

## FILE FOLDER

### DESCRIPTION ON TAB:

TC 502 Well D

---

- Outside/inside of actual folder did not contain hand written information**
- Outside/inside of actual folder did contain hand written information**  
\*Scanned as next image

Division of Environmental Management  
Groundwater Section  
P.O. Box 27687  
Raleigh, N.C. 27611

WELL ABANDONMENT  
RECORD

CONTRACTOR Cyclone Well Drilling

REG. NO. 2395

1. WELL LOCATION: (Show a sketch of the location on back of form.)

Nearest Town: CAMP Geiger County ONslow  
North Carolina Quadrangle No. \_\_\_\_\_  
(Road, Community, Subdivision, Lot No.)

2. OWNER: U.S. MARINE Corps

3. ADDRESS: Camp Geiger, N.C.

4. TOPOGRAPHY: draw, slope, hilltop, valley, flat

5. USE OF WELL: public DATE: 1/11/01

6. TOTAL DEPTH: 184' DIAMETER: 10"

7. CASING REMOVED:

feet	diameter
_____	_____
_____	_____

8. SEALING MATERIAL:

Neat cement	Sand cement
bags of cement <u>10,000</u> <small>LBS.</small>	bags of cement _____
gals. of water <u>428</u>	yds. of sand _____
	gals. of water _____

Other  
Type material \_\_\_\_\_  
Amount \_\_\_\_\_

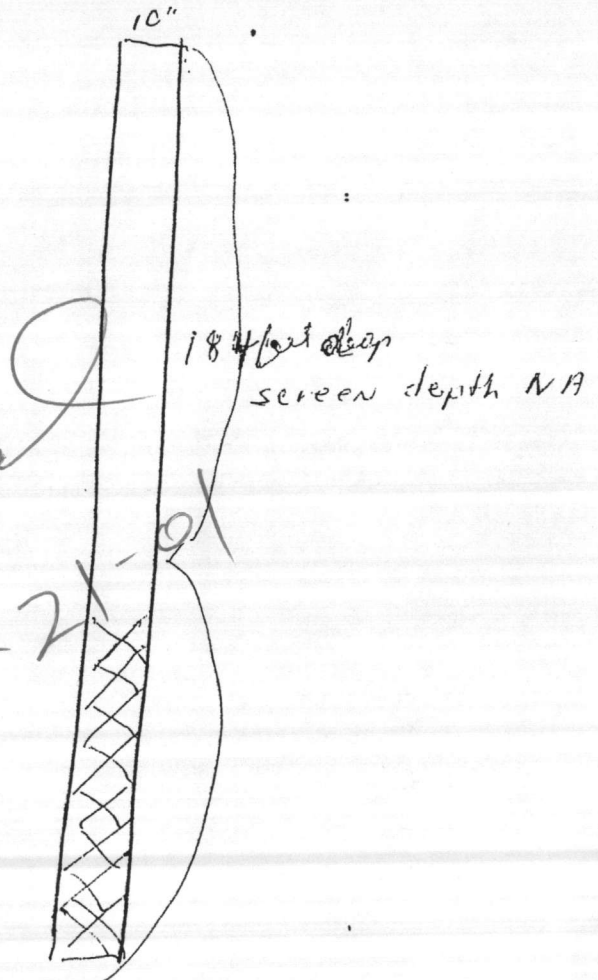
9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL.

Pump  
Abandonment

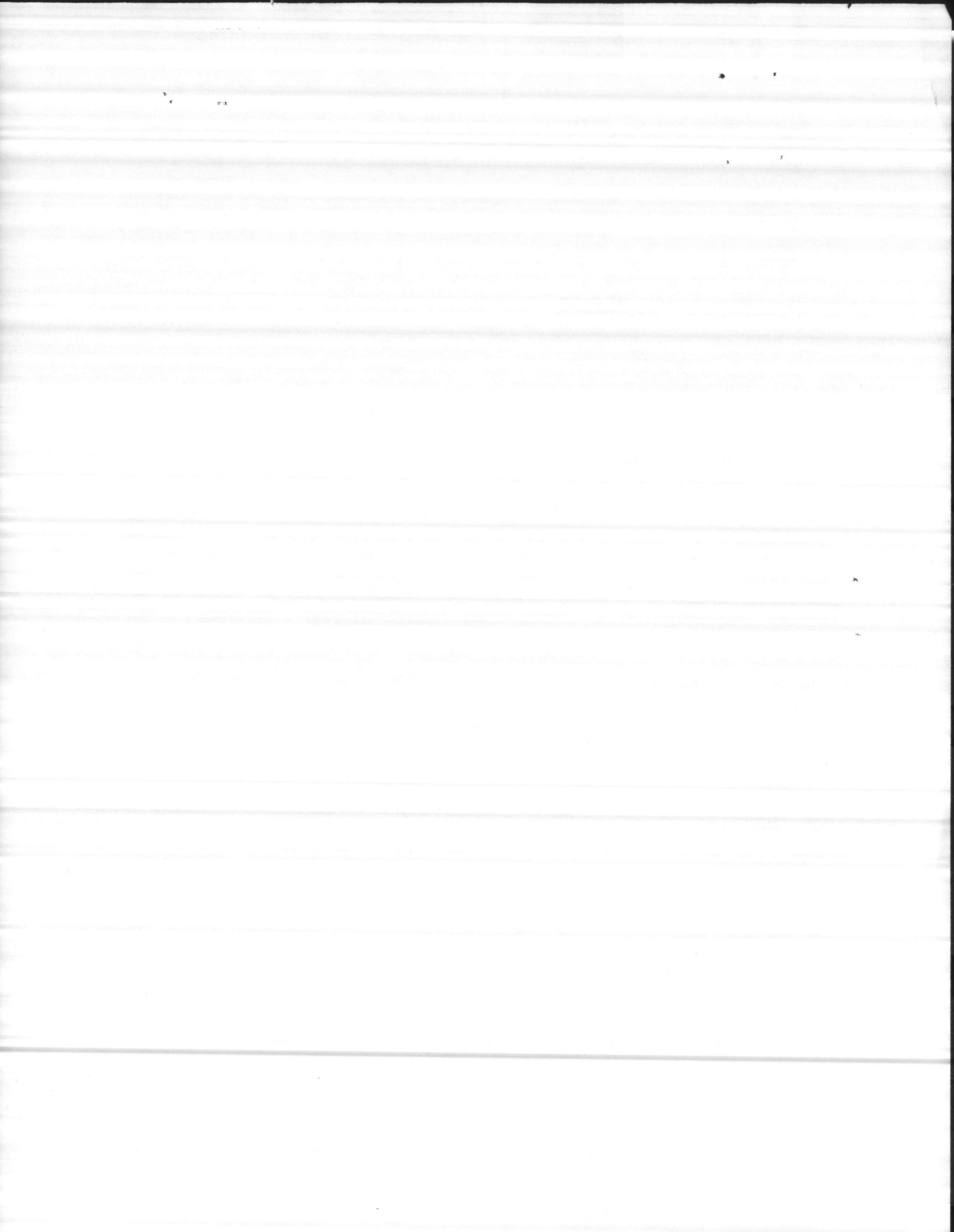
I do hereby certify that this well  
abandonment record is true and exact.

David's Quinn 1/11/01  
Signature of Contractor or Agent Date

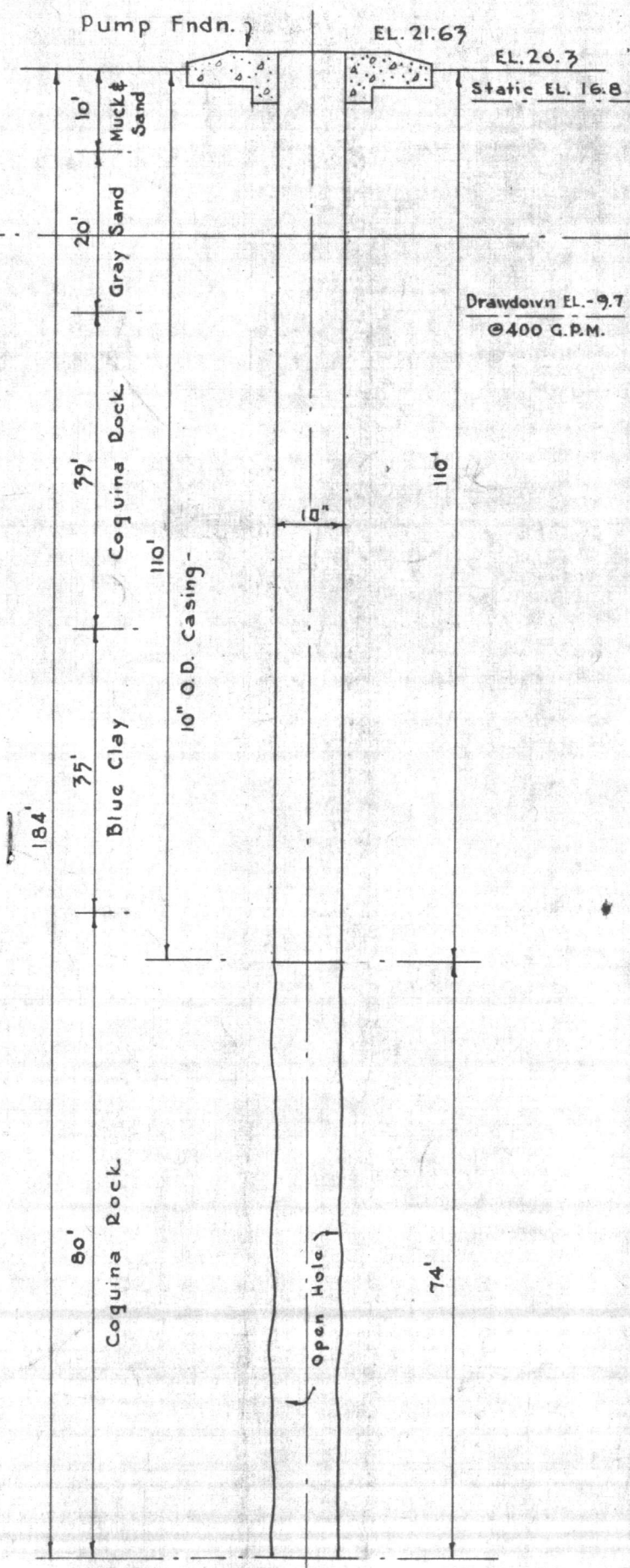
WELL DIAGRAM: Draw a detailed sketch of the well showing total depth, depth and diameter of screens remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.



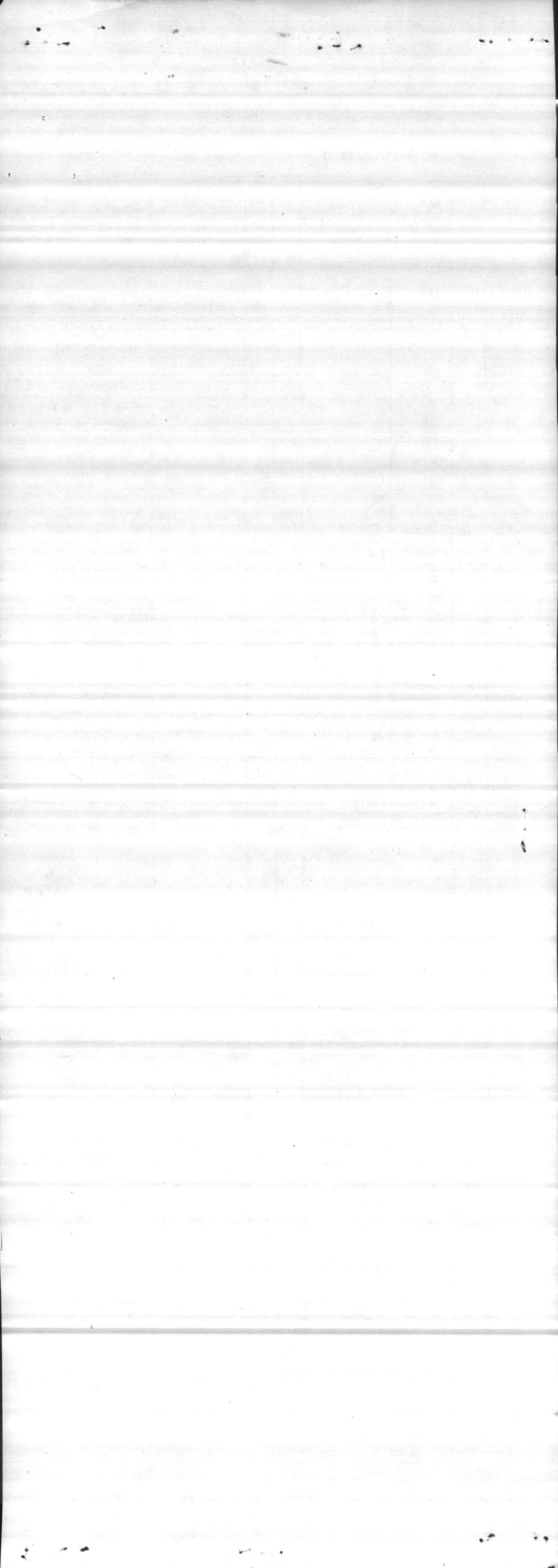
Provide the well owner a copy of this record.



400 G.P.M. - DUAL DRIVE -









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		Well Pump	
2	PUMP CROSS SECTION		TC502	121669
2	PUMP TYPICAL CURVE			
2	PUMP SPARE PARTS LIST			
2	MOTOR DRAWING			
2	PUMP MANUAL			
2	MOTOR MANUAL			

2 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.

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

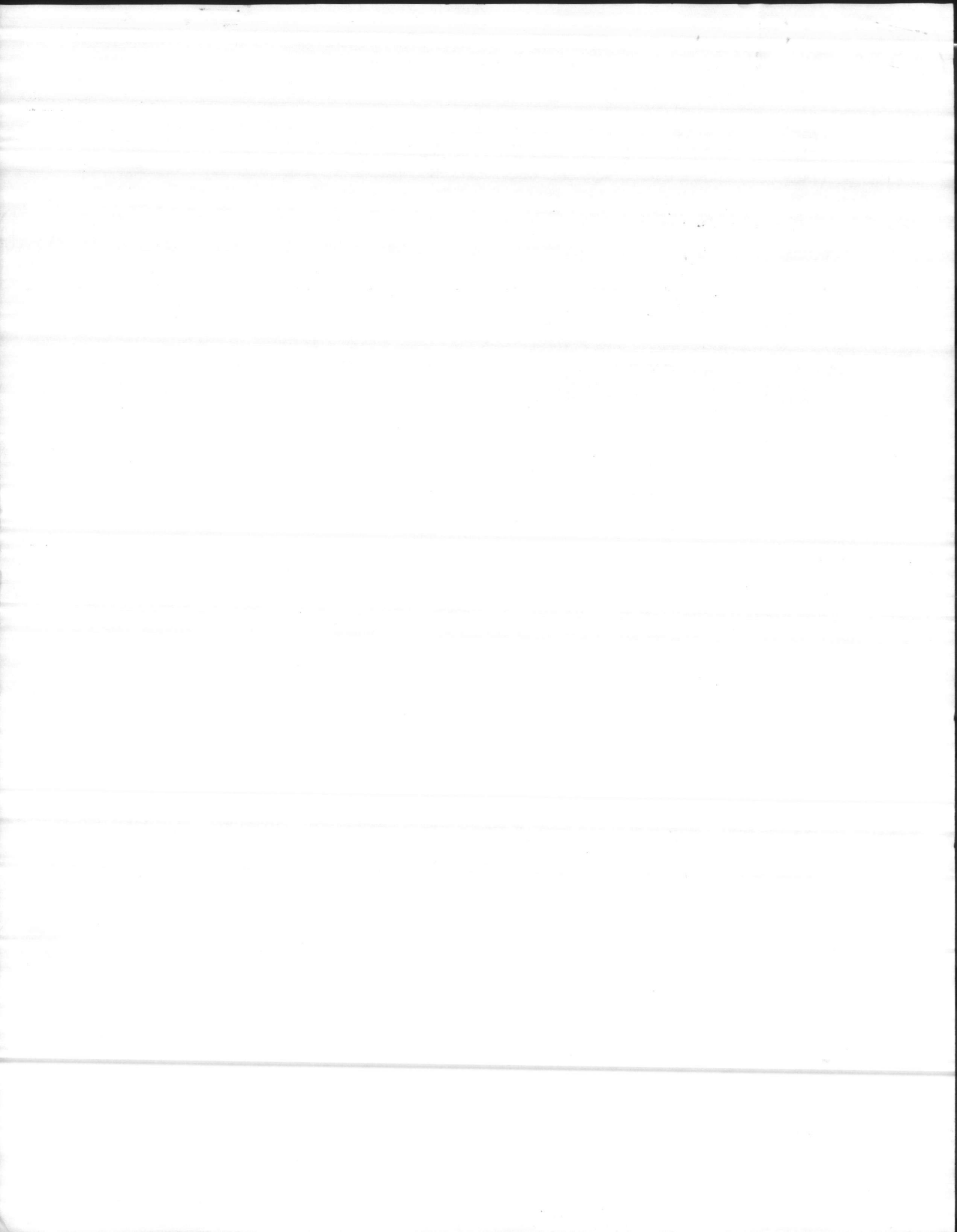
NOTE: ANY CHANGES MAY AFFECT QUOTED PRICES AND SHIPPING SCHEDULES.

VERY TRULY YOURS,

CC:

*R. W. Tayloe*

R. W. Tayloe





**GOULDS PUMPS, INC.**

Goulds Pumps, Inc.  
3675 Air Park  
Memphis, TN 38118  
Phone: 901-366-4010



**GOULDS PUMPS, INC.**  
VERTICAL PRODUCTS DIVISION

GOULDS SERIAL NO. 121669  
CUSTOMER TENCARIA MACHINERY  
CUSTOMER P.O. 112-75042-72  
BRANCH ORDER NO.  
EQUIP. OR ITEM M93058-92P1375  
SERVICE CAMP LEJEUNE, N.C.

PUMP SIZE	NO. OF STAGES	IMP. DIA.	BHP	QTY.
<u>BRJHO</u>	<u>4</u>	<u>5.25</u>	<u>9</u>	<u>1</u>
LIQUID	G.P.M.	I.D.H.	SP. GR.	TEMP.
<u>WATER</u>	<u>300</u>	<u>100</u>	<u>1.0</u>	<u>AMB.</u>
LUBE	BOWL BRG.	LINE SHAFT BRG.		
<input checked="" type="checkbox"/> WATER	<u>BRONZE</u>	<u>RUBBER</u>		
<input type="checkbox"/> OIL	BOWL SHAFT DIA.	LINE SHAFT DIA.		
	<u>1 3/16"</u>	<u>1"</u>		

COLUMN SIZE	NO. OF COLUMNS	BRG. SPAN
<u>6"</u>	<u>10</u>	<u>60"</u>

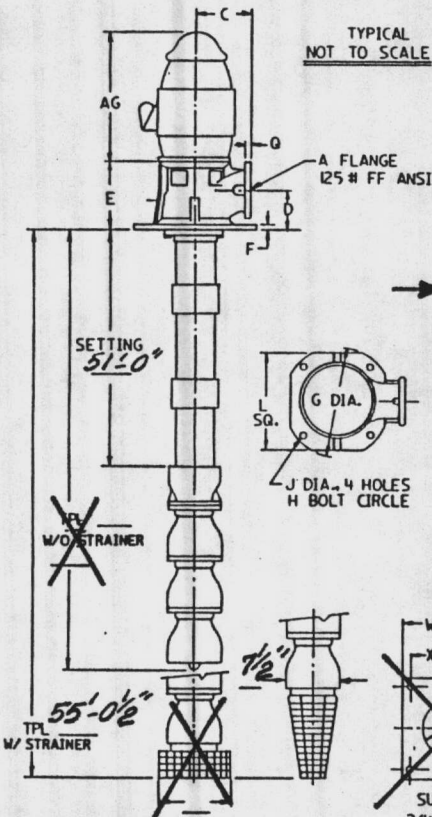
SPECIAL CONSTRUCTION  
ALL SHAFTING 416 S.S.

CERTIFIED CORRECT  
 FOR APPROVAL  
 FOR RECORD  
BY TED HUBBARD DATE 6-10-92  
DRAWING NO. DO1207B REV DATE

**MODEL VIT-C T**

WITH "A" STYLE DISCHARGE HEAD

TYPICAL  
NOT TO SCALE



DISCH. HD. MOTOR	DISCHARGE HEAD										OPTIONAL SUB BASE				
	A	BD	C	D	E	F	G	H	J	L	Q	W	X	Y	Z
10	12	9	5	13 1/2	5 3/8	1 1/4	1 1/4	1 1/4	3/4	1 1/4	3/4	10	10	5 3/8	1 1/2
6	12	12	6 3/4	5 1/2	1	2 1/2	2 1/4	3/4	20	1		24	22	7 3/8	1 1/2
10	16 1/2	14	9 1/4	19	1 1/8	25	22 3/4	3/4	21	1		26	23	7 3/8	17
12	24 1/2	16	10 3/4	23	1 1/2	32	30	3/8	28	1 1/4		34	31	1	24

**MOTOR DATA**

MOTOR MFG. G.E. FURN. BY GOULDS  
HP. 10 RPM 1800 BD. 10"  
PHASE 3 CYCLE 60 VOLTS 230/460  
FRAME L215TP ENCL. WP-I AG  
 VHS THRUST 1700 LBS MOTOR CD 18.8"  
MOTOR BORE 1"  
 VSS MTR. SHAFT 1" KEYWAY 1/4" x 1/8"  
HEAD 6" C.I. BOWLS 8" C.I.  
COLUMN 6" STEEL

- OPTIONAL STRAINER
- BASKET STRAINER
- CONE STRAINER
- OPTIONAL SUB BASE

DIMENSIONS IN INCHES OR FEET





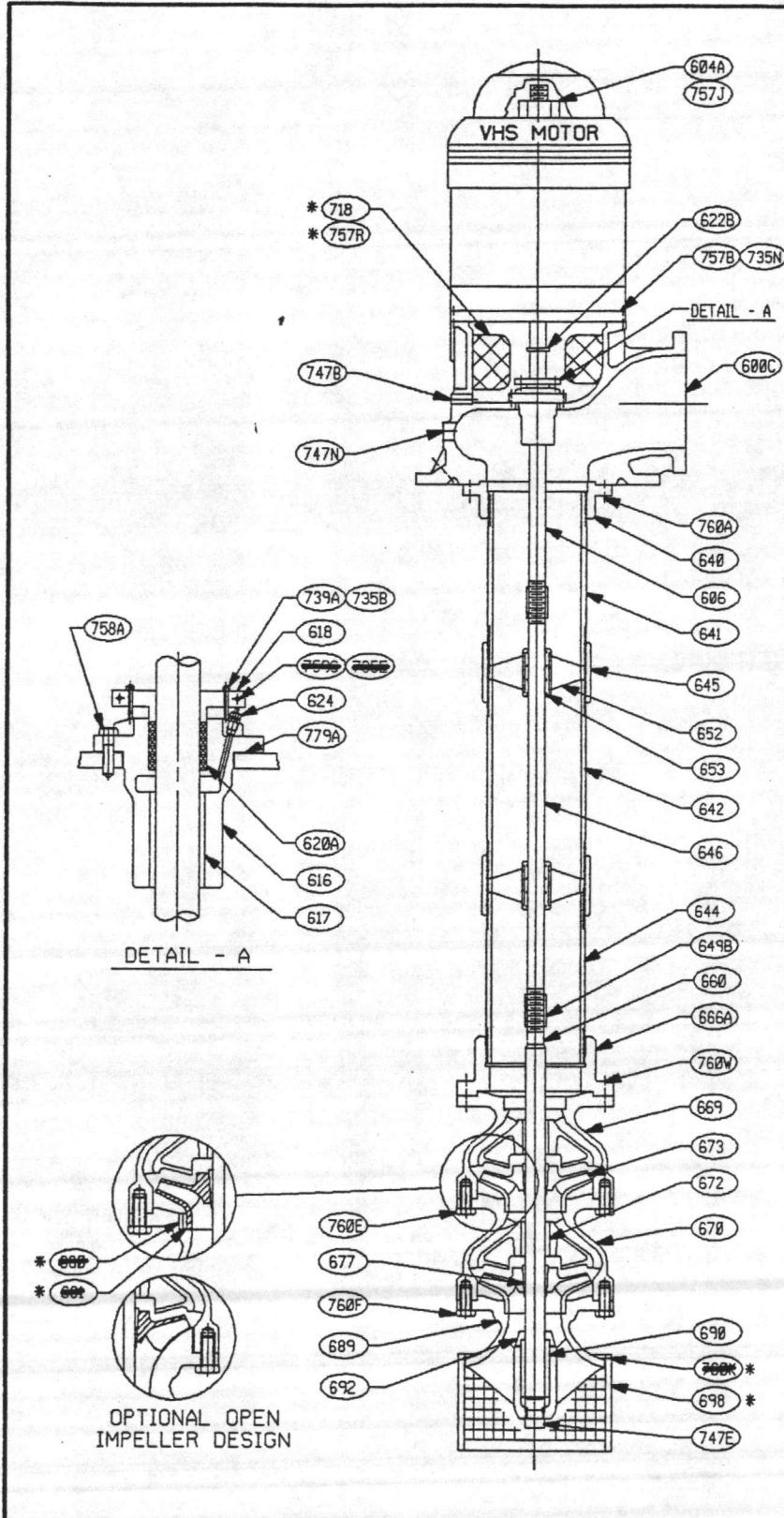


# Typical Cross Sectional

## VIT-CT Open Lineshaft

# 9.3.1

October 1, 1986  
(New)



ITEM NO.	DESCRIPTION	MATERIAL
<b>SUB-ASSEMBLY - HEAD &amp; COLUMN</b>		
600C	HEAD	CAST IRON
604A	ADJUSTING NUT	STEEL
606	DRIVESHAFT	416 S.S.
622B	SLINGER	NEOPRENE RUBBER
640	FLANGE - ADAPTER	CAST IRON
641	COLUMN - TOP	STEEL
642	COLUMN - INTMD	STEEL
644	COLUMN - BOTTOM	STEEL
645	COUPLING - COLUMN	STEEL
646	LINESHAFT	416 S.S.
649B	COUPLING-LINESHAFT	416 S.S.
652	RETAINER-BEARING	LEADED RED BRASS
653	BEARING-LINESHAFT	RUBBER
735N	HEX NUT	STEEL
747B	PIPE PLUG - DRAIN	STEEL
747N	PIPE PLUG - LUBE	STEEL
757B	HEX HD CAPSCREW	STEEL
757J	LOCK SCREW	STEEL
760A	HEX HD CAPSCREW	STEEL
<b>SUB-ASSEMBLY - STUFFING BOX</b>		
616	STUFFING BOX	CAST IRON
617	BEARING-STUFF BOX	BRONZE
618	GLAND - SPLIT	LEADED RED BRASS
620A	PACKING	GRAPHITED YARN
624	BLEEDLINE ASS'Y	AS SPECIFIED
735B	HEX NUT	BRASS
735C	HEX NUT	STEEL
739A	STUD	BRASS
758A	HEX HD CAPSCREW	STEEL
758B	HEX HD CAPSCREW	STEEL
779A	GASKET	VELLUMOID
<b>SUB-ASSEMBLY - BOWL</b>		
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
644		
649B		
660		
666A		
760W		
669		
673		
672		
670		
760E		
677		
760F		
689		
692		
690		
760K		
698		
747E		
<b>* OPTIONAL ASSEMBLY ITEMS</b>		
660	WEAR RING - BOWL	AS SPECIFIED
661	WEAR RING - IMP	AS SPECIFIED
698	STRAINER-BASKET/CONE	GALVANIZED STEEL
718	GUARD - COUPLING	EXPANDED METAL
757R	ROLOK SCREW	STEEL
760K	ROLOK SCREW	STEEL

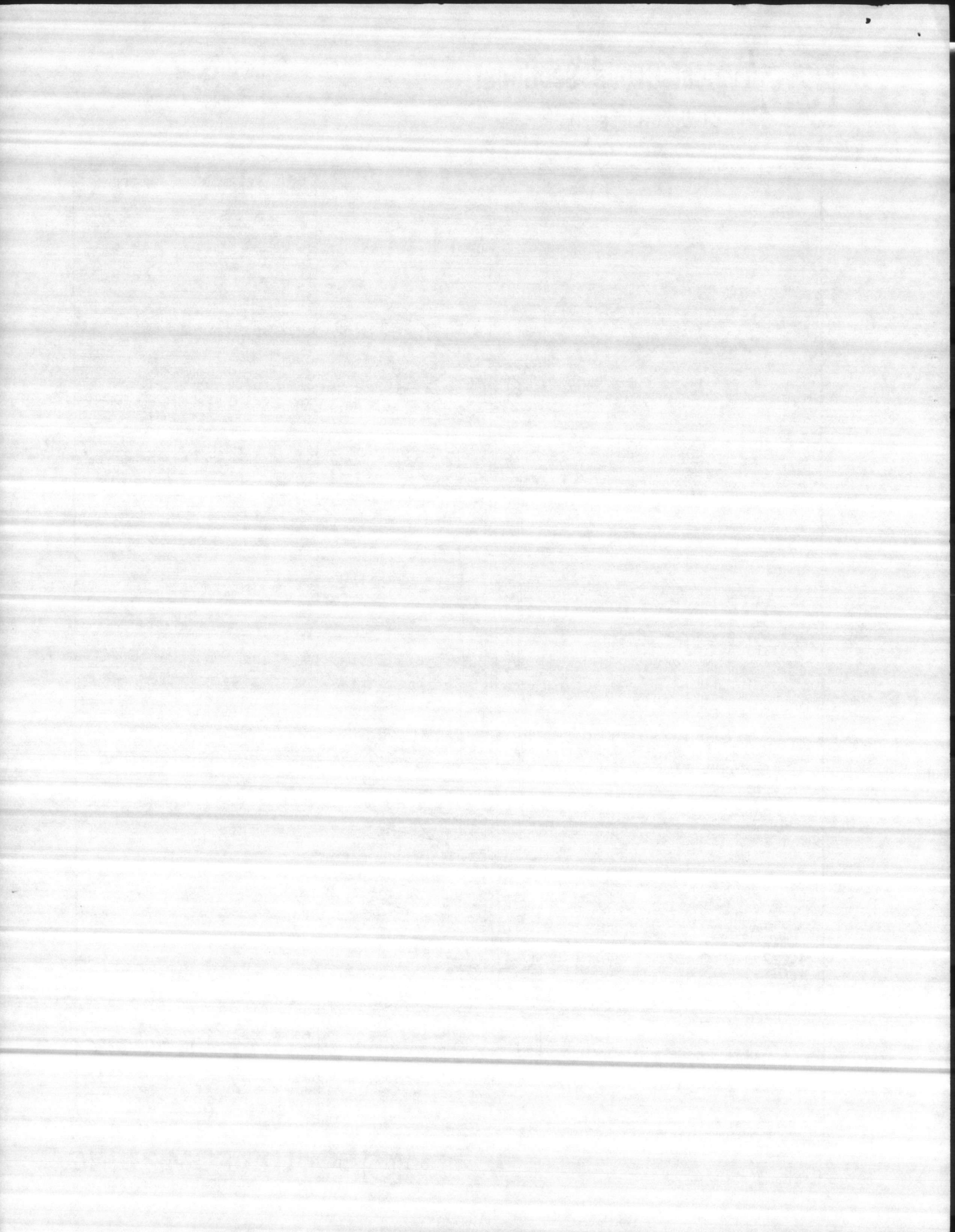
GOULDS PUMPS, INC.  
CUSTOMER TENCARVA MACH. Co.

P.O. NO. UR-75042-72  
ITEM NO. M 93058-92P1375  
SERVICE CAMP LEJEUNE, N.C.  
PUMP SIZE 8RTHO STGS. 4  
GOULDS S.O. NO. 121669

PRINTED IN U.S.A.

© 1986 Goulds Pumps, Inc.

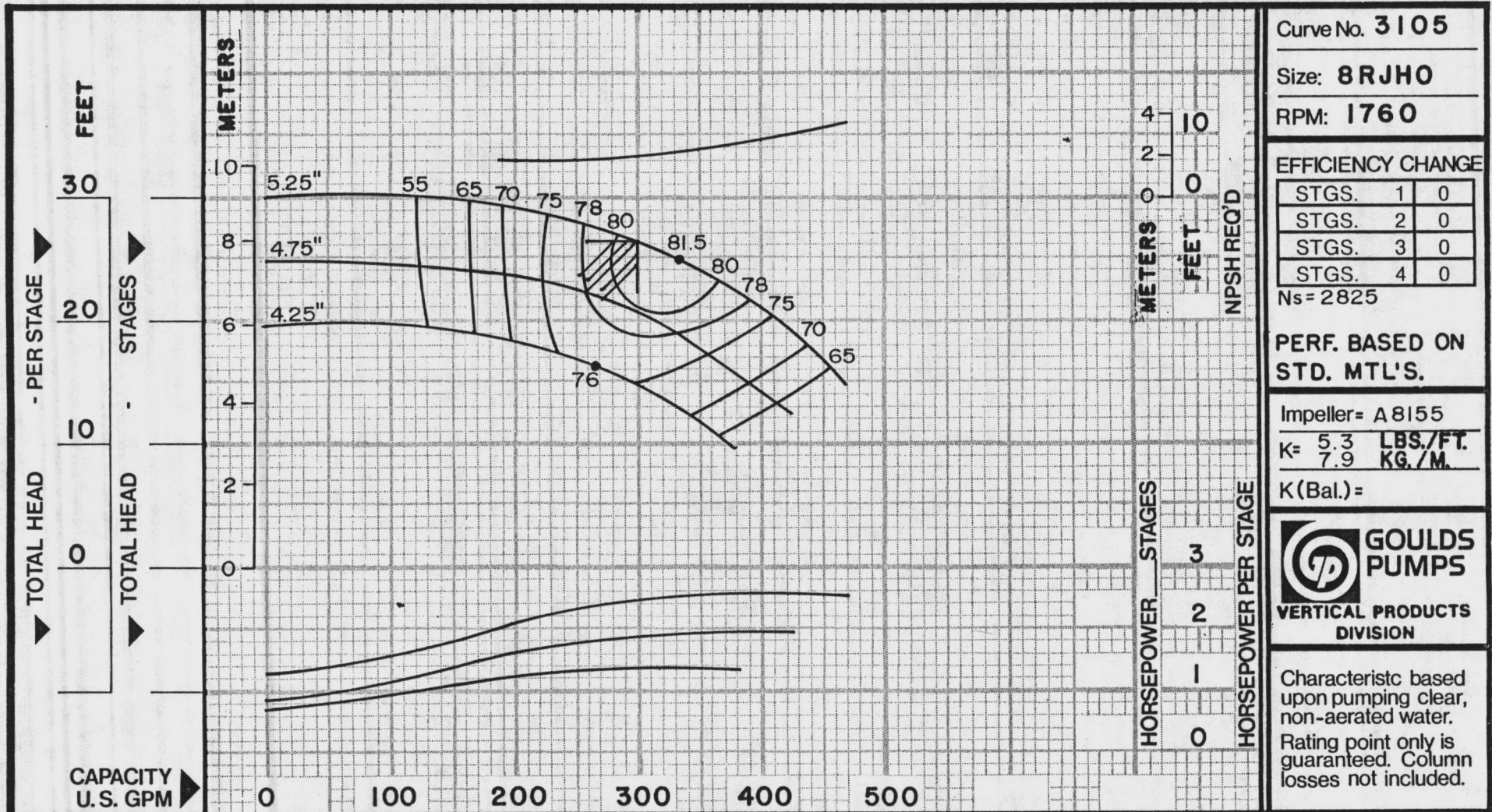






GOULDS PROPOSAL NO.	GOULDS S.O. NO. 121669	INQUIRY NO.	CUSTOMER P.O. NO. U2-75042-72	P.O. DATE 3-25-92	ITEM NO.	CUSTOMER TENCARYA MACHINERY Co., INC.
PROJECT CAMP LE JEUNE, N.C.	SERVICE:		GPM CAPACITY 300	F.T. TDH 100	% EFFICIENCY .81	RPM 1760

4 STAGES



Curve No. 3105

Size: 8RJH0

RPM: 1760

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

Ns = 2825

PERF. BASED ON STD. MTL'S.

Impeller = A8155

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 5029  
 DATE May 2, 1988  
 SUPERSEDES July 22, 1977



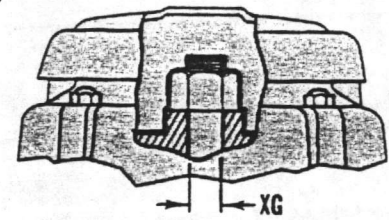
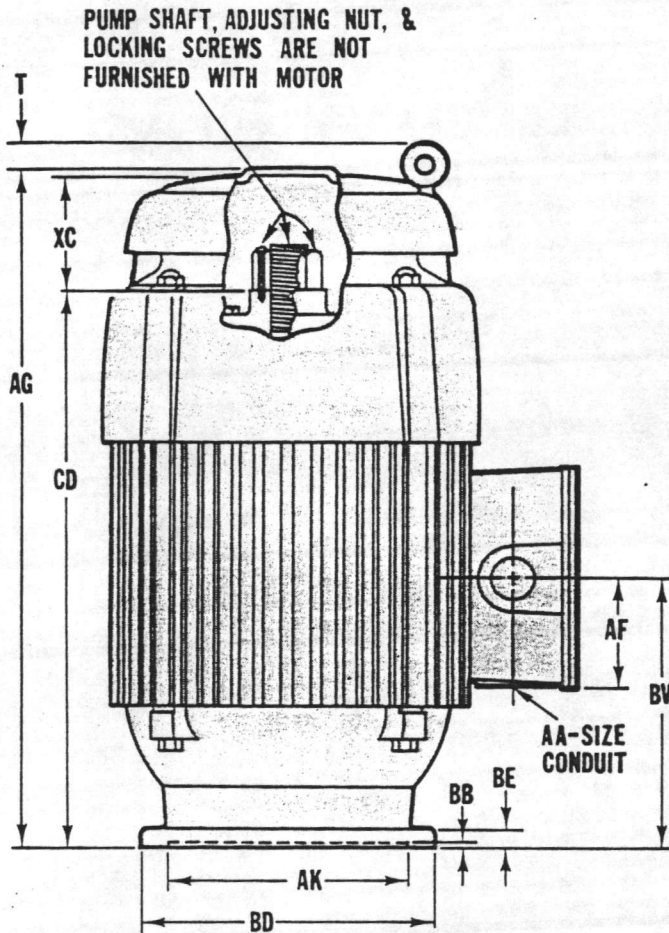


# VERTICAL MOTORS

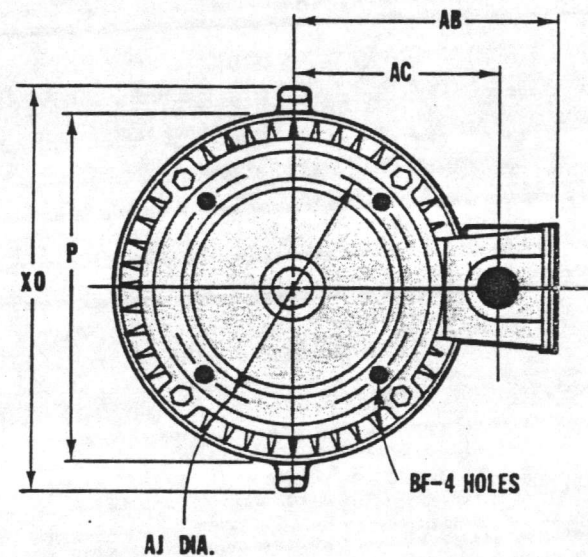


# DIMENSIONS

FRAMES 182TP THRU 286TPH -- TYPES AU, AUE (DRIPPROOF) -- WEATHER PROTECTED TYPE 1



HOLLOW SHAFT BORE



ALL DIMENSIONS ARE IN INCHES

BASIC FRAME	P*	T	AA	AB	AC	AF	AG	BV	CD	XC	XG	XO
180 ●	12-7/8	1-1/2	1	6-5/16	5-3/8	2-5/8	21-1/4	8	17-9/16	3-11/32	1-1/16	-
210	12-7/8	1-1/2	1	7-9/16	6-1/2	3-1/4	21-1/4	8	17-9/16	3-11/32	1-1/16	-
250	14	-	1-1/4	8-15/16	7-3/4	3-19/32	26-3/4▲	11-1/2	23-3/8▲	3-7/32	1-5/16	16-7/8
280	14	-	1-1/2	9-3/16	7-5/8	4-7/16	28-1/8	12-1/4	24-3/4	3-7/32	1-5/16	16-7/8

FRAME	AJ	AK +0.003	BB	BD	BE	BF
182, 184, 213, 215TP	9-1/8	8-1/4	3/16	10	3/4	7/16
254, 256, 284, 286TP	9-1/8	8-1/4	1/4	10	15/16	7/16
254, 256TPA, 284, 286TPH	14-3/4	13-1/2	1/4	16-1/2	15/16	11/16
254, 256TPH, 284, 286TPA	9-1/8	8-1/4	1/4	12	15/16	7/16

\*Largest motor width.

● Frames 182TP and 184TP are type AU only.

▲ Dimensions shown are for all ratings except 20HP, 4 Pole. Type AUE. For this rating the dimensions are: AG = 28-1/8; CD=24-3/4

All rough casting dimensions may vary by 1/4" due to casting variations.

Conduit box opening may be located in steps of 90 degrees. Standard as shown with conduit opening down.

### TOLERANCES

Face runout	.004 F.I.R.
Permissible eccentricity of mounting rabbet	.004 F.I.R.



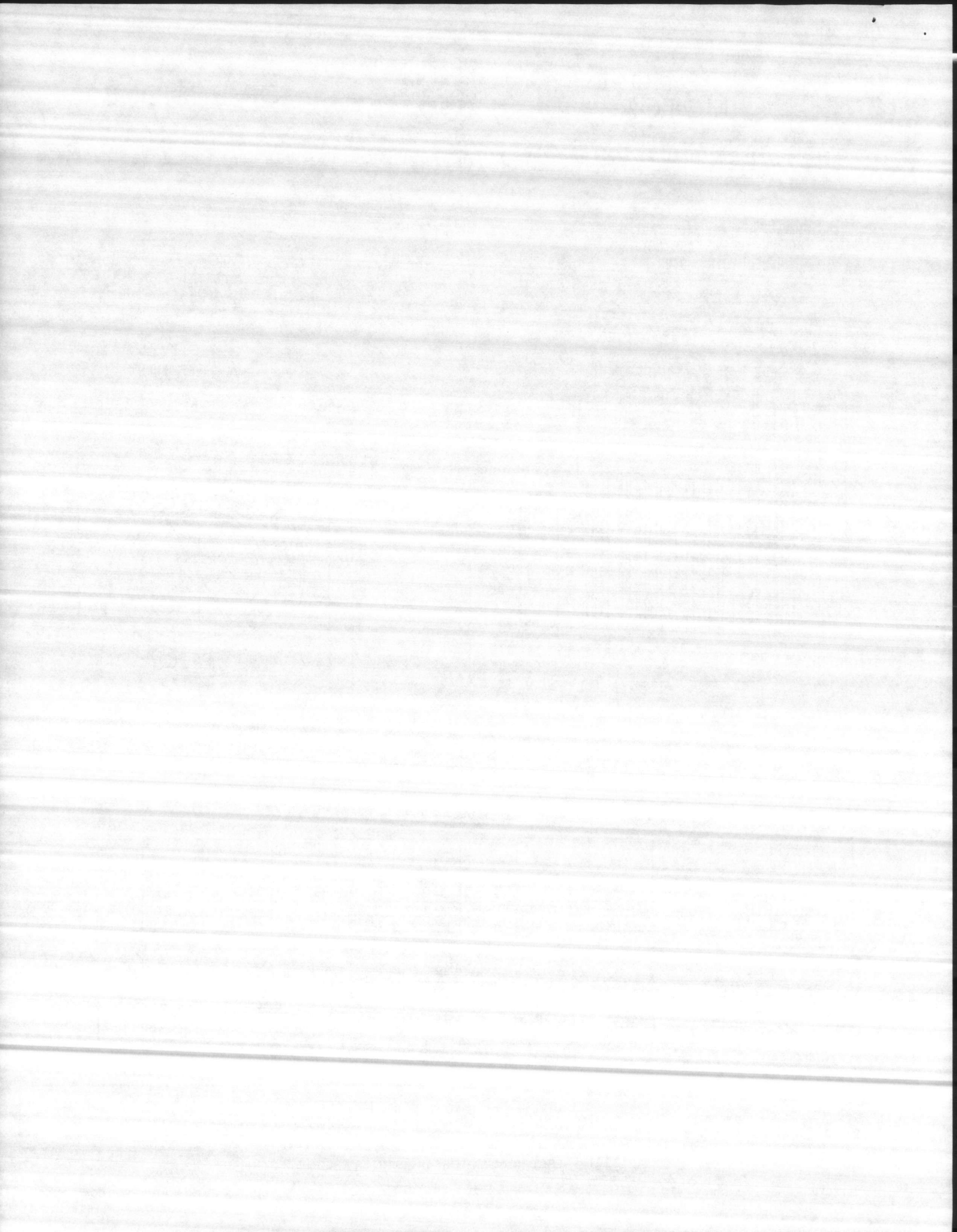
U.S. ELECTRICAL MOTORS DIVISION EMERSON ELECTRIC CO.

Printed in U.S.A.

EFFECTIVE: APRIL 15, 1987  
SUPERSEDES: DECEMBER 30, 1984

SECTION : 505  
PAGE : 1

DO NOT USE FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED



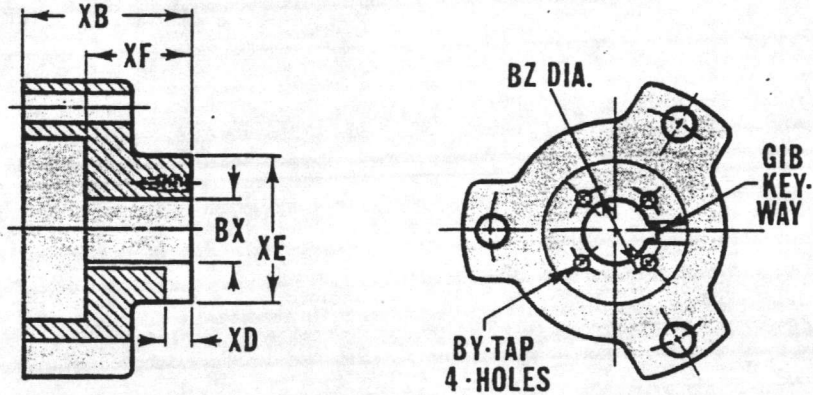


# VERTICAL MOTORS



# DIMENSIONS

DRIVE COUPLINGS FOR FRAMES 182 THRU 286 HOLLOSHAFT MOTORS.



ALL DIMENSIONS ARE IN INCHES

	TYPE	FRAME	PART NUMBER	BX BORE		BY	BZ	XB	XD	XE	XF	SQ. KEY
				NOMINAL	ACTUAL							
	AU	182,184TP	159002	3/4	.751	10-32	1-3/8	1-3/4	11/32	2	1-1/8	3/16
	LU	213, 215P,TP	181107	7/8	.876	10-32	1-3/8	1-3/4	13/32	2	1-1/8	3/16
	TU		159001	1	1.001	10-32	1-3/8	1-3/4	13/32	2	1-1/8	1/4
	AUR		157744	BLANK	.624	-	-	1-3/4	-	2	1-1/8	-
	AU	254,256	174431	3/4	.751	10-32	1-3/8	2-9/16	11/32	2-1/4	1-5/8	3/16
	LU	TP,UP,	181105	7/8	.876	10-32	1-3/8	2-9/16	11/32	2-1/4	1-5/8	3/16
	TU	TPA,TPH,UPH	102999	1	1.001	10-32	1-3/8	2-9/16	13/32	2-1/4	1-5/8	1/4
	AUC		104720	1-3/16	1.188	1/4-20	1-3/4	2-9/16	13/32	2-1/4	1-5/8	1/4
			152434	1-1/4	1.251	1/4-20	1-3/4	2-9/16	13/32	2-1/4	1-5/8	1/4
			366983	1-1/4	1.251	1/4-20	1-3/4	2-9/16	17/32	2-1/4	1-5/8	3/8
			102986	BLANK	.751	-	-	2-9/16	-	2-1/4	1-5/8	-
	AU	284,286	174431	3/4	.751	10-32	1-3/8	2-9/16	11/32	2-1/4	1-5/8	3/16
	TU	TP,TPA,TPH	181105	7/8	.876	10-32	1-3/8	2-9/16	11/32	2-1/4	1-5/8	3/16
	AUC		102999	1	1.001	10-32	1-3/8	2-9/16	13/32	2-1/4	1-5/8	1/4
			104720	1-3/16	1.188	1/4-20	1-3/4	2-9/16	13/32	2-1/4	1-5/8	1/4
			152434	1-1/4	1.251	1/4-20	1-3/4	2-9/16	13/32	2-1/4	1-5/8	1/4
			366983	1-1/4	1.251	1/4-20	1-3/4	2-9/16	17/32	2-1/4	1-5/8	3/8
			102986	BLANK	.751	-	-	2-9/16	-	2-1/4	1-5/8	-
	LU	284,286	118104	7/8	.876	10-32	1-3/8	2-9/16	13/32	2-5/8	1-5/8	3/16
		TP,TPA,TPH	112000	1	1.001	10-32	1-3/8	2-9/16	13/32	2-5/8	1-5/8	1/4
			108186	1-3/16	1.188	1/4-20	1-3/4	2-9/16	13/32	2-5/8	1-5/8	1/4
			162457	1-1/4	1.251	1/4-20	1-3/4	2-9/16	13/32	2-5/8	1-5/8	1/4
			366982	1-1/4	1.251	1/4-20	1-3/4	2-9/16	17/32	2-5/8	1-5/8	3/8
			108184	BLANK	.751	-	-	2-9/16	-	2-5/8	1-5/8	-

### SPECIAL COUPLING DIMENSIONS

PART NO.	BX BORE		BY	BZ	SQ. KEY SIZE	XB	XD	XE	XF
	NOMINAL	ACTUAL							

All tapped holes are unified national coarse, right hand thread.

All rough casting dimensions may vary by 1/4" due to casting variations.

Coupling bore dimension "BX" is machined with a tolerance of  $-.000$ ";  $+.001$ .

EFFECTIVE: MAY 1, 1986  
 SUPERSEDES: PAGE 13 DATED MARCH 25, 1984



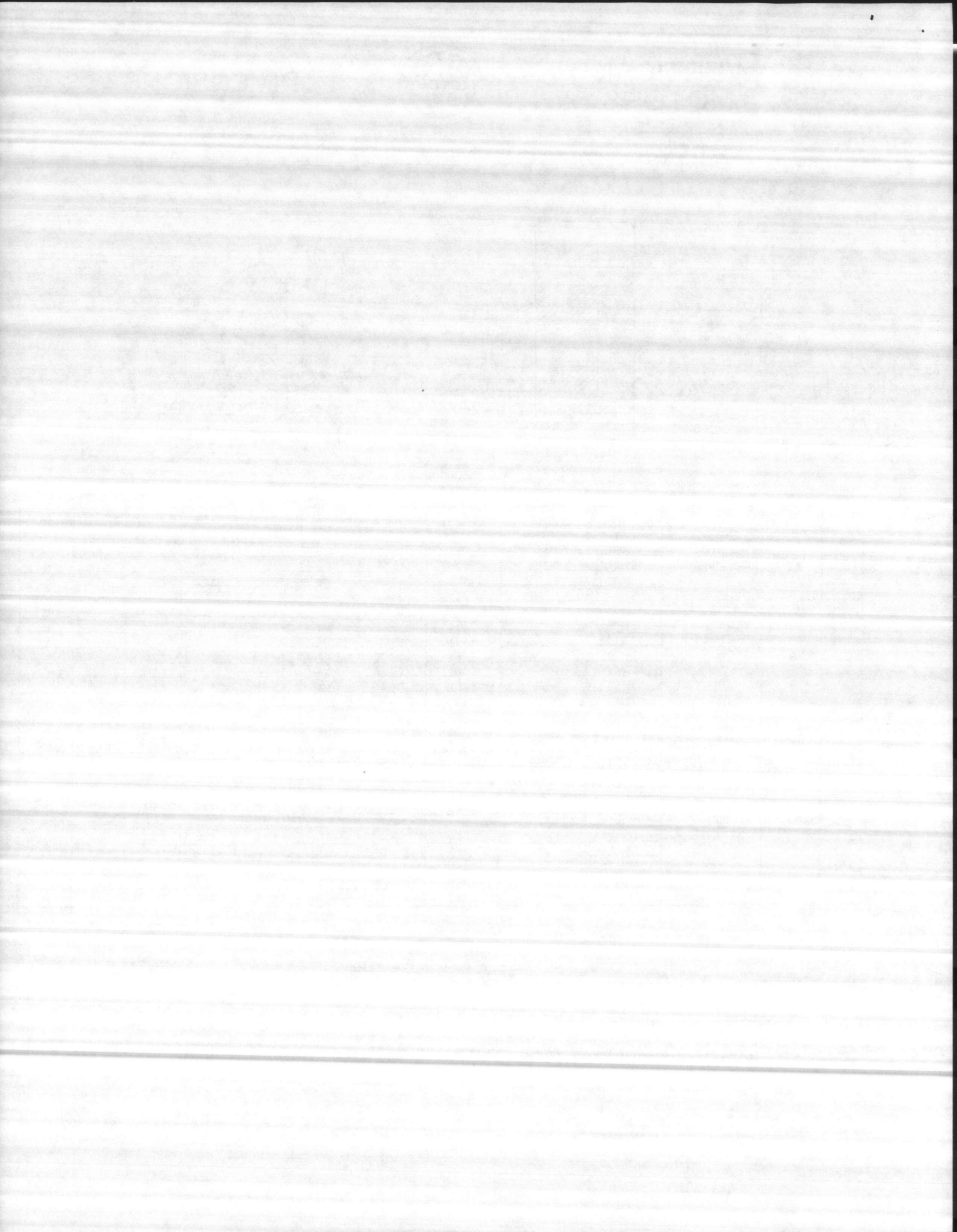
U.S. ELECTRICAL MOTORS DIVISION EMERSON ELECTRIC CO.

Printed in U.S.A.

SECTION : 505  
 PAGE : 15

DO NOT USE FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED







# Vertical Motors

Section 504  
Page 1

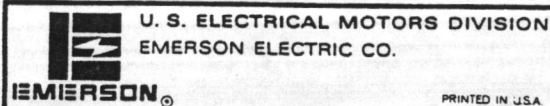
**3 PHASE 60 CYCLES  
230,460,575 VOLTS  
40°C. AMBIENT-C.RISE WP-1**

**HOLLOSHAFT & SOLIDSHAFT  
MOTORS  
OPERATING CHARACTERISTICS**

**ENGINEERING  
DATA**

HP	RPM		% EFFICIENCY			% POWER FACTOR			CURRENT IN AMPHERES 460 VOLTS		TORQUE AT FULL VOLTAGE			NEMA CODE
	NO LOAD	FULL LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	LOCKED (STARTING)	FULL LOAD TORQUE AT FULL LOAD SPEED (LB.FT.)	LOCKED	PULL OUT	
												(STARTING) PERCENT OF FULL LOAD	(BREAKDOWN) PERCENT OF FULL LOAD	
2	900	860	75.0	74.5	70.0	68.0	60.0	47.5	3.9	18.0	12.2	130	210	J
	1800	1720	80.0	79.5	75.5	81.0	72.5	59.5	4.4	32.0	9.2	215	250	K
3	1200	1155	78.5	78.0	75.0	69.0	61.0	49.0	5.4	23.0	13.6	155	230	G
	900	860	78.5	79.0	75.5	67.5	59.0	46.0	5.8	30.5	18.3	130	205	K
5	3600	3480	81.0	82.0	80.5	86.0	80.5	69.5	6.9	45.0	7.5	150	215	H
	1800	1725	81.5	82.0	79.5	84.0	76.5	63.5	7.0	47.0	15.2	185	225	J
7-1/2	1200	1160	81.0	81.0	78.0	71.0	62.5	50.0	8.5	40.0	22.6	150	215	G
	900	875	80.5	80.0	77.0	72.0	64.0	51.0	8.2	44.0	30.0	130	205	H
10	3600	3460	84.0	85.0	84.0	88.0	84.0	75.5	9.8	63.0	11.4	140	200	H
	1800	1740	83.5	84.0	82.5	84.0	80.0	71.5	10.4	63.5	22.6	175	215	H
15	1200	1170	83.0	83.5	81.0	80.5	74.0	61.5	10.5	63.0	33.7	150	205	H
	900	875	80.5	80.5	77.5	71.5	63.0	50.5	12.5	63.0	45.0	125	200	K
20	3600	3500	83.5	84.0	83.0	87.0	84.0	76.5	13.4	79.0	15.0	135	200	H
	1800	1740	86.5	87.0	85.5	81.0	75.0	64.0	13.3	82.0	30.2	165	200	H
25	1200	1165	82.5	82.5	80.0	78.5	70.0	57.0	14.0	80.0	45.1	150	200	H
	900	875	86.0	86.5	84.5	72.0	65.0	53.0	15.5	81.0	60.0	125	200	H
30	3600	3485	85.0	86.5	86.0	88.5	87.0	82.0	19.5	112.0	-22.6	130	200	G
	1800	1765	85.5	86.5	85.0	81.0	73.5	61.5	20.5	112.0	44.5	160	200	G
40	1200	1160	87.5	89.0	89.0	85.0	82.0	74.5	19.4	115.0	68.0	140	200	G
	900	870	86.0	87.5	86.5	75.5	69.5	58.5	22.5	116.0	90.6	125	200	G
50	3600	3515	85.5	87.0	87.0	89.0	87.5	82.5	25.4	145.0	29.9	130	200	G
	1800	1765	88.0	89.0	89.0	85.0	82.5	75.0	26.0	143.0	59.5	150	200	G
60	1200	1160	88.0	89.5	89.0	85.0	81.5	74.0	25.8	145.0	90.5	135	200	G
	900	880	85.0	86.5	86.0	74.5	69.0	57.0	30.5	140.0	120.0	125	200	G
75	3600	3510	89.0	90.0	89.0	88.5	87.0	81.0	30.4	172.0	37.4	130	200	F
	1800	1755	88.5	90.0	89.5	83.0	78.5	68.5	32.5	180.0	74.8	150	200	G
100	1200	1180	85.5	87.0	86.5	84.0	79.0	68.0	33.5	193.0	111.5	135	200	G
	900	880	86.0	88.0	87.5	77.0	72.0	61.0	36.5	175.0	150.0	125	200	G
125	3600	3510	89.5	90.5	89.5	87.5	85.0	78.0	37.0	218.0	44.9	130	200	G
	1800	1755	89.0	90.0	89.5	80.5	75.0	63.5	40.0	217.0	89.8	150	200	G
150	1200	1175	86.5	88.5	89.5	86.0	84.0	78.0	38.5	215.0	134.0	135	200	G
	900	880	88.0	89.5	89.5	75.0	70.0	59.5	43.5	205.0	179.0	125	200	G
200	3600	3515	90.0	91.0	90.0	86.5	83.0	75.0	48.5	310.0	59.8	125	200	G
	1800	1770	88.0	89.5	89.0	86.0	82.0	73.0	51.0	292.5	119.0	140	200	G
250	1200	1175	87.5	89.5	90.0	84.5	81.0	72.0	52.0	292.0	179.0	135	200	G
	900	875	88.0	90.0	90.0	76.0	71.5	61.0	57.5	280.0	240.0	125	200	F
300	3600	3540	88.0	89.5	89.0	87.0	84.5	78.0	63.0	350.0	74.2	120	200	G
	1800	1765	89.0	90.5	90.5	84.5	81.0	72.0	64.0	339.5	150.0	140	200	G
400	1200	1170	88.0	90.5	91.0	85.0	83.0	76.5	64.0	370.0	224.5	135	200	G
	900	875	88.5	90.0	90.0	80.0	76.0	67.0	68.0	325.0	300.0	125	200	G
500	3600	3540	89.5	91.0	91.0	89.0	89.0	86.0	72.5	410.0	89.0	120	200	G
	1800	1770	90.0	91.0	91.0	86.0	83.0	75.0	75.0	454.5	178.0	140	200	G
600	1200	1175	88.5	90.0	89.5	85.5	82.0	72.5	76.0	460.0	268.0	135	200	G
	900	875	89.0	90.5	90.5	80.5	77.0	68.0	80.5	410.0	360.0	125	200	G

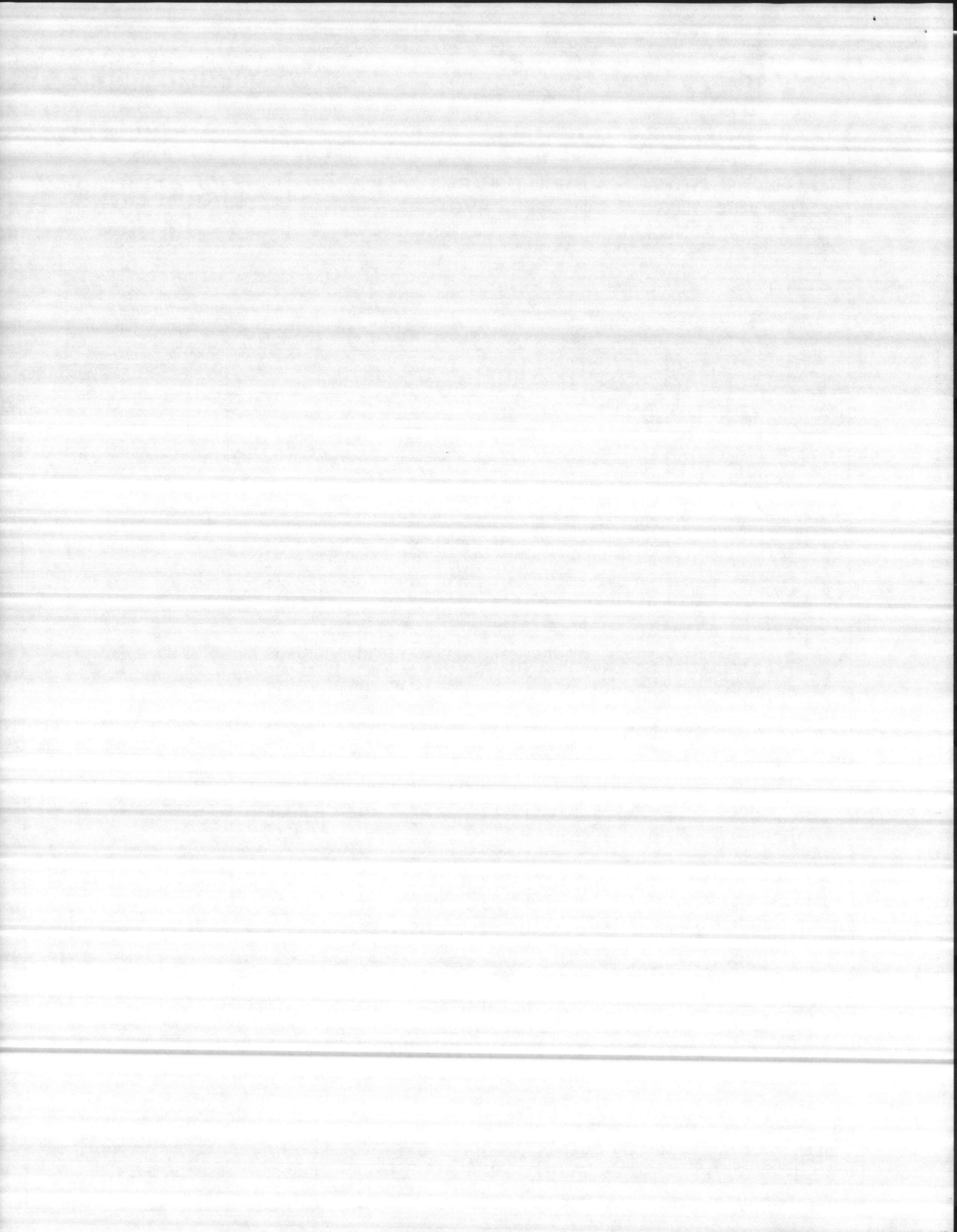
See Page 2 for higher horsepowers and notes.



Effective: NOVEMBER 15, 1979  
Supersedes: NOVEMBER 13, 1970

REFER TO COMPANY FOR CERTIFIED VALUES

PRINTED IN U.S.A.





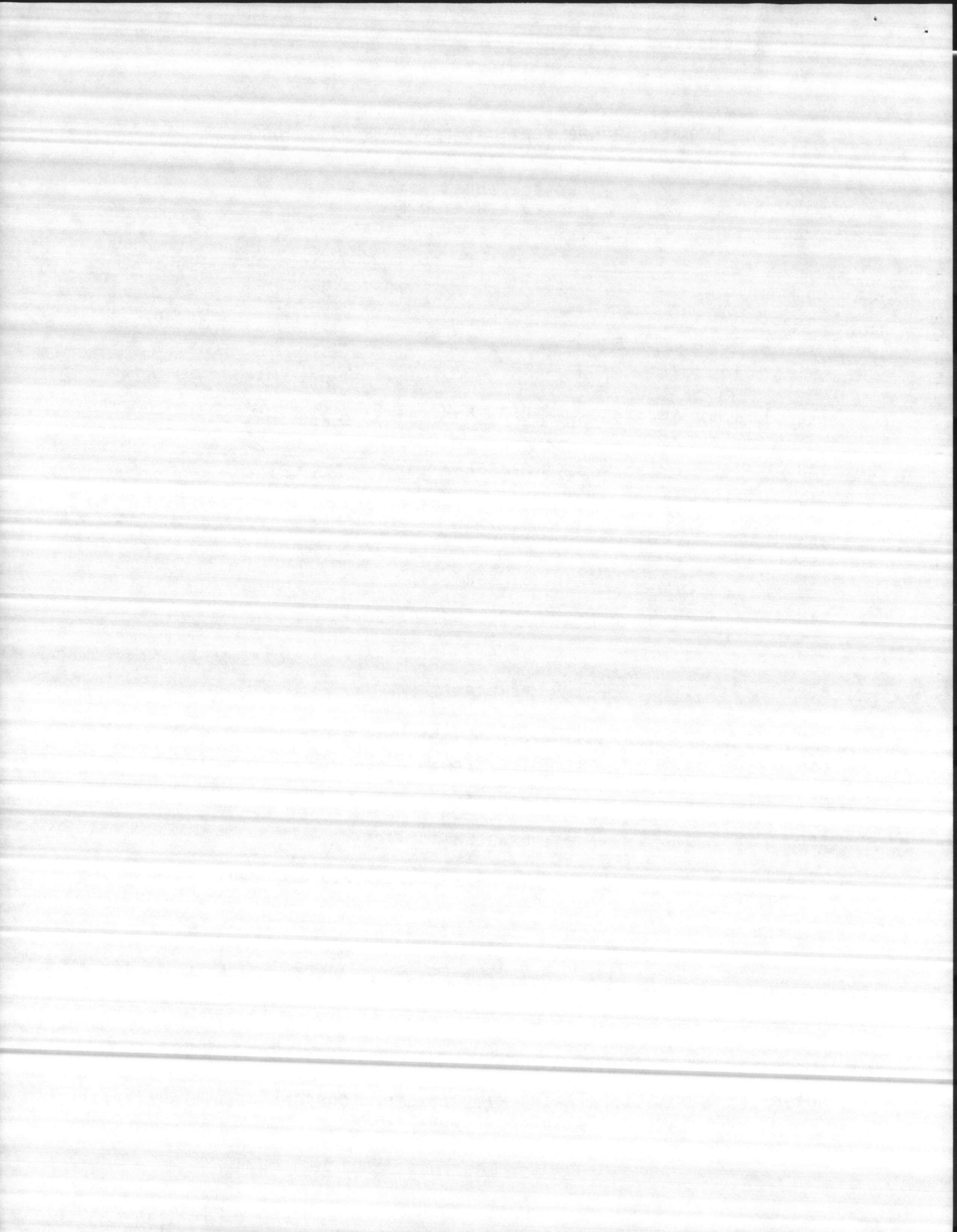
RECOMMENDED REPLACEMENT PARTS LIST  
GOULDS PUMPS VERTICAL PRODUCTS DIVISION

SO#: \_\_\_\_\_ PRODUCT LUBRICATION  
PACKED STUFFING BOX  
CUST#: \_\_\_\_\_  
PO#: \_\_\_\_\_  
BO#: \_\_\_\_\_  
ITEM: \_\_\_\_\_  
SERVICE: \_\_\_\_\_

ITEM #	QUANTITY	PART NAME
608	1	HEADSHAFT
617	1	BEARING-STUFFING BOX
620A	1 SET	PACKING
646	X	LINESHAFT
649	X	COUPLING-LINESHAFT
653	X	BEARING-LINESHAFT
660	1	PUMPSHAFT
672	N	BEARING-BOWL
673	N	IMPELLER
677	N	TAPER LOCK
690	1	BEARING-SUCTION BELL
779A	1	GASKET-STUFFING BOX TO HEAD

NOTES: X = QUANTITY VARIES WITH LENGTH. CONSULT BILL OF MATERIALS.  
N = NUMBER OF STAGES OF BOWL ASSEMBLY.





CUSTOMER NAME - TENCARVA SERIAL NUMBER -- 121669

INDEX # - MEMPHIS DESCRIPTION MEMPHIS WAREHOUSE

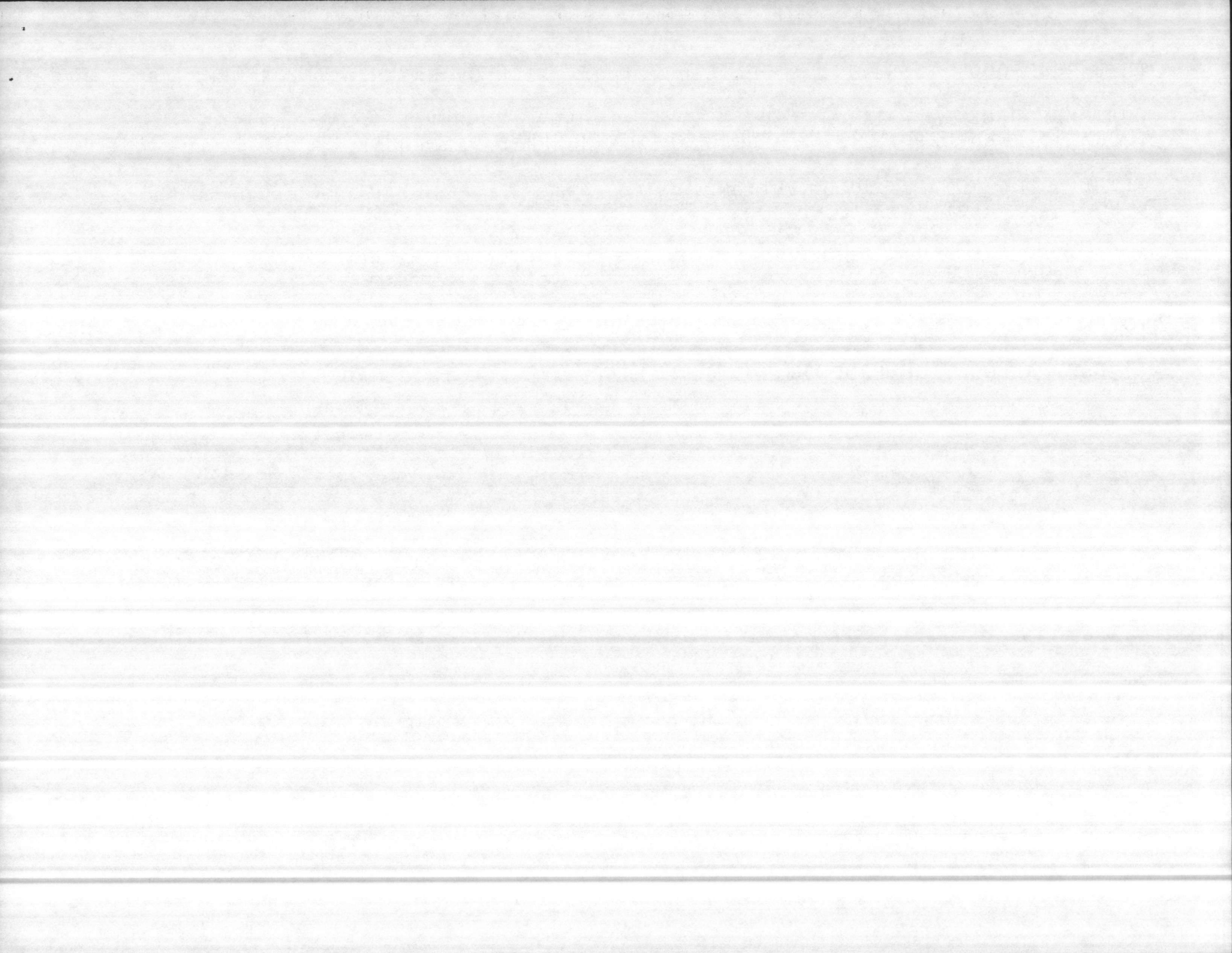
LINE NO	TOTAL QTY	DESCRIPTION	PART #
---------	-----------	-------------	--------

1		10NP VHS WF1 1800 NRR 230/460V	MISC.
---	--	--------------------------------	-------

TOTAL	1		
-------	---	--	--

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





CUSTOMER NAME - TENCARVA SERIAL NUMBER - 121669

INDEX # - DHH06W 0000 DESCRIPTION ASSY DISCH HD 06 WL

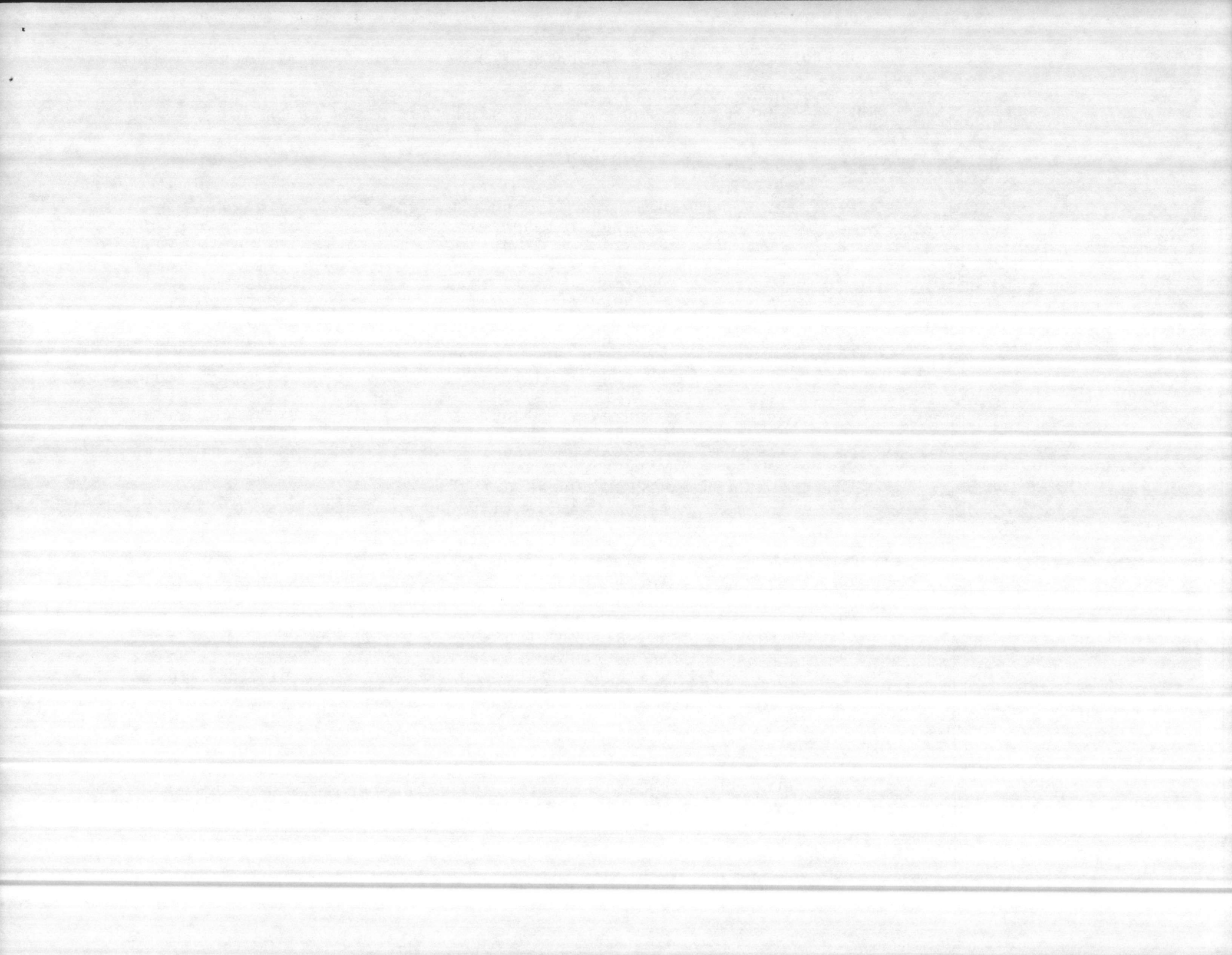
LINE NO	TOTAL QTY	DESCRIPTION	PART #
1	1	DISCH HD 6X12"BD FLG	C019888 1003
8	1	LINESRAFT 1.00" DIA	C02036B02 2227
10	25	BARSTOCK 1.00"DIA	2227 0100 2227
12	1	NUT ADJ 1.00"	IE459 1018
13	1	SCR PAN HEAD 10-32x1.25	49505 262 2298
14	1	SLINGER 1.0	A5775 2 5121
15	1	GLAND SPLIT 1.00" SFT	B01292B01 1193
17	1	PACKING 1.00"X.38 5 RING	C00779B15 5026
18	1	STUFFING BOX 1.00 SFT RDSN	C01942B 1003
19	1	BRG BRZ 1.00"ID1.25"ODX2.25"LG	IE310 1104
51	1	GASKET STUFF BOX #6 .03 THK	B2749 4 5136
52	2	STUD SB .50-13NCX2.75	91786 84 2130
53	2	NUT HEX .50IN	49507 7 2130
54	6	SCR CAP HEX .50-13 UNC 1.50"LG	49511 204 2210
55	6	WASHER LOCK HEL SPRING .50"	49522 7 6953
56	1	NIPPLE COLUMN 6X12	A5776 5 6521
57	1	RING LOCK 6IN DISCH HD	A958-B 1018
54	2	PLUG PIPE HEX HD .5IN 14NPT	63122 4 2210
65	1	PLUG PIPE HEX HD .75IN 14NPT	63122 5 2210
66	1	PLUG PIPE HEX HD 1.5IN 11NPT	63122 8 2210
68	1	TAG HEAD	A00030B 3211
69	2	FASTENER MTL TACK NAME PL .25	A00206B03 0000
70	4	SCR CAP HEX .37-16 UNC 2.75"LG	49511 109 2210
72	4	NUT HEX STD THD WNC .37"	49507 104 2210
73	4	WASHER LOCK HEL SPRING .37"	49522 5 2210
74	1	FLG COL 6" THRU THD	B01431B 1003
	1	BARSTOCK 1.00"X1/5/2"StubSA	2227 0100 2227

TOTAL 89

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

Moore's Continuous Interlocks 309





CUSTOMER NAME - TENCARVA SERIAL NUMBER - 121669

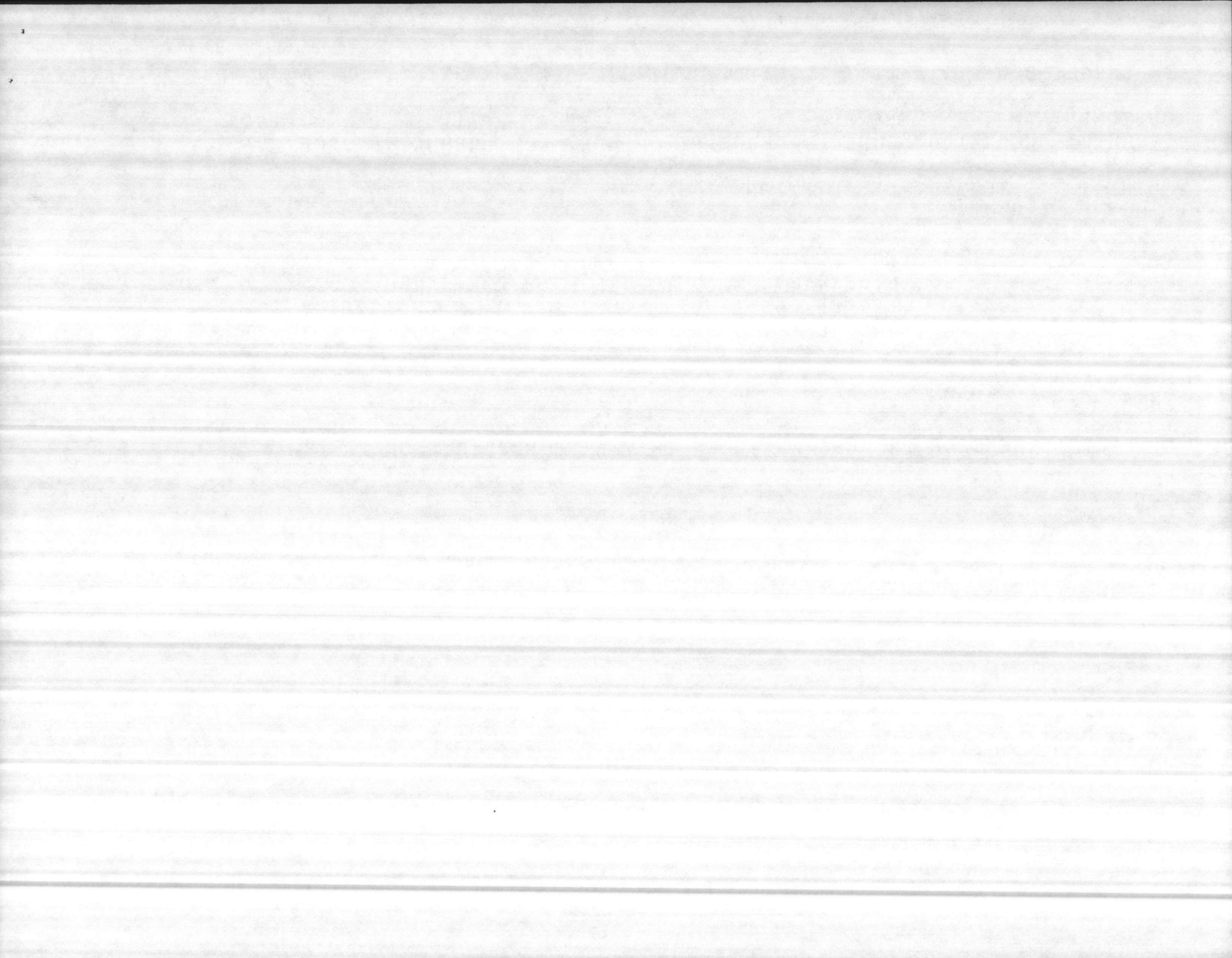
INDEX # - CC05X100W 0000 DESCRIPTION ASSY COL CHROME WL SPCL

LINE NO	TOTAL QTY	DESCRIPTION	PART #
	10	COLUMN 6" STRNR TRD 59.25"LG	B00075B05 6501
	5	LINESHAFT 1.00X10 ELS	A00041B02 2227
	10	SPIDER OLS 1.00X6	CO012ZB14 1102
	8	CPLG LS 1.00" DIA	IE112 2210

TOTAL 33

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







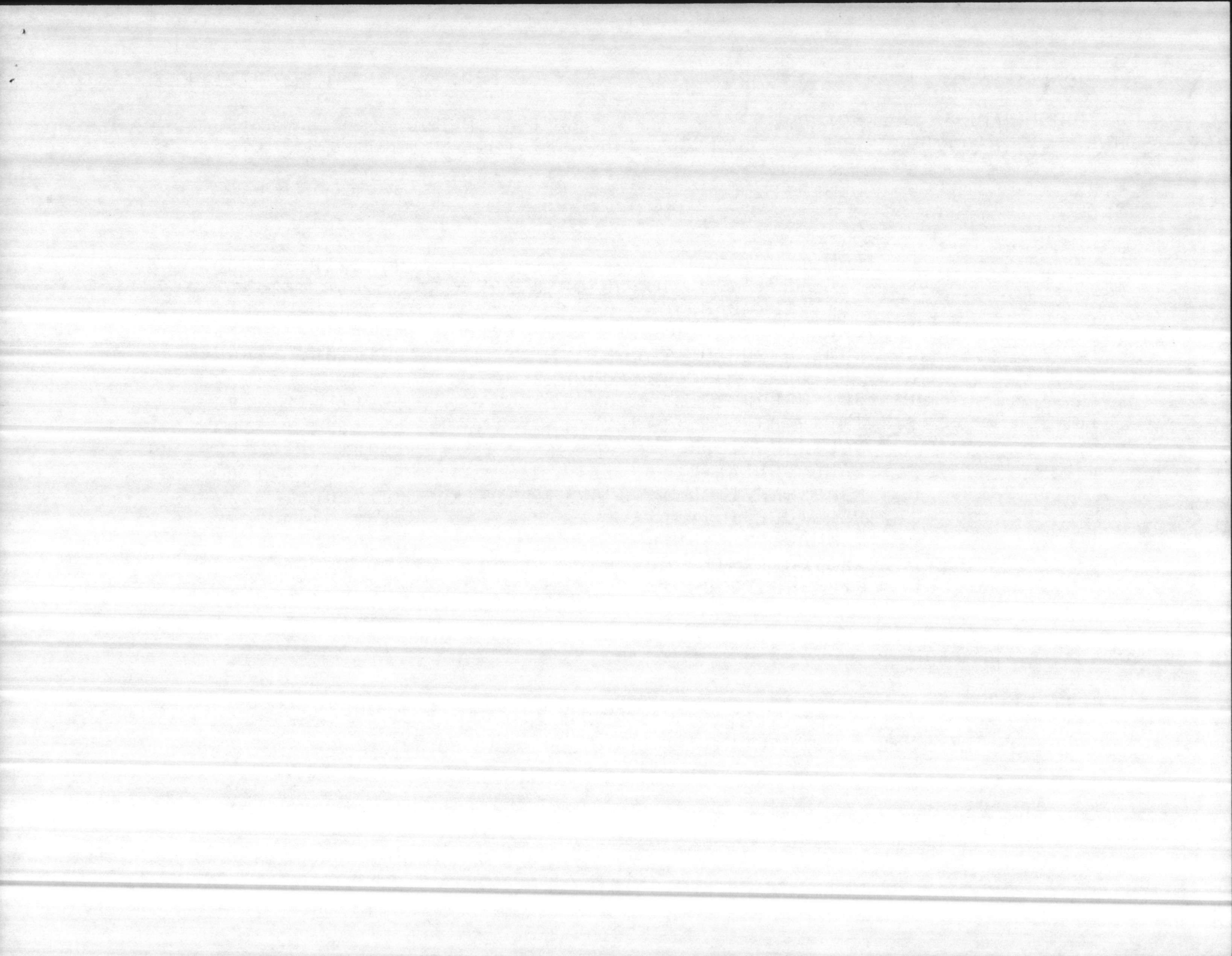
CUSTOMER NAME - TENCARVA SERIAL NUMBER - 121659

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	4	BOWL INTMD BRJO	B01281B 6911
9	4	BRG BRZ 1.50OD 1.19ID 2.25"LG	A01651B 1104
13	1	BOWL DISCH OLS 8X6	B01810B 1003
14	1	BRG BRZ 1.19"ID1.50"ODX3.50"LG	A01650B 1104
15	40	SCR CAP HEX .37-16UNCX1.00" LG	49511 102 2298
18	4	IMPLR BRJO 5.25 MAX DIA.	A8155 1102
19	4	TAPERLOCK 3D/J	IE331 2242
20	1	SAND COLLAR 1.18" SFT	B00513B 1101
22	1	PUMPSHAFT1.00X1.18"BRJ 05-BOWL	B01780B01 2227
24	42	BARSTOCK 1.18"DIA	2227 0118 2227
31	1	NAMEPLATE BOWL UNIT	A00029B 3211
32	2	FASTENER MTL TACK NAME PL .25	A00206E03 0000
	1	STRAINER CONE 5 M	A8935 2 6952

TOTAL 108

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





# SOURCE INFORMATION GROUND WATER

Date Form Completed

M M D D Y Y  
 0 1 0 9 9 5

PWSID  
 0  
4  
6  
7  
0  
4  
2

Owner Assigned source Code

502

Well Name (If purchase, name of system)

~~MCAAS WATER PLANT~~ 502

Code

G

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

If Purchase, seller ID#

\_\_\_\_\_

Source Begin Date

M M Y Y  
 \_\_\_\_\_

Source exempt—

SWTR?  Y  N

Direct Influence Date

M M D D Y Y  
 \_\_\_\_\_

Availability

A

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

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

A STREET \_\_\_\_\_

Latitude (N)

3 4 4 4 0 7

Longitude (W)

0 7 7 2 7 2 8

How Determined

G=GPS  
 M=Map  
 S=Surveyed

GPS Data

Q# or DOP#

No. of Sats. Locked on

\_\_\_\_\_

(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

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

Availability

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

Owner Assigned Entry Point Code

400

Entry Point Name

~~MCAAS~~ NEW RIVER WTP

Location: \_\_\_\_\_

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

Sources of pollution/distance: 45' to street 30' to R/W ditch (chlorides @ ± 300 mg/l)

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

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

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

Condition of house: OK Type of freeze protection: None

Well: Diameter: 10 Type: Open Hole Yield (gpm): 400 Properly sealed?  (Y,N)

Properly vented?  (Y,N) Casing depth 110 ft. (If unknown, put 'UNK') Well depth: 184 Meter available?  (Y,N)

Concrete slab adequate? \_\_\_\_\_ (Y,N) If no, explain: \_\_\_\_\_ Size: 8x12

Size of blow-off: 2' Sample tap: Before treatment?  (Y,N) After treatment? \_\_\_\_\_ (Y,N)

Pumps: Capacity: GPM: 235 HP: 10 Pump intake depth: 50 Auxiliary Power?  (Y,N)

Type pump: VERTICAL TURBINE Height above floor (pump/casing): 9.0

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)

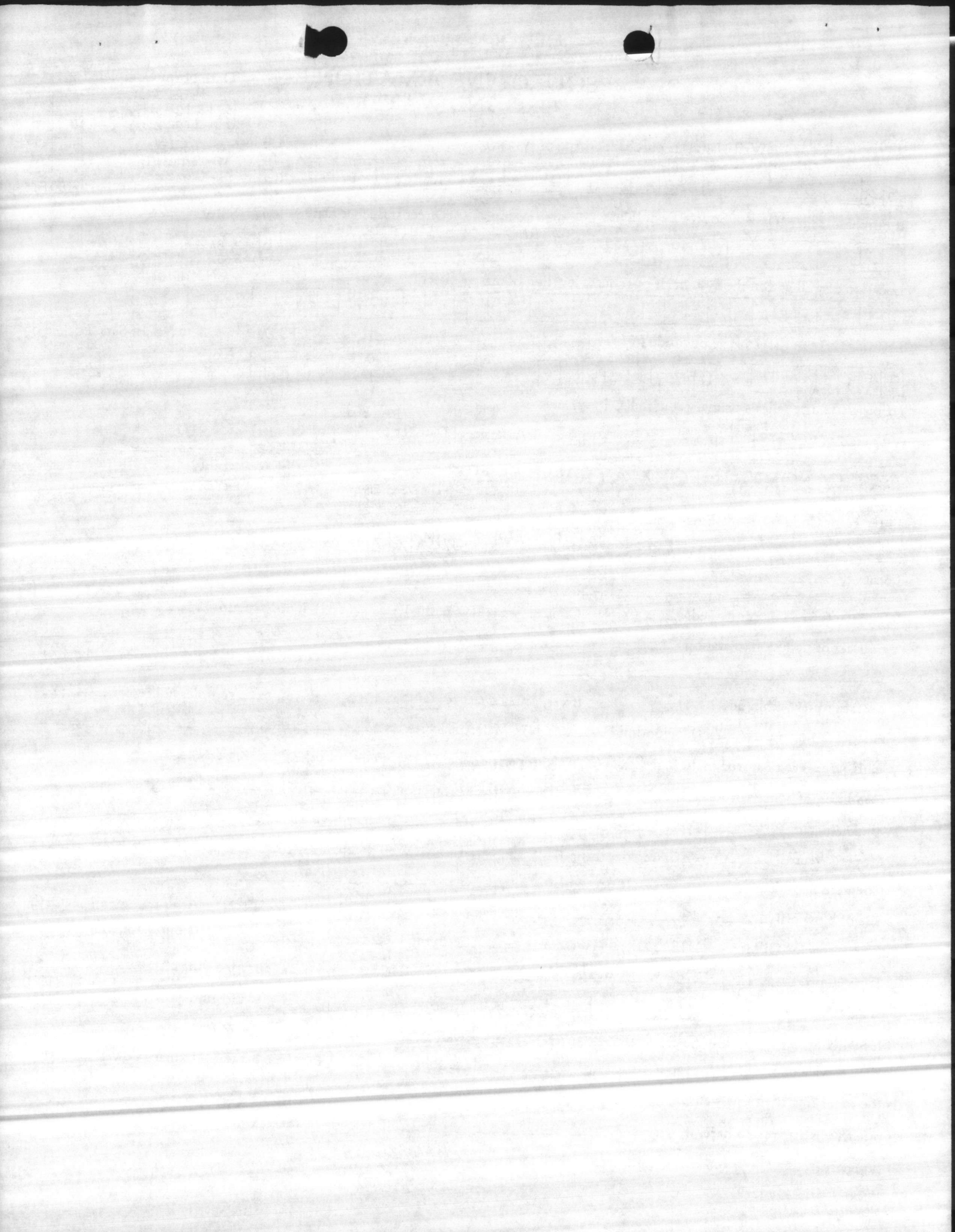
Is the water treated at this well?  (Y,N) If yes, complete back of form.

If other wells are treated here, which ones? \_\_\_\_\_ If treated elsewhere, where? MCAAS/WATER PLANT

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

① No vent  
 ② No meter





TC

WELL NUMBER 502		BY	DATE 6-3-92			
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
50	21	23	2	39	2"- 85	
		24	3	35	6"- 150	
		24	3	30	10"- 190	
		25	4	25	15"- 235	<i>Person 1st</i>

REMARKS *Dead head @ 43 PSI*  
*6" X 5' Column*  
*1" X 10' shaft*  
*5" X 10' Tail + strainer*

ANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE
<i>Howell</i>	<i>4</i>	<i>121669 model 8R/SHO</i>		





WELL NUMBER TC 502

BY Thomas Cox

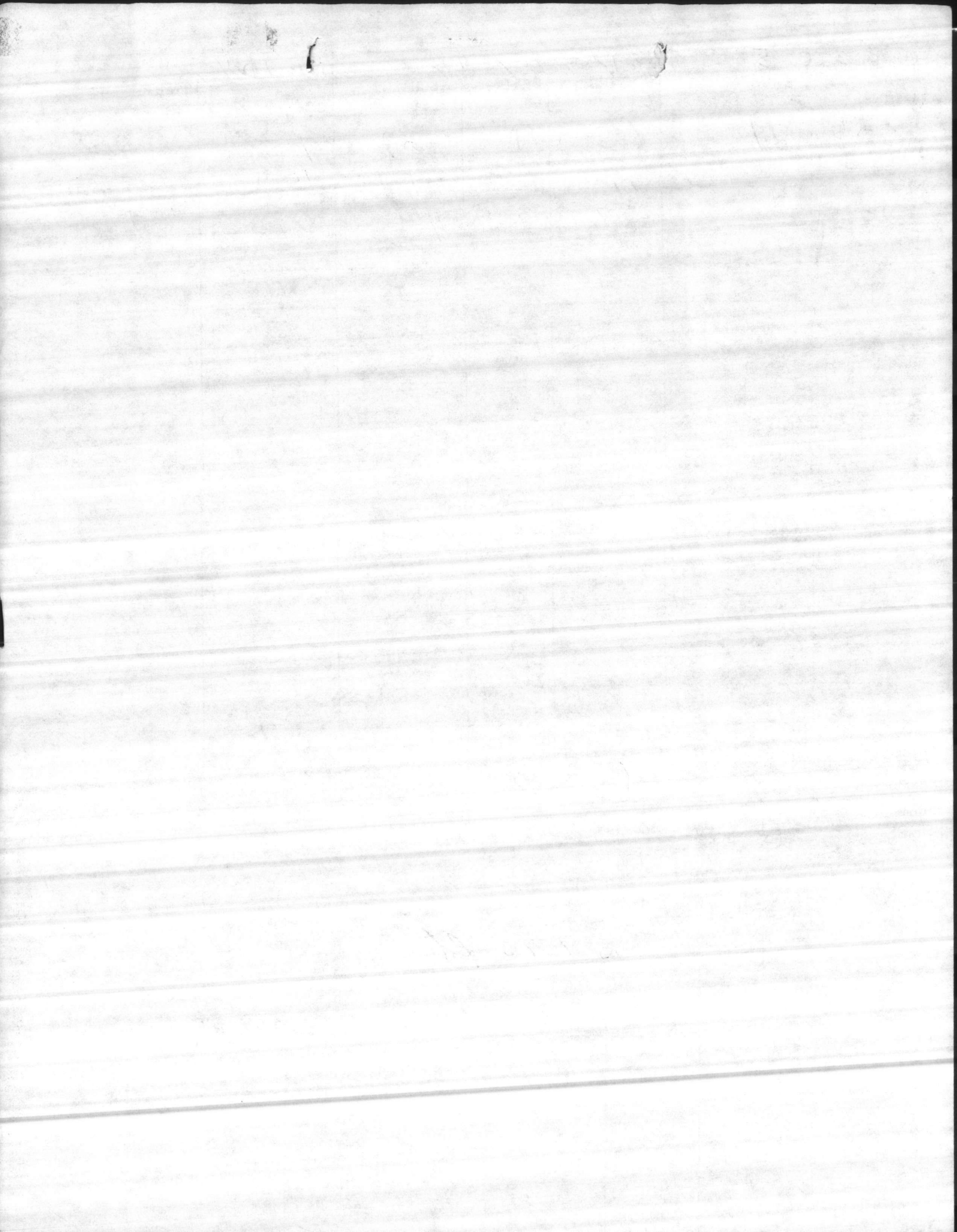
DATE 10-4-90

AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
50	24	25	1	22	105	55
		26	2	19	150	05
left out		27	3	16	180	15

REMARKS

line pressure 24 PSI  
dead head 25 PSI  
57.75 ft

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

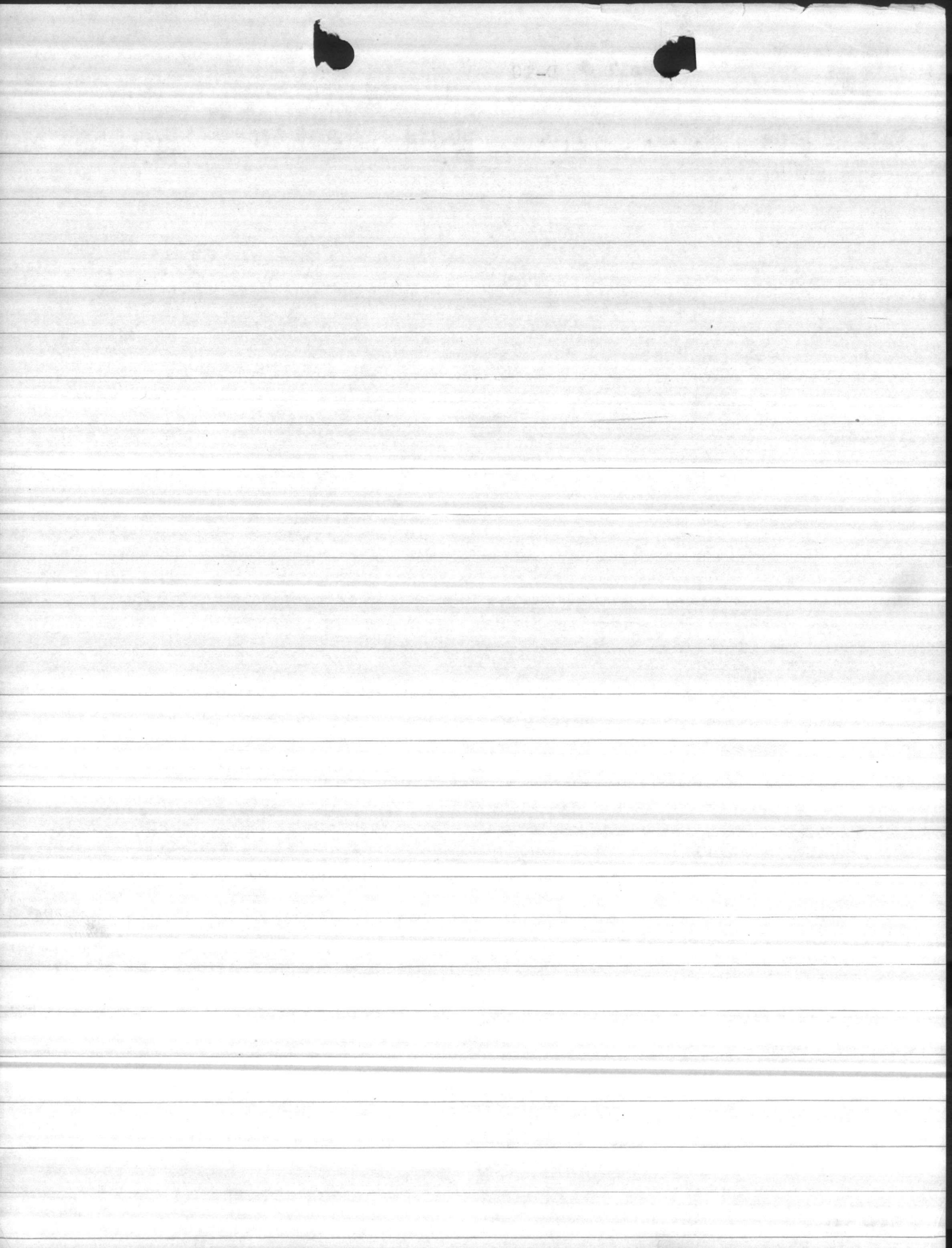


Well # D-TC 502

Date	Line Ft	G.P.N.	D.D. El.	Static El.	Shut Off Head	D.D. Ft.
------	------------	--------	-------------	---------------	------------------	-------------

Air line





June 24, 1941

SAMPLE FROM WELL NO. 3 AT 184 FT. AFTER 30 MIN. PUMPING.

Total Solids	1152	ppm
Volatile Solids	273	"
Suspended Solids	52	"
Disolved Solids	1100	"
Phenolphthalein Alkalinity	38	"
Total Alkalinity	450	"
Chlorides	324	"
Sulphates	96.9	"
Carbonates	76	"
Bi-carbonates	374	"
Silica & Insoluble in HCl	18.8	"
Iron & Aluminum as Fe	4.65	"
Calcium	4	"
Magnesium	4.9	"
Sodium & Potassium as Na	394.5	"
pH	Above	8.4
H <sub>2</sub> S	Very Distinct	
Total Hardness as CaCO <sub>3</sub>	40	"

By \_\_\_\_\_

W. H. Kellam  
Chemist







SAMPLE FROM WELL NO. 3 at 50 FEET

Total Solids	334 PPM
Disolved "	294 PPM
Suspended "	40 PPM
Phenolphthalein Alkalinity	26 PPM
Total "	192 PPM
Chlorides	15 PPM
Sulphates	3.843 PPM
Carbonates	52 "
Bicarbonates	140 "
Silica - As SiO <sub>2</sub>	11.6 "
Iron and Aluminum - as Fe	3.9 "
Calcium As Ca	105.18
Magnesium	2.18
Sodium & Potassium As Na	9.44 PPM
Pn	8.0
TOTAL HARDNESS as CaCO <sub>3</sub>	279 PPM
CARBONATE HARDNESS as CaCO <sub>3</sub>	192 PPM
NON "	87 PPM





25 June 1941

SAMPLE FROM WELL NO. 3 AT 184 FT. AFTER 7 1/2 HOURS PUMPING.

Total Solids	1246	PPM
Volatile Solids	<sup>166</sup> 1080	"
Suspended Solids	66	"
Disolved Solids	1180	"
Phenolphthalein Aklalinity	40	"
Total Alkalinity	460	"
Chlorides	312	"
Sulphates	95.3	"
Carbonates	80	"
Bicarbonates	380	
Silica & Insoluble in HCl	21.4	
Iron & Aluminum as Fe	3.2	
Calcium	22.2	
Magnesium	5.6	
Sodium & Potassium as Na	434.9	
pH	above 8.4	
H2S	Very distinct	
Total Hardness as CaCO3	84.2	

By \_\_\_\_\_

N. H. Kellam  
Chemist



1961 June 22

RECEIVED FROM THE U.S. AIR FORCE AT WASHINGTON, D.C.

179	1241	Total Solids
"	1000	Volatile Solids
"	88	Inorganic Solids
"	1110	Unfiltered Solids
"	85	Filtered Solids
"	454	Total Alkalinity
"	316	Free Alkalinity
"	138	Combined Alkalinity
"	150	Hardness
"	214	Calcium Hardness
"	28	Magnesium Hardness
"	2.2	Calcium Chloride
"	2.2	Magnesium Chloride
"	4.4	Total Chloride
"	3.3	Free Chloride
"	1.1	Combined Chloride
"	3.3	Total Chloride

M. H. Jones  
Analyst

#1

SAMPLE FROM WELL NO. 2 @ 50 ft

50 CC SAMPLE BI CARBONATES = 140 PPM

P = 1.2 CARBONATES = 52 PPM

T = 9.6 TOTAL ALKALINITY = 192 PPM

PH 8.0

#2 SAMPLE FROM TAP IN LABORATORY

50 CC SAMPLE BI CARBONATES = 400 PPM

P = 1.2 CARBONATES = 48 PPM

T = 22.4 TOTAL 448 PPM

#3 SAMPLE TAKEN DIRECT FROM WELL NO. 1

50 CC SAMPLE BI CARBONATES 402

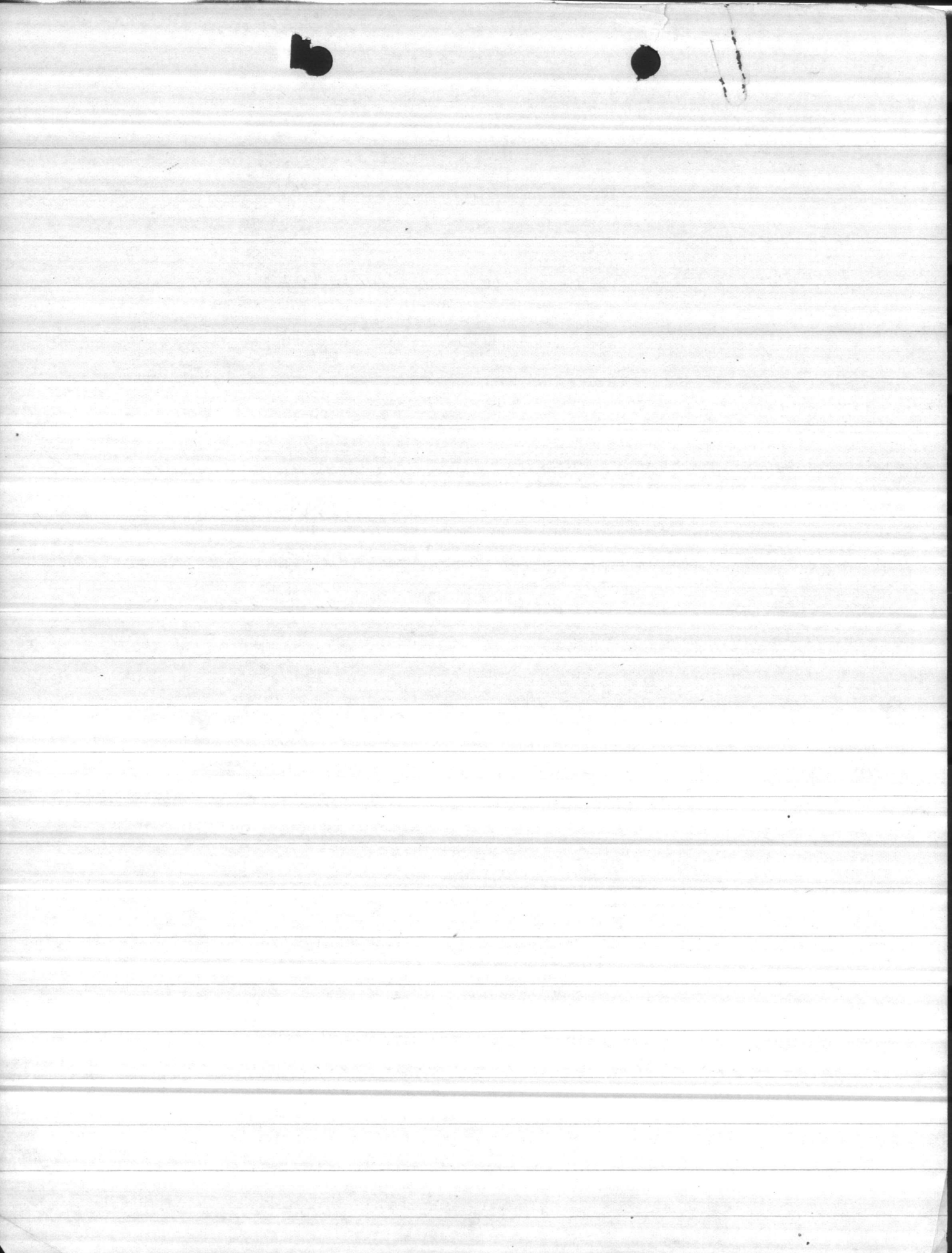
P = 1.2 CARBONATES 52 PPM

T = 22.7 TOTAL 454

PH 8.1

SAMPLE HAS A DISTINCT H<sub>2</sub>S ODOR

AFTER 5 MI. AERATION H<sub>2</sub>S ODOR VERY FAINT





WATER ANALYSIS

By \_\_\_\_\_

Date 8-13-43

Sample from WELL D  
TENT CAMP

Total Solids \_\_\_\_\_ PPM      Dissolved Solids \_\_\_\_\_ PPM

Suspended Solids \_\_\_\_\_ PPM      Volatile Solids \_\_\_\_\_ PPM

Phenol. Alk. as CaCO<sub>3</sub> 0 PPM      Silica as SiO<sub>2</sub> \_\_\_\_\_ PPM

Total Alk. " " 409 "      Ferrous Iron as Fe \_\_\_\_\_ "

Carbonates " " \_\_\_\_\_ "      Total Iron as Fe 0.2 "

Bicarbonates " " \_\_\_\_\_ "      Aluminum as Al. \_\_\_\_\_ "

Chlorides as Cl. 250 "      Calcium as Ca. \_\_\_\_\_ "

Sulphates as SO<sub>4</sub> \_\_\_\_\_ "      Magnesium as Mg. \_\_\_\_\_ "

Nitrites as NO<sub>2</sub> \_\_\_\_\_ "      Sodium as Na. \_\_\_\_\_ "

Carbon Dioxide as CO<sub>2</sub> \_\_\_\_\_ "

pH 8.1      Soap Hardness as CaCO<sub>3</sub> 64 PPM

Odor \_\_\_\_\_      Turbidity \_\_\_\_\_

REMARKS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WATER ANALYSIS

By \_\_\_\_\_  
Date \_\_\_\_\_  
Sample from \_\_\_\_\_

Total Solids \_\_\_\_\_ PPM  
Dissolved Solids \_\_\_\_\_ PPM  
Suspended Solids \_\_\_\_\_ PPM

Total Hardness as CaCO<sub>3</sub> \_\_\_\_\_ PPM  
Calcium as Ca \_\_\_\_\_ PPM  
Magnesium as Mg \_\_\_\_\_ PPM  
Total Iron as Fe \_\_\_\_\_ PPM  
Aluminum as Al \_\_\_\_\_ PPM  
Copper as Cu \_\_\_\_\_ PPM  
Zinc as Zn \_\_\_\_\_ PPM  
Manganese as Mn \_\_\_\_\_ PPM  
Carbon Dioxide as CO<sub>2</sub> \_\_\_\_\_ PPM

pH \_\_\_\_\_  
Chlorine \_\_\_\_\_ PPM

Remarks \_\_\_\_\_  
\_\_\_\_\_