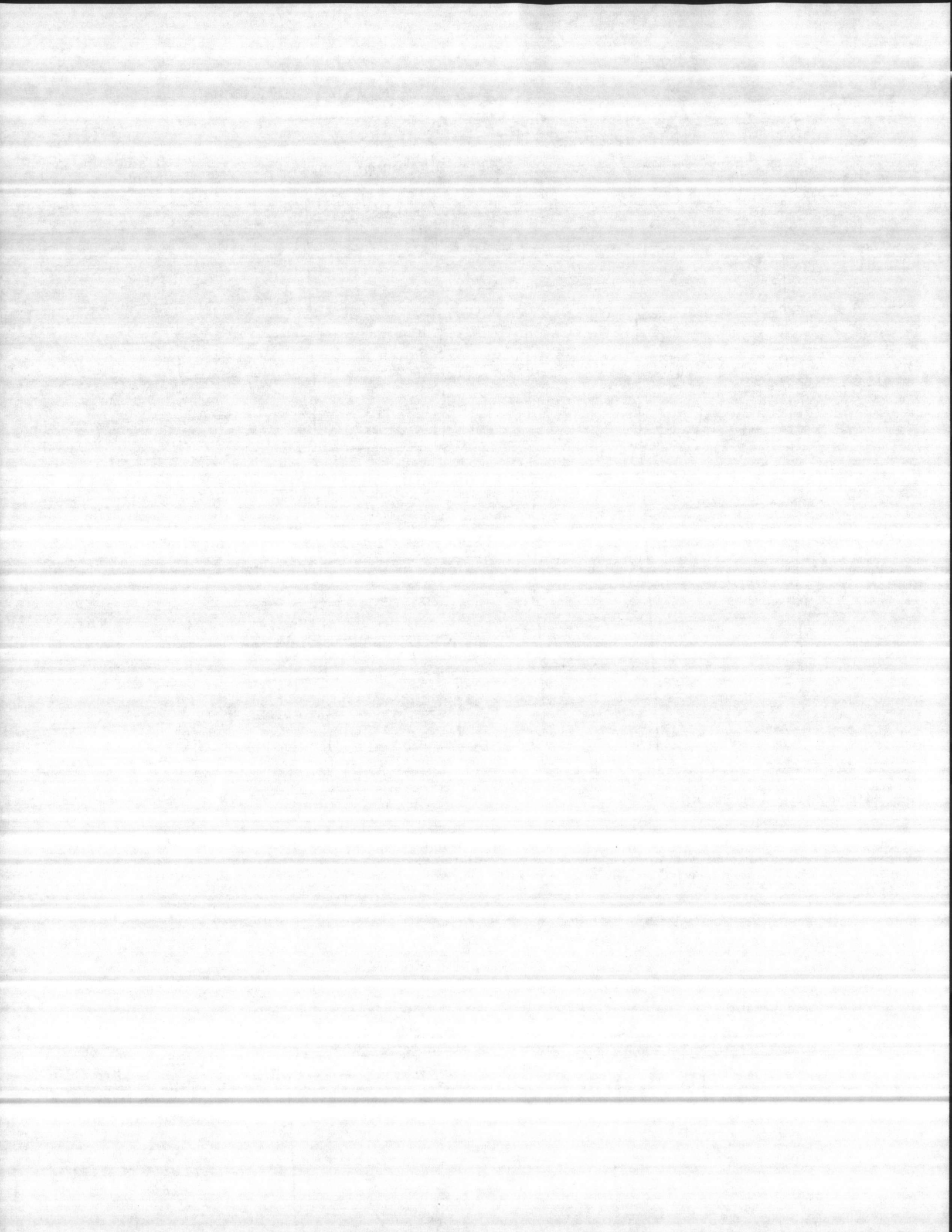
If other wells are treated here, which ones? _____ If treated elsewhere, where? H8670 PLANT

If purchase, retreat? Y N If yes, complete back of form.

① Seal pump pedestal
② Noisy Bearings
③ Low Pump Q
T/B Pulled





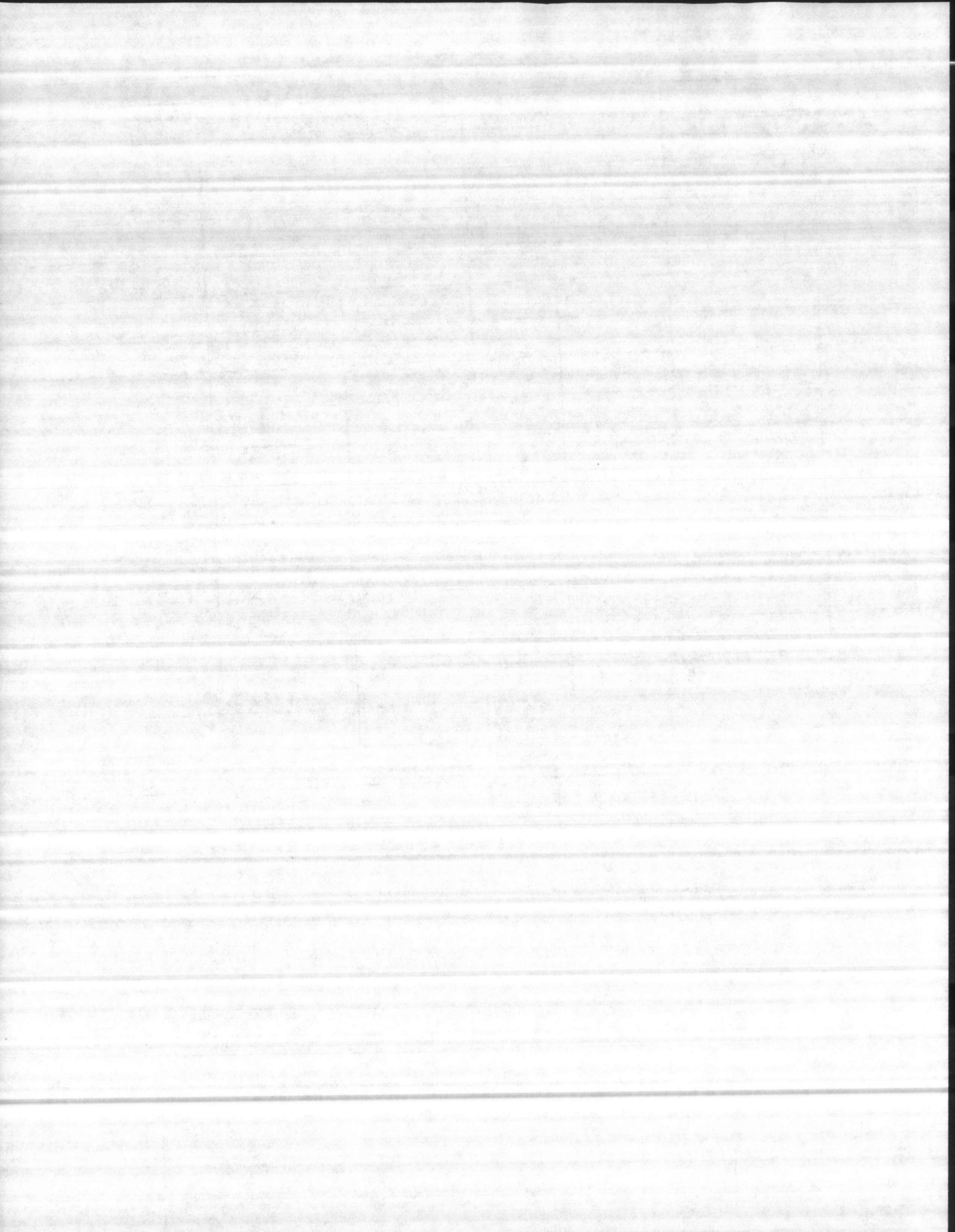


WELL NUMBER 707 BY THOMAS/STEVENS ON DATE 11-18-91

IR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
85	23	53	30	15	100	50
		67	44	9	130	05

ARRS Dead Head 33 PSI

FACTURER	STAGE	S.N.	TOTAL HEAD	SIZE





Telephone:
 (919) 799-8800
 Fax (919) 799-8801

Mailing Address:
 P.O. Box 3407
 Wilmington, NC 28406-0407

Shipping Address:
 Suite A1, 108 N. Kerr Avenue
 Wilmington, NC 28405

TO: U. S. Marine Corps Base
 Base Maintenance
 Utilities Division
 Water Treatment Plant
 Camp LeJeune, N. C. 28542

DATE June 22, 1992

ATTN: STANLEY MILLER

SUBJECT: YOUR P.O. NO. M93058-92P1375

THE FOLLOWING TECHNICAL DATA IS SUBMITTED FOR YOUR REVIEW (SEE BELOW).

<u>QTY.</u>	<u>DESCRIPTION</u>	<u>DWG. NO.</u>	<u>ITEM NO.</u>	<u>F.O. NO.</u>
2	PUMP OUTLINE			
2	PUMP CROSS SECTION		Well Pump	
2	PUMP TYPICAL CURVE		Bowl assy	
2	PUMP SPARE PARTS LIST		HP707 Well	121670
2	MOTOR DRAWING			
2	PUMP MANUAL			
2	MOTOR MANUAL			

____ INSTALLATION, OPERATING AND MAINTENANCE MANUALS ATTACHED.
 ____ YOUR COMPLETE APPROVAL REQUIRED BEFORE ORDER IS SCHEDULED AND RELEASED TO
 MANUFACTURING, UNLESS A LONGER PERIOD IS STATED IN YOUR PURCHASE ORDER,
 APPROVAL PRINTS MUST BE RECEIVED IN THIS OFFICE BY _____; DELAY BEYOND
 THIS DATE WILL RESULT IN EXTENDED DELIVERY.

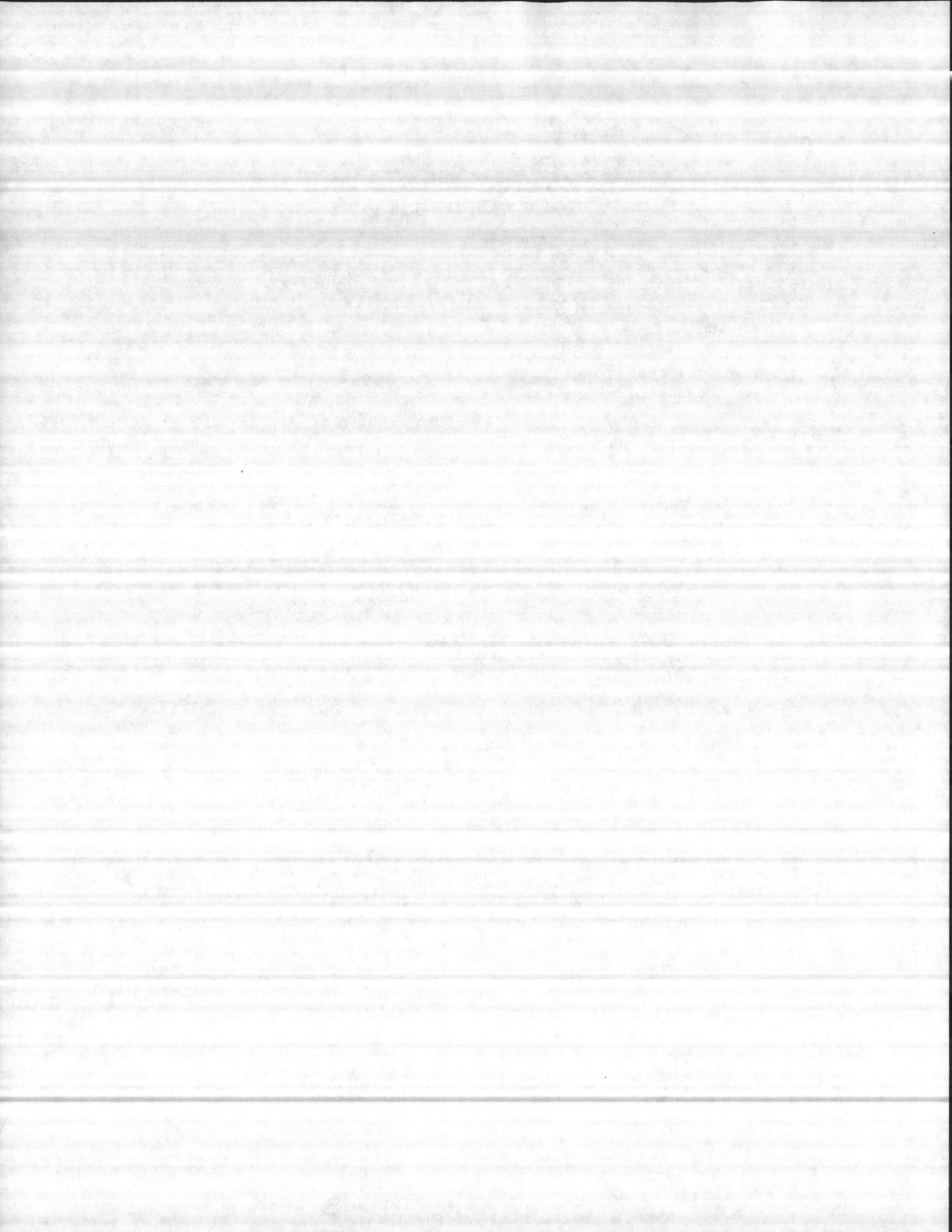
THE ABOVE LITERATURE IS FOR YOUR INFORMATION AND RECORDS, AND DOES NOT REQUIRE
 YOUR APPROVAL, RETAIN LITERATURE AS YOUR FINAL DISTRIBUTION.

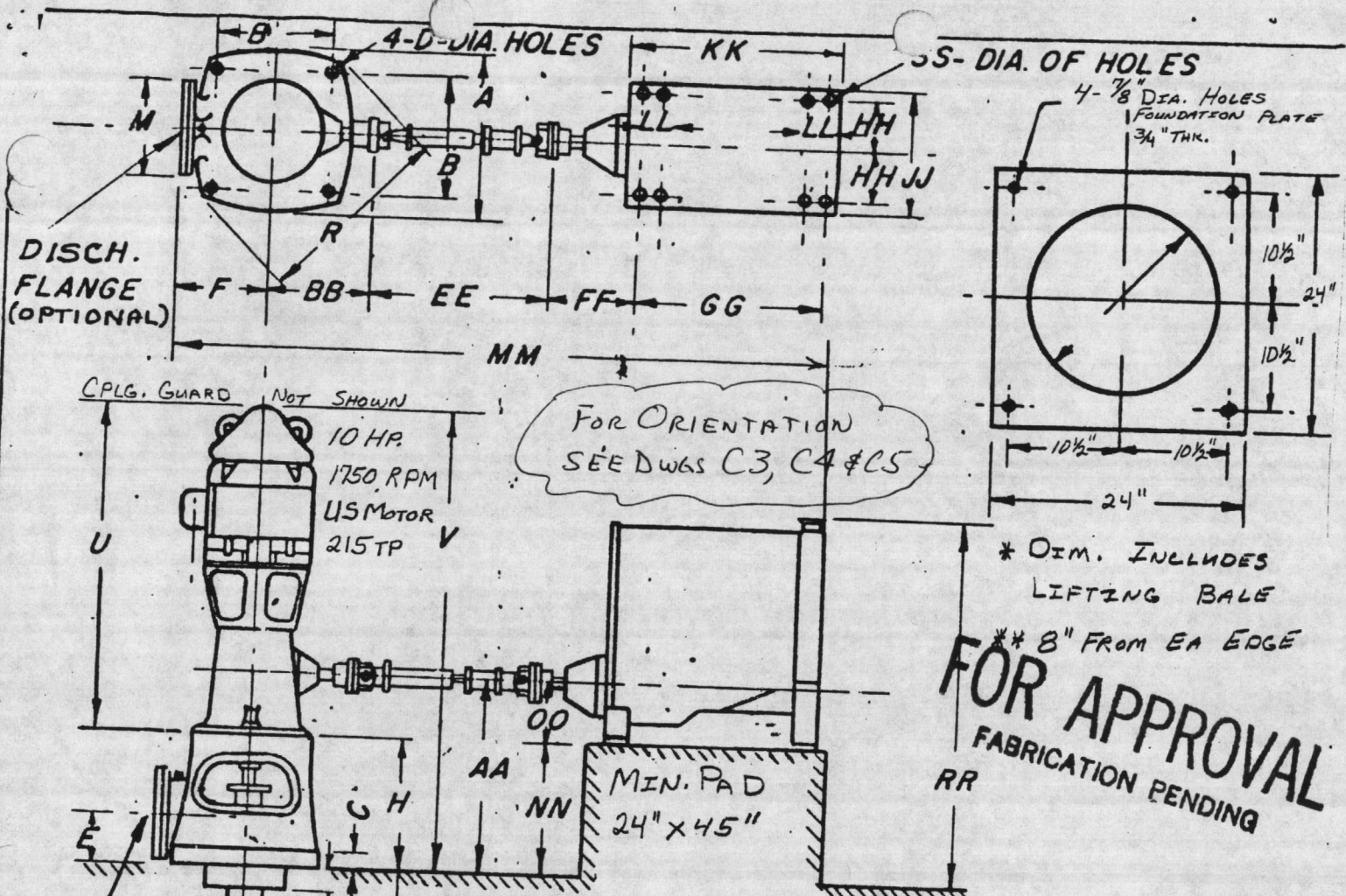
NOTE: ANY CHANGES MAY AFFECT QUOTED PRICES AND SHIPPING SCHEDULES.

VERY TRULY YOURS,

CC:

R.W. Taylor
 R. W. Taylor





FOR ORIENTATION
SEE DWGS C3, C4 & C5

* DIM. INCLUDES
LIFTING BALE
** 8" FROM EA EDGE
FOR APPROVAL
FABRICATION PENDING

HARRY PEPPER & Assoc. Inc. P.O. C642-0001
S.O. 1635-09

DIMENSIONS

A	17"	Z	11'-0 ³ / ₈ "
B	14 ¹ / ₂ "	CS	86'-6 ³ / ₄ "
C	2"	OA	101'-0 ³ / ₈ "
D	7 ⁷ / ₈ "	AA	1'-10 ¹ / ₄ "
E	6 ¹ / ₂ "	BB	10 ⁷ / ₈ "
F	9"	EE	24"
G	3 ³ / ₄ "	FF	21 ¹ / ₁₆ "
H	15 ¹ / ₂ "	GG	29"
J	9 ⁷ / ₈ "	HH	11 ¹ / ₄ "
M	11"	JJ	20"
N	6"	KK	45"
R	23"	LL	-
T	-	MM	7'-4 ⁷ / ₈ "
U	3'-11 ¹ / ₂ "	NN	10 ¹ / ₄ "
V	5'-3"	OO	12"
W	6 ¹ / ₄ "	RR	-56 ¹ / ₄ " *
X	7 ¹ / ₂ "	SS	5 ⁵ / ₈ " **
Y	3'-5 ¹ / ₄ "	TT	5"

CAMP LEJEUNE No. 9 WELL
TITLE
 VERTICAL TURBINE PUMP WITH
 COMBINATION RIGHT ANGLE GEAR
 DRIVE WITH ENGINE & MOTOR
 DATE 1-26-81 | SCALE NONE

DATE OF ISSUE
 3-1-85
 DESTROY ALL PREVIOUS PRINTS
 FIG. 4700 SIZE M8
 DRAWING NO. T82516

THE DEMING CO.
 SALEM, OHIO

125*ASA
 DISCHARGE

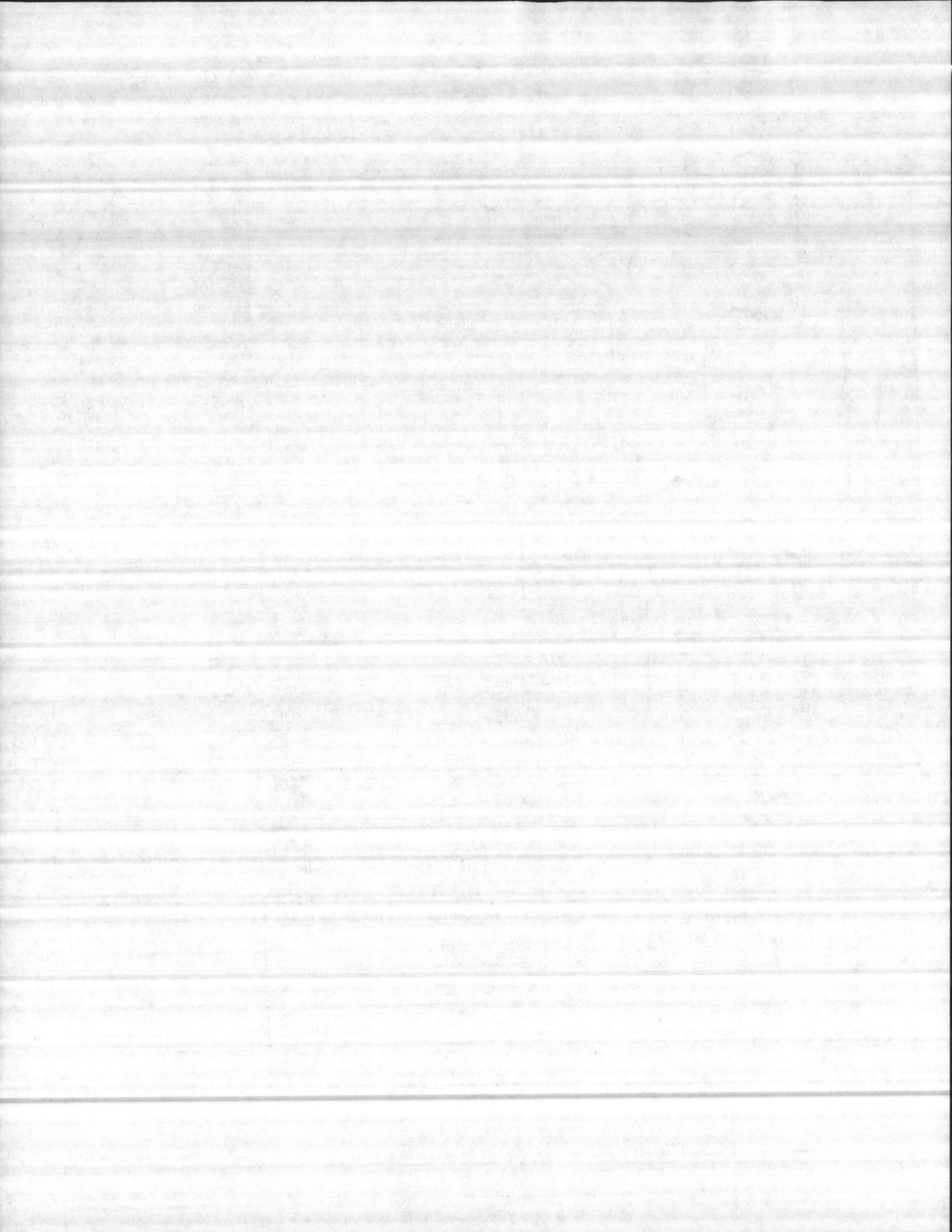
5" x 1" Col. Shaft

4-STAGES

TT-SIZE OF
 SUCTION
 PIPE &
 PAINER

CPLG. GUARD NOT SHOWN
 10 HP.
 1750 RPM
 US MOTOR
 215 TP

MIN. PAD
 24" x 45"



CONTRACTOR'S SUBMITTAL TRANSMITTAL
 LANTDIV NORFOLK 4-4355/3 (Rev 11-80)

3/10

Hunt

FROM CONTRACTOR Harry Pepper & Associates, Inc.	CONTRACT NO 81-C-1644	TRANSMITTAL NO 206	DATE 5-15-86
TO Henry Von Oesen & Associates, Inc.	PROJECT TITLE AND LOCATION Holcomb Blvd Water Treatment Plant MCB, Cp Lejeune, North Carolina		

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

- Contractor Approved
 OICC Approval
 Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

****ACTION CODES**

- A-Approved
- D-Disapproved
- AN-Approved as noted
- RA-Receipt acknowledged.
- C-Comments
- R-Resubmit

ITEM NO	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO.	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES	REVIEWER'S INITIALS CODE AND DATE
	02734	ROTARY DRILLED WATER WELLS			
		WELL # 9			
1	3.1.6	24 Hour Pump Test	7	A	JRB
2	3.1.6	2 Hour Recovery Test	7	A	JRB

CONTRACTOR'S COMMENTS

Contractor was advised by Title II Inspector to Pump Test at 300 GPM.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

ONE COPY TO ROICC

DATE RECEIVED BY REVIEWER: 5/20/86

FROM (Reviewer): Henry von Oesen & Assoc., Inc.

CONTRACTOR REPRESENTATIVE Signature: Phil Reese

TO: Henry von Oesen & Assoc., Inc.

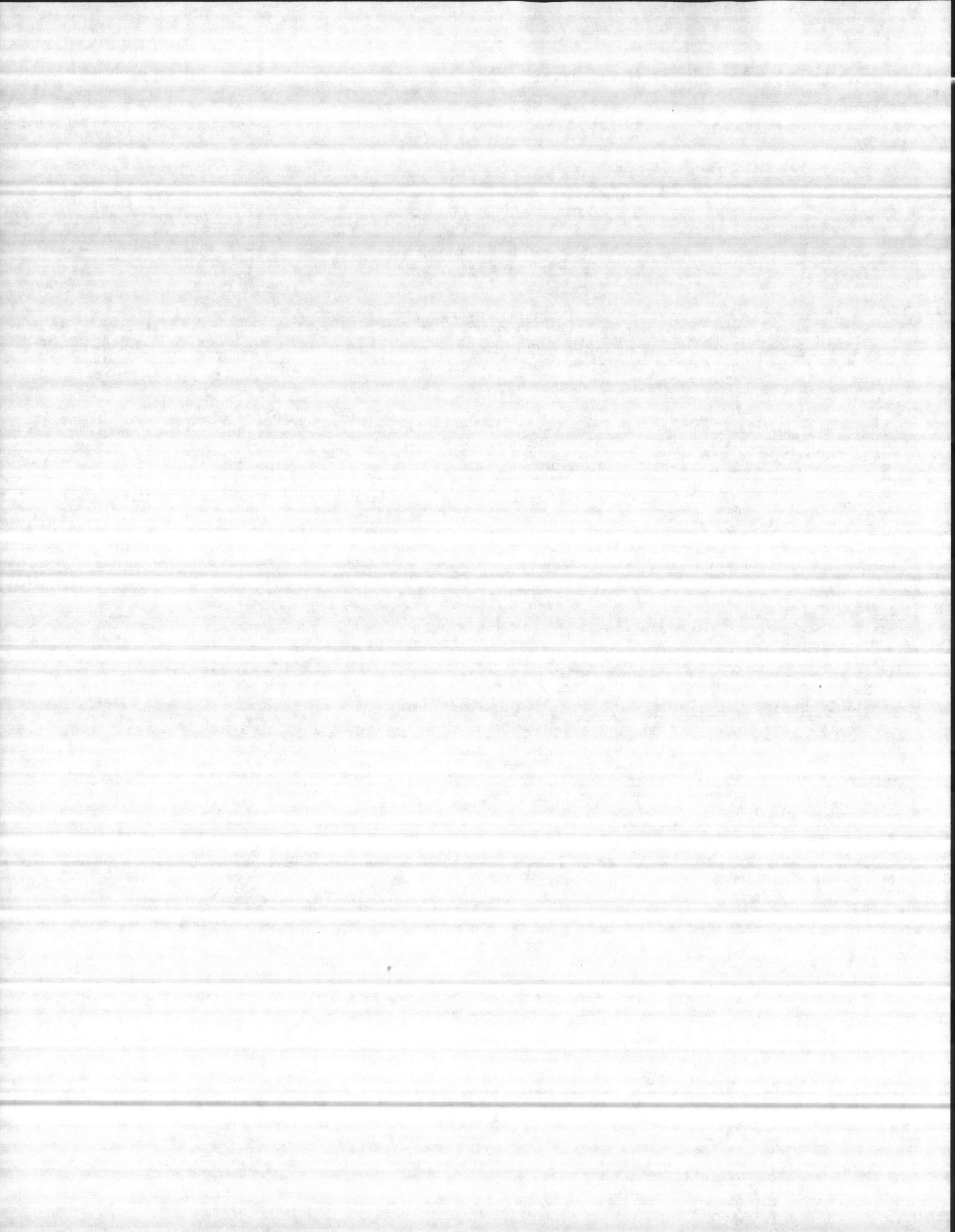
- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

REVIEWER'S COMMENTS

COPIES TO ROICC (2), LANTDIV (1), A-E (1)

DATE: 5/23/86

SIGNATURE: [Signature]



24 HOUR PUMP TEST
WELL # 9

PUMPING RATE 300 GPM

ITEM # 1

TIME	PUMP SETTING 84'	STATIC 16'2"
	PUMPING LEVEL	DRAWDOWN
11:01	34'2	18'
11:02	36'6	2'4
11:03	38'11	2'5
11:04	40'11	2'
11:05	43'2	2'3
11:06	45'10	2'8
11:07	47'9	1'11
11:08	48'11	1'2
11:09	50'	1'1
11:10	51'	12"
11:15	52'4	1'4
11:20	53'7	1'3
11:25	54'5	10"
11:30	55'1	8"
11:35	56'1	12"
11:40	57'3	12"
11:45	58'3	12"
11:50	59'2	11"
11:55	61'1	11"
12:00	65'8	1'7"
1:00	65'9	1"
2:00	66'2	5"
3:00	66'4	2"
4:00	66'7	3"
5:00	66'10	3"
6:00	67'3	5"
7:00	67'10	7"
8:00	68'2	4"
9:00	68'6	4"
10:00	68'8	2"
11:00	68'9'	1"
12:00	68'10	1"
1:00	68'11	1"
2:00	69'2	3"
3:00	69'2	"
4:00	69'6	4"
5:00	69'6	"
6:00	69'8	2"
7:00	"	"
8:00	"	"
9:00	"	"
10:00	"	"
11:00	"	"

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

APPROVED _____
 APPROVED AS NOTED _____
 DISAPPROVED _____

SUBJECT TO THE POINTS OF
 CONTRACT NO. N62470-81-C-1644
 APPROVAL OF THIS DRAWING DOES NOT INCLUDE
 APPROVAL OF THE CONTRACTOR'S THE CON-
 TRACTOR'S RESPONSIBILITY IS THE CONTRACTOR
 TO COMPLY WITH THE CONTRACT AND SUPPORTS THE
 DEVIATION -- THE CONTRACTOR SHALL BE RES-
 PONSIBLE FOR THE CORRECTION OF FINANCIAL
 DIMENSIONS AND THE COORDINATION OF
 TRADES, ETC. AS REQUIRED.

REVIEWED *Phil Rosen* DATE MAY 22 1986

FOR OFFICER IN CHARGE OF CONSTRUCTION

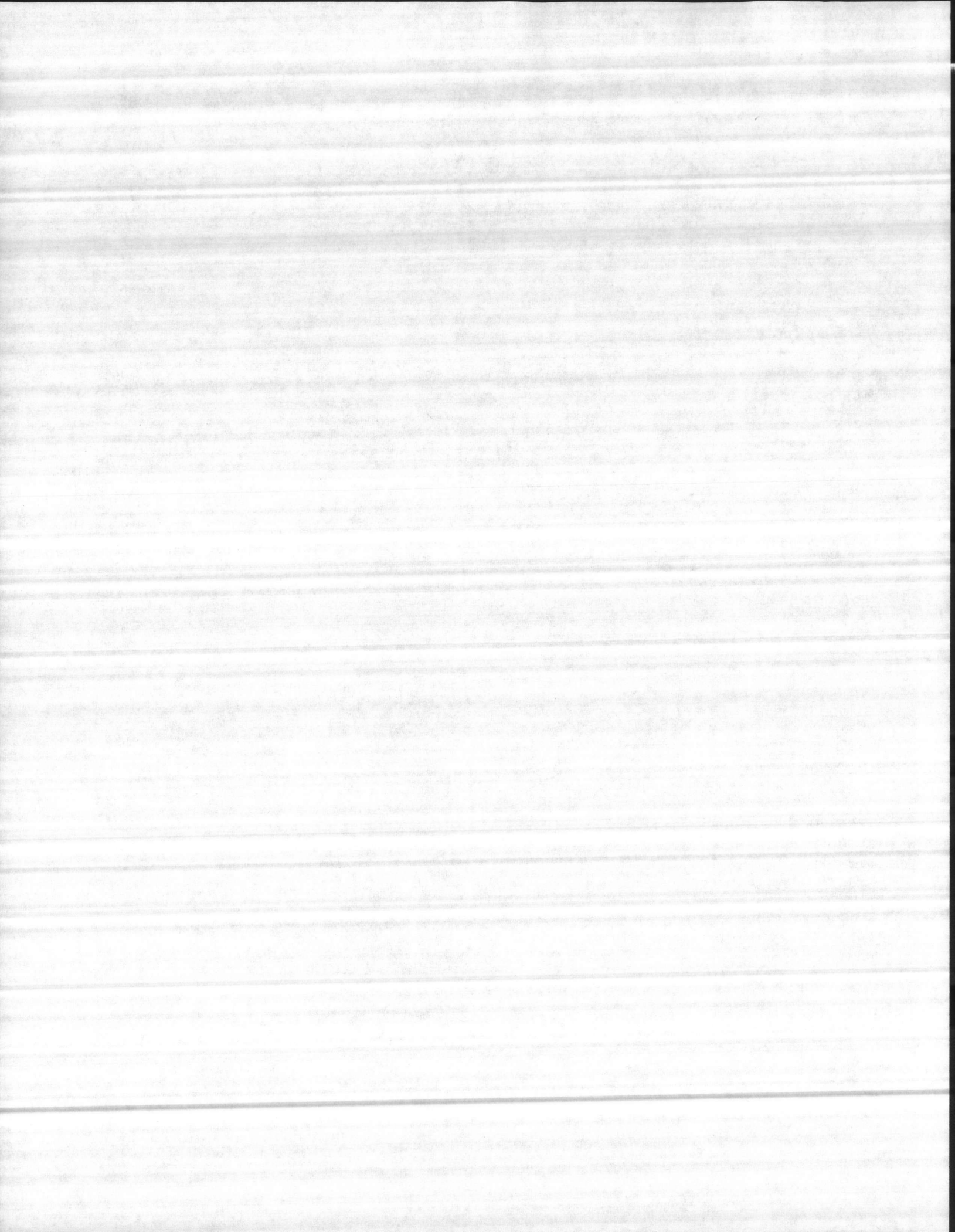
It is hereby certified that the (material) (equipment) shown and
 indicated in this submittal, shop drawings, catalog cut(s), etc., and
 approved/proposed to be incorporated into Contract Number
N62470-81-C-1644 is in compliance with the Contract Drawings
 and Specifications and can be installed in the allocated space,
 and is:

Approved for use.

Submitted for Government approval.

Approved for use subject to Government approval of
 specific deviation.

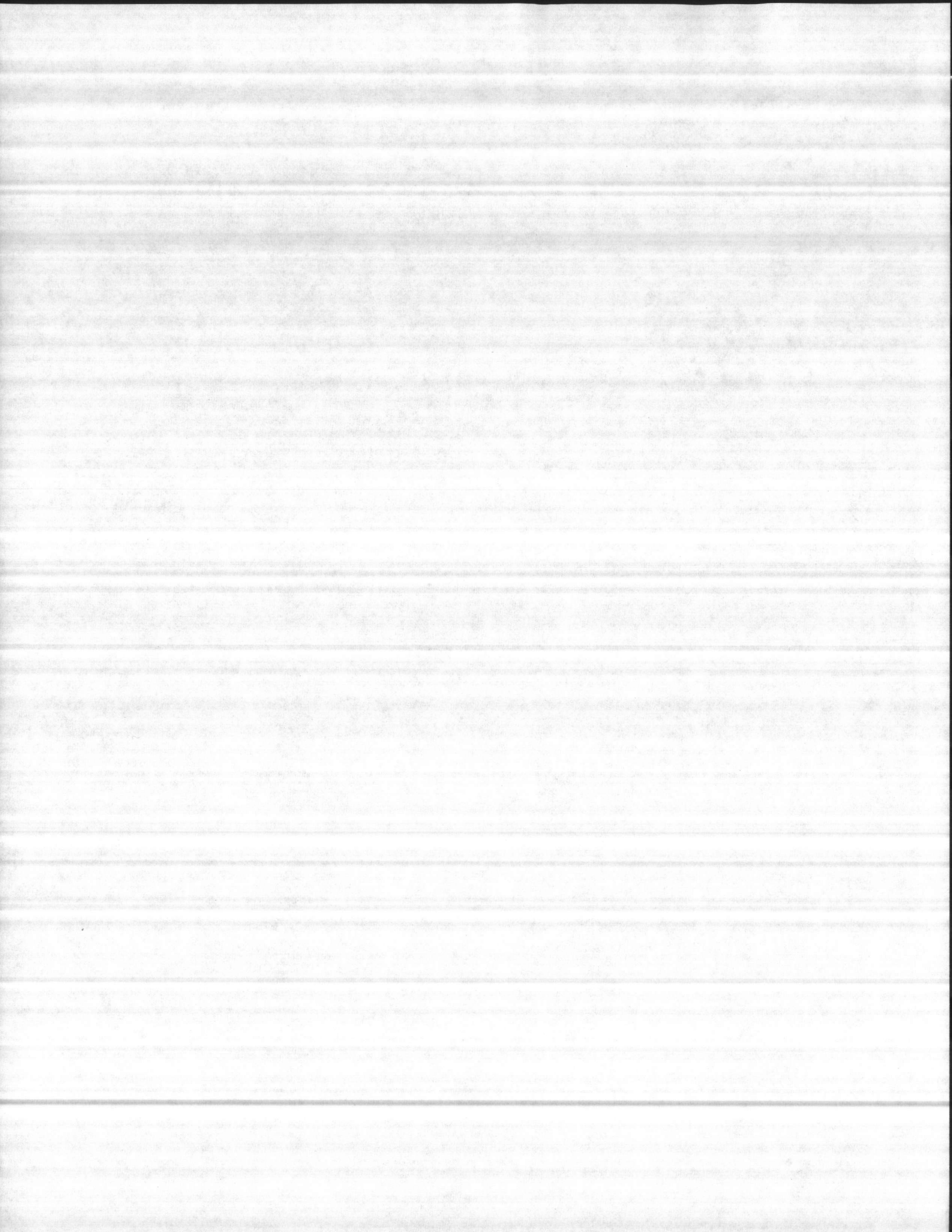
Authorized Reviewer _____ DATE _____
 Signature CQC Rep. *Phil Rosen* DATE 5-15-86



Two Hour Recovery
Well # 9

ITEM # 2

11:01	36'2
11:02	34'4
11:03	32'11
11:04	30'1
11:05	28'5
11:06	26'6
11:07	24'9
11:08	23'8
11:09	22'1
11:10	21'
11:15	19'11
11:20	18'3
11:25	17'1
11:30	16'11
11:35	16'9
11:40	16'6
11:45	16'2
11:50	"
12:00	"
1:00	"



Hw

CONTRACTOR'S SUBMITTAL TRANSMITTAL
LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

FROM CONTRACTOR
Harry Pepper & Associates, Inc.
TO
Henry Von Oesen & Associates, Inc.

CONTRACT NO
81-C-1644
TRANSMITTAL NO
202
DATE
5-9-86
PROJECT TITLE AND LOCATION
Holcomb Blvd Water Treatment Plant
MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

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List only one of the following categories on each transmittal form, and indicate which is being submitted

- Contractor Approved
- OICC Approval
- Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

****ACTION CODES**
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged
C-Comments
R-Resubmit

ITEM NO	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO.	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES	REVIEWER'S INITIALS CODE AND DATE
1	02734	ROTARY DRILLED WATER WELLS Step TEst	7	A	JRB

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC
ONE COPY TO ROICC

DATE RECEIVED BY REVIEWER: **5/13/86**

FROM (Reviewer): **Henry von Oesen & Assoc., Inc.**

CONTRACTOR REPRESENTATIVE / Signature: **Phil Reese** *Phil Reese*

TO: _____

Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

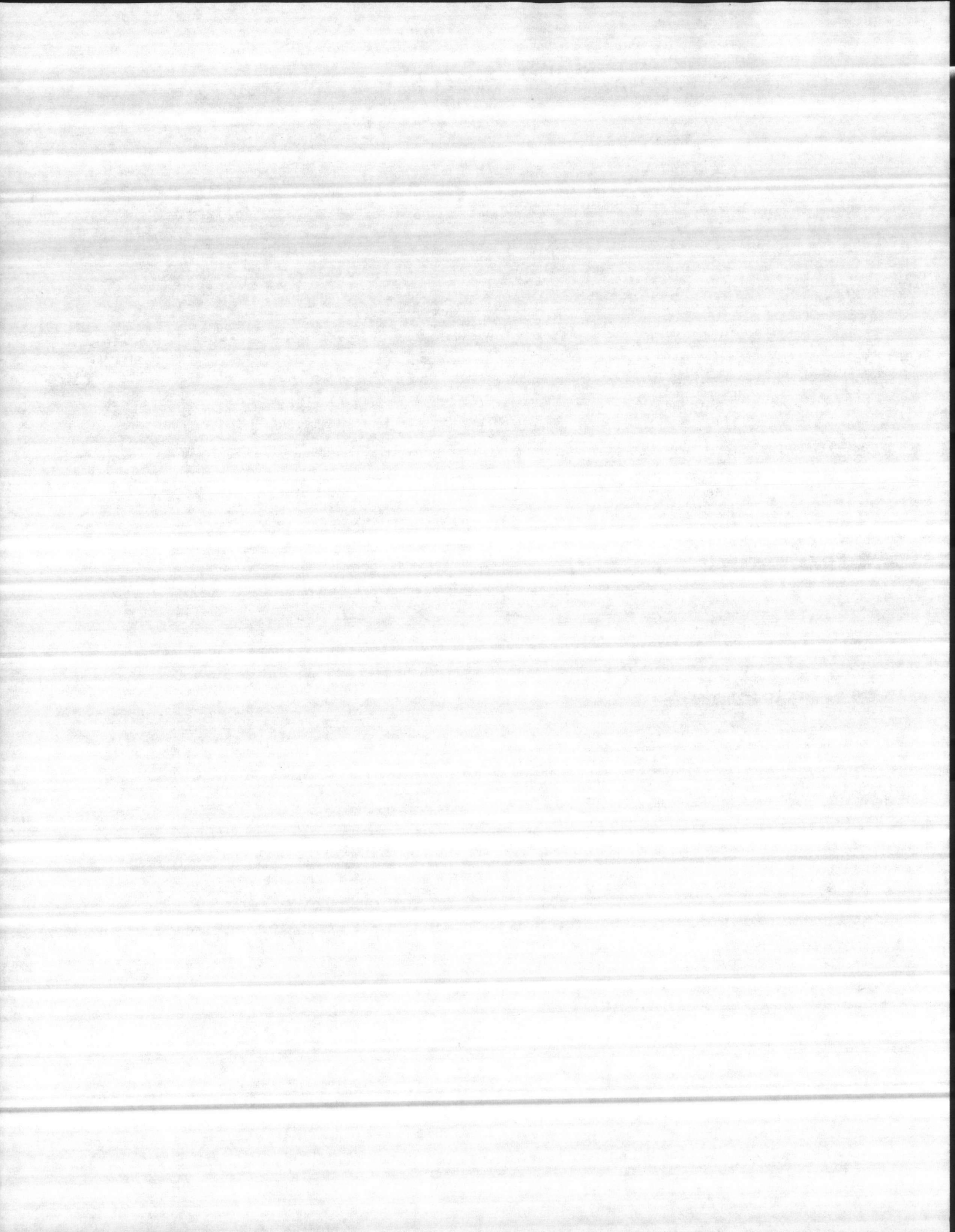
Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

COPIES TO
ROICC (2)
LANTDIV (1)
A-E (1)

DATE: **5/14/86 11 35**

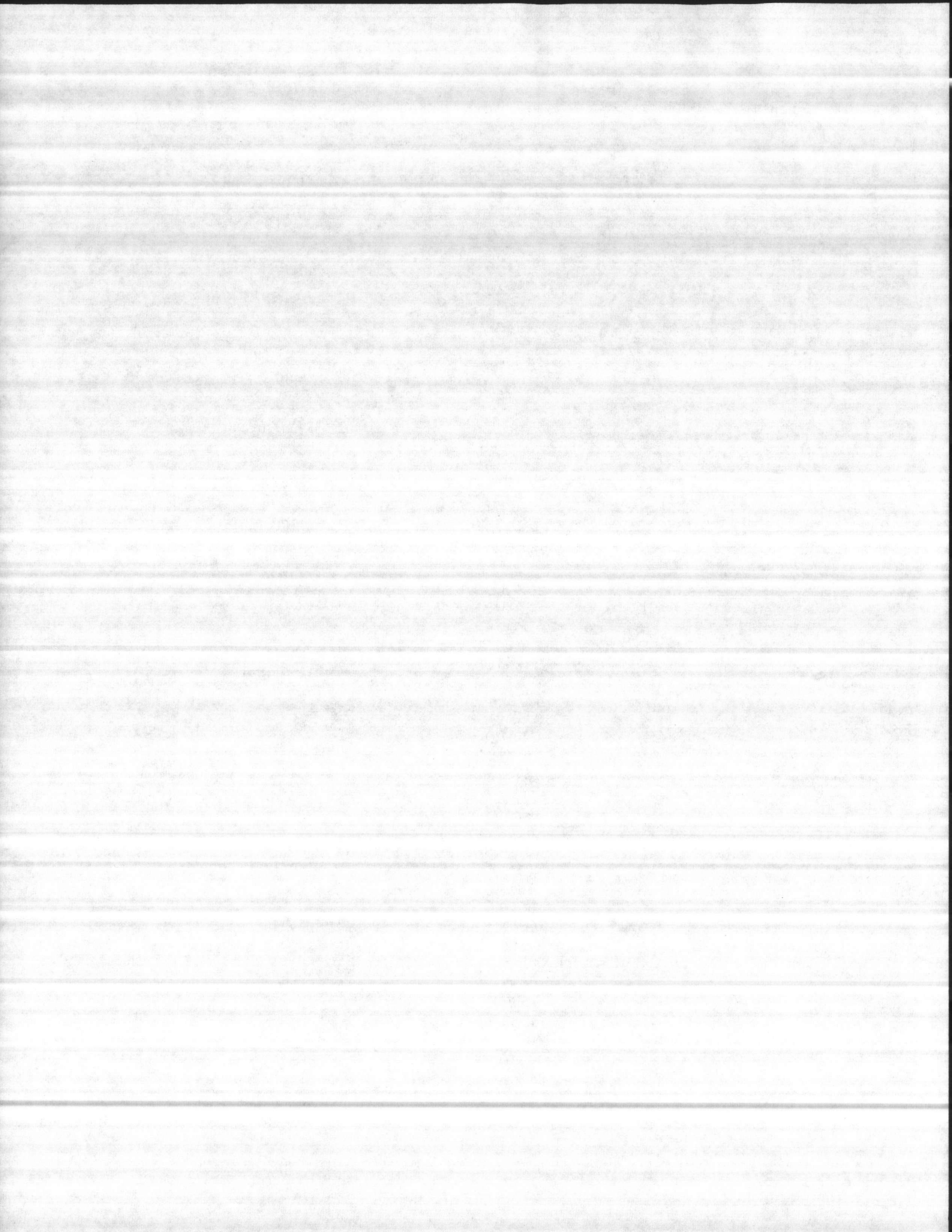
SIGNATURE: *[Signature]*



Step Test
Well # 9

ITEM # 1

TIME	STATIC	PUMPING LEVEL	PUMPING RATE
2:15	16'2	25'8	
2:30		26'1	100 GPM
2:45		26'11	"
3:00		27'6	"
3:30		28'	"
4:00		28'5	"
4:30		28'7	"
5:00		28'10	"
5:15		29'6	
5:30		30'1	150 GPM
5:45		30'5	"
6:00		30'11	"
6:30		31'1	"
7:00		31'7	"
7:30		32'1	"
8:00		32'9	"
8:15		41'6	
8:30		42'	200 GPM
8:45		42'4	"
9:00		42'8	"
9:30		43'1	"
10:00		43'7	"
10:30		43'10	"
11:00		43'11	"
11:15		54'11	
11:30		55'2	250 GPM
11:45		55'6	"
12:00		55'9	"
12:30		55'2	"
1:00		55'8	"
1:30		56'	"
2:00		56'2	"
2:15		65'4	
2:30		65'9	300 GPM
2:45		65'11	"
3:00		66'	"
3:30		66'3	"
4:00		66'6	"
4:30		66'11	"
5:00		66'11	"
5:15		77'1	
5:30		77'8	350'GPM
5:45		77'11	"
6:00		78'2	"
6:30		78'6	"
7:00		78'10	"
7:30		79'4	"
8:00		79'4	"



NO.

NOTES

- 1 ALL DIMENSIONS SHOWN ARE IN INCHES UNLESS OTHERWISE STATED.
- 2 BEFORE STARTING PUMP, IMPELLER MUST BE LIFTED.

CUSTOMER TENCARVA MACH. CO., INC.
FOR USMC - CAMP LEJEUNE

P.O. NO. U2-75042-72

NO. OF UNITS ONE

PUMP SIZE 8RJLO NO. OF STGS. 6

GPM 200 T.D.H. 150 FT.

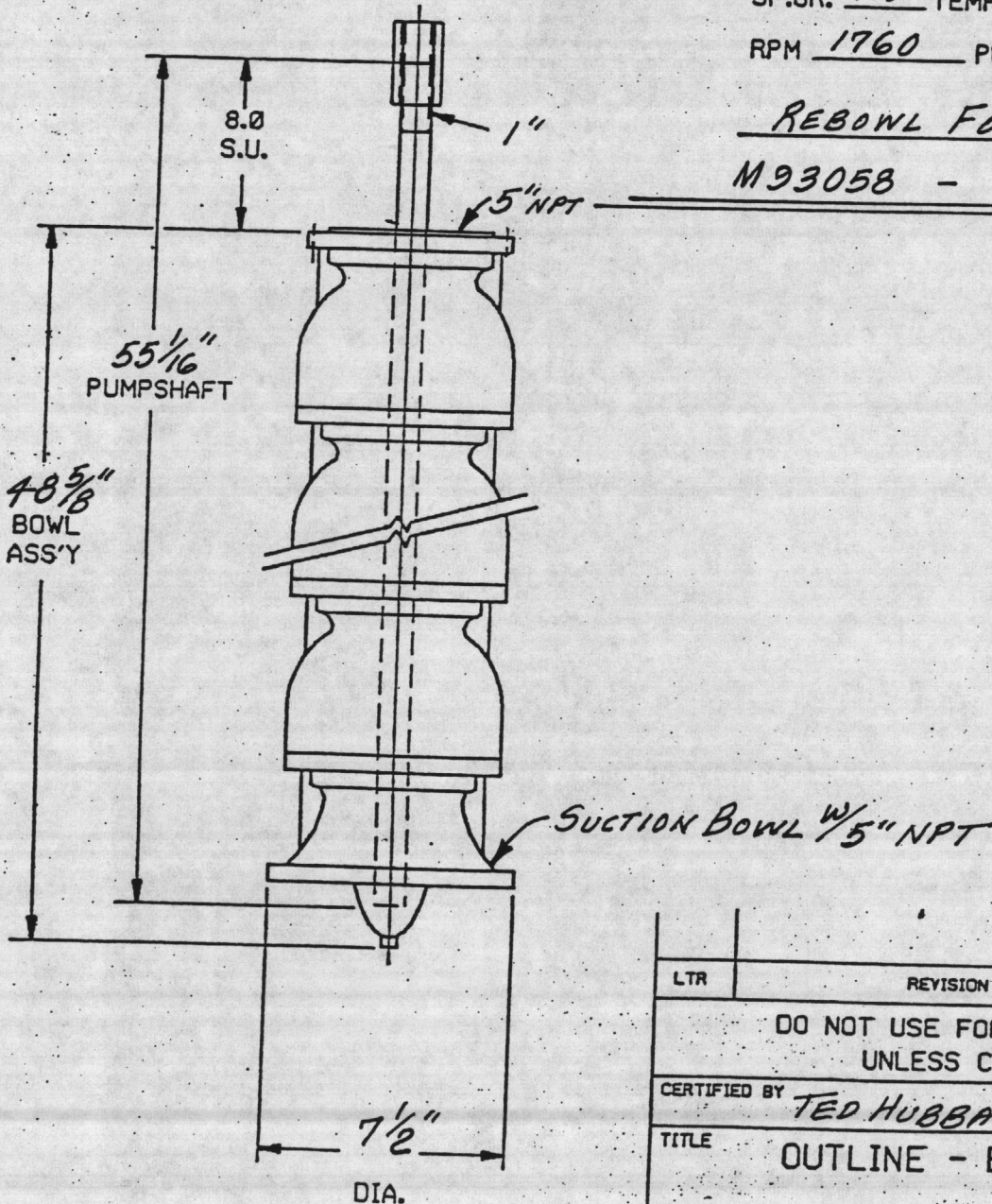
LIQUID WATER


SP.GR. 1.0 TEMP. AMB. VISC. -

RPM 1760 PUMP WEIGHT 255 LBS.

REBOWL FOR HP907 WELL

M93058 - 92P1375



LTR	REVISION	BY	DATE
DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED			
CERTIFIED BY <u>TED HUBBARD</u>		DATE <u>6-11-92</u>	
TITLE <u>OUTLINE - BOWL ASSEMBLY</u>			
DRAWN BY <u>T. HUBBARD</u>		DATE <u>6-11-92</u>	
 GOULDS PUMPS VERTICAL PUMP DIVISION INDUSTRY, CALIFORNIA		S.O. NUMBER	
		<u>121670</u>	

CAD:

C=VITBAO

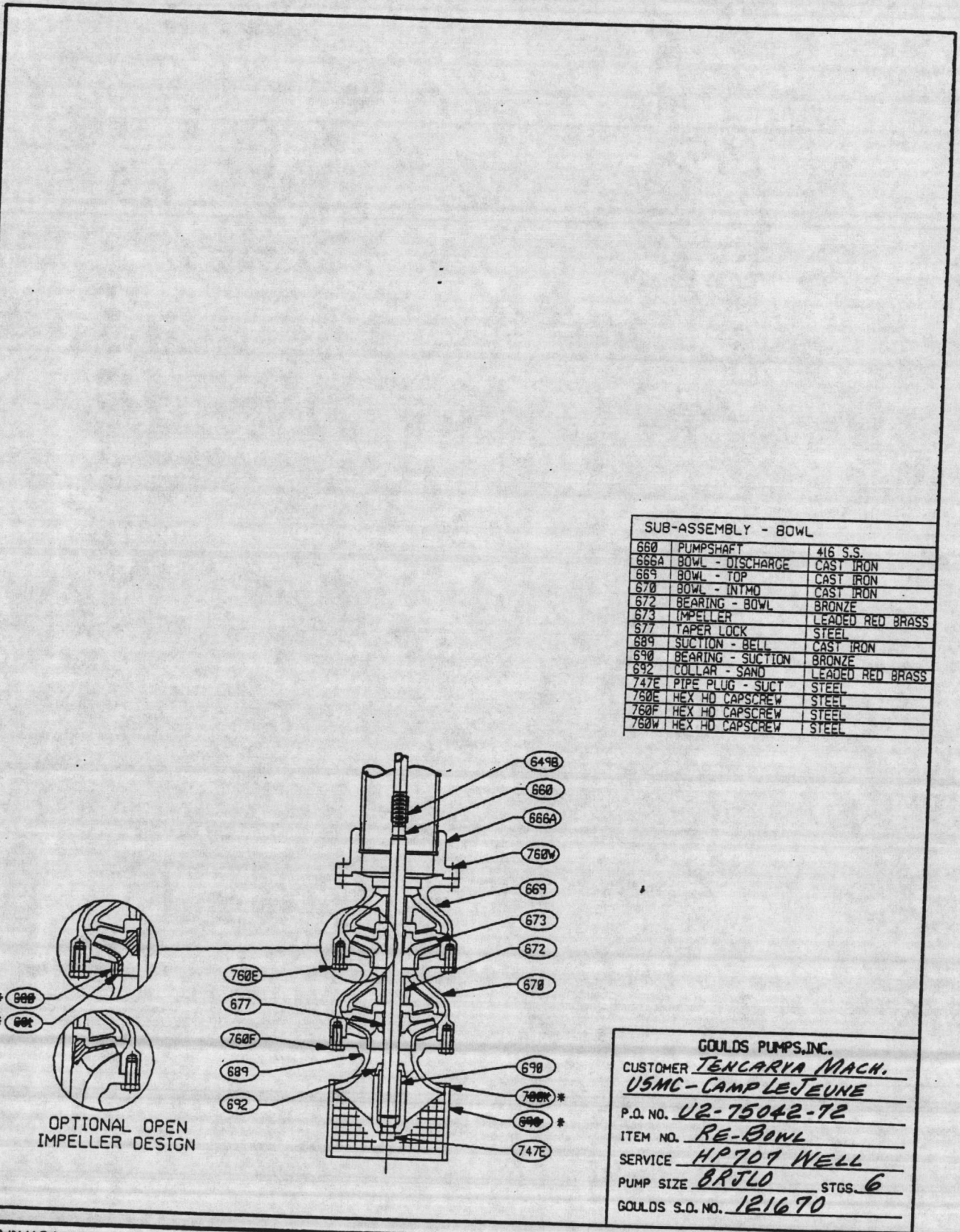


Typical Cross Sectional

VIT-CT Open Lineshaft

9.3.1

October 1, 1986
(New)



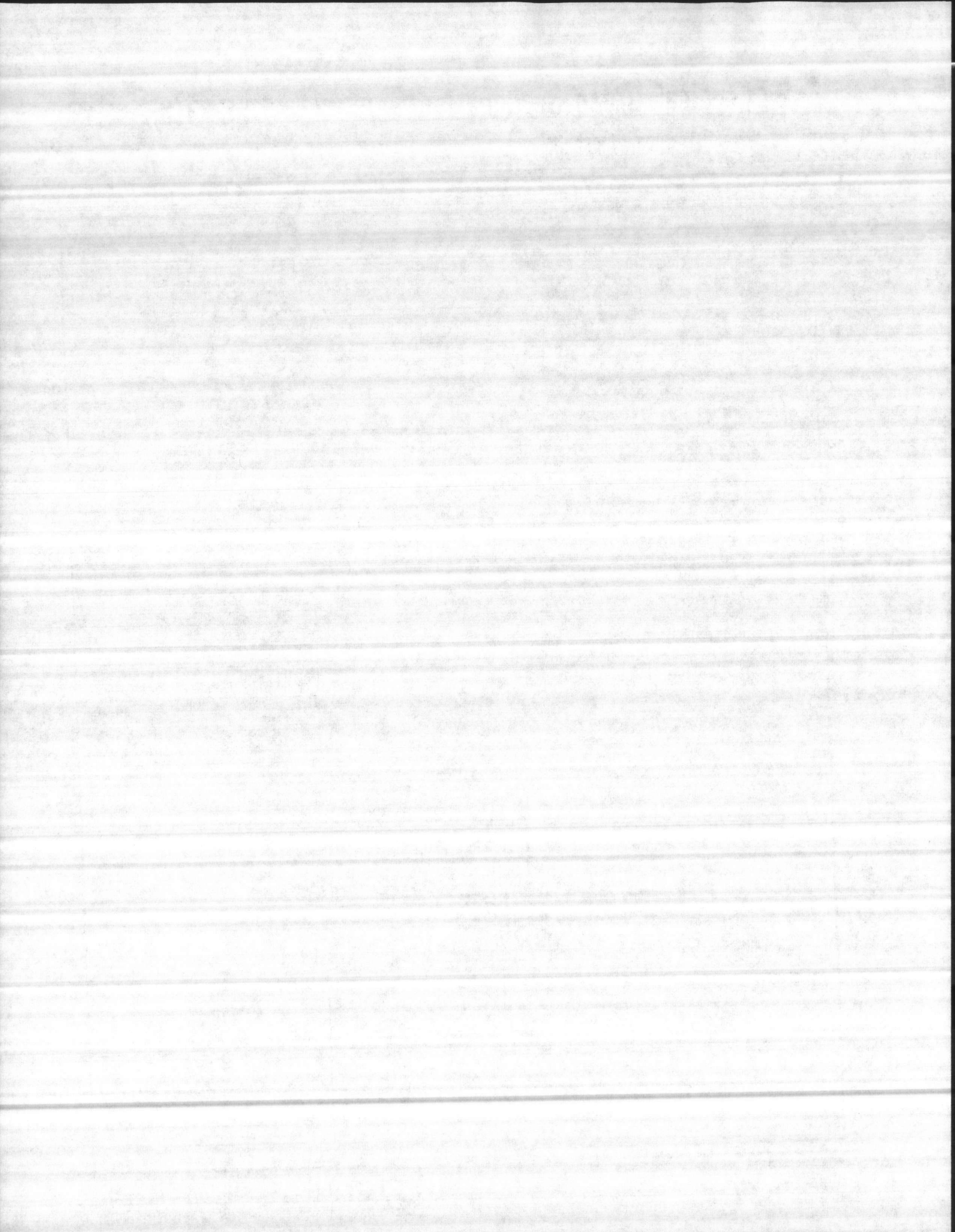
SUB-ASSEMBLY - BOWL		
660	PUMPSHAFT	416 S.S.
666A	BOWL - DISCHARGE	CAST IRON
669	BOWL - TOP	CAST IRON
670	BOWL - INTMD	CAST IRON
672	BEARING - BOWL	BRONZE
673	IMPELLER	LEADED RED BRASS
677	TAPER LOCK	STEEL
689	SUCTION - BELL	CAST IRON
690	BEARING - SUCTION	BRONZE
692	COLLAR - SAND	LEADED RED BRASS
747E	PIPE PLUG - SUCT	STEEL
760E	HEX HD CAPSCREW	STEEL
760F	HEX HD CAPSCREW	STEEL
760W	HEX HD CAPSCREW	STEEL

GOULDS PUMPS, INC.
 CUSTOMER TENCARYA MACH.
USMC - CAMP LEJEUNE
 P.O. NO. U2-75042-72
 ITEM NO. RE-BOWL
 SERVICE HP707 WELL
 PUMP SIZE BRJLO STGS. 6
 GOULDS S.O. NO. 121670

PRINTED IN U.S.A.

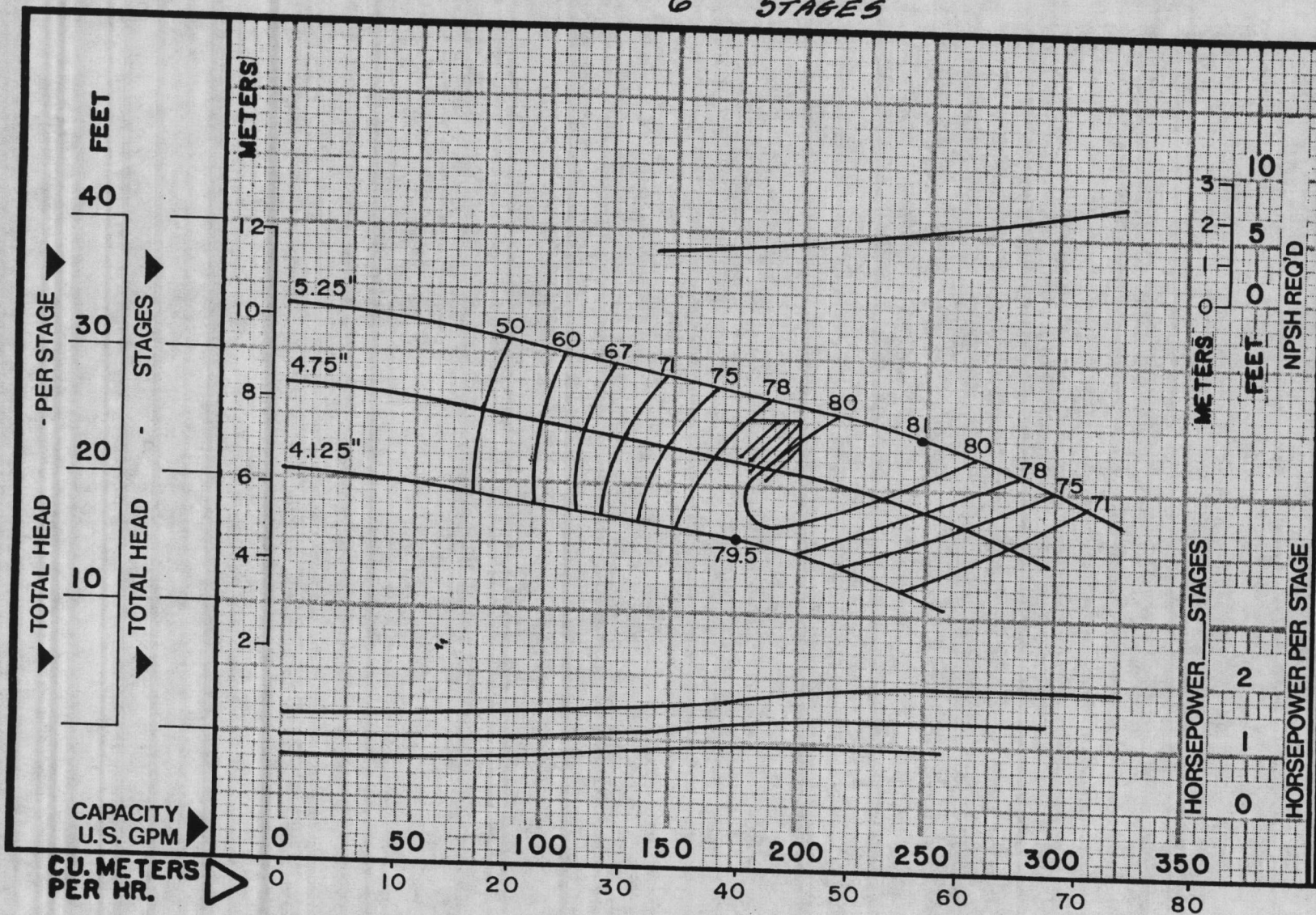
© 1986 Goulds Pumps, Inc.

GOULDS PUMPS, INC.
 VERTICAL PRODUCTS DIVISION



GOULDS PROPOSAL NO.	GOULDS S.O. NO. 1216.70	INQUIRY NO.	CUSTOMER P.O. NO. 02-75042-72	P.O. DATE 3-25-92	ITEM NO.	CUSTOMER TENCARVA MACHINERY CO. INC.		
PROJECT USMC-CAMP LE JEUNE		SERVICE: RE-BOWL FOR HP707 WELL			GPM CAPACITY 200	F.T. TDH 150	% EFFICIENCY .79	RPM 1760

6 STAGES



Curve No. **3103**

Size: **8 RJLO**

RPM: **1760**

EFFICIENCY CHANGE

STGS.	1	0
STGS.	2	0
STGS.	3	0
STGS.	4	0

Ns = 2625

PERF. BASED ON
STD. MTL'S.

Impeller = A8154

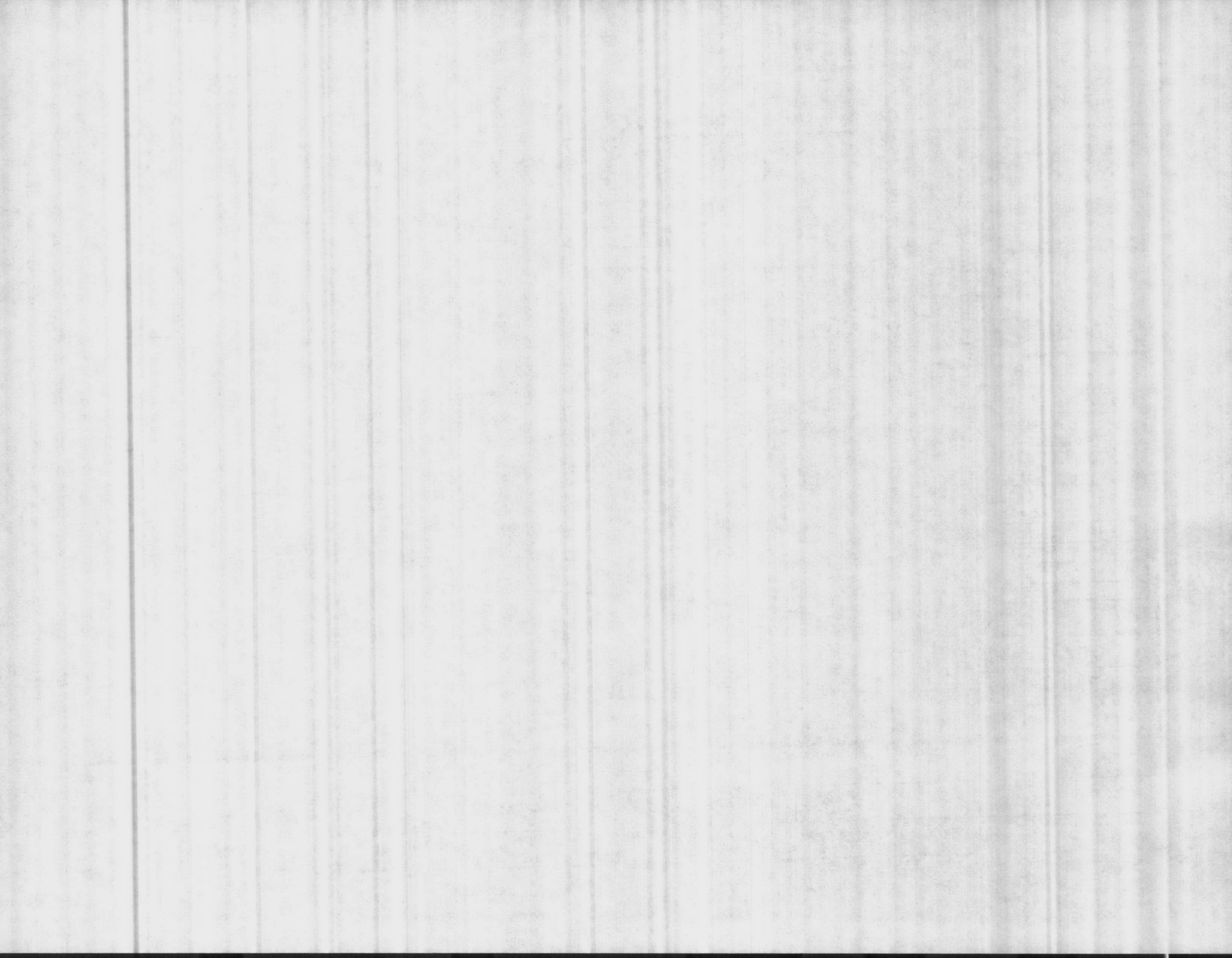
K = 5.3 LBS/FT
7.9 KG/M.

K(Bal.) =



Characteristic based upon pumping clear, non-aerated water.
Rating point only is guaranteed. Column losses not included.

PAGE
5C27
DATE
May 2, 1988
SUPERSEDES
July 22, 1977

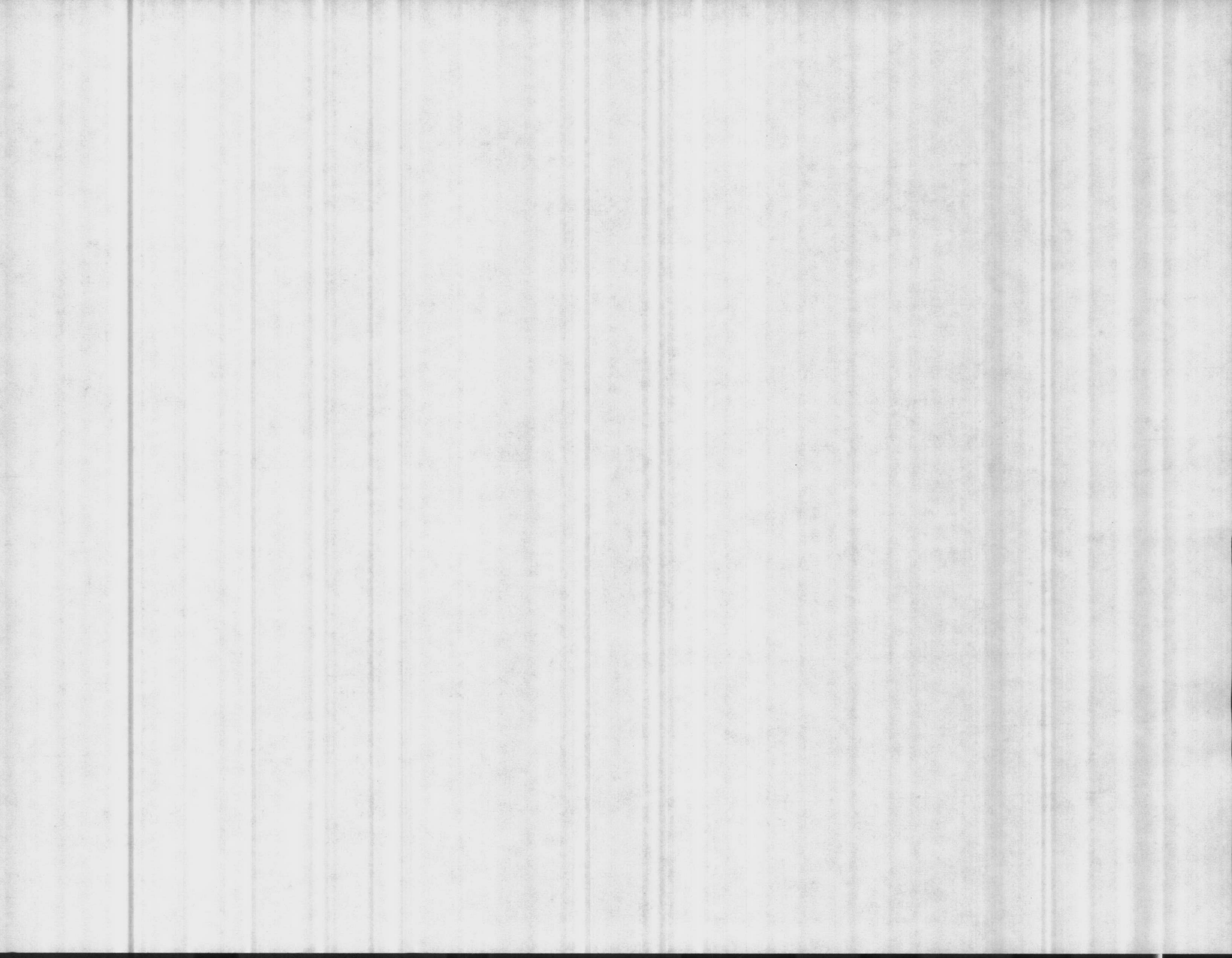


CUSTOMER NAME - TENCARVA SERIAL NUMBER - 121670
 INDEX # - BA08JOW RDSN DESCRIPTION ASSY BOWL BJO WL

LINE NO	TOTAL QTY	DESCRIPTION	PART #
4	1	BOWL SUCT BRJO	B01282B 1003
6	1	BRG BRZ 1.19"ID1.50"ODX3.50"LG	A01650B 1104
8	6	BOWL INTMD BRJO	B01281B 6911
9	6	BRG BRZ 1.500D 1.19ID 2.25"LG	A01651B 1104
12	1	BOWL DISCH OLS BRD,8I,8RJ,BRA	B01760B 1003
14	1	BRG BRZ 1.19"ID1.50"ODX3.50"LG	A01650B 1104
15	56	SCR CAP HEX .37-16UNCX1.00" LG	49511 102 229B
17	6	IMPLR BJLO	A8154 1102
19	6	TAPERLOCK 8D/J	IE331 2242
20	1	SAND COLLAR 1.18" SFT	B00513B 1101
22	1	PUMPSHAFT1.00X1.18"BRJ DS-BOWL	B01780B01 2227
24	55	BARSTOCK 1.18"DIA	2227 0118 2227
31	1	NAMEPLATE BOWL UNIT	A00029B 3211
32	2	FASTENER MTL TACK NAME PL .25	A00206B03 0000

TOTAL 144

** PART ALLOCATION PROCESS HAS BEEN INITIATED FOR THIS ORDER **



NO.

NOTES

- 1 ALL DIMENSIONS SHOWN ARE IN INCHES UNLESS OTHERWISE STATED.
- 2 BEFORE STARTING PUMP, IMPELLER MUST BE LIFTED.

CUSTOMER TENCARVA MACH. CO., INC.
FOR USMC-CAMP LEJEUNE

P.O. NO. U2-75042-72

NO. OF UNITS ONE

PUMP SIZE 8RJLO NO. OF STGS. 6

GPM 200 T.D.H. 150 FT.

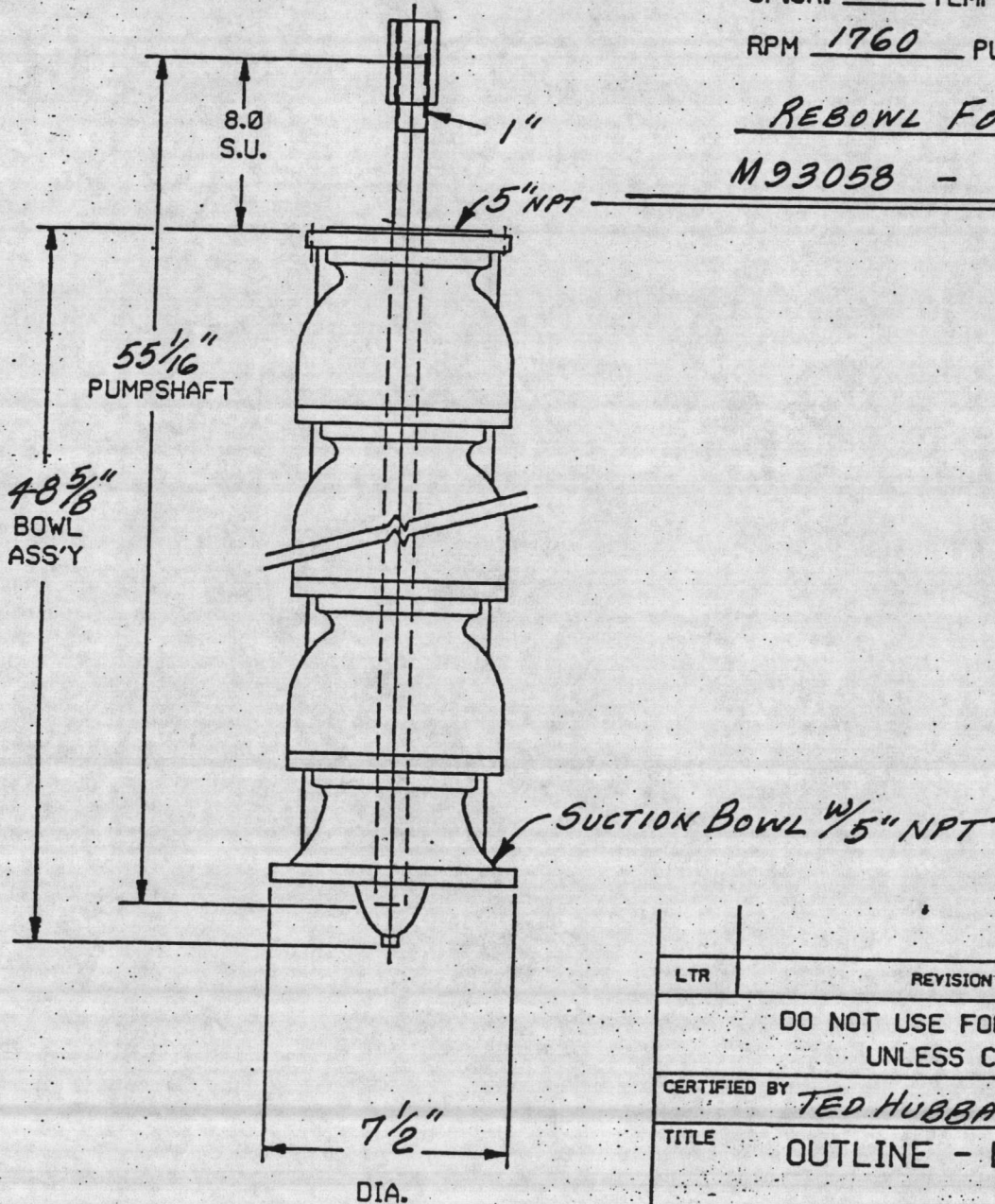
LIQUID WATER


SP.GR. 1.0 TEMP. Amb. VISC. -

RPM 1760 PUMP WEIGHT 255 LBS.

REBOWL FOR HP907 WELL

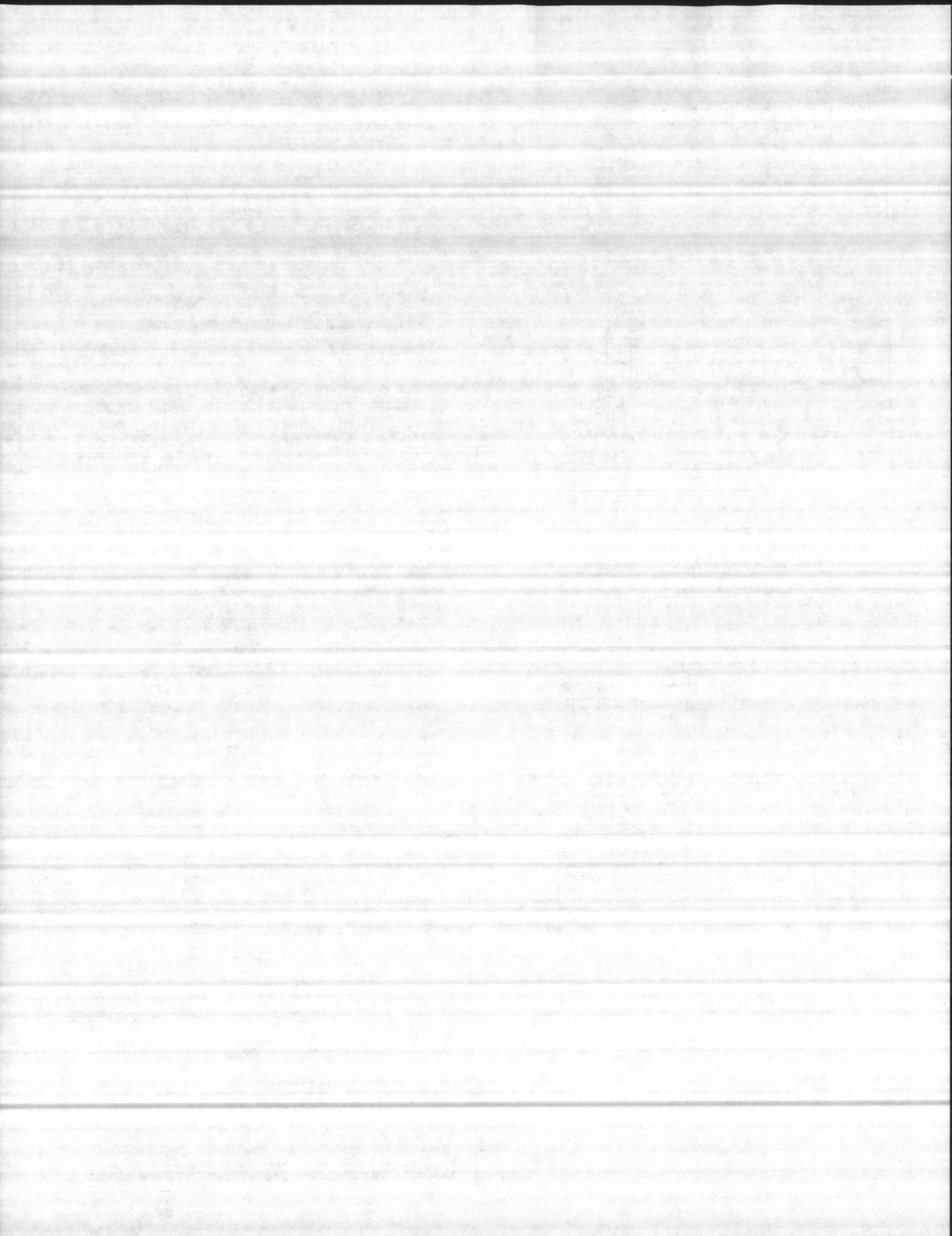
M93058 - 92P1375



LTR	REVISION	BY	DATE
DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED			
CERTIFIED BY <u>TED HUBBARD</u>		DATE <u>6-11-92</u>	
TITLE <u>OUTLINE - BOWL ASSEMBLY</u>			
DRAWN BY <u>T. HUBBARD</u>		DATE <u>6-11-92</u>	
 GOULDS PUMPS VERTICAL PUMP DIVISION INDUSTRY, CALIFORNIA			S.O. NUMBER <u>121670</u>

CAD:

C=VITBAO

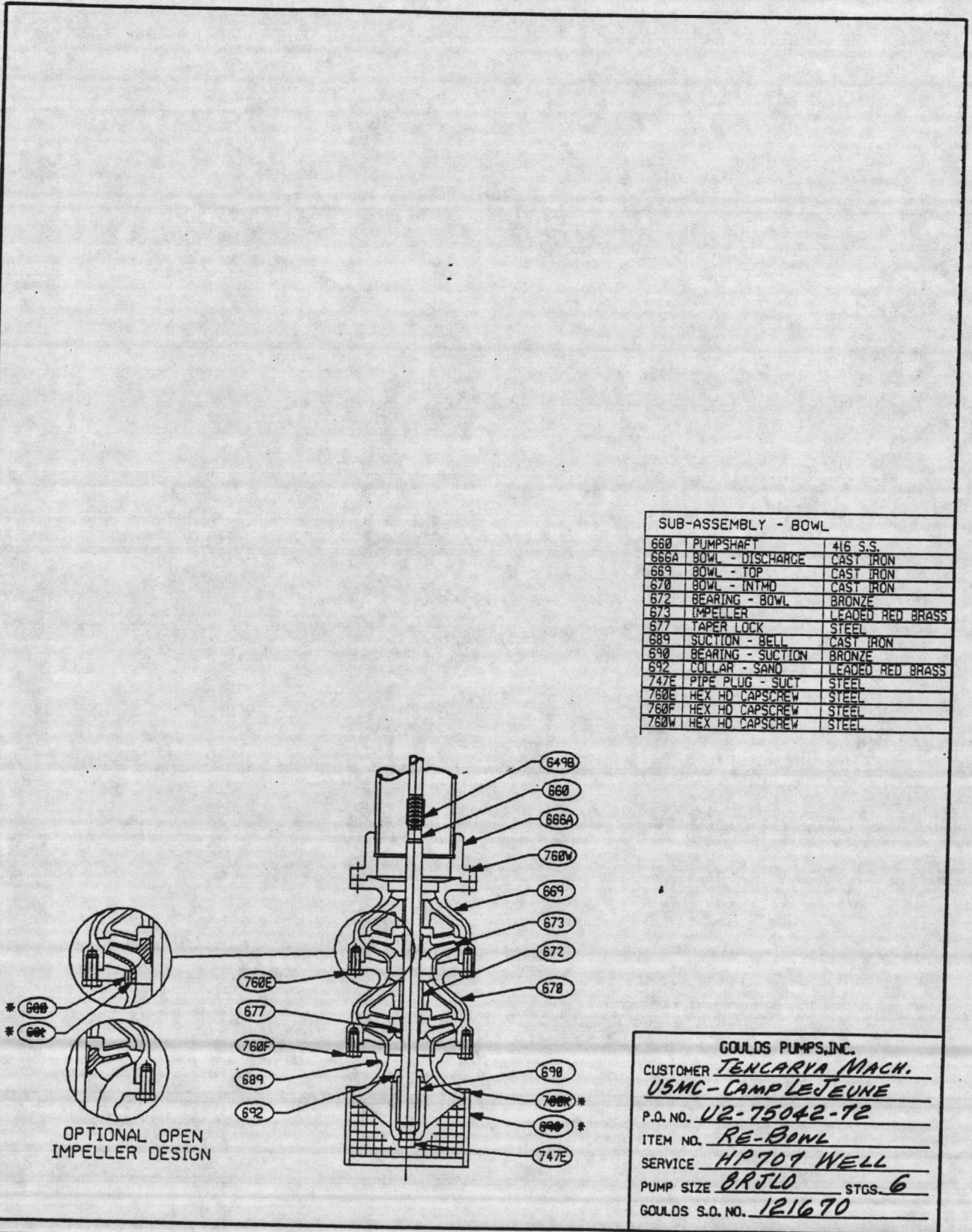




Typical Cross Sectional VIT-CT Open Lineshaft

9.3.1

October 1, 1986
(New)



SUB-ASSEMBLY - BOWL		
660	PUMPSHAFT	416 S.S.
666A	BOWL - DISCHARGE	CAST IRON
669	BOWL - TOP	CAST IRON
670	BOWL - INTMO	CAST IRON
672	BEARING - BOWL	BRONZE
673	IMPELLER	LEADED RED BRASS
677	TAPER LOCK	STEEL
689	SUCTION - BELL	CAST IRON
690	BEARING - SUCTION	BRONZE
692	COLLAR - SAND	LEADED RED BRASS
747E	PIPE PLUG - SUCT	STEEL
760E	HEX HD CAPSCREW	STEEL
760F	HEX HD CAPSCREW	STEEL
760V	HEX HD CAPSCREW	STEEL

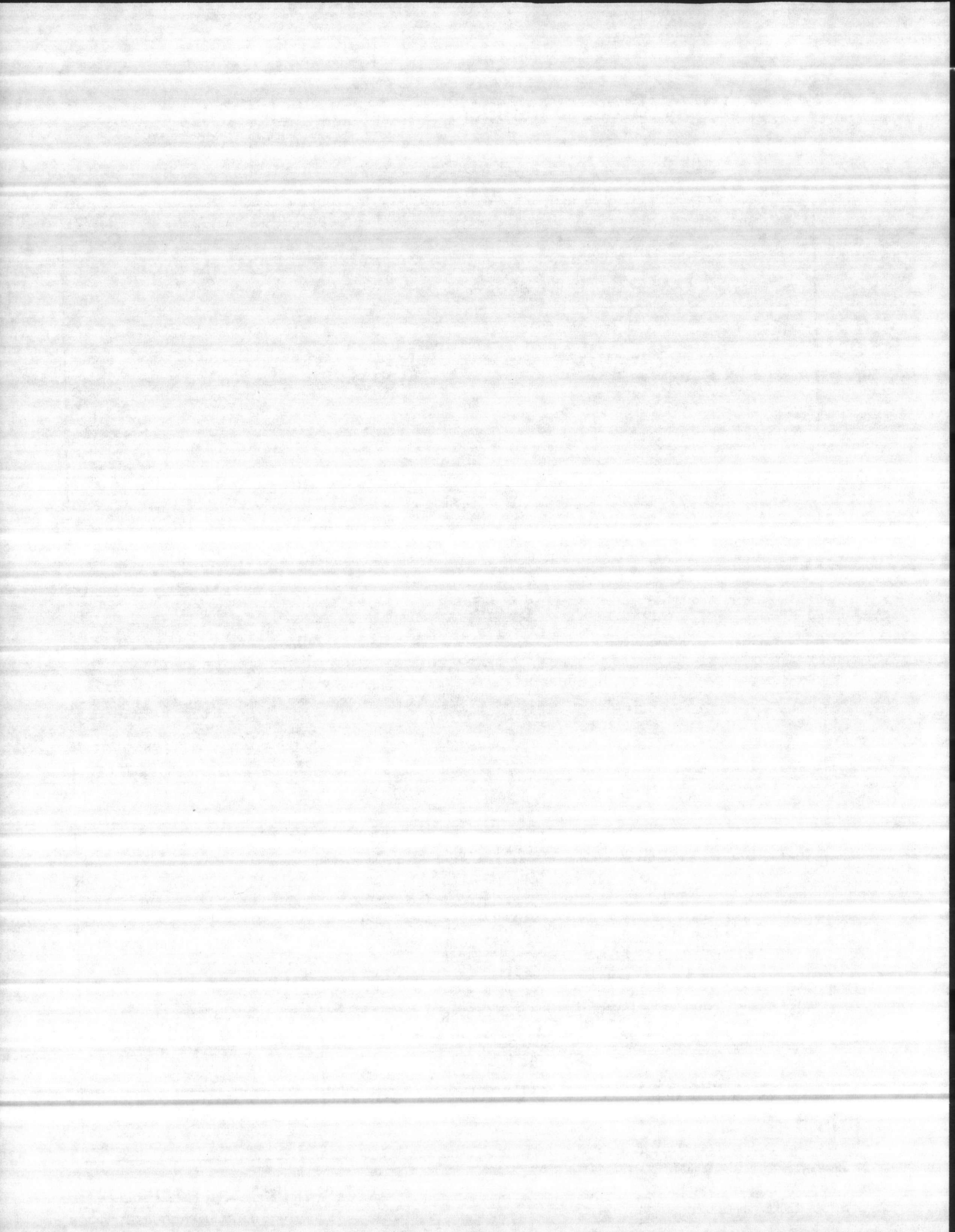
GOULDS PUMPS, INC.
 CUSTOMER TENCARYA MACH.
USMC - CAMP LEJEUNE
 P.O. NO. U2-75042-72
 ITEM NO. RE-BOWL
 SERVICE HP707 WELL
 PUMP SIZE BRJLO STGS. 6
 GOULDS S.O. NO. 121670

PRINTED IN U.S.A.

© 1986 Goulds Pumps, Inc.

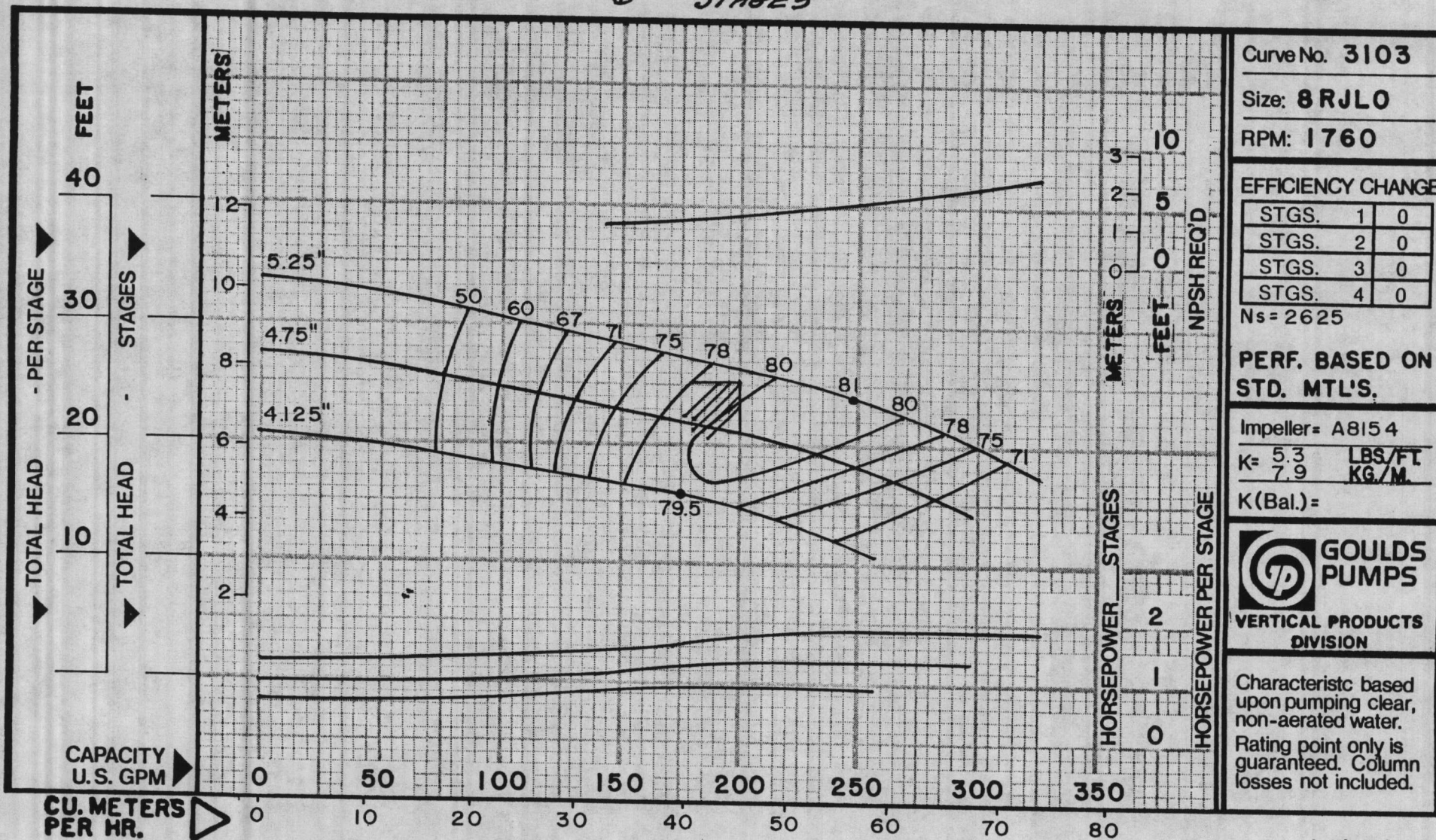


GOULDS PUMPS, INC.
VERTICAL PRODUCTS DIVISION

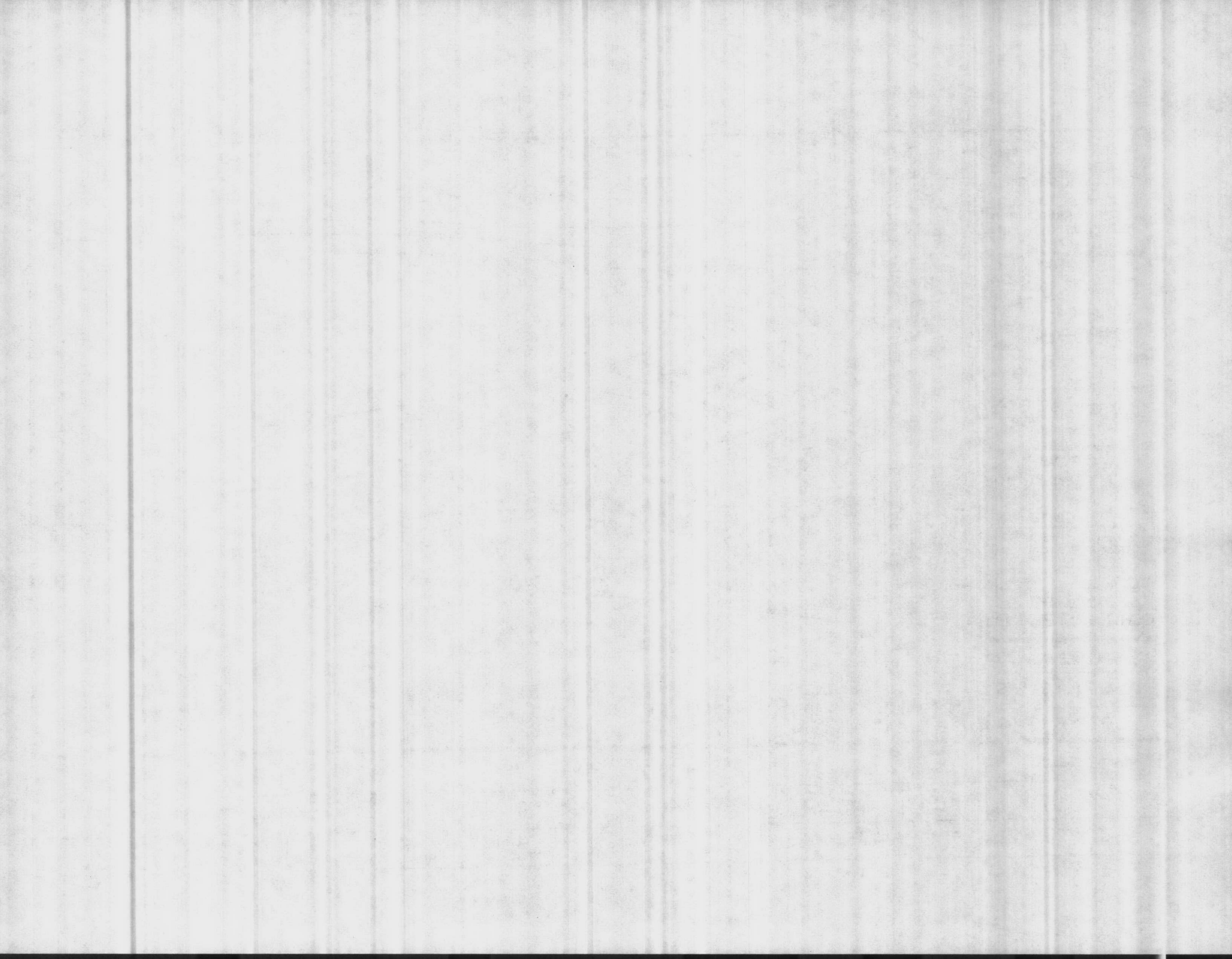


GOULDS PROPOSAL NO.	GOULDS S.O. NO. 121670	INQUIRY NO.	CUSTOMER P.O. NO. 02-75042-72	P.O. DATE 3-25-92	ITEM NO.	CUSTOMER TENARVA MACHINERY Co. INC.		
PROJECT USMC-CAMP LE JEUNE		SERVICE: RE-BOWL FOR HP707 WELL			GPM CAPACITY 200	F.T. TDH 150	% EFFICIENCY .79	RPM 1760

6 STAGES



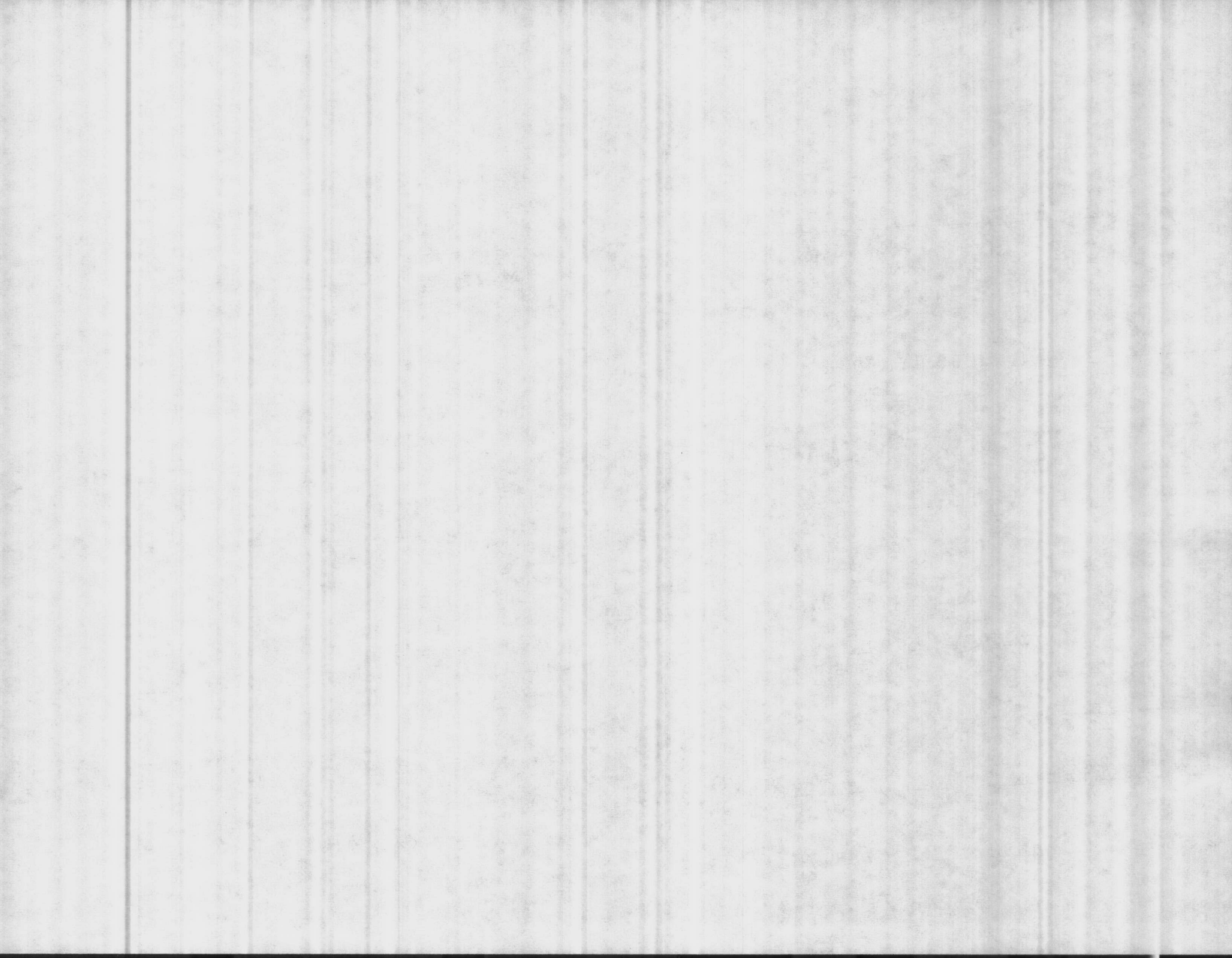
PAGE
5C27
DATE
MAY 2, 1988
SUPERSEDES
JULY 22, 1977



CUSTOMER NAME - TENCARVA SERIAL NUMBER - 121670
 INDEX # - BA08JOW RUSN DESCRIPTION ASSY BOWL BJO WL

LINE NO	TOTAL QTY	DESCRIPTION	PART #
4	1	BOWL SUCT BRJO	
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24	55	BARSTOCK 1.18"DIA	B01780B01 2227
31	1	NAMEPLATE BOWL UNIT	2227 0118 2227
32	2	FASTENER MTL TACK NAME PL .25	A00029B 3211
			A00206B03 0000
TOTAL	144		

** PART ALLOCATION PROCESS HAS BEEN INITIATED FOR THIS ORDER **



Hunt

SUBMITTAL TRANSMITTAL

4-4355/3 (Rev. 11-80)

CONTRACT NO 81-C-1644	TRANSMITTAL NO 184	DATE 3-19-86
--------------------------	-----------------------	-----------------

& Associates, Inc.

esen & Associates, Inc.

PROJECT TITLE AND LOCATION
Holcomb Blvd Water Treatment Plant

MCB, Cp Lejeune, North Carolina

CONTRACTOR USE ONLY

REVIEWER USE ONLY

*List only one specification division per form.

**ACTION CODES

List only one of the following categories on each transmittal form, and indicate which is being submitted

- A-Approved
- D-Disapproved
- AN-Approved as noted
- RA-Receipt acknowledged.
- C-Comments
- R-Resubmit

Contractor Approved

OICC Approval

Deviation/Substitution
For OICC Approval

ITEM NO	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO.	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	02734	ROTARY DRILLED WATER WELLS WELL # 9			
1	2.2.4	Recommendation and Data Submittal	7	A	JRB
2	2.2	Driller's Log	7		
3	2.2.3	Electric Log and Gamma Log	7	A	JRB
4	2.2.2	Water Analysis	7	A	JRB
5	2.2.2	Sieve Anaylsis	7	A	JRB
6	1.2.1	Shop Drawings	7	A	JRB

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

ONE COPY TO ROICC

CONTRACTOR REPRESENTATIVE (Signature)

Phil Reese

DATE RECEIVED BY REVIEWER

3/25/86

FROM (Reviewer)

Henry von Oesen & Assoc., Inc.

TO

Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

REVIEWER'S COMMENTS

Contractor's approval appears to be appropriate.

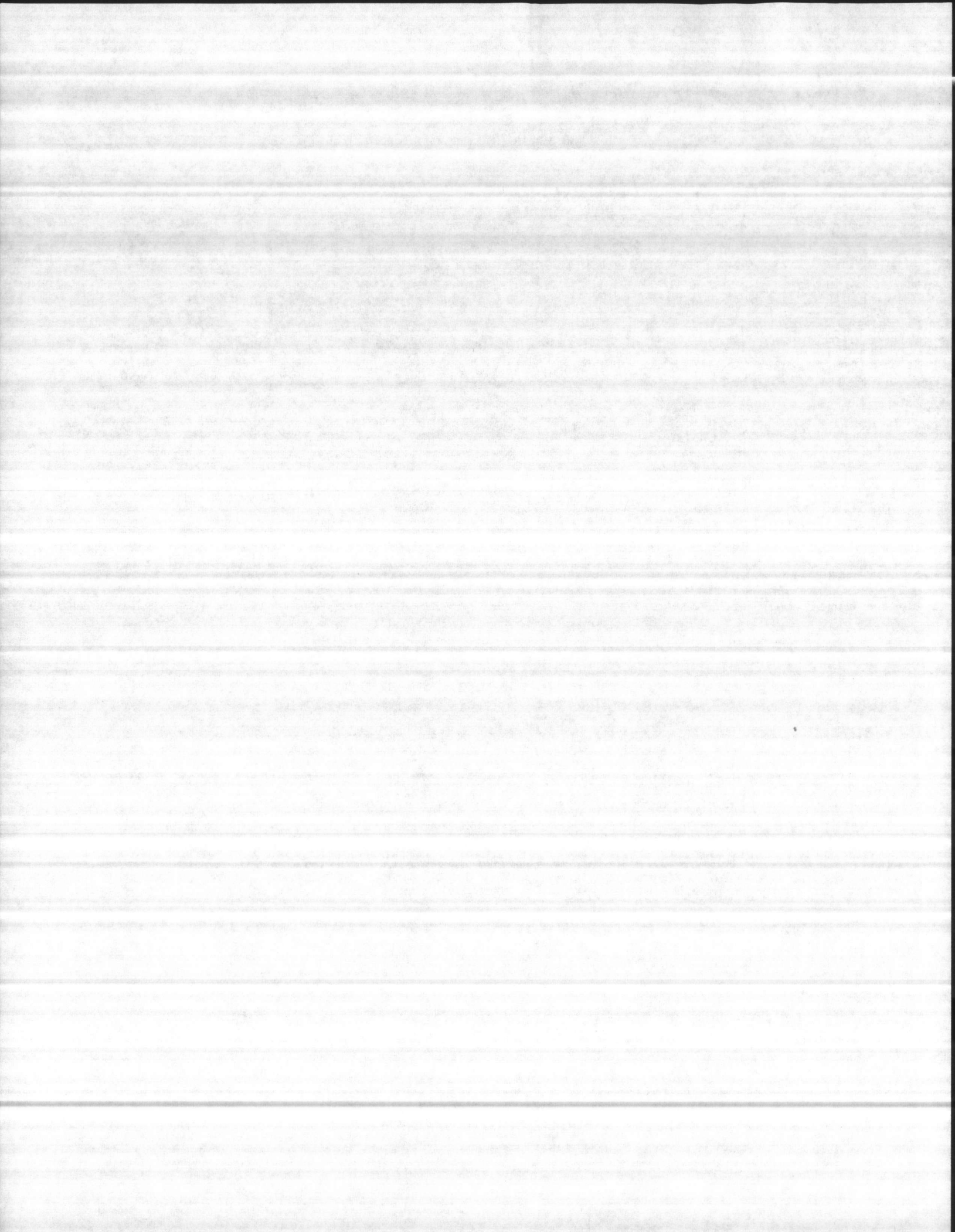
COPIES TO
ROICC (2)
LANTDIV (1)
A-E (1)

DATE

4/2/86

SIGNATURE

[Signature]





HARRY PEPPER & ASSOCIATES, INC.

Item #1

ENGINEERING CONTRACTORS

March 18, 1986

Henry Von Oesen & Associates, Inc.
611 Princess Street
Wilmington, NC 28402

RE: N62470-81-C-1644
Expansion of Holcomb Blvd
Water Treatment Plant
Camp Lejeune, NC 28542
Well # 9

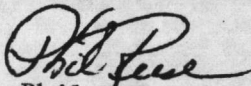
Gentlemen:

We are enclosing (7) copies of the Driller's Log, Gamma Log, Electric Log, Water Analysis and Sieve Analysis for your review. The test well was drilled at 250'. Water samples were taken at the 130' level.

We recommend a line of .030 slot stainless steel screen set at the 80' to 130' level for a total of 50VF of screen. The gravel pack recommended is 8-12. It is our best estimate that this well may yield 260 GPM.

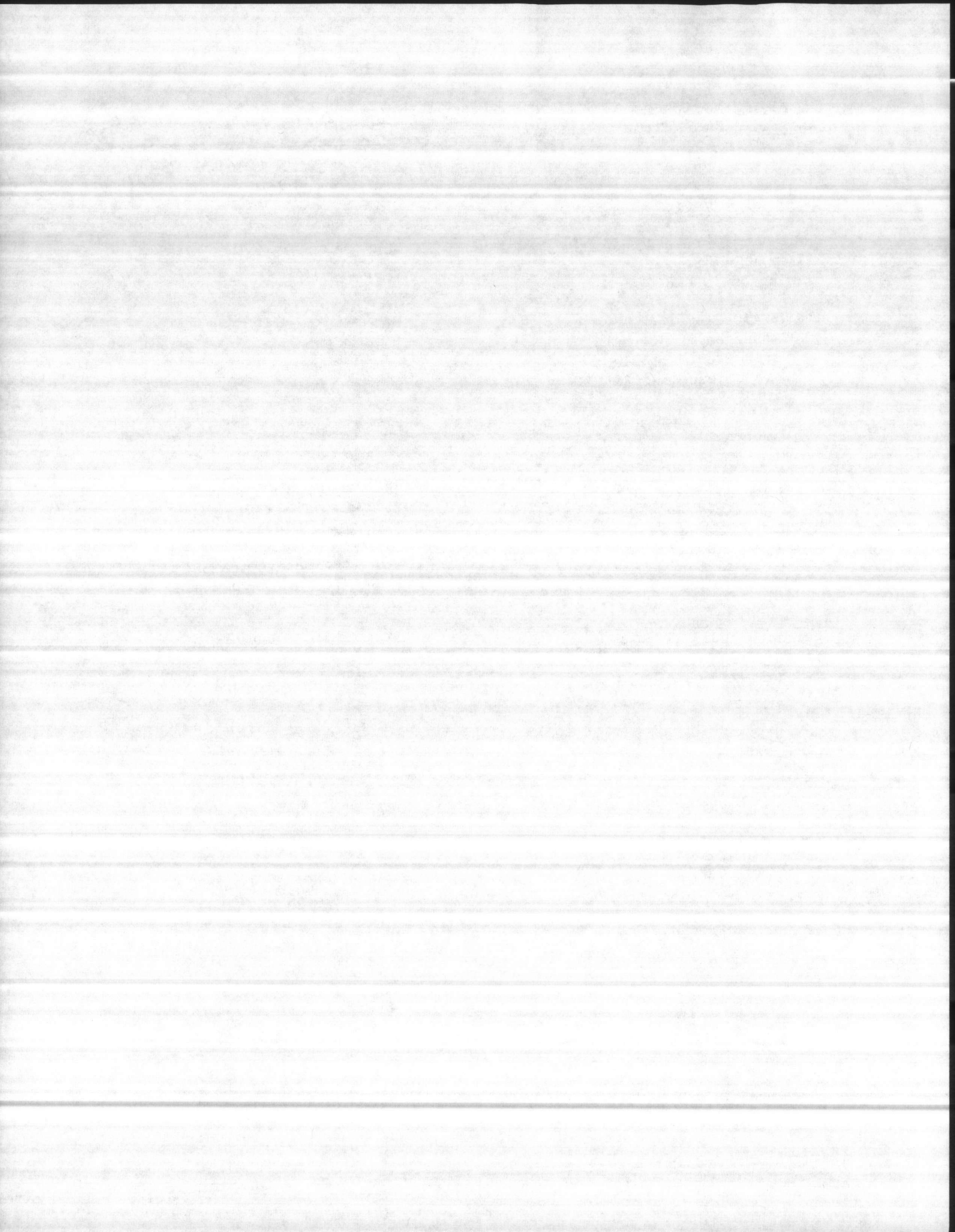
Please review the data and advise if we are to proceed with developing a permanent well at this site.

Very truly yours,
HARRY PEPPER & ASSOCIATES, INC.


Phil Keese
CQC Officer

Page 86

Enclosures

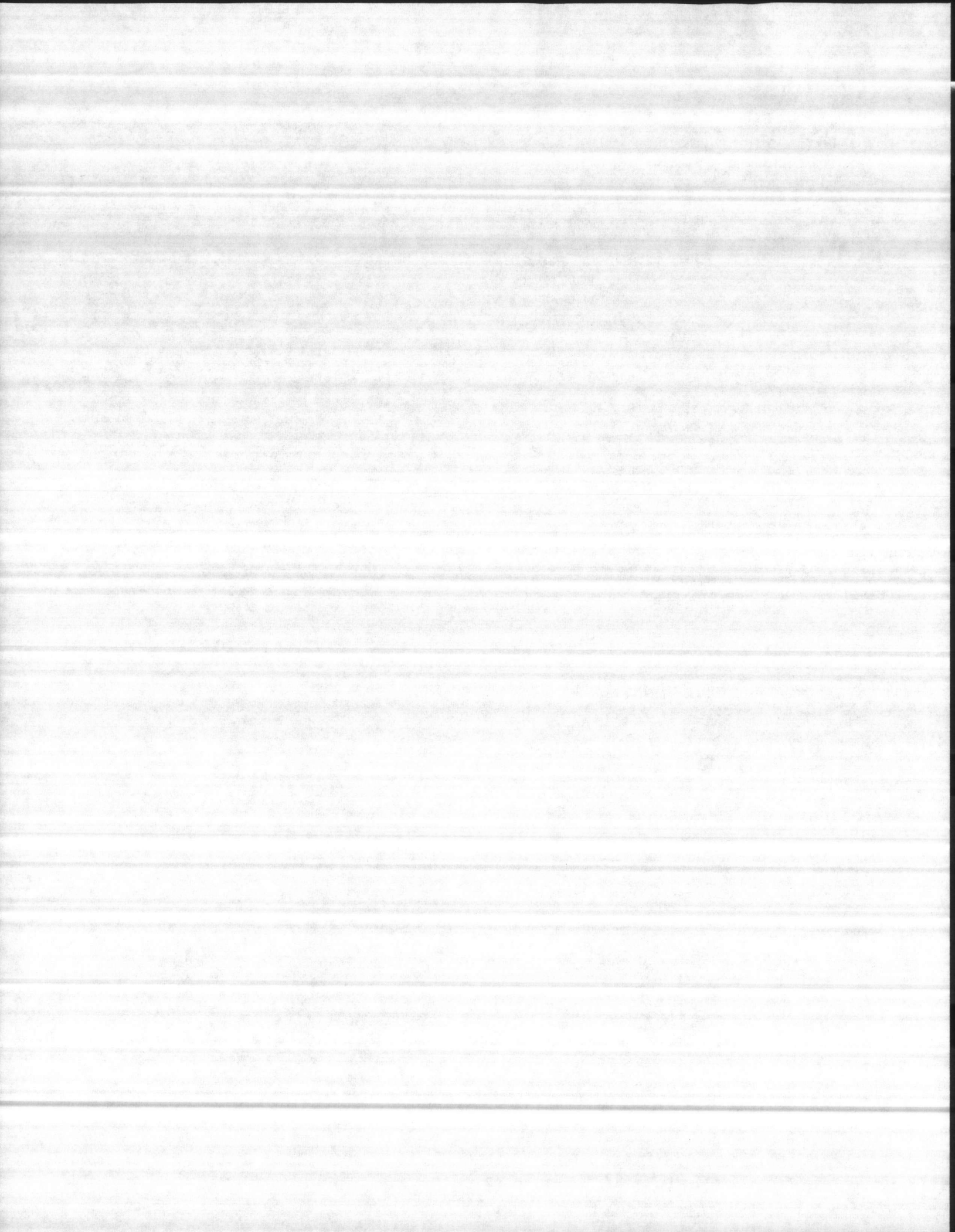


Item #2

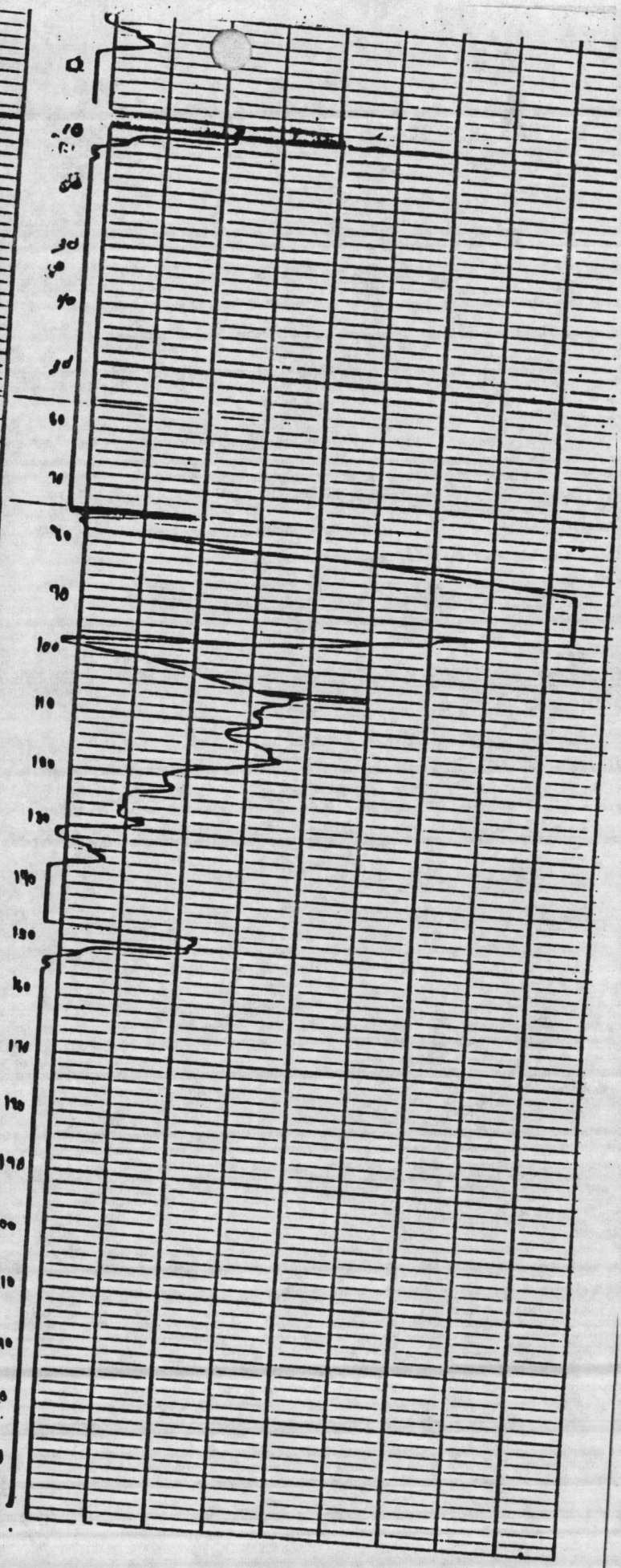
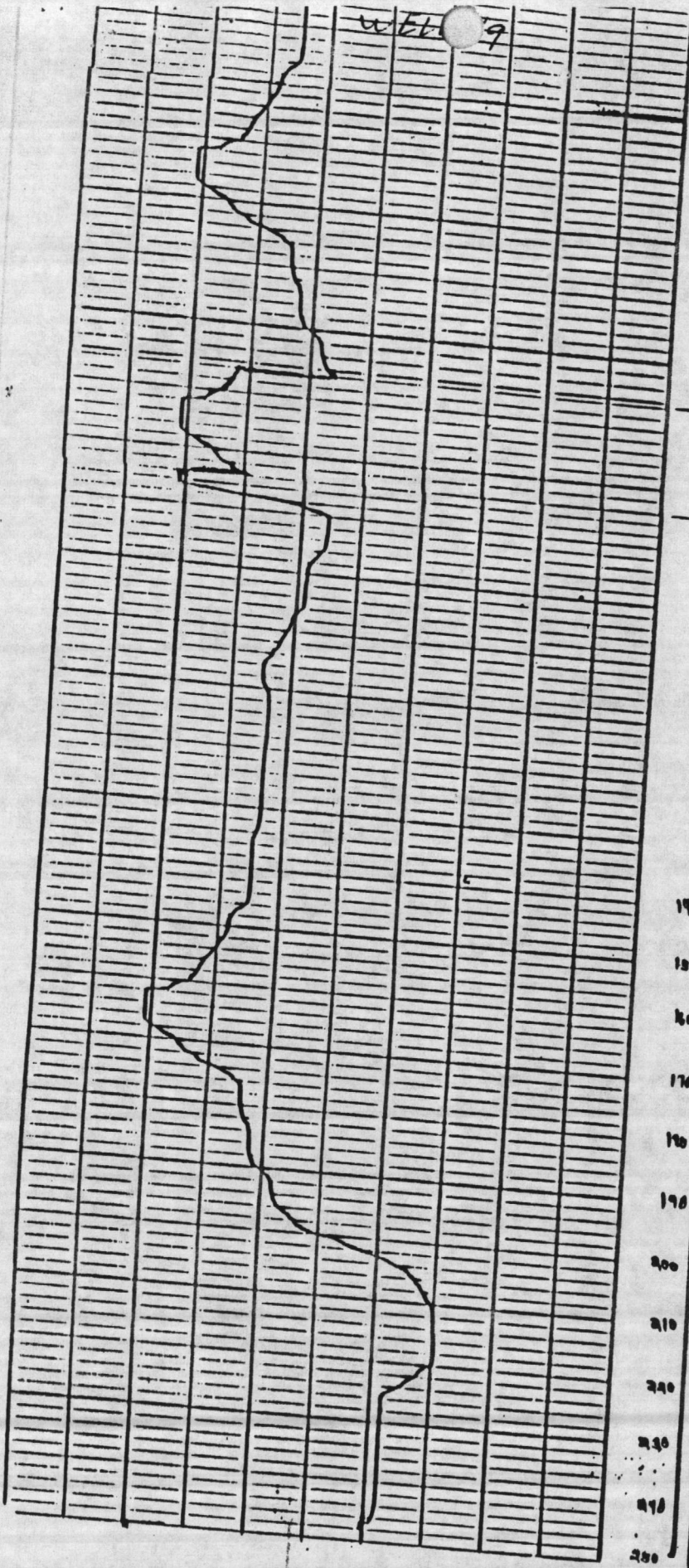
WELL DRILLERS LOG
FCR - MAGETTE WELL AND PUMP CO.
PROJECT NAME:

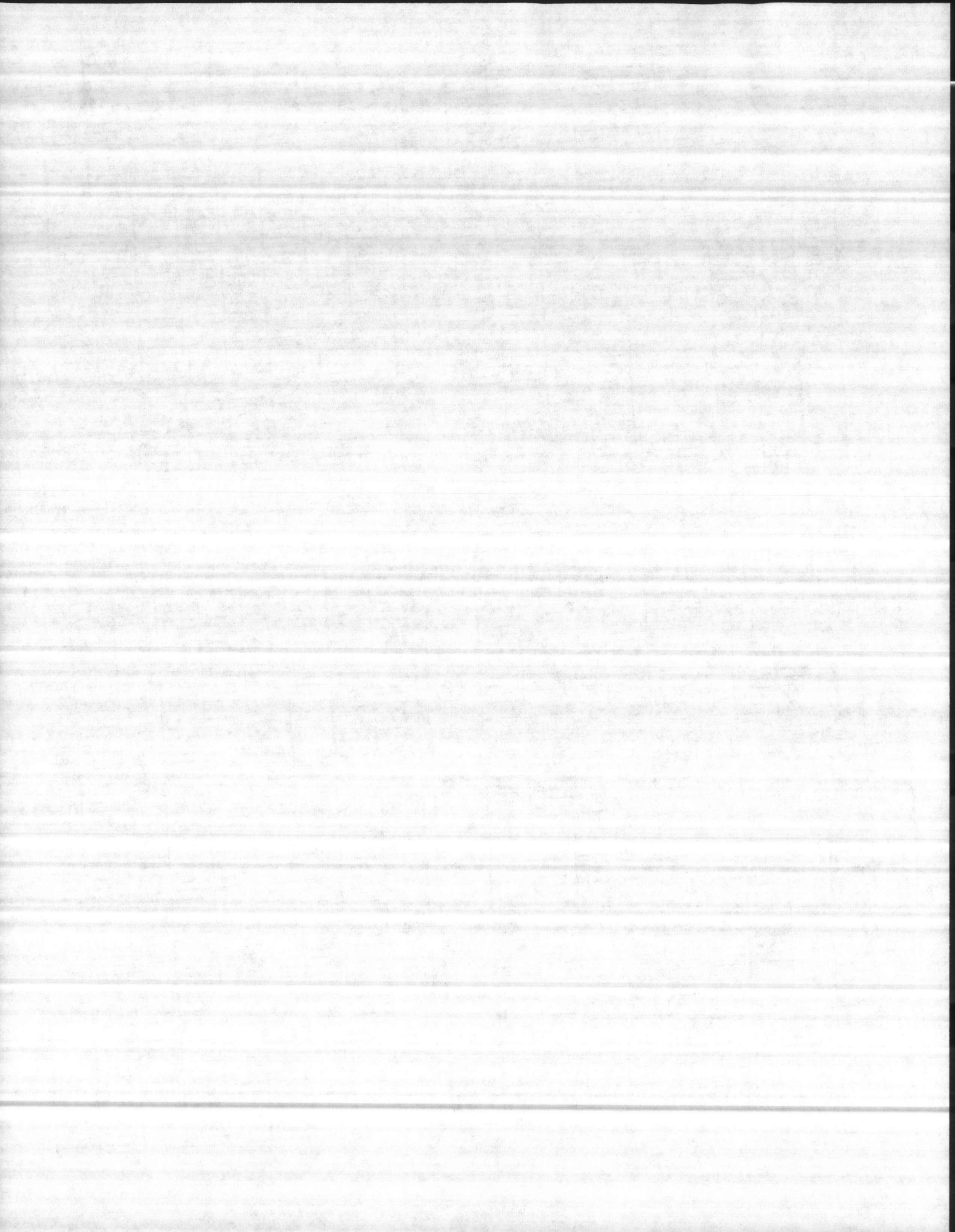
Well #9

DEPTH IN FEET	MATERIAL SAMPLED
0 - 10	BROWN AND WHITE CLAY
10 - 20	BROWN AND WHITE CLAY
20 - 30	BROWN AND WHITE CLAY
30 - 40	BROWN AND WHITE CLAY
40 - 50	BLUE CLAY, FINE GRAY SAND
50 - 60	BLUE CLAY, FINE GRAY SAND
60 - 70	BLUE CLAY, FINE GRAY SAND
70 - 80	BLUE CLAY, FINE GRAY SAND
80 - 90	LIMESTONE
90 - 100	LIMESTONE
100 - 110	LIMESTONE
110 - 120	LIMESTONE
120 - 130	LIMESTONE
130 - 140	LIMESTONE
140 - 150	BLUE MUD, SHELL
150 - 160	BLUE MUD, SHELL
160 - 170	BLUE MUD, SHELL
170 - 180	BLUE MUD, SHELL
180 - 190	BLUE MUD, SHELL
190 - 200	BLUE MUD, SHELL
200 - 210	BLUE MUD, SHELL
210 - 220	BLUE MUD, SHELL
220 - 230	BLUE MUD, SHELL
230 - 240	BLUE MUD, SHELL
240 - 250	BLUE MUD, SHELL



W 56 79





Consulting and Analytical Chemists

ESTABLISHED 1903

Item # 4

Well # 707

Main Office
1711 Castle Street
P.O. Box 629
Wilmington, N.C. 28402

REPORT DATE: 3-13-86

RICHARD SPIVEY, President
919-762-7082 919-762-8956
TWX 510-937-0280

MAJETTE WELL & PUMP COMPANY
POST OFFICE BOX 908
SMITHFIELD, VA. 23430
ATTN: BUD KELLOG

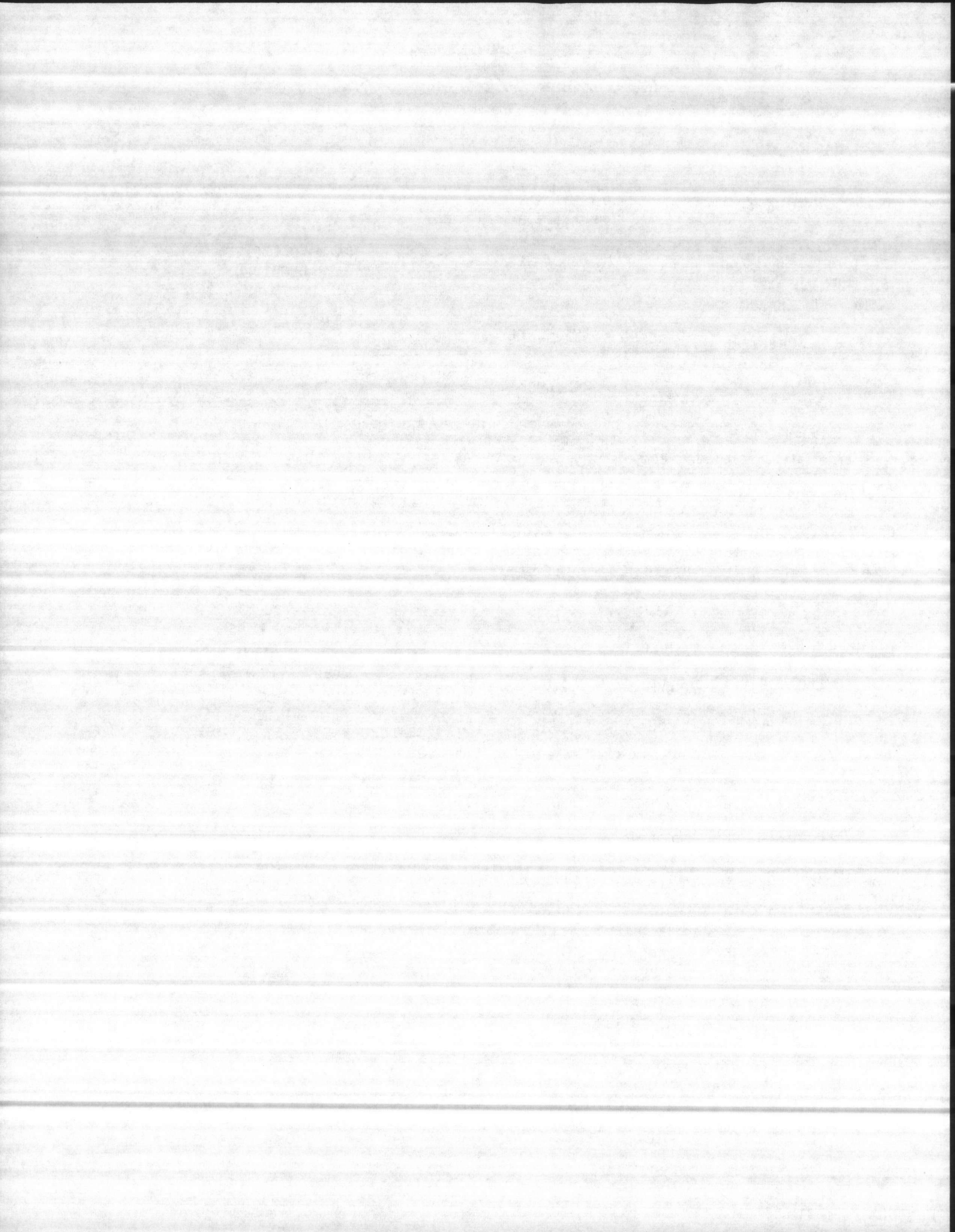
DATE COLLECTED: 3-06-86
DATE RECEIVED: 3-06-86
COLLECTED BY: CUSTOMER
LAB I.D.# EW 3435

SAMPLE DESCRIPTION: WELL WATER WELL #9 (80' - 140')

TESTS/SAMPLES	RESULTS	RESULTS
pH	7.6	POTASSIUM PPM 1.6
CARBON DIOXIDE PPM	0	CHLORIDE PPM 34
SULFIDES PPM	0	NITRATE NITROGEN PPM <.2
CHLORINE DEMAND PPM	1.4	IRON PPM 0.025
COLOR APHA	<5	MANGANESE PPM <.015
TURBIDITY NTU	2.7	SILICON PPM 4.9
TOTAL ALKALINITY PPM	143	FLOURIDE PPM <.2
HYDROXIDE PPM	0	DISSOLVED OXYGEN MC/L 6
BICARBONATE PPM	136	TEMPERATURE 60
CARBONATE PPM	7	
TOTAL HARDNESS PPM	130	
NON-CARBONATE PPM	0	
CARBONATE PPM	130	
TOTAL DISSOLVED SOLIDS PPM	167	
SPECIFIC CONDUCTANCE UMHOS	305	
SULFATES PPM	3	
CALCIUM PPM	43	
MAGNESIUM PPM	1.2	
SODIUM PPM	6.6	

CHEMIST: Jolly Bidworn

TOTAL CHARGES: 180.00



IT # 43

CONTACT...-
 TELEPHONE...-
 REMARKS...WATER WELL
 RECOMMENDATIONS:
 GRAVEL SIZE-----
 SCREEN SIZE-----

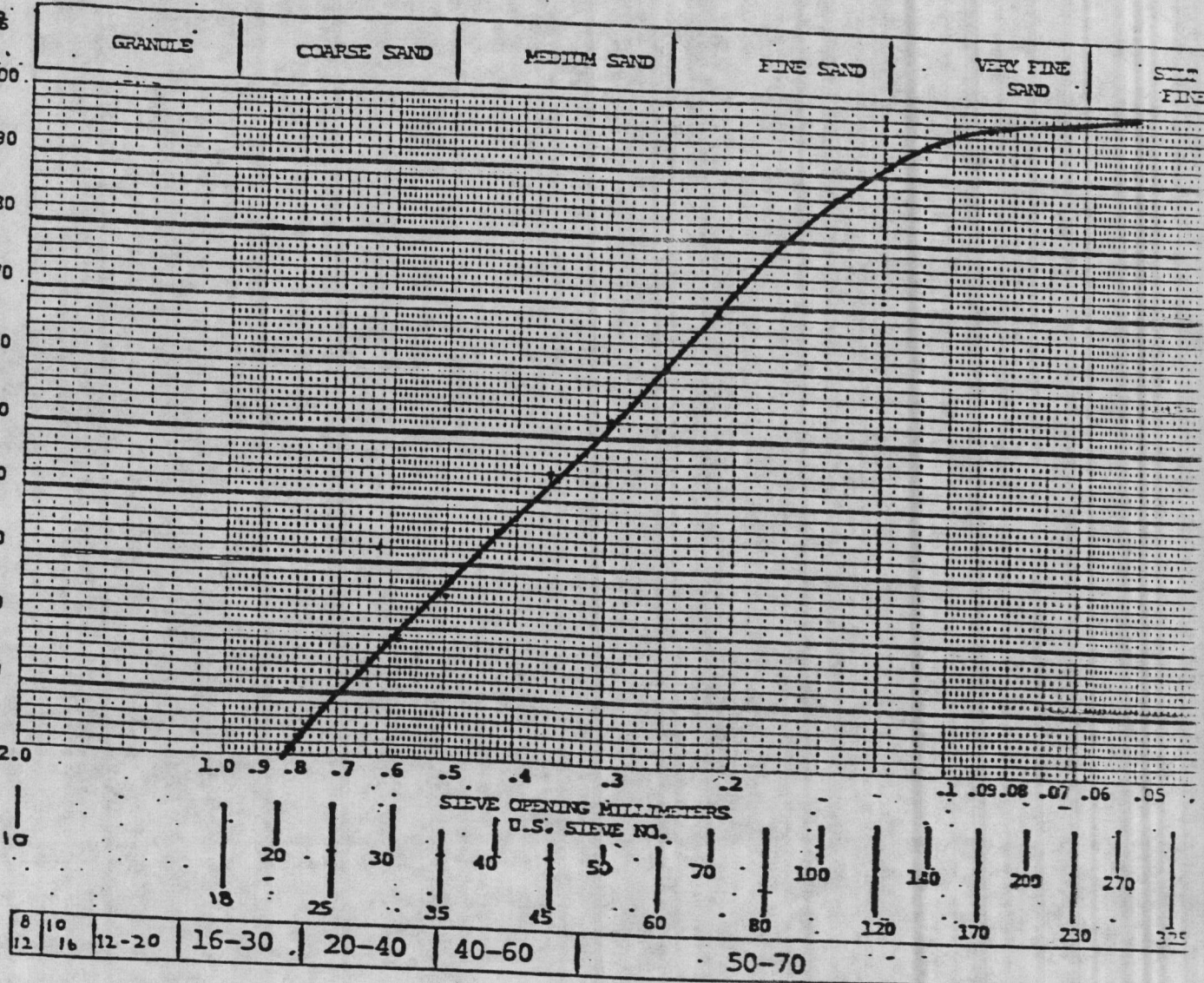
HOWARD SMITH SCREEN COMPANY

A Halliburton Company
 P.O. Box 666 • Houston, Texas 77001
 713-869-5771 • Telex: 77-4667

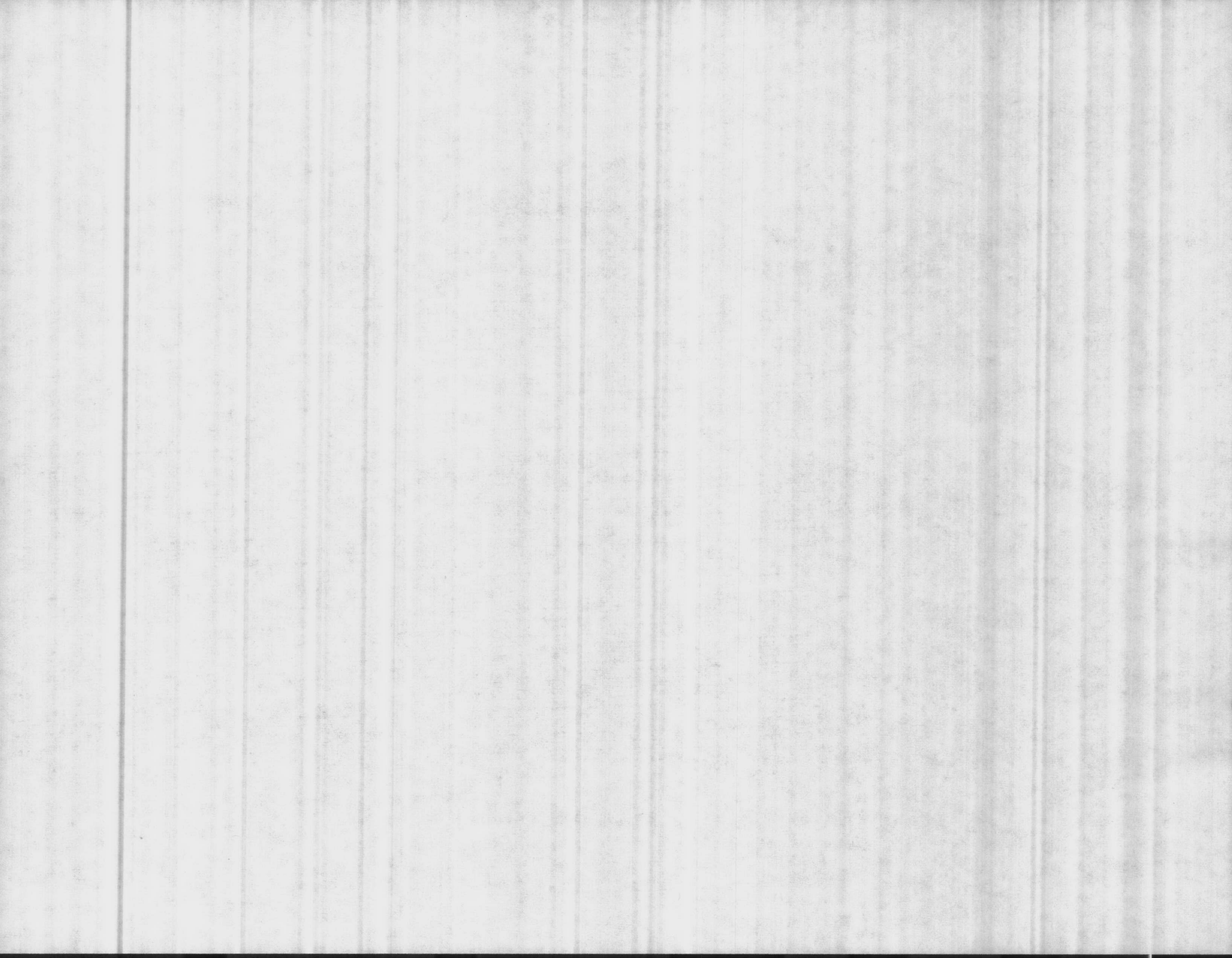
COMPANY...R.L.MAGETTE COMPANY
 WELL.....#9
 DEPTH.....80-130
 FIELD.....-
 COUNTY.....-
 STATE.....VA

SIEVE ANALYSIS REPORT

US SIEVE	IN	MM	WT RET	CUM WT	CUM %
10	.0787	2.000	--	--	100
14	.0555	1.410	--	--	90
18	.0394	1.000	--	--	80
20	.0331	0.840	--	--	70
25	.0280	0.710	--	--	60
30	.0234	0.589	6.4	6.4	52.4
35	.0197	0.500	2.5	8.9	44.4
40	.0165	0.420	3.5	12.4	35.7
45	.0139	0.351	3.0	15.4	25.6
50	.0117	0.297	2.8	18.2	18.4
60	.0098	0.250	2.8	21.0	15.4
70	.0083	0.210	2.6	23.6	12.4
80	.0070	0.177	3.5	27.1	9.4
100	.0059	0.149	2.7	29.8	6.4
120	.0049	0.124	1.9	31.7	5.4
140	.0041	0.104	1.5	33.2	4.4
170	.0035	0.088	0.7	33.9	3.4
200	.0029	0.074	0.4	34.3	2.4
250	.0024	0.062	0.3	34.6	1.4
270	.0021	0.053	0.1	34.7	0.4
325	.0017	0.044	--	--	0
375	--	--	--	--	0



3-13-88
 JAMES E. JACKSON



Well # 9

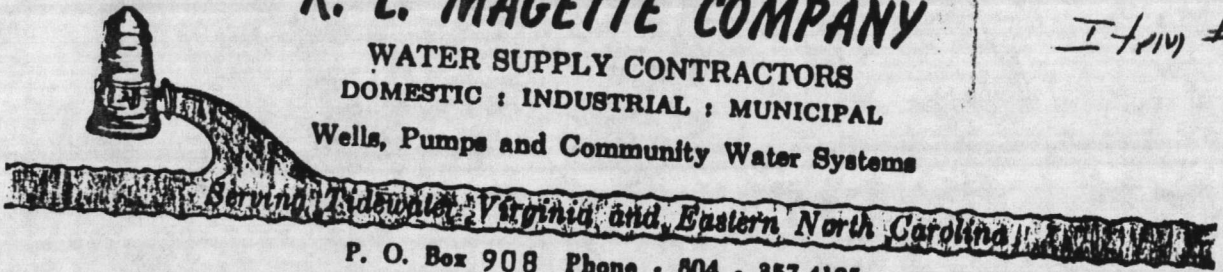
FCR

R. L. MAGETTE COMPANY

WATER SUPPLY CONTRACTORS
DOMESTIC : INDUSTRIAL : MUNICIPAL

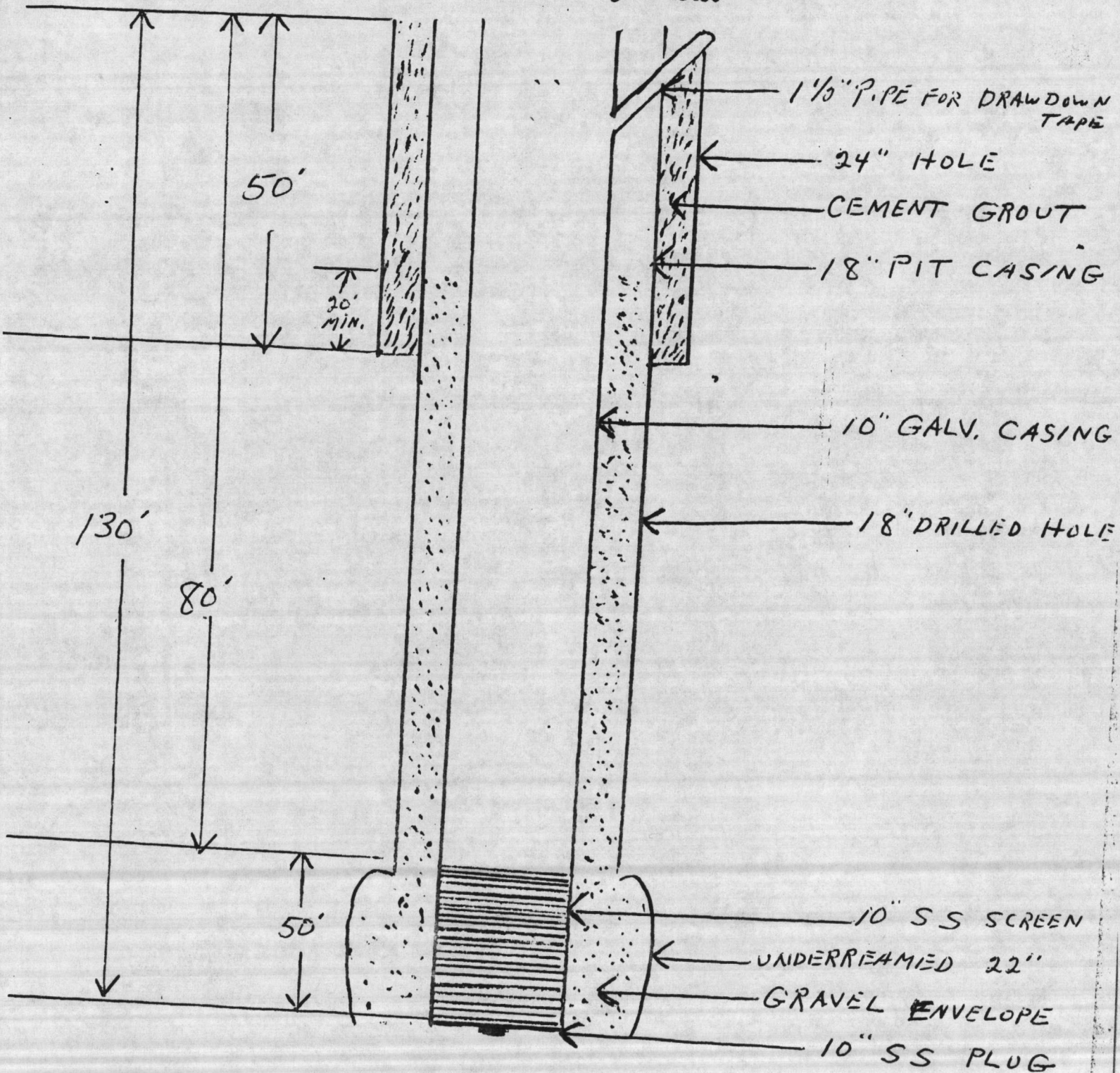
Wells, Pumps and Community Water Systems

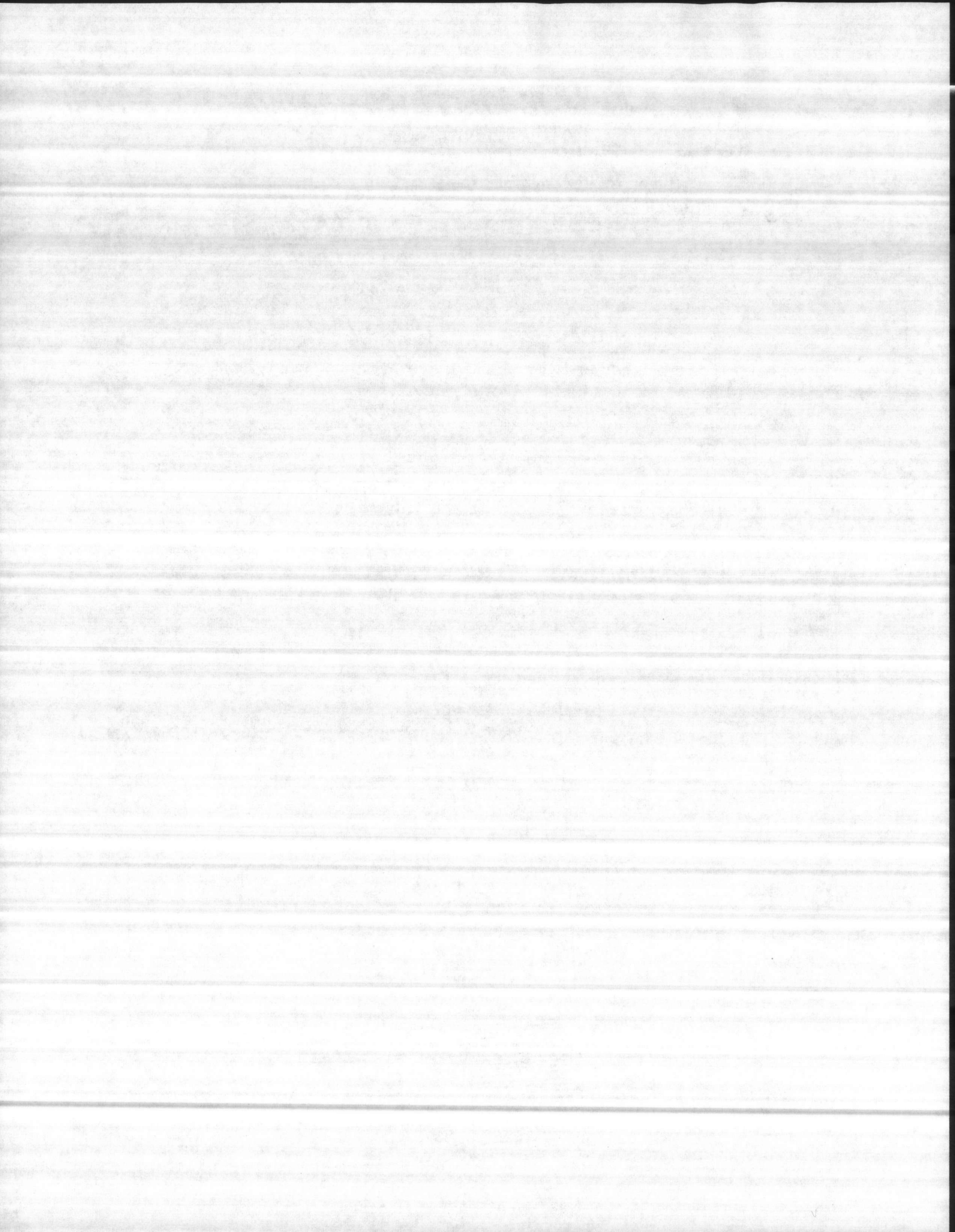
Item # 6



P. O. Box 908 Phone - 804 - 357-4105

Smithfield, Virginia 23430





CAMP LEJEUNE No. 9 WELL

DEMING PUMP CO.

SALEM, OHIO, U.S.A.

240 HARRY PEPPER & ASSOC. INC. S.O. 1635-09 P.O. C642-0001

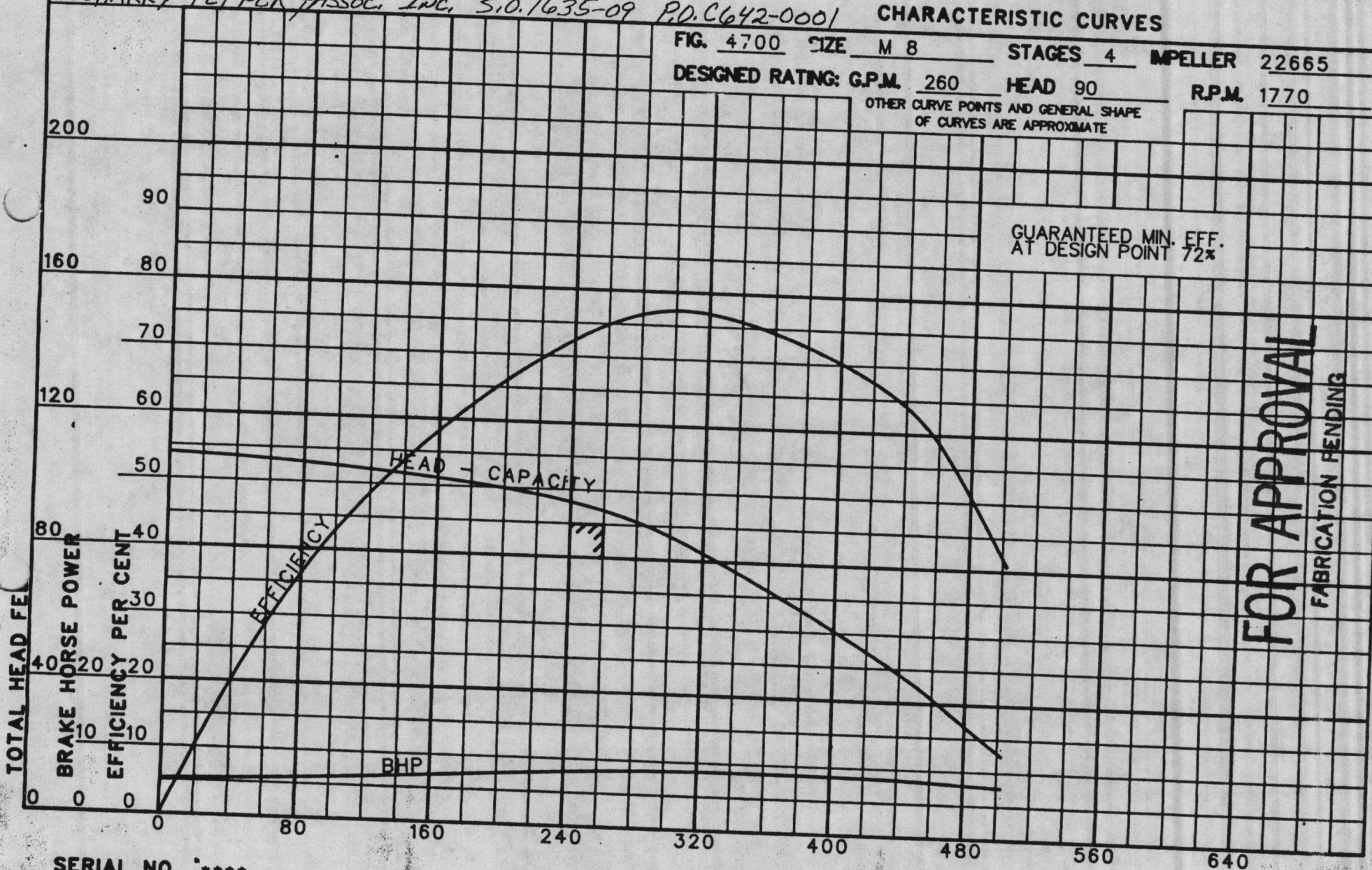
CHARACTERISTIC CURVES

FIG. 4700 SIZE M 8 STAGES 4 IMPELLER 22665

DESIGNED RATING: G.P.M. 260 HEAD 90 R.P.M. 1770

OTHER CURVE POINTS AND GENERAL SHAPE OF CURVES ARE APPROXIMATE

GUARANTEED MIN. EFF. AT DESIGN POINT 72%



FOR APPROVAL
FABRICATION PENDING

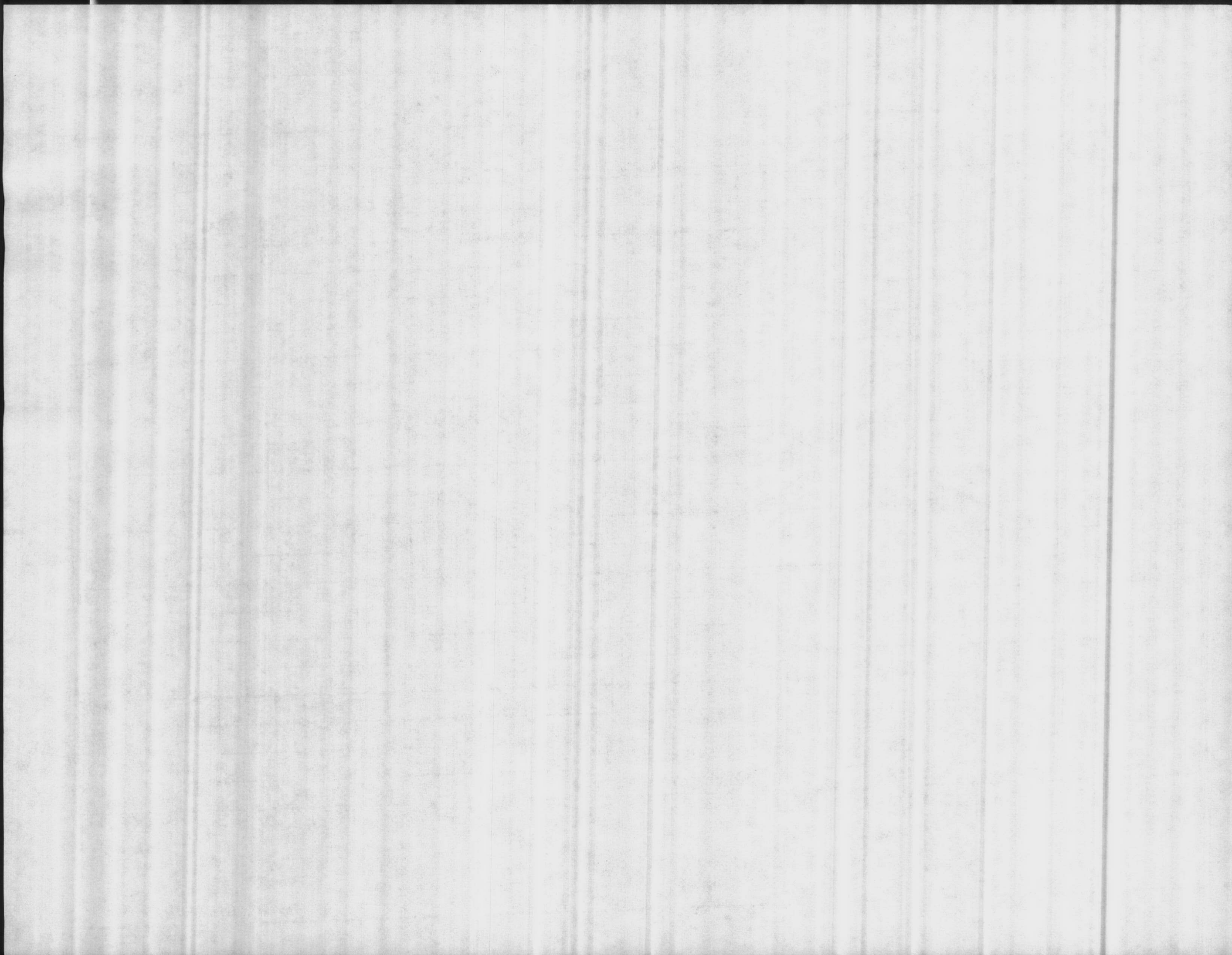
SERIAL NO. ****

U. S. GALLONS PER MINUTE

DATE 2-19-85

INT. DIA. 5 1/2"

NO. Q23642



Hunt

CONTRACTOR'S SUBMITTAL TRANSMITTAL
LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO. 81-C-1644 TRANSMITTAL NO. 206 DATE 5-1-86

FROM CONTRACTOR
Harry Peppas & Associates, Inc.
TO
Henry Von Oesen & Associates, Inc.

PROJECT TITLE AND LOCATION
Holcomb Blvd Water Treatment Plant
WCB, Cp Leflore, North Carolina

CONTRACTOR USE ONLY

REVIEWER USE ONLY

*List only one specification division per form.

****ACTION CODES**

List only one of the following categories on each transmittal form, and indicate which is being submitted

- A-Approved
- D-Disapproved
- AN-Approved as noted
- RA-Receipt acknowledged.
- C-Comments
- R-Resubmit

- Contractor Approved OICC Approval Deviation/Substitution For OICC Approval

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	02734	ROTARY DRILLED WATER WELLS			
1	3.1.6	4 Hour Pump Test	7	A	TR
2	3.1.6	2 Hour Recovery Test	7	A	TR

CONTRACTOR'S COMMENTS

Contractor was advised by Title II Inspector to Pump Test at 300 GPM.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC CONTRACTOR REPRESENTATIVE (Signature)
 ONE COPY TO ROICC Phil Rosen

DATE RECEIVED BY REVIEWER 5/20/86 FROM (Reviewer) Henry von Oesen & Assoc., Inc. TO

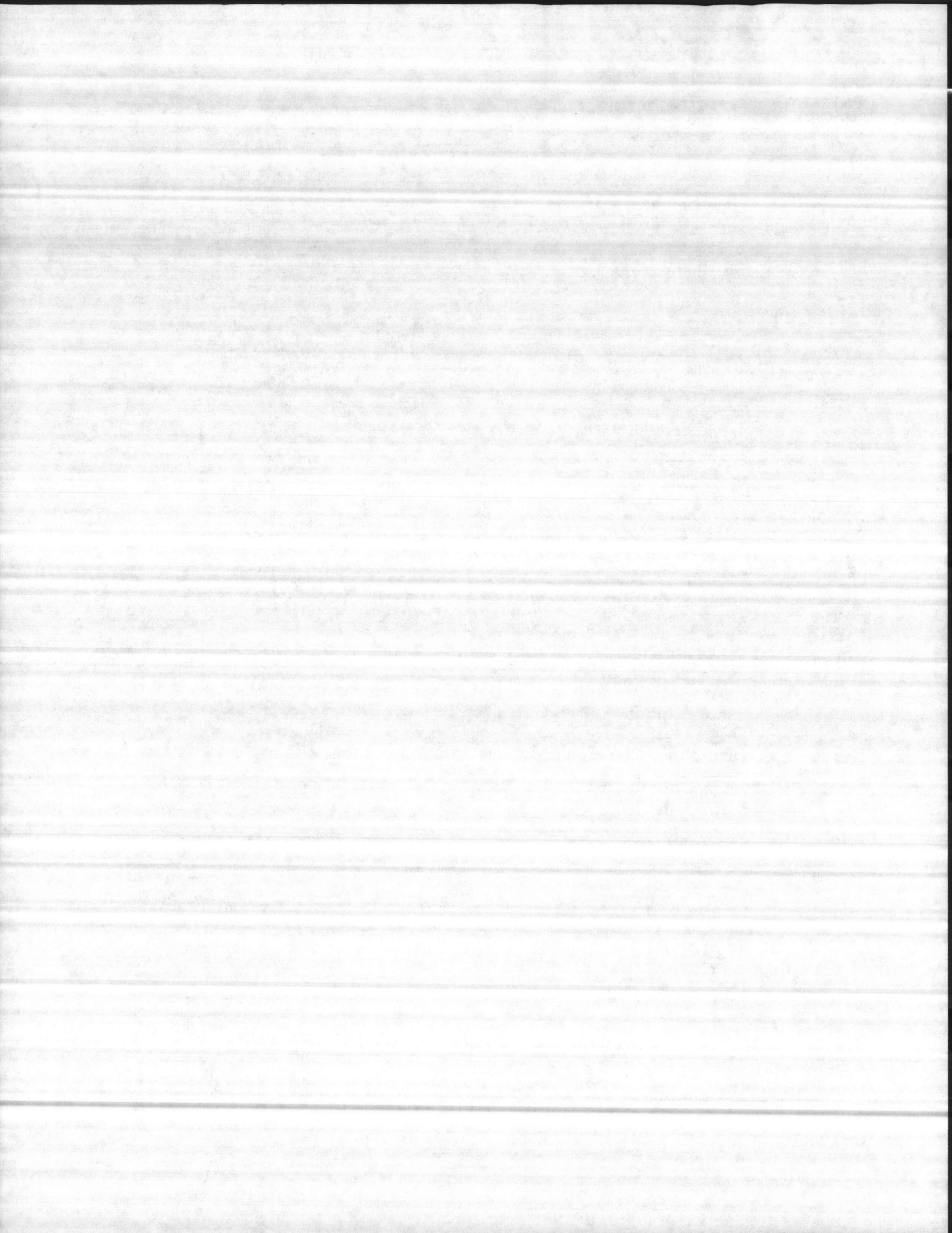
- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

REVIEWER'S COMMENTS

COPIES TO ROICC (2) DATE 5/23/86 SIGNATURE

LANTDIV (1)

A-E (1)



24 HOUR PUMP TEST
WELL # 9

PUMPING RATE 300 GPM

ITEM # 1

TIME	PUMP SETTING 84'	STATIC 16'2"
	PUMPING LEVEL	DRAWDOWN
11:01	34'2	18'
11:02	36'6	2'4
11:03	38'11	2'5
11:04	40'11	2'
11:05	43'2	2'3
11:06	45'10	2'8
11:07	47'9	1'11
11:08	48'11	1'2
11:09	50'	1'1
11:10	51'	12"
11:15	52'4	1'4
11:20	53'7	1'3
11:25	54'5	10"
11:30	55'1	8"
11:35	56'1	12"
11:40	57'3	12"
11:45	58'3	12"
11:50	59'2	11"
11:55	61'1	11"
12:00	65'8	1'7"
1:00	65'9	1"
2:00	66'2	5"
3:00	66'4	2"
4:00	66'7	3"
5:00	66'10	3"
6:00	67'3	5"
7:00	67'10	7"
8:00	68'2	4"
9:00	68'6	4"
10:00	68'8	2"
11:00	68'9'	1"
12:00	68'10	1"
1:00	68'11	1"
2:00	69'2	3"
3:00	69'2	"
4:00	69'6	4"
5:00	69'6	"
6:00	69'8	2"
7:00	"	"
8:00	"	"
9:00	"	"
10:00	"	"
11:00	"	"

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NOFOLK, VIRGINIA 23511

APPROVED _____
 APPROVED AS NOTED _____
 DISAPPROVED _____

SUBJECT TO THE REQUIREMENTS OF
 CONTRACT NO. N62470-81-C-1644
 APPROVED FOR USE DOES NOT INCLUDE
 APPROVAL OF THE CONTRACTOR'S
 CONTRACT DRAWINGS. THE CONTRACTOR
 CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL
 DEVIATION. THE CONTRACTOR SHALL BE RES-
 PONSIBLE FOR PROVIDING PROPER PHYSICAL
 DIMENSIONS AND WEIGHTS, COORDINATION OF
 TRADES, ETC. AS REQUIRED.

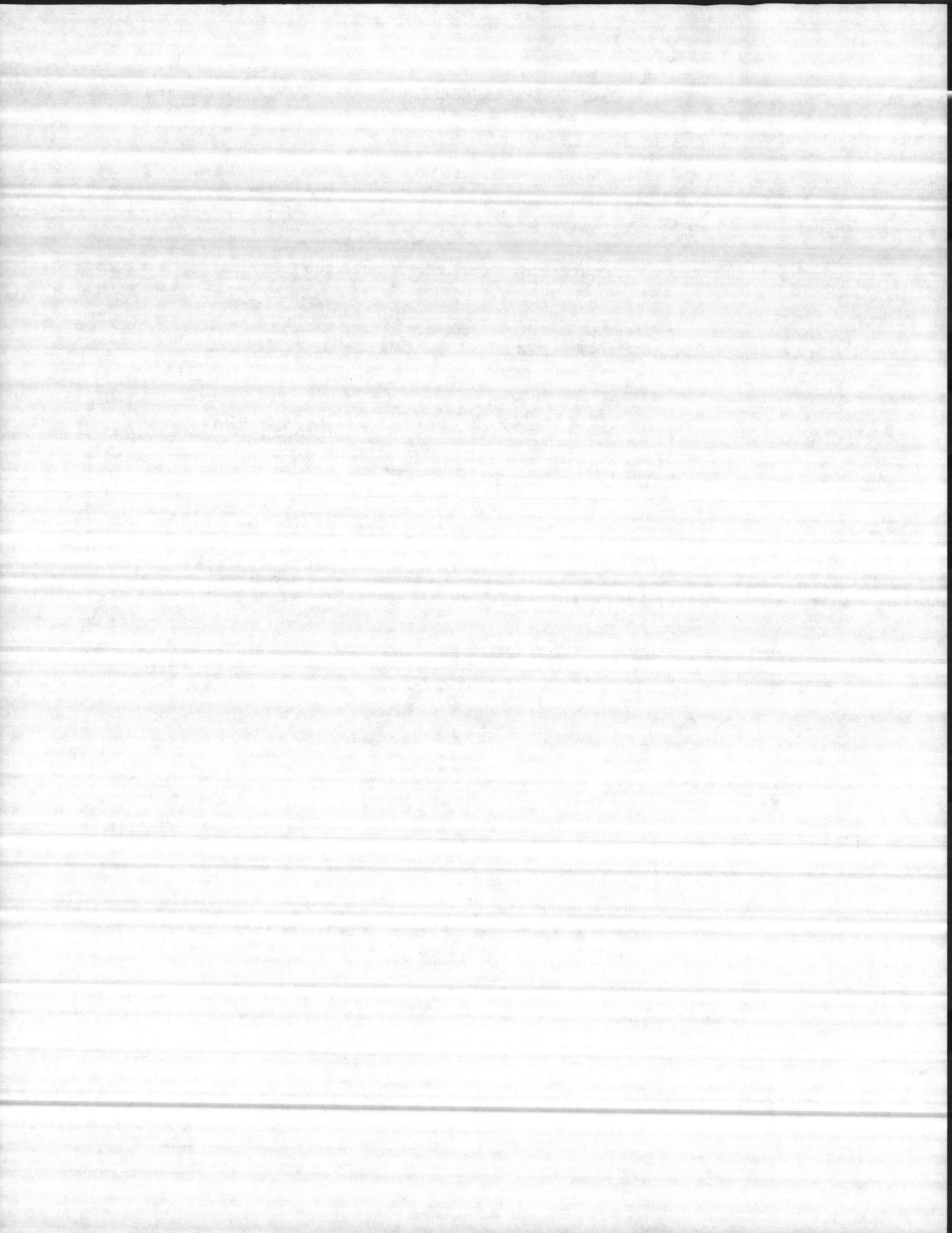
REVIEWER *M. Brown* DATE MAY 22 1986

FOR OFFICER IN CHARGE OF CONSTRUCTION

It is hereby certified that the (material) (equipment) shown and
 attached in this submittal, shop drawings, catalog cut(s), etc., are
 approved/proposed to be incorporated into Contract Number
 N62470-81-C-1644 is in compliance with the Contract Drawings
 and Specifications and can be installed in the allocated space,
 and is

Approved for use.
 Submitted for Government approval.
 Approved for use subject to Government approval of
 specific deviation.

Authorized Reviewer _____ DATE _____
 Signature CQC Rep. *Phil Reese* DATE 5-15-86



Two Hour Recovery
Well # 9

11:01	36'2
11:02	34'4
11:03	32'11
11:04	30'1
11:05	28'5
11:06	26'6
11:07	24'9
11:08	23'8
11:09	22'1
11:10	21'
11:15	19'11
11:20	18'3
11:25	17'1
11:30	16'11
11:35	16'9
11:40	16'6
11:45	16'2
11:50	"
12:00	"
1:00	"

