FILE FOLDER

DESCRIPTION ON TAB:

MCAS 1251 (R) Well

☑ **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**

Confidential Records Management, Inc.
New Bern, NC
1-888-622-4425
9/08

North Carolina Department of Environment, Health and Natural Resources
Division of Environmental Management
Groundwater Section
P.O. Box 27687
Raleigh, N.C. 27611

TC 1257

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: 1/25/01
6. TOTAL DEPTH: 150' DIAMETER: 8"
7. CASING REMOVED:

feet	diameter

8. SEALING MATERIAL:

Neat cement		Sand cement	
bags of cement	7500 LBS	bags of cement	
gals. of water	321	yds. of sand	
		gals. of water	

Other
Type material ______
Amount ______

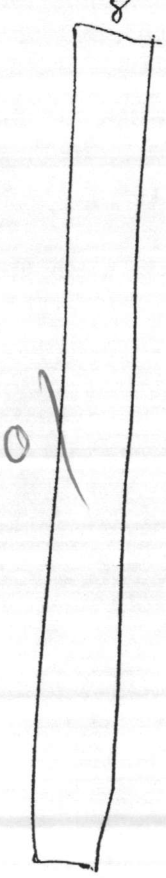
9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL
   pump

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

David S. Quinn 1/25/01
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.

8"



150 feet deep
Screen depth NA

Abandoned 9-21-01

Provide the well owner a copy of this record.

GW (revised 1/90)

N Carolina Department of Environment, Health, and
Division of Environmental Health, Public Water Supp ction

SOURCE INFORMATION GROUND WATER

Date Form Completed (M M D D Y Y): 0 1 2 7 9 5

PWSID: 0 4 6 7 0 4 2

Owner Assigned Source Code: 251

Well Name (If purchase, name of system): ~~MCAS WATER PLANT~~ WELL TC /251

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: P — P=Permanent, E=Emergency, S=Seasonal, I=Interim, O=Other

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

Latitude (N) Deg. Min. Sec.: 34 43 29.

Longitude (W) Deg. Min. Sec.: 077 27 10.

How Determined: M — 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, E=Emergency, S=Seasonal, I=Interim, O=Other

Owner Assigned Entry Point Code: 400

Entry Point Name: ~~TC/25~~ MCAS NEW RIVER WTP

Location:

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

Sources of pollution/distance: 60' to Rd & R/W ditch @ 40' monitoring wells on site for prev. UST (Remove

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

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

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: None

Well: Diameter: 8" Type: SCREENED Yield (gpm): 200 Properly sealed? Y (Y,N)

Properly vented? N (Y,N) Casing depth UNK ft. (If unknown, put 'UNK') Well depth: 240 Meter available? N (Y,N)

Size: 12x12

Concrete slab adequate? Y (Y,N) If no, explain: well not in center

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

Pumps: Capacity: GPM: 183 HP: ____ Pump intake depth: 70 Auxiliary Power? ____ (Y,N)

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

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? N Y/N If yes, complete back of form.

If other wells are treated here, which ones? ____ If treated elsewhere, where? MCAS / WATER PLANT

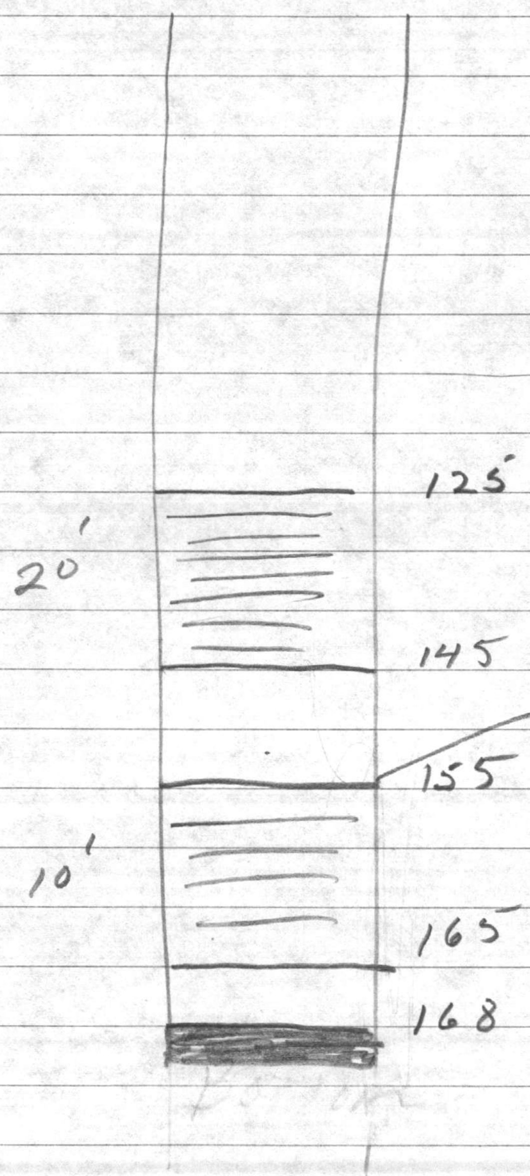
If purchase, retreat? Y / N If yes, complete back of form.

(1) No vent

(2) No meter

DEHNR 3803 (Revised 12/93)
Public Water Supply Section (Review 12/96)

TC 125'   2-1-95



closed up
By Scott Barner
the week of
2-6-95

WELL NUMBER 1251		BY Stevenson & Peterson			DATE	
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
80	22	25	3	30	100	45
		25	3	25	122	55
		25	3	20	140	05
		25	3	15	157	15
		25	3	10	175	

REMARKS 54 PSI D/H

0 PSI - 210 GPM

thread Both end

Need 23" - 4" pipe & CAP

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER 1251		BY THOMAS / STEVENSON			DATE 5-9-94	
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
80	17	19	2	35	100	15
		20	3	30	125	25
		20	3	25	137	35
		20	3	20	159	45
		20	3	15	170	55
LEFT SET →		20	3	10	183	05

REMARKS Dead head @ 55

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER AS 1251	BY THOMAS/COX			DATE 11-7-90		
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
80	20	24	4	20	110	20
⟶	⟶ [illegible]	26	6	10	150	30

REMARKS

Dead head 40

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER 1251 BY THOMAS / HUNTER DATE 6-28-89

AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
80	20	22	2	35	104	00
		23	3	30	122	10
		24	4	20	146	20
		25	5	15	175	30
left set →		26	6	10	185	40

REMARKS Pend head @ 55

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER 1251		BY THOMAS / BROWN			DATE 1-4-85	
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME 0830
80'	26	28	2	38	104	0840
		28	2	35	111	0850
		28	2	30	143	0900
		29	3	20	172	0910

REMARKS

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

TAS 1251

10-8-85

AL	SL	PL	DD	PSI	GPM	Time
80	25	25	–	37	100	15
		25	–	34	115	15
		25	–	30	133	15
		26	1	26	149	15
		26	1	20	175	15
		26	1	15	190	15

left set at 20 PSI 175

1251

DATE	LENGTH OF AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAW DOWN	DISCHARGE PRESSURE	CAP. PER FOOT OF DRAW DOWN	Time ~~TOTAL~~ ~~GPM.~~
July 22, 82	80'	23'	24'	1'	39	104	1050
			25'	2'	36	119	1115
			25	2'	33	133	1130
			25	2'	30	146	1145

REMARKS: Left set at 30 PSI 146 GPM
used direct reading gage
at 0 PSI. 199 GPM has 27' pumping level

...OF:
...
...
...:
...
...DATH:

#25

Floating Aerators • Water & Sewage Pumps • Sewage Lift Stations

EPI

ENVIRONMENTAL PRODUCTS INC.

P. O. BOX 2385 HICKORY, NORTH CAROLINA 28601 TELEPHONE 704/322-7003

Prepared For: Carolina Well & Pump Company

Project: N62470-73B-1155

Location: New River Utilities Expansion - MCAS (Helicopter)

Subject: Well "R"

Conditions: 150 GPM @ 110' TDH, 1770 RPM - Setting 86' 15/8"

Description:

One (1) Crane Deming Figure 4700, size XH6, eight stage bowl assembly, with SD-44-10 discharge head, seventy feet of 4" x 1 1/4" column and shafting, for the above design conditions, water lubricated with suction pipe, strainer, Johnson Model HA-15, 1:1 ratio right angle gear drive, and 7 1/2 HP, 1800 RPM, 3 phase, 60 cycle, ~~230/460~~ 200 volt, vertical hollow shaft motor, with non-reverse ratchet, 1.15 service factor, 213TP10 frame, open dripproof, WP-1 enclosure.

APPROVED
SUBJECT TO REQUIREMENTS OF SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES
CONSULTING ENGINEERS
BY: MJE
DATE: 6-13-75

April 14, 1975

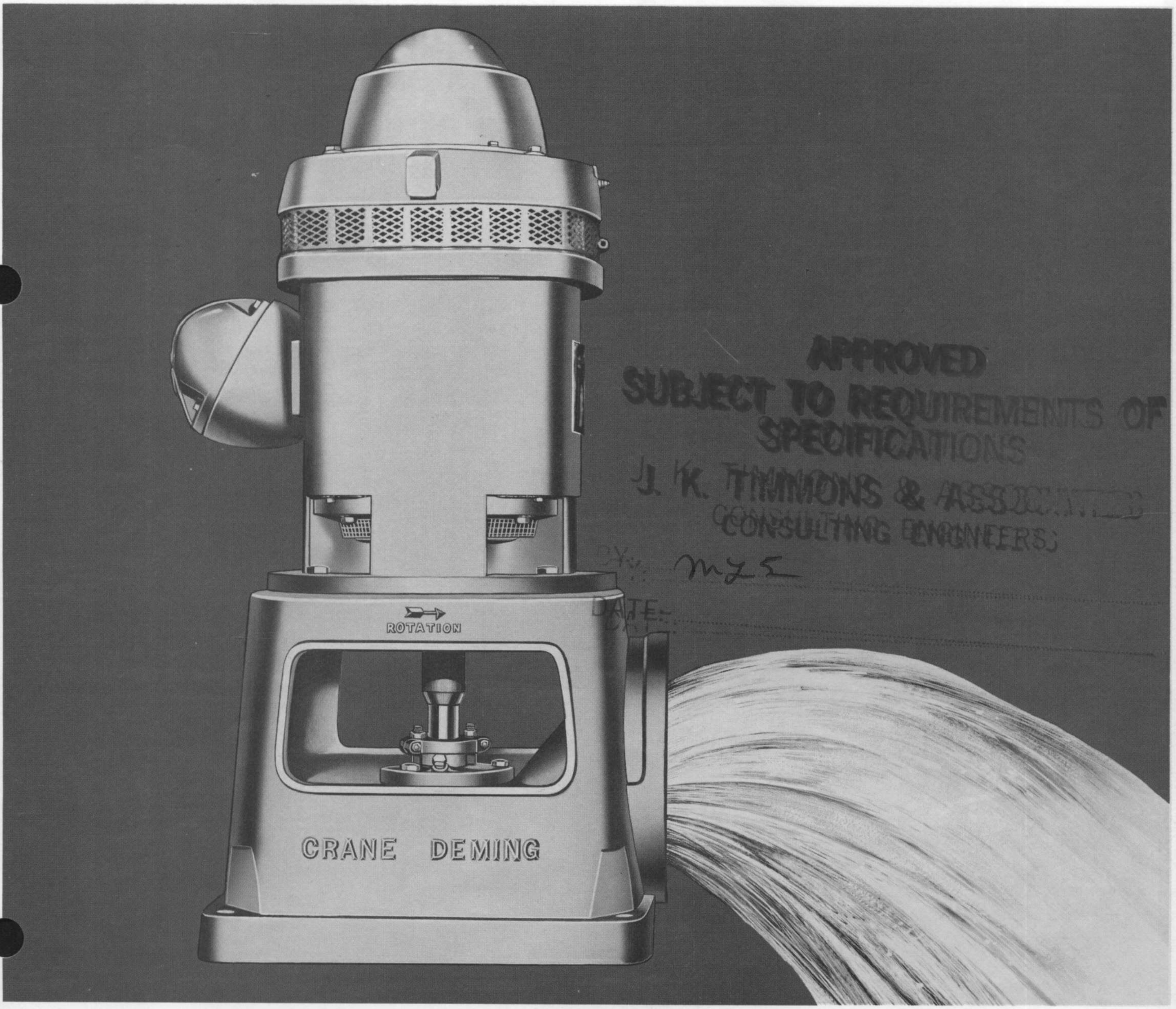
Well "R"
Bans #25

CRANE DEMING

BULLETIN NO. 4700B

Water and Oil Lubricated

VERTICAL TURBINE PUMPS



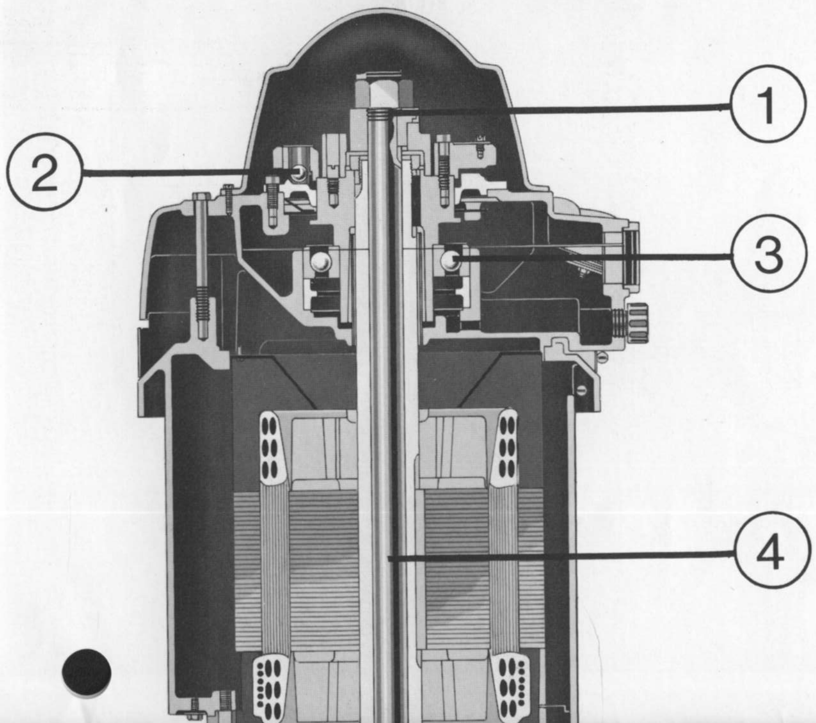
PRECISION ENGINEERED TO FILL EVERY MUNICIPAL, INDUSTRIAL & AGRICULTURAL REQUIREMENT

CRANE DEMING

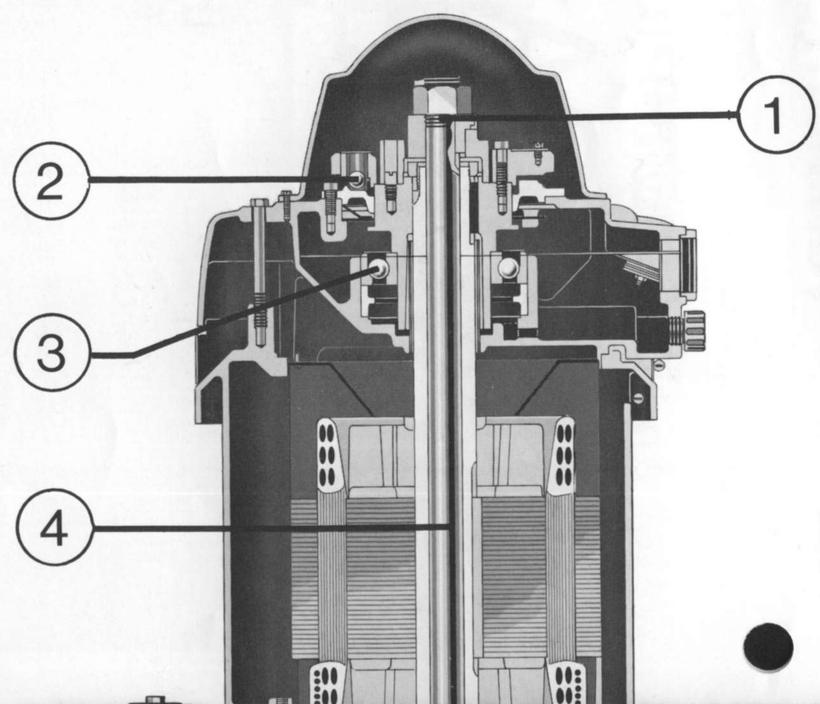
VERTICAL TURBINE PUMPS

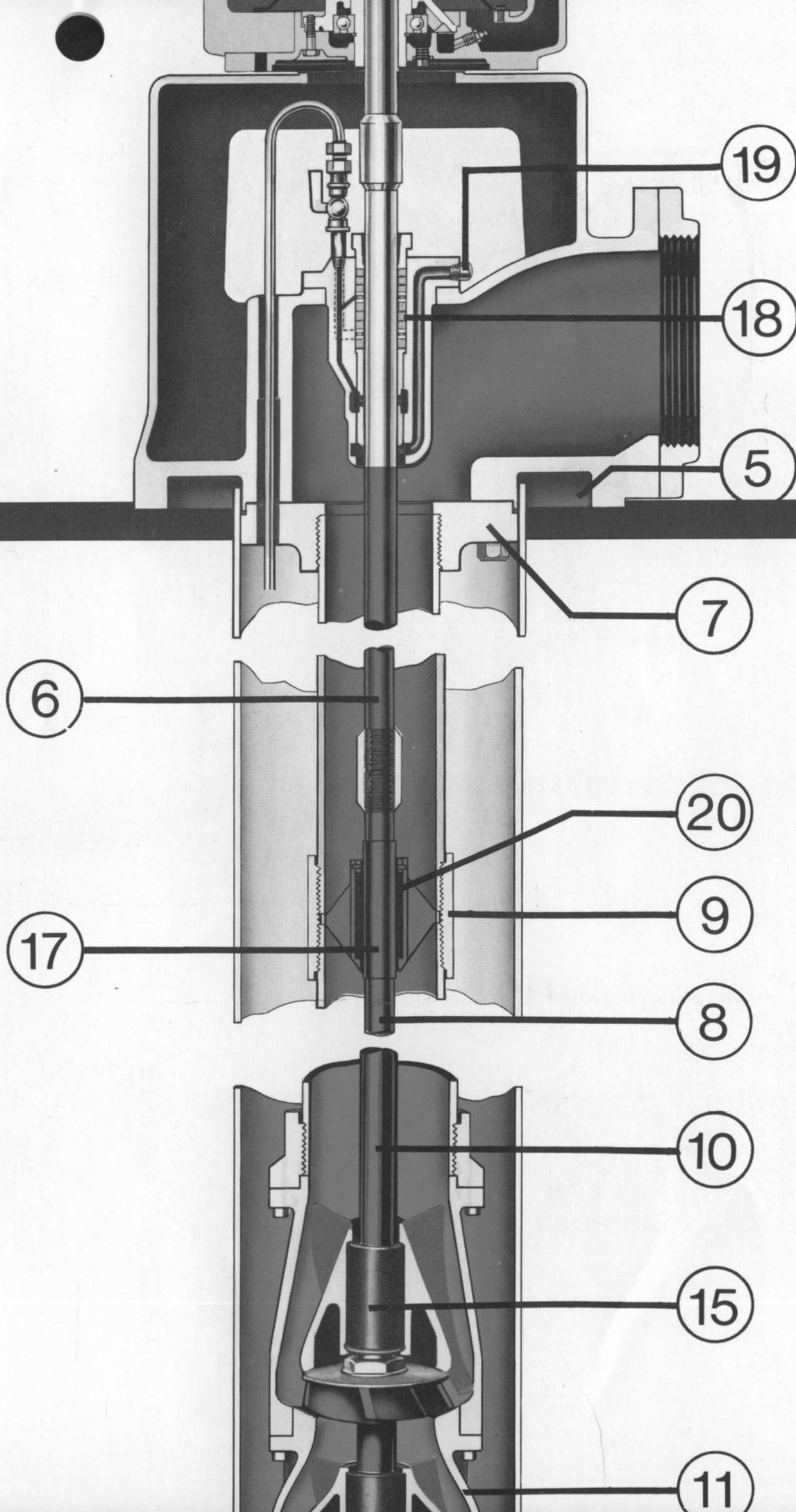
precision engineered to fill every municipal, industrial & agricultural requirement

WATER LUBRICATED



OIL LUBRICATED

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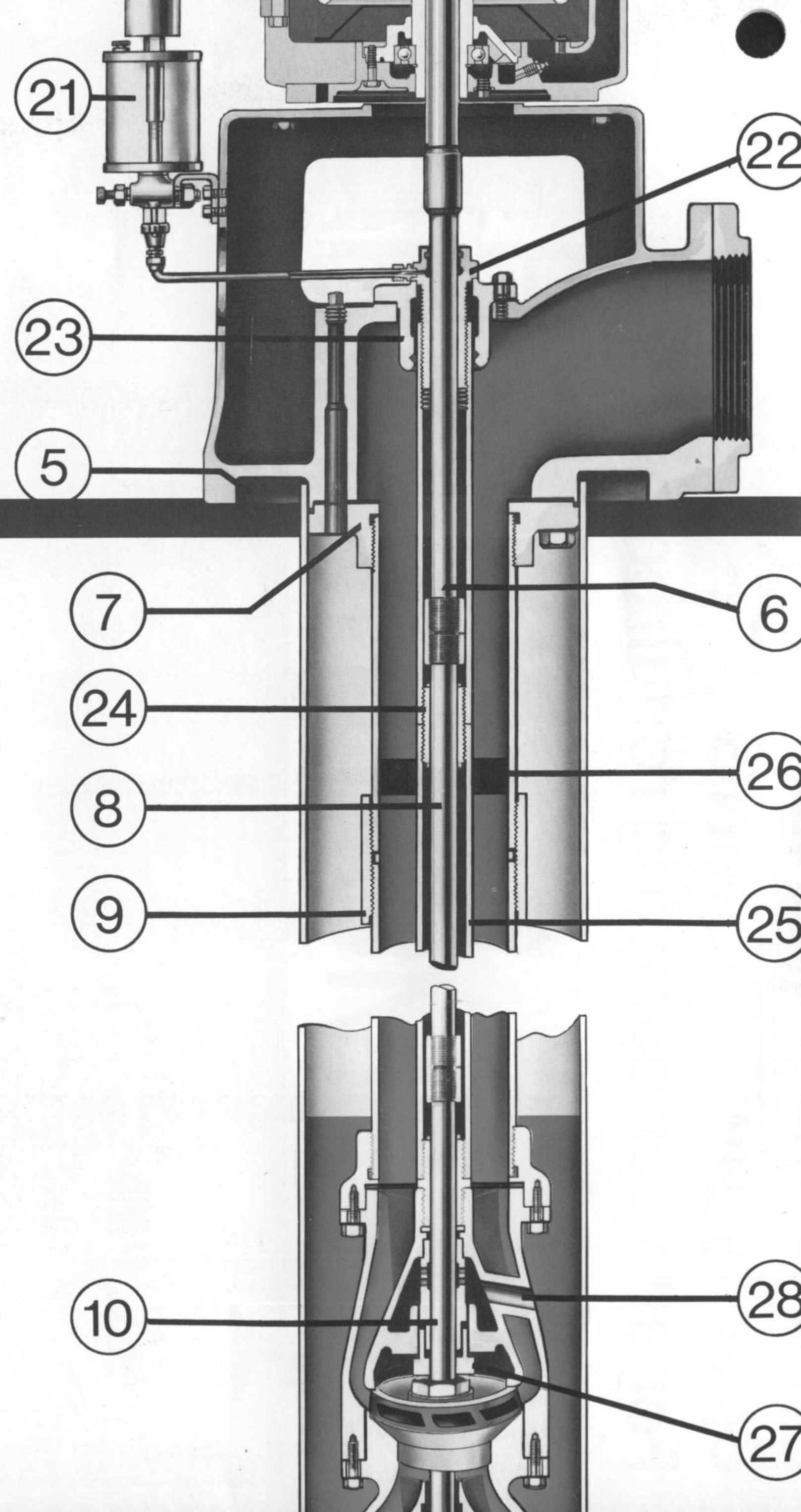
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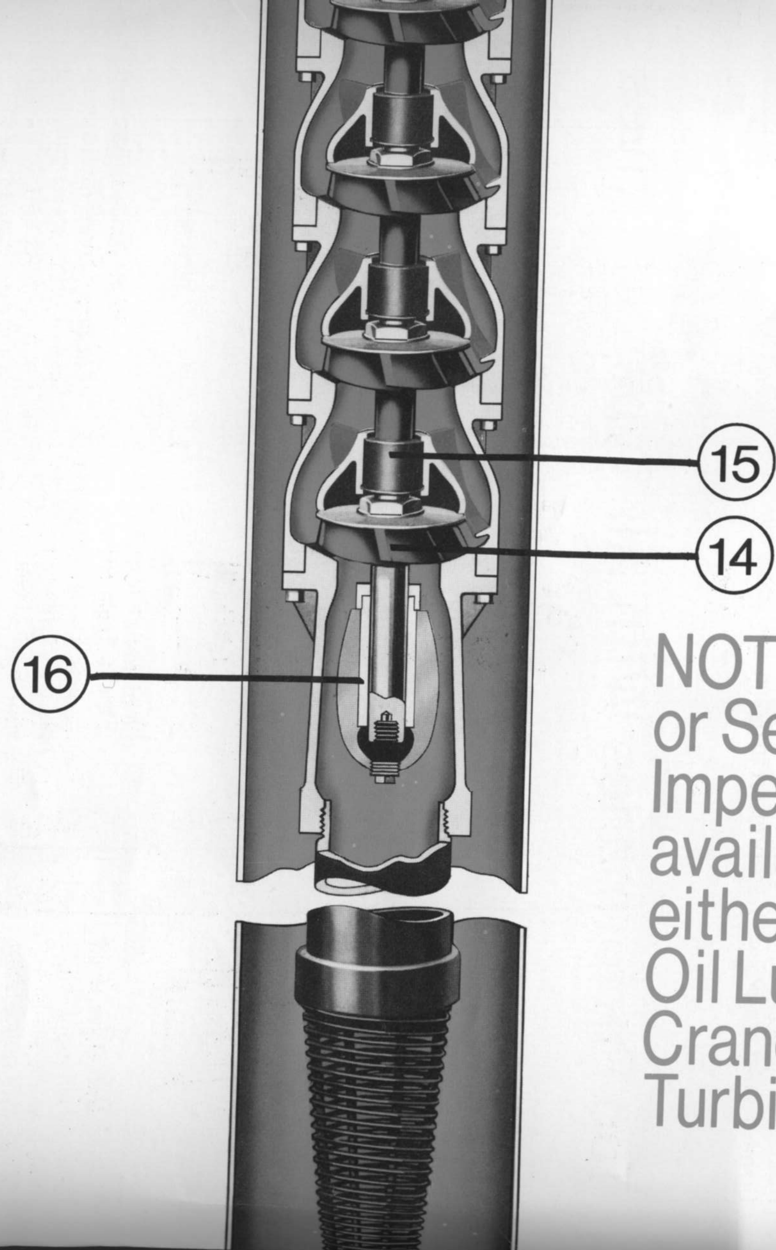
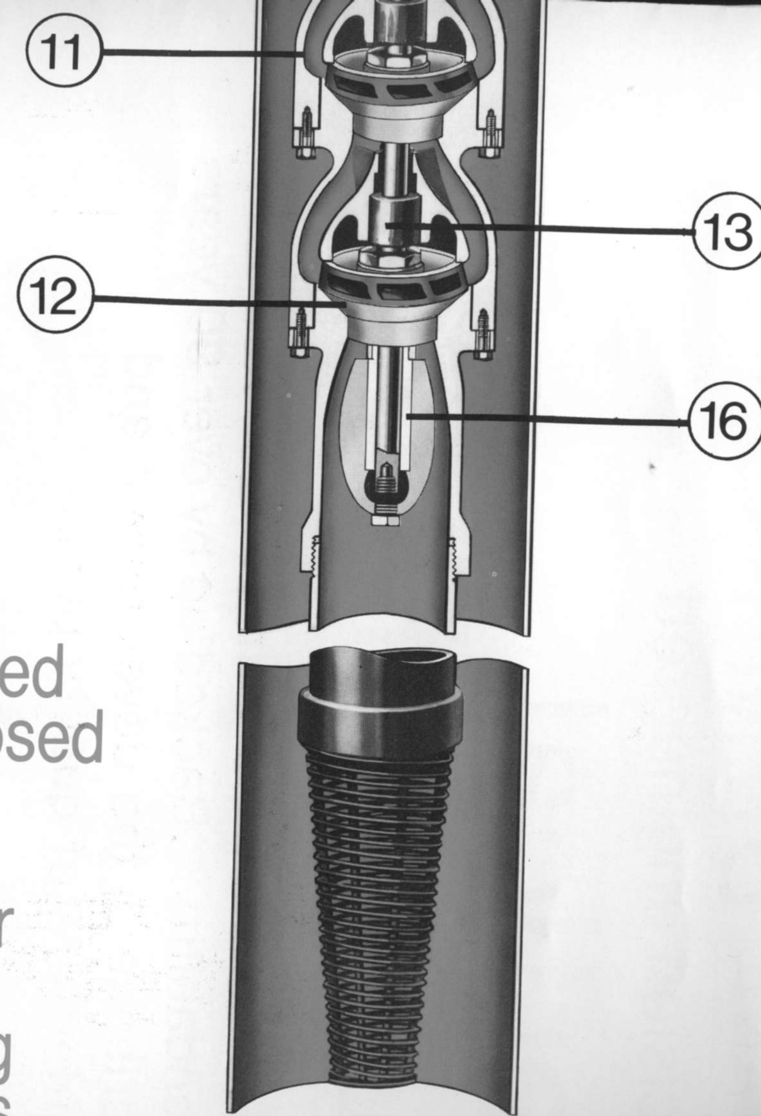


NOTE: Enclosed or Semi-Enclosed Impellers are available on either Water or Oil Lubricated Crane-Deming Turbine Pumps



Crane Deming quality design features provide longer life...lower operating costs

OIL AND WATER LUBRICATED

1. IMPELLERS EASILY ADJUSTABLE – with adjusting nut located at top of motor.

2. RATCHET PREVENTS BACKSPIN – and avoids damage to pump in case of phase reversal.

3. HEAVY-DUTY THRUST BEARING – cooled by air entering motor.

4. SEPARATE HEADSHAFT – with coupling in pump head facilitates installation. Permits changing drives without raising pump.

5. BASE OF HEAD RECESSED – permits casing or sleeve to extend above foundation as required by many Public Health Departments.

6. STAINLESS STEEL STUFFING BOX SHAFT – may be inverted to renew wearing surface.

7. FLANGED HEAD CONSTRUCTION – facilitates assembly of column and discharge head. Maintains accurate alignment between motor and column shaft assembly.

8. HIGH STRENGTH LINE SHAFT – of heat treated steel, ground and polished – one-third stronger than ordinary shaft.

9. COLUMN COUPLINGS – machined with 8 pitch threads for tight fitting butt joints.

10. STAINLESS STEEL IMPELLER SHAFT – specially heat treated, ground and polished for longer life.

11. STREAMLINED BOWL PASSAGEWAYS – enameled to reduce friction and give greater pump efficiency.

12. ENCLOSED BRONZE IMPELLERS – have completely finished surfaces for maximum efficiency.

13. BRONZE BOWL BEARINGS – on all enclosed impeller pumps.

14. SEMI-ENCLOSED BRONZE IMPELLERS – have completely finished surfaces for greater efficiency.

15. RUBBER BOWL BEARINGS – on all semi-enclosed impeller pumps.

16. ENCLOSED BRONZE BEARING – in suction bowl, protected with sand cap and packed with non-soluble grease.

WATER LUBRICATED ONLY

17. STAINLESS STEEL SHAFT SLEEVES – welded to shaft. Specially heat treated, ground and polished for maximum resistance to wear and corrosion. Replaceable in the field.

18. ACCESSIBLE EXTRA-DEEP STUFFING BOX – with controlled lubrication for long packing life.

19. PRE-LUBRICATION CONNECTION – through stuffing box distributes water around shaft for proper lubrication before start up.

20. WATER LUBRICATED SHAFT BEARINGS – fluted, resilient rubber shaft bearings are lubricated by water flowing through the pump. Bearings are held in place by a machined bronze bearing retainer secured between two pipe ends.

OIL LUBRICATED ONLY

21. AUTOMATIC LINE SHAFT LUBRICATOR – on motor driven units – opens when pump starts, closes when it stops.

22. BRONZE TUBING TENSION NUT – is easily accessible for placing tube under proper tension – also provides close fitting bearing in pump head.

23. TUBING HEAD ADAPTER WITH "O" RING – assures water tight seal around shaft enclosing tube.

24. BRONZE LINESHAFT BEARINGS – provide accurate alignment for lineshaft and a coupling for enclosure tube. A spiraling internal oil groove permits uniform bearing lubrication and by-pass of oil to bearings below.

25. HEAVY-DUTY TUBULAR STEEL SHAFT ENCLOSURE TUBE – protects lineshaft. Specially machined for accurate bearing alignment.

26. ENCLOSURE TUBE STABILIZERS – reinforced rubber "spiders" are regularly spaced to maintain enclosure tube alignment.

27. BEARING PROTECTING SLINGER – prolongs bearing life by preventing entrance of sand into top bowl bearing.

28. RELIEF PORTS IN TOP BOWL – prevent water from rising in tube above water level in well.

Specifications subject to change without notice

CRANE DEMING VERTICAL TURBINE PUMPS

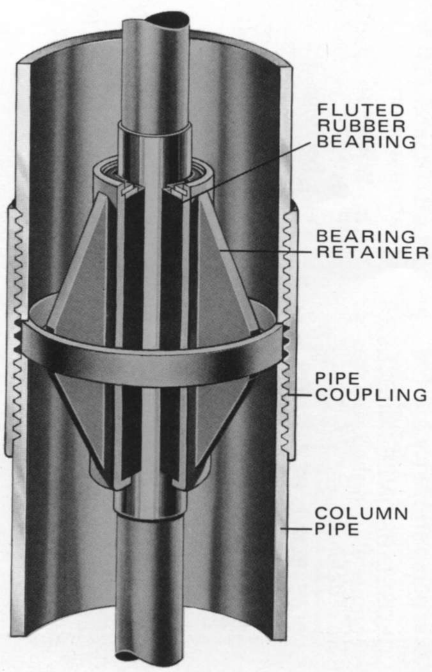
WATER OR OIL LUBRICATED

Crane Deming Vertical Turbine Pumps are available with either oil or water lubrication. The basic difference is in the construction of the lineshaft, its supporting mechanism and the bearings supplied with each. Either type may be furnished with semi-enclosed or enclosed impeller design.

WATER LUBRICATED CONSTRUCTION

Crane Deming water lubricated pumps are lubricated by the water that is being pumped, and require no supplemental lubricants or maintenance.

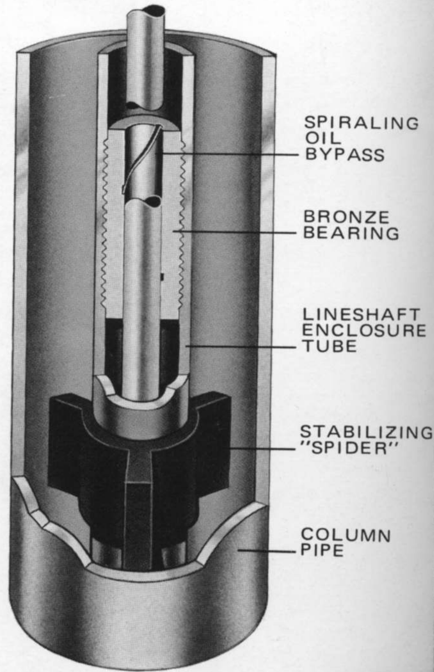
Water lubricated construction includes high strength steel lineshaft and rubber bearings throughout.



Bronze lineshaft bearing retainers are centered in each pipe coupling — tightly secured between the two pipe ends. Retainers are precision cast and machined to house the water lubricated, resilient rubber bearings and assure perfect vertical alignment of pump lineshaft. Rubber bearings are fluted to provide adequate lubrication and permit sand and other abrasive particles to flow through.

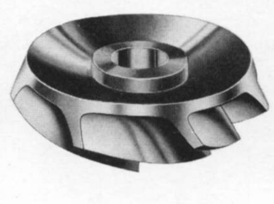
OIL LUBRICATED CONSTRUCTION

Oil lubricated construction has an enclosed lineshaft with bronze bearings used throughout. A heavy-duty steel enclosure tube contains the lubricating oil around the lineshaft and bearings, and shields both from foreign matter and corrosion.

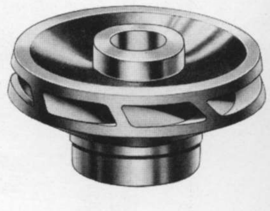


In standard construction, machined bronze bearings are spaced every five feet to assure true pumpshaft alignment and smooth, quiet operation. Bearings are threaded and also serve as a coupling for lineshaft enclosure tubing. A spiraling groove in the bearing inner wall provides uniform oil distribution over the lineshaft surface and permits oil passage through the bearing to each succeeding bearing below. Reinforced rubber "spiders" are spaced at regular intervals to center the enclosure tube in the column pipe.

IMPELLERS



Corrosion-resistant bronze semi-enclosed impellers are easily adjustable at the top of the driver to handle changes in well capacity or ground conditions. Impellers can be temporarily adjusted upward to avoid pump wear when clearing a sandy well. Top pump efficiency can easily be maintained.



Enclosed impellers are high quality corrosion-resistant bronze with completely finished surfaces. The hydraulic design developed from years of engineering experience assures maximum efficiency with minimum operating costs in Crane Deming Vertical Turbine Pumps.

CRANE DEMING

precision engineered

Vertical Turbine Pumps

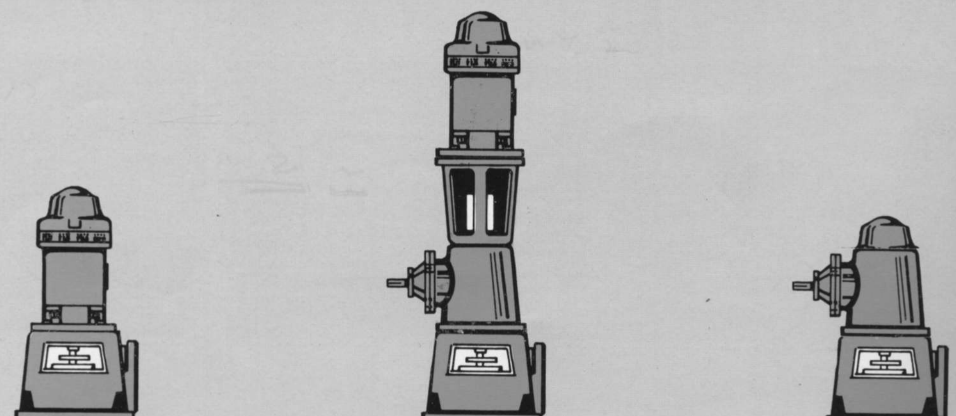
offer Unequaled Economy, Performance and Dependability...Backed up by over 90 years experience in the development and manufacture of quality pumps.

Crane Deming vertical turbine pumps are scientifically engineered and constructed of top quality materials to provide years of dependable service.

Close tolerance machining to increase operating efficiency – precision balancing of moving parts to eliminate vibration – special heat treating to reduce maintenance – using bronze to combat corrosion – stainless steel at critical wear points . . . Crane Deming has expended every effort to design and build a pump that runs smoother, lasts longer and yet stays in line with competition. The pumps described in this bulletin are the result of this manufacturing philosophy – no short cuts – no sacrificing of quality.

Over 90 years of research, engineering and manufacturing experience stand behind your selection of a Crane Deming Vertical Turbine Pump. It will prove a wise choice.

Top Performance With All Types of Drives

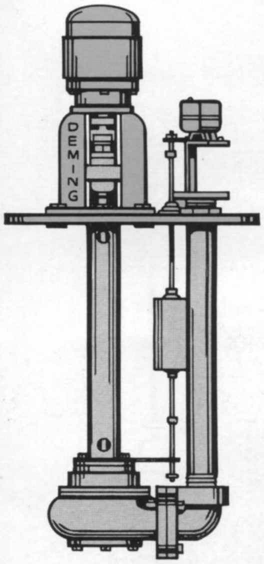


Unit Drive Head
For installations where electric power is available the Unit Drive with hollowshaft motor is compact, quiet and efficient.

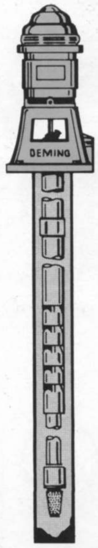
Combination Motor – Right Angle Drive
For municipal waterworks and installations where an auxiliary source of power must be available at a moment's notice.

Right Angle Drives
For direct connection to gasoline or diesel power unit. Gear ratio permits unit to operate at the most economical speed.

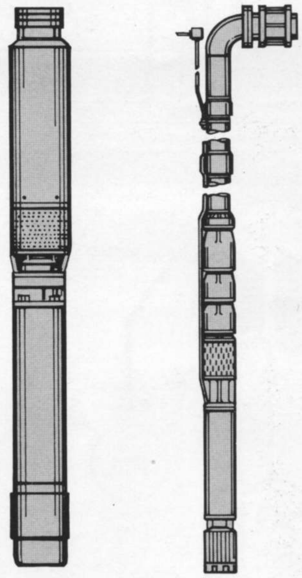
For Maximum operating efficiency Specify CRANE DEMING For all your pumping requirements



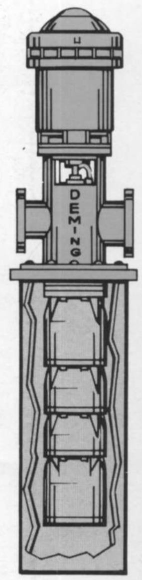
Sewage Pumps and Cellar Drainers



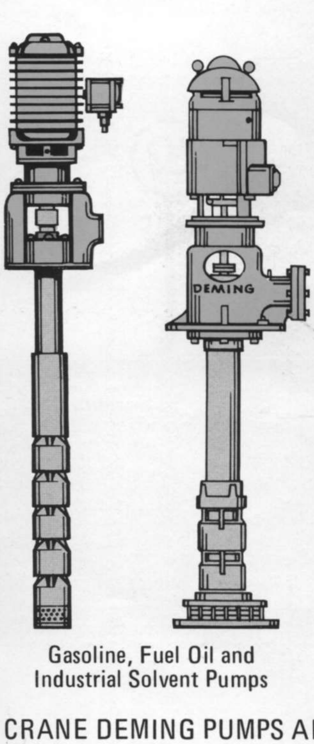
Close-Coupled Vertical Turbine Pumps



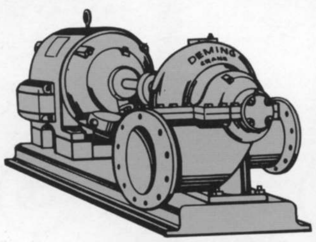
Submersible Pumps



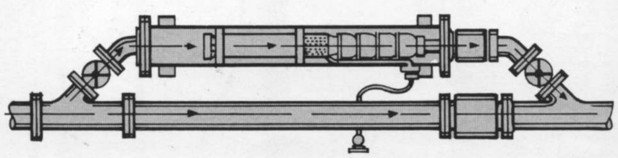
Tee Head Booster Pumps



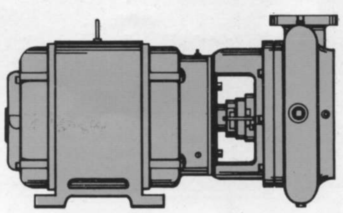
Gasoline, Fuel Oil and Industrial Solvent Pumps



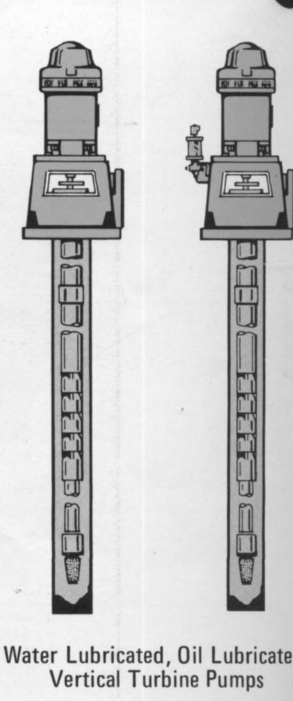
Split Case Centrifugal Pumps



Horizontal Submersible Pumps



Horizontal Motor Mount Pumps



Water Lubricated, Oil Lubricated Vertical Turbine Pumps

CRANE DEMING PUMPS ARE SOLD AND SERVICED BY:

VALVES • PUMPS • FITTINGS • WATER TREATMENT • CONTROLS • PLUMBING • HEATING

CRANE®

DEMING PUMPS

CRANE CO. DEMING DIV. • P. O. BOX 450 • SALEM, OHIO 44460

Form 4700B

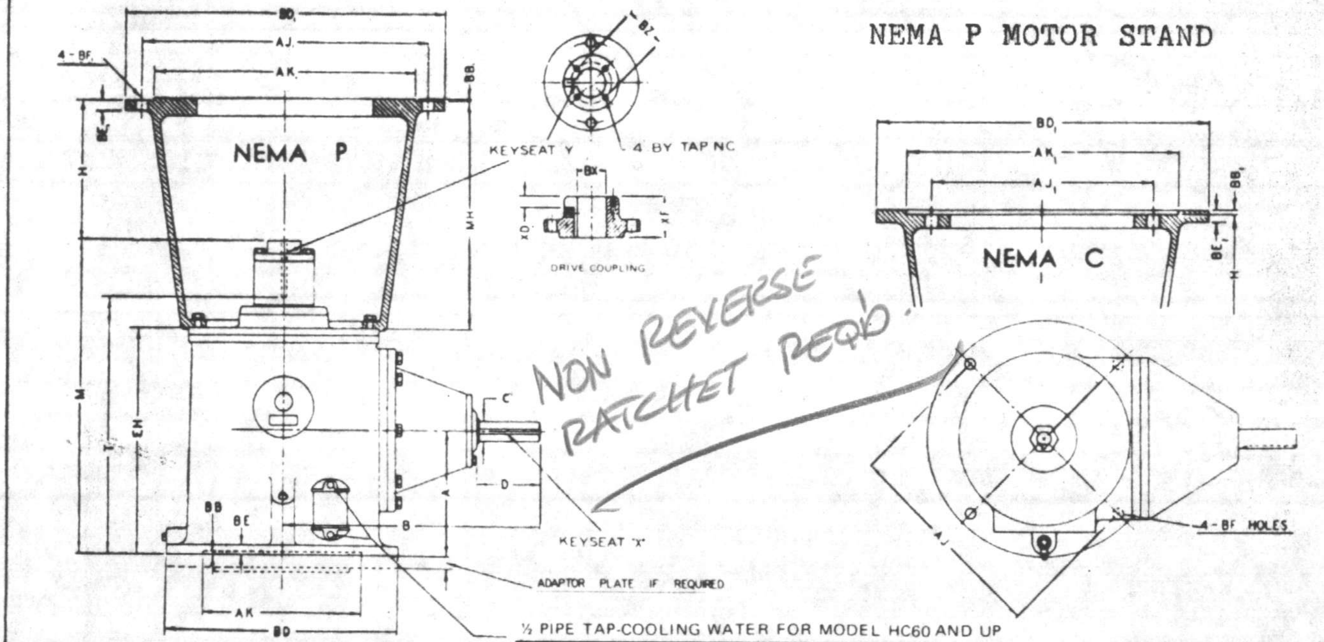
SP

JOHNSON RIGHT ANGLE GEAR DRIVE

DIVISION OF ARROW GEAR COMPANY

Customer Crane Co. Order No. 404539
Customer's Reference
Serial No. 49841 Model HA 15 Ratio 1:1 Rotation Fig. 1
Approved by DS Date 4/8/75 Drive Coupling "BX" 3/4" Type NR

NEMA P MOTOR STAND



DIMENSIONS OF JOHNSON COMBINATION RIGHT ANGLE GEAR DRIVES TABLE 2

Model	A	B	C	D	EH	H	M	BE	BD	AJ	AK	BB	BF	Keyseat X
HA15	6⅜	13	1⅛	2¾	10⅝	3 1/8	16	⅝	10	9⅛	8¼	3/16	7/16	¼ x ⅛ x 2½
~~HB40(12)~~	~~9~~	~~16~~	~~1½~~	~~3½~~	~~15¼~~		~~22¼~~	~~¾~~	~~12~~	~~9⅛~~	~~8¼~~	~~3/16~~	~~7/16~~	~~⅜ x 3/16 x 3~~
HB40	9	16	1½	3½	15¼		22¼	¾	16½	14¾	13½	3/16	11/16	⅜ x 3/16 x 3
HC60	9	16	1½	3½	15¼		22¼	¾	16½	14¾	13½	3/16	11/16	⅜ x 3/16 x 3
HD90	11⅜	17½	2	3½	19⅝		26¾	1	16½	14¾	13½	3/16	11/16	½ x ¼ x 3
HE150	13¼	20½	2 7/16	4¾	23⅛		31¾	1	20	14¾	13½	3/16	11/16	⅝ x 5/16 x 4
HF200	15	24	2¾	5½	26⅜		36	1⅛	20	14¾	13½	3/16	11/16	⅝ x 5/16 x 5
HG250	16½	29	2¾	5½	29⅞		40¼	1¼	24½	* 22	13½	⅜	* 15/16	⅝ x 5/16 x 5
HH350	16½	30	3	5¾	29⅞		41¾	[illegible]	24½	* 22	13½	⅜	* 15/16	¾ x ⅜ x 5
HH425	16½	31	3½	6¾	29⅞		41¾	[illegible]	[illegible]	* 22	13½	⅜	* 15/16	⅞ x 7/16 x 5¾
HI500	16½	33	3¾	7½	[illegible]		[illegible]	[illegible]	[illegible]	* 22	13½	[illegible]	* 15/16	⅞ x 7/16 x 5¾
HJ600	19	36	4	7½	37		48¾	1½	30½	26	22	⅜	15/16	1 x ½ x 7

*Also 5/8-11 Tap on 14¾ AJ 1" Deep

MAX. DRIVE COUPLING AND KEYSEAT

Model	XF	XD	BX Fig. 1 & 4	BX Fig. 2 & 3	BY	BZ	T	Y
HA15	1⅜	5/16	¾	~~¾~~	10-32	1⅜	12¼	3/16 x 3/32 x 5¼
HB40	2⅛	9/16	1½	1¼	¼-20	2⅛	17¾	⅜ x 3/16 x 6½
HC60	2⅛	9/16	1½	1¼	¼-20	2⅛	17¾	⅜ x 3/16 x 6½
HD90	2⅛	9/16	1½	1½	¼-20	2⅛	22⅛	⅜ x 3/16 x 6½
HE150	2⅜	9/16	1 15/16	1¾	¼-20	2½	26½	½ x ¼ x 7
HF200	2⅝	11/16	2	2	¼-20	2½	30	½ x ¼ x 8
HG250	3	11/16	2 3/16	2 3/16	⅜-16	3¼	34	½ x ¼ x 9
HH350	3¼	13/16	2 7/16	2 7/16	⅜-16	3¼	34	⅝ x 5/16 x 10
HH425	3¼	13/16	2 7/16	2 7/16	⅜-16	3¼	35	⅝ x 5/16 x 11
HI500	4	13/16	2 11/16	2 11/16	⅜-16	3¾	39½	⅝ x 5/16 x 12
HJ600	4	1	3 3/16	3 3/16	⅜-16	4¼	39½	¾ x ⅜ x 12

MOTOR STAND

MH	8 1/2
BD1	10
AJ1	9 1/8
AK1	8 1/4
BB1	1/8
BF1	3/8-16
BE1	1/2

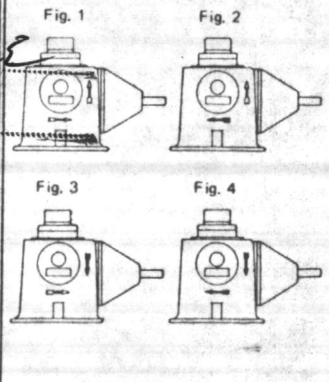
SPEC. DRIVE COUPLING

BX	
Y	
BY	
BZ	
XD	

ROTATION DIAGRAM

Fig. 1 Fig. 2

Fig. 3 Fig. 4



APPROVED
SUBJECT TO REQUIREMENTS OF SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES
CONSULTING ENGINEERS
BY: MZE
DATE:

Tolerances: Drive Shaft "C" plus .000 minus .001; Base Rabbet 'AK" plus .002 plus .005; Coupling Bore "BX" plus .0005 plus .0015; Motor Stand Rabbet "AK1" plus .000 minus .005 – Unfinished cast surfaces subject to normal variation.

MEMO OF DATA TRANSMITTAL

GENERAL ELECTRIC COMPANY

Refer to G.E. Req'n No. In Correspondence

MARCH 19, 1975 (DATE) | SAN JOSE, CALIFORNIA (LOCATION) | FIRST CLASS (PRINTS FORWARDED VIA)

CUSTOMER
ENVIRONMENTAL PRODUCTS, INC.
P. O. DRAWER 2385
HICKORY, NORTH CAROLINA 28601

STATION OR PROJECT NO.

CUSTOMER ORDER	CUSTOMER REQN.	G.E. CONTRACT	G.E. REQUISITION
2191			348-39536

PRINTS ARE:
[XX] FOR APPROVAL [ ] FOR INSTALLATION [ ] FOR REFERENCE [ ] ....

APPROVAL REQUIRED BY .... (DATE)

RETURN OF "FOR APPROVAL" PRINTS SHOULD BE ADDRESSED TO THE GENERAL ELECTRIC OFFICE WITH WHOM YOUR ORDER IS PLACED. —NOT TO THE FACTORY—

Drawings are intended to be in accordance with applicable purchase order specifications. Comments are solicited concerning any departures in this respect. Features not covered by purchase order specifications portray General Electric Company standard design practice. The shipping date for this equipment is based on obtaining approval by the above specified date, and any delay in approval may extend the shipping schedule. Any requested changes from the purchase order specifications, resulting in additional engineering and/or manufacturing costs, will entail an increase in price and the extension of the shipping schedule.

7 PRINTS TO:
MR. BOB DARNELL
ENVIRONMENTAL PRODUCTS, INC.

MDT TO:
MR. W.L. RICHBOURG
GENERAL ELECTRIC CO.
P. O. BOX 10367
GREENSBORO, N. C. 27404

MDT TO:
B. HILL
801 SUMMIT AVE.
GREENSBORO, N. C. 27405

ITEM NO: 1
MOTOR MODEL:
OUTLINE NO: GEM 2296F
TYPE: K
FRAME: 213TP10
HORSEPOWER: 7.5
RPM: 1800
PHASE: 3
CYCLES: 60
VOLTS: ~~230/460~~ 200
THRUST: HIGH
ENCLOSURE: OPEN DRIPPROOF, WP1
SHAFT TYPE: HOLLOW
VERTICAL INDUCTION MOTOR.
1.15 SERVICE FACTOR
NON REVERSE CPLG. 1" BORE

APPROVED
SUBJECT TO REQUIREMENTS OF
SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES
CONSULTING ENGINEERS
BY: m LC
DATE: ....

SPARE PARTS LIST:

- ORDER SERVICE - S. J.
-
-
- VIRGINIA KIMMY

COPY OF M/S TO

AP-558-CM 4-62 (new)

PRINTS ARE NOT TO SCALE, are loaned subject to return upon demand, and the express condition that they will not be used in any way detrimental to the General Electric Company.

REPRODUCTION OR DATA SECTION
By TRUDY HABENICHT

INDUCTION MOTORS—INTEGRAL-HP, 3- AND 2-PHASE
VERTICAL

SQUIRREL-CAGE

TRI/CLAD • Hollow-shaft • Shielded (Dripproof)*

High-thrust • Normal-starting-torque • NEMA Type P Base

Type K

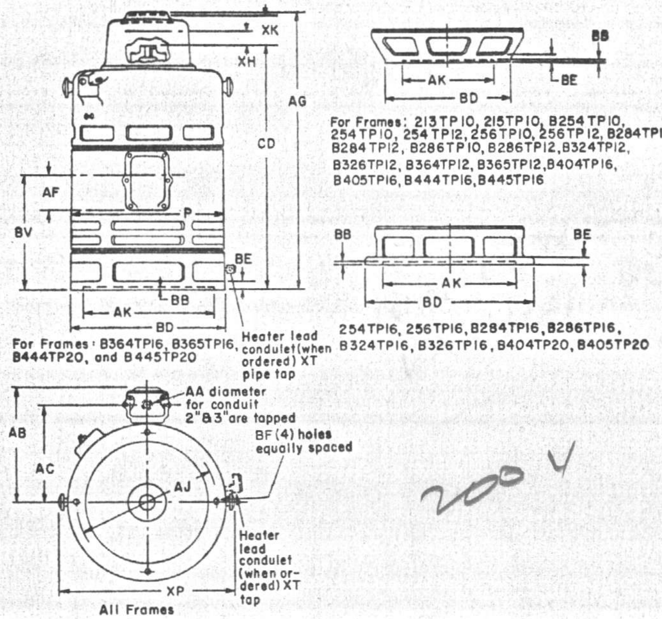
Frames 213TP10 to B405TP20, 3600 Rpm and Below
Frames B444TP16 to B445TP20, 1800 Rpm and Belowθ

Self-release, Bolted or Nonreverse Coupling

GEM-2296F

Sept. 8, 1970

DIMENSIONS



FOR 3600-RPM MOTORS ONLY

For a given pump-shaft diameter, the following table gives the maximum distance between the motor's top coupling and the pump's first line-shaft bearing. This table is based on keeping the headshaft critical at least 25% above operating speed. The selection of a small headshaft diameter may make it necessary to support the headshaft in a close-fitting bushing in the lower end of the motor shaft.

Pump-shaft Diameter in Inches	Maximum Distance Between Top Coupling and Lower Support in Inches
0.750	33
1.000	38
1.187	42
1.437	45
1.500	47
1.688	50
1.750	51

Frame No.	Approx Net Wt in Lb	Dimensions in Inches																	
		P	AA	AB	AC	AF	AG	AJ	AK †	BB Min	BD	BE	BF	BV	CD	XH ‡	XK	XP	XT
→ 213TP10	165	10 7/8	1 1/4	9 3/8	7 5/16	3 1/2	23 13/16	9 1/8	8 1/4	3/16	10	3/4	7/16	10 15/16	20 15/16	1 3/4	2 3/4	....	1/2 ←
~~215TP10~~	~~180~~	~~10 7/8~~	~~1 1/4~~	~~9 3/8~~	~~7 5/16~~	~~3 1/2~~	~~23 13/16~~	~~9 1/8~~	~~8 1/4~~	~~3/16~~	~~10~~	~~3/4~~	~~7/16~~	~~10 15/16~~	~~20 15/16~~	~~1 3/4~~	~~2 3/4~~	~~....~~	~~1/2~~
B254TP10	205	10 7/8	1 1/2	9 3/8	7 5/16	3 1/2	23 13/16	9 1/8	8 1/4	3/16	10	3/4	7/16	10 15/16	20 15/16	1 3/4	2 3/4	....	1/2
254TP10	270	12 15/16	1 1/2	10 3/8	8 5/16	3 1/2	26 1/2	9 1/8	8 1/4	3/16	10	3/4	7/16	13	23 9/16	1 3/4	2 3/4	....	1/2
254TP12	270	12 15/16	1 1/2	10 3/8	8 5/16	3 1/2	26 1/2	9 1/8	8 1/4	3/16	12	3/4	7/16	13	23 9/16	1 3/4	2 3/4	....	1/2
254TP16	270	12 15/16	1 1/2	10 3/8	8 5/16	3 1/2	26 1/2	14 3/4	13 1/2	1/4	16 1/2	3/4	11/16	13	23 9/16	1 3/4	2 3/4	....	1/2
256TP10	310	12 15/16	1 1/2	10 3/8	8 5/16	3 1/2	26 1/2	9 1/8	8 1/4	3/16	10	3/4	7/16	13	23 9/16	1 3/4	2 3/4	....	1/2
256TP12	310	12 15/16	1 1/2	10 3/8	8 5/16	3 1/2	26 1/2	9 1/8	8 1/4	3/16	12	3/4	7/16	13	23 9/16	1 3/4	2 3/4	....	1/2
256TP16	310	12 15/16	1 1/2	10 3/8	8 5/16	3 1/2	26 1/2	14 3/4	13 1/2	1/4	16 1/2	3/4	11/16	13	23 9/16	1 3/4	2 3/4	....	1/2
B284TP10	330	12 15/16	2	11 3/8	8 7/8	4 5/8	26 1/2	9 1/8	8 1/4	3/16	10	3/4	7/16	13	23 9/16	1 3/4	2 3/4	....	1/2
B284TP12	330	12 15/16	2	11 3/8	8 7/8	4 5/8	26 1/2	9 1/8	8 1/4	3/16	12	3/4	7/16	13	23 9/16	1 3/4	2 3/4	....	1/2
B284TP16	330	12 15/16	2	11 3/8	8 7/8	4 5/8	26 1/2	14 3/4	13 1/2	1/4	16 1/2	3/4	11/16	13	23 9/16	1 3/4	2 3/4	....	1/2
B286TP10	355	12 15/16	2	11 3/8	8 7/8	4 5/8	26 1/2	9 1/8	8 1/4	3/16	10	3/4	7/16	13	23 9/16	1 3/4	2 3/4	....	1/2
B286TP12	355	12 15/16	2	11 3/8	8 7/8	4 5/8	26 1/2	9 1/8	8 1/4	3/16	12	3/4	7/16	13	23 9/16	1 3/4	2 3/4	....	1/2
B286TP16	355	12 15/16	2	11 3/8	8 7/8	4 5/8	26 1/2	14 3/4	13 1/2	1/4	16 1/2	3/4	11/16	13	23 9/16	1 3/4	2 3/4	....	1/2
B324TP12	460	14 1/4	2§	12 3/16	9 11/16	4 5/8	32 7/16	9 1/8	8 1/4	3/16	12	7/8	7/16	15 7/16	28 3/16	3 1/8	4	15 3/4	1/2
B324TP16	460	14 1/4	2§	12 3/16	9 11/16	4 5/8	32 7/16	14 3/4	13 1/2	1/4	16 1/2	7/8	11/16	15 7/16	28 3/16	3 1/8	4	15 3/4	1/2
B326TP12	510	14 1/4	3	13 15/16	10 5/16	6 1/2	32 7/16	9 1/8	8 1/4	3/16	12	7/8	7/16	15 7/16	28 3/16	3 1/8	4	15 3/4	1/2
B326TP16	510	14 1/4	3	13 15/16	10 5/16	6 1/2	32 7/16	14 3/4	13 1/2	1/4	16 1/2	7/8	11/16	15 7/16	28 3/16	3 1/8	4	15 3/4	1/2
B364TP12	600	16 1/4	3	14 13/16	11 3/16	6 1/2	35 7/16	9 1/8	8 1/4	3/16	12	1 1/8	7/16	16 1/8	31 3/16	3 1/8	4	17 7/8	3/4
B364TP16	600	16 1/4	3	14 13/16	11 3/16	6 1/2	35 7/16	14 3/4	13 1/2	[illegible]	16 1/2	[illegible]	11/16	16 1/8	31 3/16	3 1/8	4	17 7/8	3/4
B365TP12	660	16 1/4	3	[illegible]	11 3/16	6 1/2	35 7/16	[illegible]	8 1/4	3/16	12	[illegible]	7/16	16 1/8	31 3/16	3 1/8	4	17 7/8	3/4
B365TP16	660	16 1/4	3	[illegible]	11 3/16	6 1/2	35 7/16	14 3/4	13 1/2	1/4	16 1/2	1	11/16	16 1/8	31 3/16	3 1/8	4	17 7/8	3/4
B404TP16	890	18 7/16	3	15 3/4	12 1/8	6 1/2	[illegible]	[illegible]	13 1/2	[illegible]	16 1/2	7/8	11/16	19 1/2	36 7/16	3 1/4	4 1/2	20 1/8	3/4
B404TP20	890	18 7/16	3	15 3/4	12 1/8	6 1/2	[illegible]	14 3/4	13 1/2	1/4	20	7/8	11/16	19 1/2	36 7/16	3 1/4	4 1/2	20 1/8	3/4
B405TP16	990	18 7/16	3	15 3/4	12 1/8	6 1/2	41 1/4	14 3/4	13 1/2	1/4	16 1/2	7/8	11/16	19 1/2	36 7/16	3 1/4	4 1/2	20 1/8	3/4
B405TP20	990	18 7/16	3	15 3/4	12 1/8	6 1/2	41 1/4	14 3/4	13 1/2	[illegible]	20	[illegible]	11/16	19 1/2	36 7/16	3 1/4	4 1/2	20 1/8	3/4
B444TP16	1180	20 3/8	3	16 15/16	13 5/16	[illegible]	47 1/8	14 3/4	13 1/2	1/4	16 1/2	1 1/8	11/16	23 1/4	41 7/8	3 7/8	5	22	3/4
B444TP20	1180	20 3/8	3	16 15/16	13 5/16	6 1/2	47 1/8	14 3/4	13 1/2	1/4	20	1 1/8	11/16	23 1/4	41 7/8	3 7/8	5	22	3/4
B445TP16	1330	20 3/8	3	16 15/16	13 5/16	[illegible]	47 1/8	[illegible]	[illegible]	1/4	16 1/2	1 1/8	11/16	23 1/4	41 7/8	3 7/8	5	22	3/4
B445TP20	1330	20 3/8	3	16 15/16	13 5/16	6 1/2	47 7/8	14 3/4	13 1/2	1/4	20	1 1/8	11/16	23 1/4	41 7/8	3 7/8	5	22	3/4

APPROVED
SUBJECT TO REQUIREMENTS OF
SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES
CONSULTING ENGINEERS
BY: mLC
DATE:

Coupling dimensions on reverse side.

* These motors meet NEMA specifications for weather-protected Type 1 motors.

† 'AK' diameters of 8 1/4 inches will come within the limits of +0.003 inch, −0.000 inch; diameters of 13 1/2 inches will come within the limits of +0.005 inch, −0.000 inch.

‡ The total height of pump shaft and locking nut above top of coupling must not exceed dimension XH.

§ For 3600 rpm, Frames B324TP12 and B324TP16, conduit box dimensions are same as for Frames B326TP12 and B326TP16.

θ For 3600 rpm in this frame size, refer to the Company.

Frames 213TP10 through B286TP16 have grease-lubricated upper guide and lower thrust bearings. All other frames have oil-lubricated upper thrust bearing and grease-lubricated lower guide bearing.

For 3600 rpm, Frames B404TP16 through B405TP20 inclusive maximum shaft permissible 1.751 inches.

Nonreverse coupling assemblies, Frames 213TP to B286TP are complete, nonreverse assemblies, Frame B324TP to B445TP, must be used together with appropriate self-release coupling.

Provided mounting conditions permit, conduit box may be turned so that entrance can be made upward, downward, or from either side.

For shipping weight add 5 per cent to the above net weights.

For ESTIMATING ONLY unless endorsed for construction.

APPROVED
SUBJECT TO REQUIREMENTS OF SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES
CONSULTING ENGINEERS

June 11, 1975

BY: m &c

DATE: 1 Aug 75

Peabody S. E., Inc.
P. O. Drawer 7248
Jacksonville, North Carolina 28540

Attn: Mr. Felix E. Acosta

Dear Mr. Acosta:

Our recommendations on Well B would be to set:

- 60' of 18" Pit Casings
- 120' of 8" Gav. Pipe
- 20' of 8" Stainless Steel Well Screen
- 20' of 8" Gav. Pipe
- 10' of 8" Stainless Steel Well Screen
- 10' of 8" Gav. Pipe

We feel like this well would produce 200 GPM of water.

Very truly yours;

Carolina Well and Pump Co., Inc.

Worth F. Picard
P. O. Box 1085
Sanford, North Carolina 27330

WFP/slm

UTILITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-1155
JACKSONVILLE, NORTH CAROLINA
SPEC. 15H.3.8
SUB. NO. 15H.3.7 CONTRACT DWG. NO.
CK. & APP. BY [signature] DATE 12 Aug 1975
PEABODY-PETERSEN CO.
Job No. 7409

Peabody S. E., Inc.
P. O. Drawer 7248
Jacksonville, N. C. 28540

REC'D JUN 1 1 1975

REC'D JUN 1 1 1975

UTILITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-1155
JACKSONVILLE, NORTH CAROLINA
CONTRACT
PAR NO. 15H 309 DWG. NO.
CK'S & APP. BY [signature] DATE 17 June 1975
PEABODY-PETERSEN CO.
Job No. 7409

NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES
CHEMICAL ANALYSIS OF WATER
Division of Health Services, Laboratory Section
P. O. Box 28047, Raleigh, North Carolina 27611

Complete all Items above Heavy Line
(see instructions on reverse side)

Name of Owner or Supply: Camp Lejeune
Address: Jacksonville, N.C.
Well No. R
County: Onslow
Report to: Worth F. Pickard
Address: Box 1085
Seaford, N.C. 27930
Collected by: Ralph W. Harrison
Date Collected: 5-16-75 Time: 5:00 pm
Remarks: Sample # 2
126' to 130'
10' of 6" Stainless
10' of 6" Gal.

Type of Supplier:
[ ] 1-Municipal
[ ] 2-Sanitary District
[ ] 3-Mobile Home Park
[ ] 4-Community
[ ] 5-Association
[ ] 6-Industrial
[ ] 7-Institution
[ ] 8-Private
[ ] 9-Other

Source of Water:
[✓] 1-Ground
[ ] 2-Surface
[ ] 3-Both
[ ] 4-Purchased

APPROVED
SUBJECT TO REQUIREMENTS OF
SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES
CONSULTING ENGINEERS
BY: MJE
DATE: 1 Aug 75

Source of Sample:
[✓] 1-Well tap
[ ] 2-House Tap
[ ] 3-Distribution Tap

Type of Sample:
[✓] 1-Raw
[ ] 2-Treated

Type of Treatment:
[ ] 0-None
[ ] 1-Chlorinated
[ ] 2-Fluoridated
[ ] 3-Filtered
[ ] 4-Alum
[ ] 5-Lime
[ ] 6-Soda Ash
[ ] 7-Polyphosphate
[ ] 8-Water Softener
[ ] 9-Other

Analysis Desired:
[✓] 1-Complete analysis (18 tests)
[ ] 2-Partial analysis (9 tests)

High, mix OK

ANALYSIS

Color	(000)	15 units	Ph	(00.0)	8.4

Results in Parts per Million

Alkalinity $CaCO_3$	(000)	318	Fluoride	(0.00)	1.74
Total Hardness	(000)	20	Arsenic	(*0.00)	<0.01
Iron	(*00.00)	<0.05	Cadmium	(*0.00)	<0.01
Manganese	(*00.00)	<0.03	Chromium^{+6}	(*0.00)	<0.05
Turbidity SiO_2	(000)	3	Copper	(*00.00)	<0.05
Acidity $CaCO_3$	(000)	0	Lead	(*0.00)	<0.05
Chloride	(000)	31	Zinc	(*00.00)	0.05
Sodium	(000)	145			5.2
Potassium	(00.0)	9.2			1.8

NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES
CHEMICAL ANALYSIS OF WATER
Division of Health Services. Laboratory Section
P. O. Box 28047. Raleigh. North Carolina 27611

Complete all items above Heavy Line
(see instructions on reverse side)

APPROVED SUBJECT TO REQUIREMENTS OF SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES CONSULTING ENGINEERS
BY: [illegible]
DATE: [illegible]

Name of Owner or Supply: Camp Lejeune

Address: Jacksonville, NC

Well No. 2

County: Onslow

Report to: [illegible]

Address: Box 1055
Sanford, NC 27330

Collected by: Ralph W. Harrison

Date Collected: 1-15-75 Time: 4:00 pm

Remarks: 168' to 192'
Sample 1

Type of Supplier:
[✓] 1-Municipal
[ ] 2-Sanitary District
[ ] 3-Mobile Home Park
[ ] 4-Community
[ ] 5-Association
[ ] 6-Industrial
[ ] 7-Institution
[ ] 8-Private
[ ] 9-Other

Source of Water:
[ ] 1-Ground
[ ] 2-Surface
[ ] 3-Both
[ ] 4-Purchased

Source of Sample:
[✓] 1-Well tap
[ ] 2-House Tap
[ ] 3-Distribution Tap

Type of Sample:
[✓] 1-Raw
[ ] 2-Treated

Type of Treatment:
[✓] 0-None
[ ] 1-Chlorinated
[ ] 2-Fluoridated
[ ] 3-Filtered
[ ] 4-Alum
[ ] 5-Lime
[ ] 6-Soda Ash
[ ] 7-Polyphosphate
[ ] 8-Water Softener
[ ] 9-Other

Analysis Desired:
[✓] 1-Complete analysis (18 tests)
[ ] 2-Partial analysis (9 tests)

ANALYSIS

Color	(000)	15 units	Ph	(00.0)	8.6

Results in Parts per Million

High - mix OK

Alkalinity $CaCO_3$	(000)	334	Fluoride	(0.00)	1.70
Total Hardness	(000)	19	Arsenic	(*0.00)	< 0.01
Iron	(*00.00)	< 0.05	Cadmium	(*0.00)	< 0.01
Manganese	(*00.00)	[illegible]	Chromium $^{+6}$	(*0.00)	< 0.05
Turbidity SiO_2	(000)	1.5	Copper	(*00.00)	< 0.05
Acidity $CaCO_3$	(000)	0	Lead	(*0.00)	< 0.05
Chloride	(000)	38	Zinc	(*00.00)	0.06
Sodium	(000)	165	Calcium		4.5
Potassium	(00.0)	4.7	Magnesium		1.7

ELECTRIC LOG BY

JOHNSON-KECK™ DR-61 ELECTRICAL LOGGING SYSTEM

Well [illegible] Owner [illegible]

Location ______ Date 5/14/75

Borehole depth 202 ft. dia. 6 in. Casing depth 28 ft. dia. 8 in.

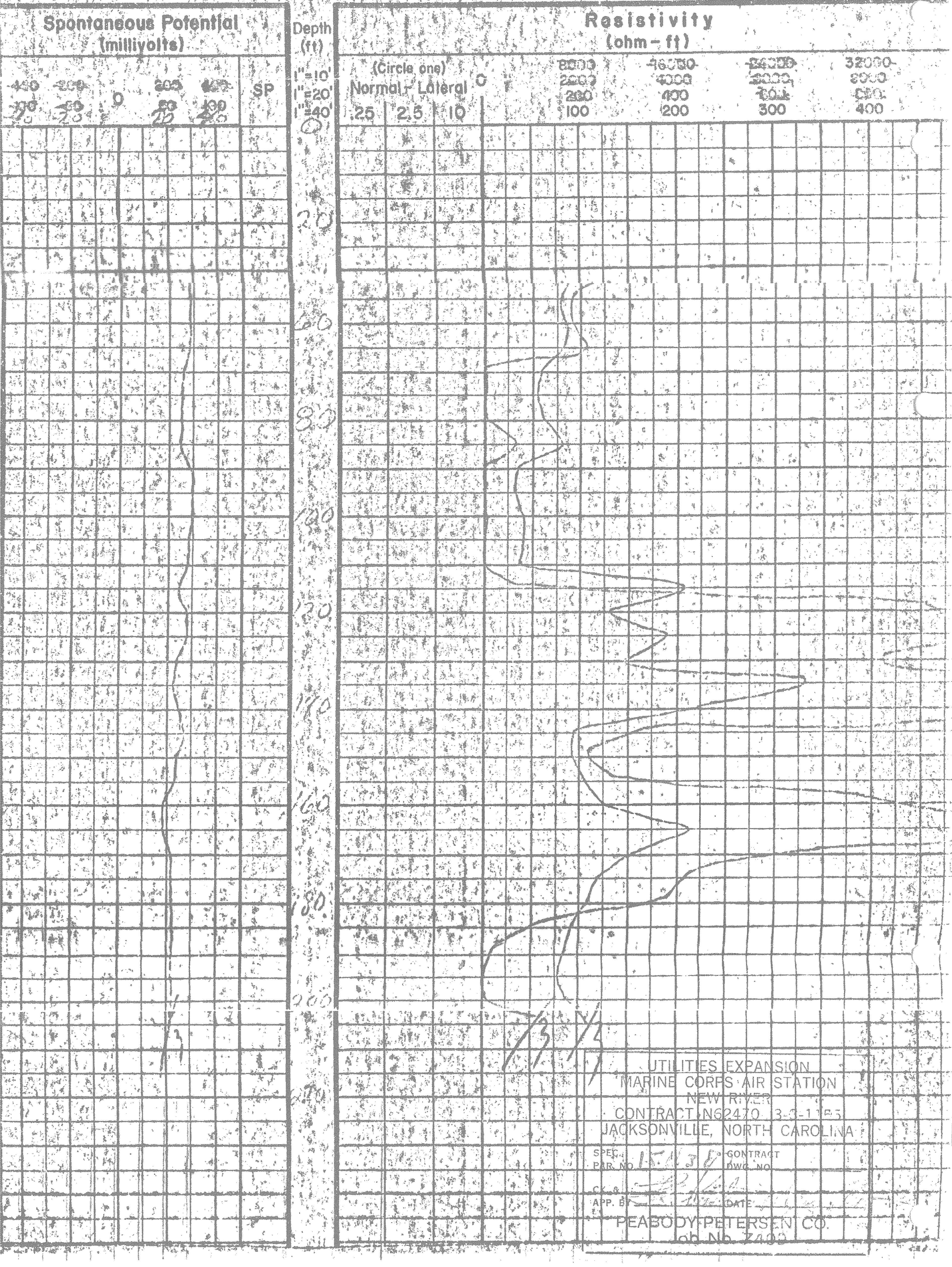
Mud resistivity ______ temperature ______ F

viscosity ______ sec weight ______ lb/gal type ______

Measuring point 0 ft. above/below ground level

Fluid level in hole 16 ft. Other logs ______

Driller Ralph Harrison E-log operator [illegible]



ELECTRIC LOG BY

JOHNSON KECK DR-61 ELECTRICAL LOGGING SYSTEM

Well ______ Owner Camp [illegible]

Location ______ Date 5/[illegible]/25

Borehole depth ______ ft. dia ______ in. Casing depth 28 ft. dia. 8 in.

Mud resistivity ______ temperature ______ °F

viscosity ______ sec. weight ______ lb/gal type ______

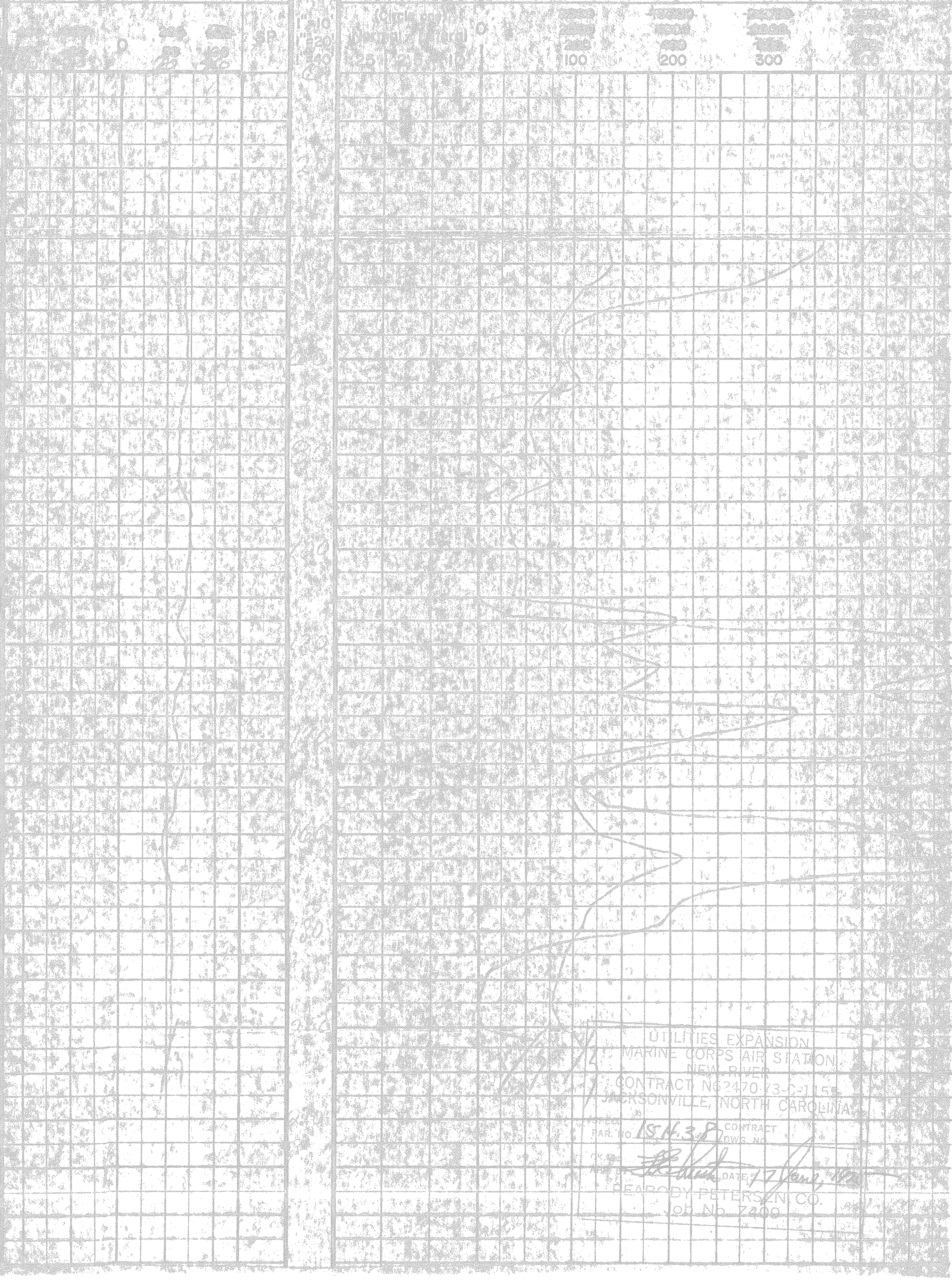
Measuring point ______ ft. above/below ground level

Fluid level in hole ______ ft. Other logs ______

Driller Ralph Harrison E-log operator [illegible]

APPROVED SUBJECT TO REQUIREMENTS OF SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES CONSULTING ENGINEERS

Spontaneous Potential (millivolts) | Depth (ft) | Resistivity (ohm-ft)



UTILITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-1155
JACKSONVILLE, NORTH CAROLINA

PAR. NO. 15N.3 CONTRACT DWG. NO.

CK. [signature] DATE 17 Jan [illegible]

PEABODY PETERSEN CO.
Job No. 7200

Peabody S. E., Inc.
P. O. Drawer 7248
Jacksonville, N. C. 28540

REC'D MAY 22 1975

TS CATALOG - SECTION C - 1750 RPM
VERTICAL TURBINE PUMP CURVES
PERFORMANCE PER STAGE

CRANE-DEMING PUMPS
CRANE CO.
SALEM, OHIO, U.S.A.

SIZE XH6 — SINGLE STAGE PERFORMANCE — **1770 R.P.M.**

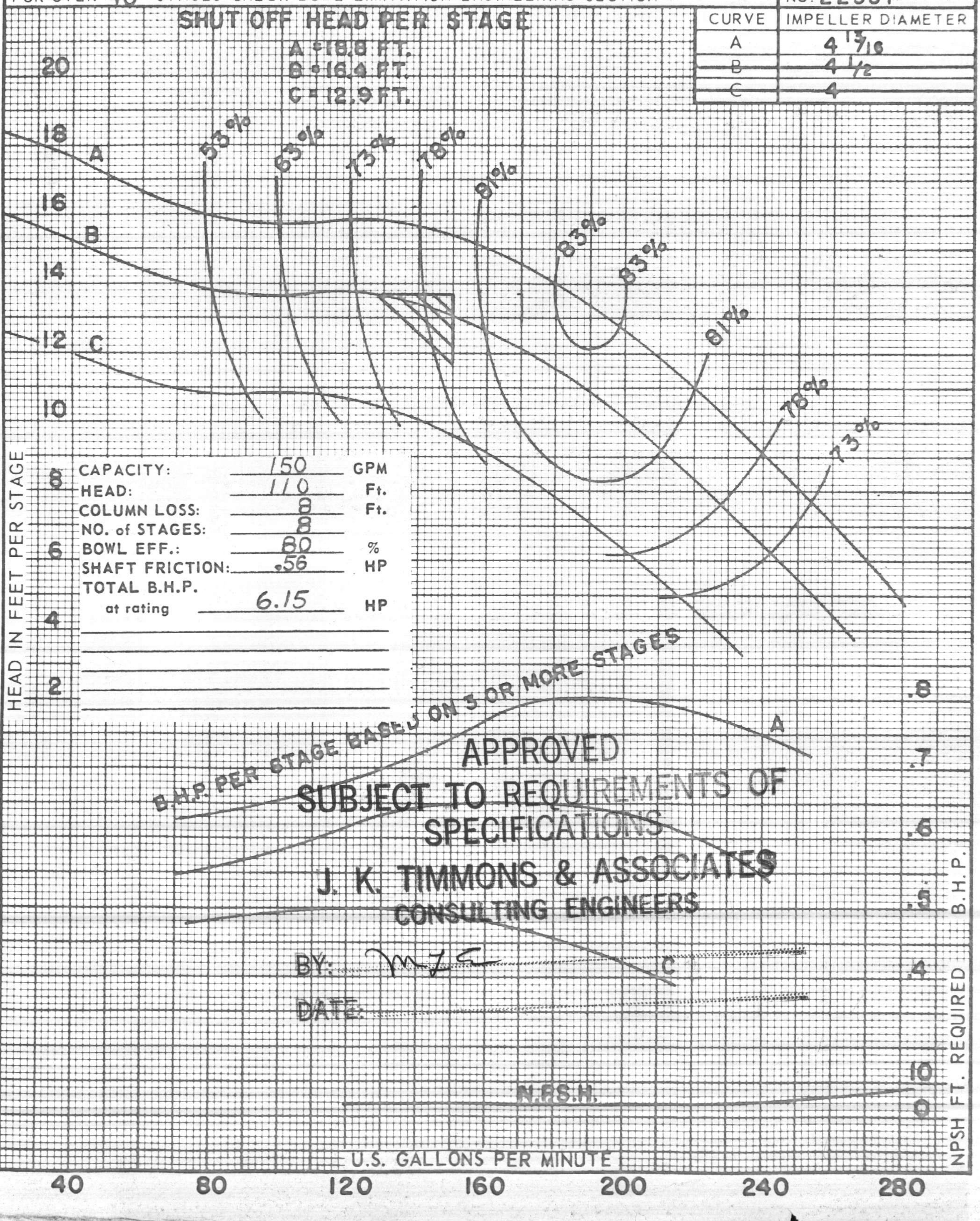
EFFICIENCY CHANGE:		
___ STAGE DEDUCT	___	POINTS
3 STAGE DEDUCT	0	POINTS
2 STAGE DEDUCT	2	POINTS
1 STAGE DEDUCT	4	POINTS
ENAMELED BOWLS		

DIMENSIONS	FIG. 4700	FIG. 4750
BOWL DIAMETER	5 3/4	5 3/4
IMPELLER SHAFT DIA.	1	1
LENGTH FIRST STAGE	17 1/8	20 1/8
ADDITIONAL STAGE	6 1/2	6 1/2
THRUST FACTOR =	3.9	3.9

SUCTION - I.D. PIPE SIZE 4" SIZE COLUMN ADAPTER (4)" " OR 5" SEMI-ENC. IMPELLER

FOR OVER 40 STAGES CHECK BOWL LIMITATION ENGINEERING SECTION — NO. 22957

CURVE	IMPELLER DIAMETER
A	4 13/16
B	4 1/2
C	4



CRANE DEMING PUMPS

TELEPHONE-(216) 337-8741
TELEX NO.-098-6445

CRANE CO. • 884 SOUTH BROADWAY • SALEM, OHIO 44460

Environmental Products, Inc.
P.O. Drawer 2385
Hickory, N. Car. 28601

DATA TRANSMITTAL

DATE: 4-10-75

Attention: Mr. Bob Darnell

Subject: Purchase Order 2189
Deming Order 6108 S/N T-74759
Project:

Gentlemen:

Attached is data as listed below:

QTY.	DESCRIPTION	NUMBER & REMARKS:
11	DIMENSION DRAWING	DATED
11	PERFORMANCE CURVE	
11	BULLETIN	Fig. 4700
11	INSTRUCTION MANUAL WITH PARTS LIST	" "

( ) xxxxx Above submittal is for APPROVAL and we are withholding the order from entry for production awaiting receipt of approved data at this office along with full information to enable us to proceed. See note * below.

( ) Above submittal is for record and file. We are proceeding with production in accordance with same. Please note that any changes after this date may result in delays and possible additional charges.

( ) Above for record and file.

REMARKS:

Richard Fergason Turbine Dept.
Application Engineering Dept.

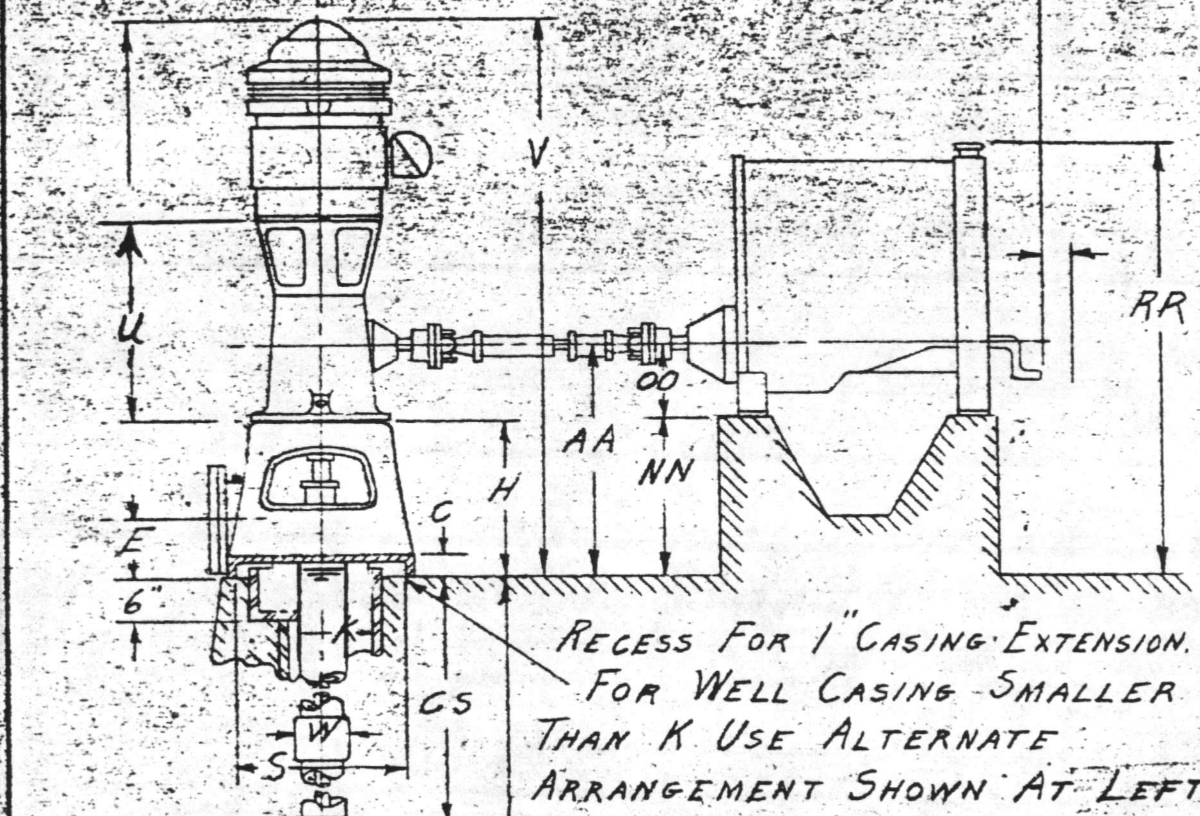
* NOTE: When for approval, attached copy of this letter returned with your release will facilitate identification and handling.

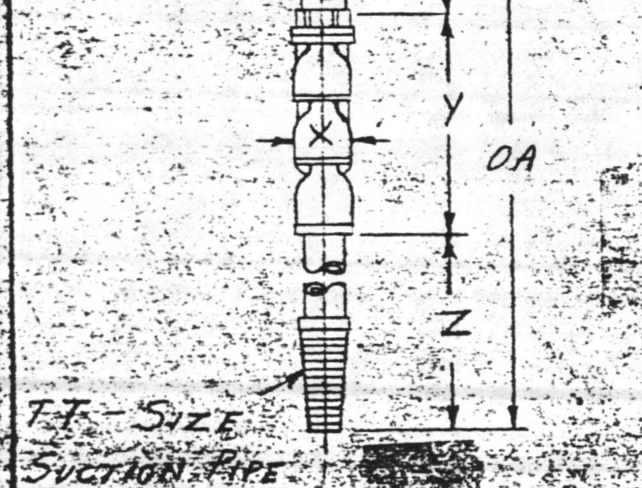
APPROVED FOR PRODUCTION: ....
(date)

FILE

For ....

MODEL HA-15 COMB. RIGHT ANGLE GEAR DRIVE 1:1 RATIO JOHNSON





DIMENSION			
A	14"	CS	70'-0"
B	12 3/8"	OA	86'-1 5/8"
C	2"	AA	21 7/8"
D	5/8"	BB	13"
E	6"	EE	—
F	9"	FF	—
H	15 1/2	GG	—
K	6"	HH	—
M	11"	JJ	—
N	6"	KK	—
R	19 1/8"	LL	—
S	12 3/4"	MM	—
U	19 1/8"	NN	—
V	—	OO	—
W	5"	RR	—
X	5 3/4"	SS	—
Y	5'-2 5/8"	TT	4"
Z	10'-11"		

SPECIFICATIONS

L DEMING Fig. 4700 Vertical Turbine Pump designed for 150 GPM at 110 feet head, including:
7 1/2 HP 1750 RPM ____ Volt ____ Phase ____ Cycle
G.E. Vertical Hollowshaft Motor ____
MOTOR FURNISHED BY OTHERS
SD-44-10 Surface Discharge Head with — inch discharge flange with bolts and gasket.
70 feet 4" x 1 1/4" Column and shaft with RUBBER Bearings on 10 foot centers
8 Stage 6 inch ENAMELED Bowl Assembly using Impeller 22957 from Curve PC-3186
10 feet 4 inch BLACK STEEL suction pipe
4 inch KEYSTONE TYPE TC GALV. strainer

When properly endorsed this print is correct for
ENVIRONMENTAL PRODUCTS INC.
Customer's P.O. 2189 Turbine No. T- 74759
Date 4-7-75 By David E. Snyder 50.0610B-00

MARK NEW RIVER WELL "R"

DATE OF ISSUE

DESTROY ALL PREVIOUS PRINTS

THE DEMING CO. SALEM, OHIO	TITLE VERTICAL TURBINE PUMP WITH RIGHT ANGLE GEAR DRIVE & ENG. WITH MOTOR	FIG. 47 SIZE
Y-4 C7	DATE 4-20-49 SCALE	DRAWING NO. 18464

ADS

CURVE PAGE 76
SIZE XH6 P.C.3186
SUPERSEDES P.C.2622

TS[illegible]TALOG - SECTION C - 1750 RPM
VERTICAL TURBINE PUMP CURVES
PERFORMANCE PER STAGE

CRANE-DEMING PUMPS
CRANE CO.
SALEM, OHIO, U.S.A.

SIZE XH6 — SINGLE STAGE PERFORMANCE — 1770 R.P.M.

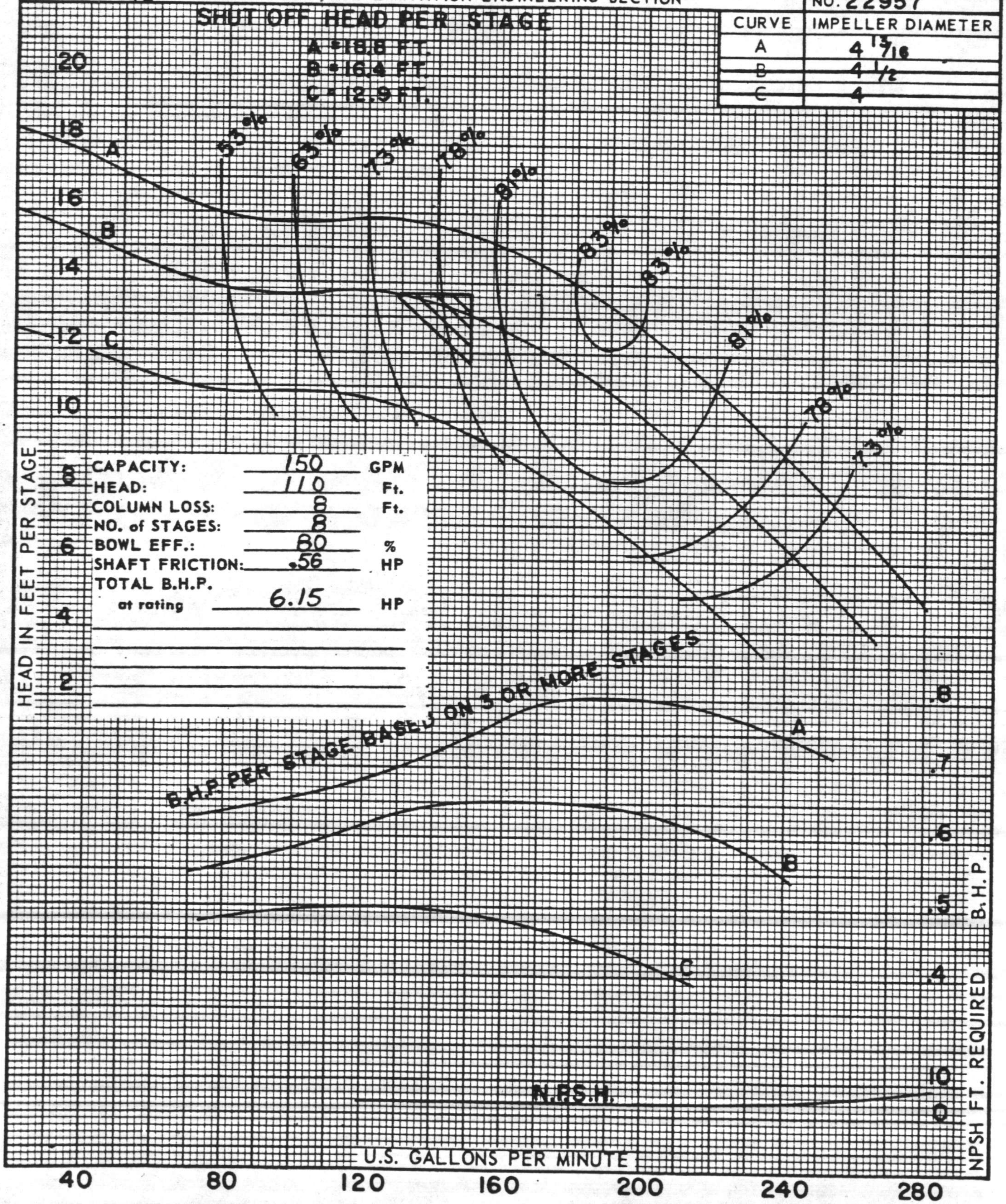
EFFICIENCY CHANGE:		
3	STAGE DEDUCT	0 POINTS
2	STAGE DEDUCT	2 POINTS
1	STAGE DEDUCT	4 POINTS
ENAMELED BOWLS		

DIMENSIONS	FIG. 4700	FIG. 4750
BOWL DIAMETER	5 3/4	5 3/4
IMPELLER SHAFT DIA.	1	1
LENGTH FIRST STAGE	17 1/8	20 1/8
ADDITIONAL STAGE	6 1/2	6 1/2
THRUST FACTOR =	3.9	3.9

SUCTION – I.D. PIPE SIZE 4" SIZE COLUMN ADAPTER (4)" OR, 5" SEMI-ENC. IMPELLER NO. 22957

FOR OVER 40 STAGES CHECK BOWL LIMITATION ENGINEERING SECTION

CURVE	IMPELLER DIAMETER
A	4 13/16
B	4 1/2
C	4



CAPACITY:	150	GPM
HEAD:	110	Ft.
COLUMN LOSS:	8	Ft.
NO. of STAGES:	8	
BOWL EFF.:	80	%
SHAFT FRICTION:	.56	HP
TOTAL B.H.P. at rating	6.15	HP

"R"

APPROVED
SUBJECT TO REQUIREMENTS OF SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES
CONSULTING ENGINEERS
BY: M F E
DATE: 1 Aug 75

June 11, 1975

Peabody S. E., Inc.
P. O. Drawer 7248
Jacksonville, North Carolina 28540

Attn: Mr. Felix E. Acosta

Dear Mr. Acosta:

Our recommendations on Well R would be to set:

60' of 18" Pit Casings
120' of 8" Gav. Pipe
20' of 8" Stainless Steel Well Screen
20' of 8" Gav. Pipe
10' of 8" Stainless Steel Well Screen
10' of 8" Gav. Pipe

We feel like this well would produce 200 GPM of water.

Very truly yours;

Carolina Well and Pump Co., Inc.

Worth F. Picard
P. O. Box 1085
Sanford, North Carolina 27330

WFP/slm

UTILITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-1153
JACKSONVILLE, NORTH CAROLINA
SP. 15H.3.8
PR. NO. 15H.3.7 CONTRACT DWG. NO.
CK. & APP. BY: [signature] DATE: 12 Aug, 1975
PEABODY-PETERSEN CO.
Job No. 7409

Peabody S. E., Inc.
P. O. Drawer 7248
Jacksonville, N. C. 28540

REC'D JUN 1 1 1975

REC'D JUN 1 1 1975

NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES
CHEMICAL ANALYSIS OF WATER
Division of Health Services. Laboratory Section
P. O. Box 28047. Raleigh. North Carolina 27611

Complete all items above Heavy Line
(see instructions on reverse side)

Name of Owner or Supply: Camp Lejeune
Address: Jacksonville, NC
Well No. R
County: Onslow
Report to: W... F ...
Address: Box 1085
Sanford NC 27330
Collected by: Ralph W Harrison
Date Collected: 4-15-75 Time: 4:00 pm
Remarks: 168' to 172'
Sample 1

Type of Supply: [✓] 1-Municipal [ ] 2-Sanitary District [ ] 3-Mobile Home Park [ ] 4-Community [ ] 5-Association [ ] 6-Industrial [ ] 7-Institution [ ] 8-Private [ ] 9-Other

Source of Water: [ ] 1-Ground [ ] 2-Surface [ ] 3-Both [ ] 4-Purchased

Source of Sample: [✓] 1-Well tap [ ] 2-House Tap [ ] 3-Distribution Tap

Type of Sample: [✓] 1-Raw [ ] 2-Treated

Type of Treatment: [✓] 0-None [ ] 1-Chlorinated [ ] 2-Fluoridated [ ] 3-Filtered [ ] 4-Alum [ ] 5-Lime [ ] 6-Soda Ash [ ] 7-Polyphosphate [ ] 8-Water Softener [ ] 9-Other

Analysis Desired: [✓] 1-Complete analysis (18 tests) [ ] 2-Partial analysis (9 tests)

APPROVED
SUBJECT TO REQUIREMENTS OF SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES
CONSULTING ENGINEERS
BY: MZE
DATE: 1 Aug 75

HIGH - MIX OK

ANALYSIS

Color	(000)	15 units	Ph	(00.0)	8.6

Results in Parts per Million

Alkalinity $CaCO_3$	(000)	334	Fluoride	(0.00)	1.70
Total Hardness	(000)	19	Arsenic	(*0.00)	<0.01
Iron	(*00.00)	<0.05	Cadmium	(*0.00)	<0.01
Manganese	(*00.00)		Chromium +6	(*0.00)	<0.05
Turbidity SiO_2	(000)	1.5	Copper	(*00.00)	<0.05
Acidity $CaCO_3$	(000)	0	Lead	(*0.00)	<0.05
Chloride	(000)	38	Zinc	(*00.00)	0.06
Sodium	(000)	165	Calcium		4.8
Potassium	(00.0)	4.7	Magnesium		1.7

Date received

UTILITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-1155
JACKSONVILLE, NORTH CAROLINA

SPEC.
PAR. NO. 15H.3.8 CONTRACT DWG. NO. ____

CK. &
APP. BY [signature] DATE 17 June 1975

PEABODY-PETERSEN CO.
Job No. 7409

NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES

CHEMICAL ANALYSIS OF WATER

Division of Health Services, Laboratory Section

P. O. Box 28047, Raleigh, North Carolina 27611

Complete all Items above Heavy Line
(see instructions on reverse side)

APPROVED SUBJECT TO REQUIREMENTS OF SPECIFICATIONS
J. K. TIMMONS & ASSOCIATES CONSULTING ENGINEERS
BY: MYZ
DATE: 1 Aug 75

Name of Owner or Supply: Camp Lejeune

Address: Jacksonville, N.C.

Well No. R

County: Onslow

Report to: Wyatt F Pickard

Address: Box 1085
Seaford, NC 27330

Collected by: Ralph W. Harrison

Date Collected: 5-16-75 Time: 2:00 pm

Remarks: Sample #2
126' to 130'

Type of Supplier: [ ] 1-Municipal [ ] 2-Sanitary District [ ] 3-Mobile Home Park [ ] 4-Community [ ] 5-Association [ ] 6-Industrial [ ] 7-Institution [ ] 8-Private [ ] 9-Other

Source of Water: [✓] 1-Ground [ ] 2-Surface [ ] 3-Both [ ] 4-Purchased

Source of Sample: [✓] 1-Well tap [ ] 2-House Tap [ ] 3-Distribution Tap

Type of Sample: [✓] 1-Raw [ ] 2-Treated

Type of Treatment: [✓] 0-None [ ] 1-Chlorinated [ ] 2-Fluoridated [ ] 3-Filtered [ ] 4-Alum [ ] 5-Lime [ ] 6-Soda Ash [ ] 7-Polyphosphate [ ] 8-Zeolite Softener [ ] 9-Other

UTILITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-4155
JACKSONVILLE, NORTH CAROLINA
SPEC. PAR. NO. ____ CONTRACT DWG. NO. ____
CK. & APP. BY ____ DATE ____
PEABODY-PETERSEN CO.
Job No. 7409

Analysis Desired: [✓] 1-Complete analysis (18 tests) [ ] 2-Partial analysis (9 tests)

ANALYSIS

Color	(000)	15 units	Ph	(00.0)	8.4

Results in Parts per Million

HIGH, MIX OK

Alkalinity $CaCO_3$	(000)	318	Fluoride	(0.00)	1.74
Total Hardness	(000)	20	Arsenic	(*0.00)	<0.01
Iron	(*00.00)	< 0.05	Cadmium	(*0.00)	<0.01
Manganese	(*00.00)	< 0.03	Chromium $^{+6}$	(*0.00)	<0.05
Turbidity SiO_2	(000)	.8	Copper	(*00.00)	<0.05
Acidity $CaCO_3$	(000)	0	Lead	(*0.00)	<0.05
Chloride	(000)	31	Zinc	(*00.00)	0.05
Sodium	(000)	145			5.2
Potassium	(00.0)	9.2			1.8

UTILITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-1155
JACKSONVILLE, NORTH CAROLINA

SPEC. PAR. NO. 15H.3.6 CONTRACT DWG. NO.

CK. & APP. BY [signature] DATE 17 June, 1975

PEABODY-PETERSEN CO.
Job No. 7409

NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES

CHEMICAL ANALYSIS OF WATER

Division of Health Services, Laboratory Section

P. O. Box 28047, Raleigh, North Carolina 27611

Complete all Items above Heavy Line
(see instructions on reverse side)

Name of Owner or Supply: CAMP LEJUINE

Address: JACKSONVILLE, N. C.

Well No. R

County: ONSLOW

Report to: WORTH F. PICKARD

Address: BOX 1085

SANFORD, N. C. 27330

Collected by: RALPH HARRISON

Date Collected: 7/10/75 Time: 10:00 p.m.

Remarks: ON PUMPING TEST MARINE BASE

Type of Supplier:
[ ] 1-Municipal
[ ] 2-Sanitary District
[ ] 3-Mobile Home Park
[ ] 4-Community
[ ] 5-Association
[ ] 6-Industrial
[ ] 7-Institution
[ ] 8-Private
[ ] 9-Other

Source of Water:
[X] 1-Ground
[ ] 2-Surface
[ ] 3-Both
[ ] 4-Purchased

Source of Sample:
[X] 1-Well tap
[ ] 2-House Tap
[ ] 3-Distribution Tap

Type of Sample:
[X] 1-Raw
[ ] 2-Treated

Type of Treatment:
[X] 0-None
[ ] 1-Chlorinated
[ ] 2-Fluoridated
[ ] 3-Filtered
[ ] 4-Alum
[ ] 5-Lime
[ ] 6-Soda Ash
[ ] 7-Polyphosphate
[ ] 8-Water Softener
[ ] 9-Other

Analysis Desired:
[X] 1-Complete analysis (18 tests)
[ ] 2-Partial analysis (9 tests)

ANALYSIS

Color (000)	15 units	Ph (00.0)	8.1

Results in Parts per Million

Alkalinity, $CaCO_3$ (000)	315	Fluoride (0.00)	1.62
Total Hardness (000)	25	Arsenic (*0.00)	< 0.01
Iron (*00.00)	0.05	Cadmium (*0.00)	< 0.01
Manganese (*00.00)	< 0.03	Chromium^{+6} (*0.00)	< 0.05
Turbidity SiO_2 (000)	0.5	Copper (*00.00)	< 0.05
Acidity $CaCO_3$ (000)	5	Lead (*0.00)	< 0.05
Chloride (000)	30	Zinc (*00.00)	0.10
Sodium (000)	150	Calcium	7.2
Potassium (00.0)	9.0	Magnesium	1.7

Date received July 17, 1975 Date reported July 23, 1975 09477

PUMPING TEST DATA

Test conducted by: Carolina Well and Pump Company, Inc. By: Ralph Harrison
Well Owner: Air Station - Camp Lejune Address: Jacksonville, North Carolina
Pumped Well No.: R Location: County: Onslow
Observation Well Locations:
Airline Lengths: Pumped Well Observation Wells
Remarks:

Pumping rate measured with: Orifice 3" X 4" Water levels measured with: Electric Tape

Pump Well Data

Date and Time	Elapsed Time Min.	Piezometer Tube Reading Inches	Pumping Rate GPM	Pump Discharge Pressure	Altitude Gauge Reading Feet	Feet to Water	Remarks
7-8-75							
8:55		Static Water Level				14.9	
9:00		Pumping Test Started					Water clear
9:15	15	5	100			15.11	
9:30	30	5	100			16.0	
9:45	45	5	100			16.1	
10:00	60	5	100			16.1	
10:30	90	5	100			16.1	
11:00	120	5	100			16.2	
11:30	150	5	100			16.2	
12:00	180	5	100			16.2	
12:30	210	5	100			16.2	
1:00	240	5	100			16.2	
1:30	270	5	100			16.2	
2:00	300	5	100			16.2	
2:30	330	5	100			16.2	
3:00	360	5	100			16.3	
3:30	390	5	100			16.3	
4:00	420	5	100			16.3	
4:30	450	5	100			16.3	
5:00	480	5	100			16.3	
5:30	510	5	100			16.4	
6:00	540	5	100			16.4	
6:30	570	5	100			16.4	
7:00	600	5	100			16.4	
7:30	630	5	100			16.4	
8:00	660	5	100			16.4	
8:30	690	5	100			16.4	
9:00	720	5	100			16.4	
9:30	750	5	100			16.4	
10:00	780	5	100			16.4	
10:15	795 [redacted]	13	150			16.11	
10:30	810 [redacted]	13	150			17.0	
10:45	825 [redacted]	13	150			17.0	
11:00	840 [redacted]	13	150			17.0	
11:30	870 [redacted]	13	150			17.0	
12:00	900 [redacted]	13	150			17.0	
12:30	930 [redacted]	13	150			17.0	
1:00	960 [redacted]	13	150			17.0	
1:30	990 [redacted]	13	150			17.0	
2:00	1020 [redacted]	13	150			17.0	
2:30	1050 [redacted]	13	150			17.0	
3:00	1080 [redacted]	13	150			17.0	
3:30	1110 [redacted]	13	150			17.0	

PUMPING TEST DATA

Test conducted by: Carolina Well and Pump Company, Inc. By: Ralph Harrison
Well Owner: Air Station - Camp Lejune Address: Jacksonville, North Carolina
Pumped Well No.: R Location: County: Onslow
Observation Well Locations:
Airline Lengths: Pumped Well Observation Wells
Remarks:

Pumping rate measured with: Orifice 3" X 4" Water levels measured with: Electric Tape

Pump Well Data

Date and Time	Elapsed Time Min.	Piezometer Tube Reading Inches	Pumping Rate GPM	Pump Discharge Pressure	Altitude Gauge Reading Feet	Feet to Water	Remarks
4:30	1170	13	150			17.0	
5:00	1200	13	150			17.0	
5:30	1230	13	150			17.0	
6:00	1260	13	150			17.0	
6:30	1290	13	150			17.0	
7:00	1320	13	150			17.0	
7:30	1350	13	150			17.0	
8:00	1380	13	150			17.0	
8:30	1410	13	150			17.0	
9:00	1440	13	150			17.0	
9:30	1470	13	150			17.0	
10:00	1500	13	150			17.0	
10:30	1530	13	150			17.0	
11:00	1560	13	150			17.0	
11:15	1575	23	200			17.8	
11:30	1590	23	200			17.9	
11:45	1605	23	200			17.9	
12:00	1620	23	200			17.10	
12:30	1650	23	200			17.10	
1:00	1680	23	200			17.11	
1:30	1710	23	200			18.0	
2:00	1740	23	200			18.1	
2:30	1770	23	200			18.1	
3:00	1300	23	200			18.1	
3:30	1830	23	200			18.1	
4:00	1860	23	200			18.5	
4:30	1890	23	200			18.5	
5:00	1920	23	200			18.5	
5:30	1950	23	200			18.5	
6:00	1980	23	200			18.5	
6:30	2010	23	200			18.5	
7:00	2040	23	200			18.5	
7:30	2070	23	200			18.5	
8:00	2100 [redacted]	23	200			18.5	
8:30	2130 [redacted]	23	200			18.5	
9:00	2160 [redacted]	23	200			18.5	
9:30	2190 [redacted]	23	200			18.5	
10:00	2220 [redacted]	23	200			18.5	
10:30	2250 [redacted]	23	200			18.5	
11:00	2280 [redacted]	23	200			18.5	
11:30	2310 [redacted]	23	200			18.5	
12:00	2340 [redacted]	23	200			18.5	
12:15	2355 [redacted]	35	250			18.11	
12:30	2370 [redacted]	35	250			18.11	

Page 3

PUMPING TEST DATA

By: Ralph Harrison

Test conducted by: Carolina Well and Pump Company, Inc. Address: Jacksonville, North Carolina

Well Owner: Air Station - Camp Lejune County: Onslow

Pumped Well No.: R Location:

Observation Well Locations:

Airline Lengths: Pumped Well Observation Wells

Remarks:

Pumping rate measured with: Orifice 3" X 4" Water levels measured with: Electric Tape

Pump Well Data

Date and Time	Elapsed Time Min.	Piezometer Tube Reading Inches	Pumping Rate GPM	Pump Discharge Pressure	Altitude Gauge Reading Feet	Feet to Water	Remarks
1:00	2400	35	250			19.0	
2:00	2460	35	250			19.0	
3:00	2520	35	250			19.0	
4:00	2580	35	250			19.0	
5:00	2640	35	250			19.0	
6:00	2700	35	250			19.0	
7:00	2760	35	250			19.0	
8:00	2820	35	250			19.0	
9:00	2880	35	250			19.0	
10:00	2940	35	250			19.1	
11:00	3000	35	250			19.2	
12:00	3060	35	250			19.3	
1:00	3120	35	250			19.4	
2:00	3180	35	250			19.4	
3:00	3240	35	250			19.4	
4:00	3300	35	250			19.4	
5:00	3360	35	250			19.4	
6:00	3420	35	250			19.4	
7:00	3480	35	250			19.4	
8:00	3540	35	250			19.4	
9:00	3600	35	250			19.4	
10:00	3660	35	250			19.4	
11:00	3720	35	250			19.4	
12:00	3780	35	250			19.4	
	Recovery Time						
						17.2	
12:05						17.1	
12:10						17.0	
12:15						16.11	
12:20						16.11	
12:25						16.10½	
12:30						16.10	
12:35						16.9½	
12:40						16.9¼	
12:45						16.9	
12:50						16.8 3/4	
12:55						16.8½	
1:00						16.8	
1:15						16.7½	
1:30						16.7	
1:45						16.6	

LITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-1153
JACKSONVILLE, NORTH CAROLINA
SPEC. PAR. NO. 1511.3.7 CONTRACT DWG. NO.
CK. & APP. DATE 17 June 1975
PEABODY-PETERSEN CO.
Job No. 7409

166

NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES

CHEMICAL ANALYSIS OF WATER

Division of Health Services, Laboratory Section
P. O. Box 28047, Raleigh, North Carolina 27611

Complete all items above Heavy Line
(see instructions on reverse side)

Name of Owner or Supply: CAMP LEJUNE

Address: JACKSONVILLE NC

Well No. R

County: ONSLOW

Report to: NORTH F PICKARD

Address: BOX 1085
SANFORD NC 27330

Collected by: RALPH H. HARRISON

Date Collected: 4-15-75 Time: 4:00 P.M.

Remarks:
168' TO 172'
SAMPLE 1
...
CCI RUNDGREN 5-30-75

Type of Supply:
[x] 1-Municipal
[ ] 2-Sanitary District
[ ] 3-Mobile Home Park
[ ] 4-Community
[ ] 5-Association
[ ] 6-Industrial
[ ] 7-Institution
[ ] 8-Private
[ ] 9-Other

Source of Water:
[x] 1-Ground
[ ] 2-Surface
[ ] 3-Both
[ ] 4-Purchased

Source of Sample:
[x] 1-Well tap
[ ] 2-House Tap
[ ] 3-Distribution Tap

Type of Sample:
[x] 1-Raw
[ ] 2-Treated

Type of Treatment:
[x] 0-None
[ ] 1-Chlorinated
[ ] 2-Fluoridated
[ ] 3-Filtered
[ ] 4-Alum
[ ] 5-Lime
[ ] 6-Soda Ash
[ ] 7-Polyphosphate
[ ] 8-Water Softener
[ ] 9-Other

Analysis Desired:
[x] 1-Complete analysis (18 tests)
[ ] 2-Partial analysis (9 tests)

ANALYSIS

Color (000)	15 units	Ph (00.0)	8.6

Results in Parts per Million

Alkalinity $CaCO_3$ (000)	334	Fluoride (0.00)	1.70
Total Hardness (000)	19	Arsenic (*0.00)	< 0.01
Iron (*00.00)	< 0.05	Cadmium (*0.00)	< 0.01
Manganese (*00.00)	< 0.03	Chromium $^{+6}$ (*0.00)	< 0.05
Turbidity SiO_2 (000)	1.5	Copper (*00.00)	< 0.05
Acidity $CaCO_3$ (000)	0	Lead (*0.00)	< 0.05
Chloride (000)	38	Zinc (*00.00)	0.06
Sodium (000)	165	CALCIUM	4.8
Potassium (00.0)	9.7	MAGNESIUM	1.7

Date received 5-19-75 Date reported 5-28-75

Lab. No. 7913

Date analyzed Reported by

"R"

Peabody Petersen

Peabody Petersen Co.
1930 Silver Star Road. | P. O. Box 7934
Orlando, Florida 32804 | Telephone 305 299-3020

LETTER OF TRANSMITTAL

Date	17 June 1975 Gal. Ed.
Customer Order No.	N62 ...
Attention	[illegible]
Re:	MCA (H) [illegible] Utilities Expansion Camp Lejeune, N.C.
Copies Mailed To:	Orlando Office, Opec Hdqs, A. Eackhaus [illegible]

To LCDR. K.W. McGee
Building 1005
Marine Corps Base
Camp Lejeune N.C. 28542

Gentlemen:

We are sending You

☒ Attached ☐ Under separate cover via ________ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☒ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ ________ Recommendation

COPIES	DATE	NUMBER	DESCRIPTION
4	17 June 75	69	Well data for well R, water sample analysis, electric log & permanent pump recommendation.

2893 LAWTON PRINTERS Orlando Distributors

Remarks:
(1) For your information

Thanks

Copy To: ________

Signed: [signature]

If enclosures are not as noted, kindly notify us at once.

June 11, 1975

Peabody S. E., Inc.
P. O. Drawer 7248
Jacksonville, North Carolina 28540

Attn: Mr. Felix E. Acosta

Dear Mr. Acosta:

Our recommendations on Well R would be to set:

60' of 18" Pit Casings
120' of 8" Gav. Pipe
20' of 8" Stainless Steel Well Screen
20' of 8" Gav. Pipe
10' of 8" Stainless Steel Well Screen
10' of 8" Gav. Pipe

We feel like this well would produce 200 GPM of water.

Very truly yours;

Carolina Well and Pump Co., Inc.

Worth F. Picard
P. O. Box 1085
Sanford, North Carolina 27330

UTILITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-1155
JACKSONVILLE, NORTH CAROLINA
15H.3.8
NO. 15H.3.7 CONTRACT DWG. NO.
CK. & APP. BY [signature] DATE 12 June, 1975
PEABODY-PETERSEN CO.
Job No. 7409

WFP/slm

Peabody S. E., Inc.
P. O. Drawer 7248
Jacksonville, N. C. 28540

REC'D JUN 11 1975

REC'D JUN 1 1975

UTILITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-1155
JACKSONVILLE, NORTH CAROLINA
CONTRACT
FAC NO. 16W 309 DWG. NO.
CK'D BY ________ DATE 17 June, 1975
PEABODY-PETERSEN CO.
Job No. 7409

NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES
CHEMICAL ANALYSIS OF WATER
Division of Health Services, Laboratory Section
P. O. Box 28047, Raleigh, North Carolina 27611

Complete all items above Heavy Line
(see instructions on reverse side)

Name of Owner or Supply: Camp Lejeune

Address: Jacksonville, N.C.

Well No. R

County: Onslow

Report to: [illegible]

Address: Box 1085
[illegible], N.C. 28[illegible]

Collected by: Ralph W. [illegible]

Date Collected: 5-16-75 Time: 2:00 pm

Remarks: Sample #2
126' to 130'

Type of Supplier:
[ ] 1-Municipal
[ ] 2-Sanitary District
[ ] 3-Mobile Home Park
[ ] 4-Community
[ ] 5-Association
[ ] 6-Industrial
[ ] 7-Institution
[ ] 8-Private
[ ] 9-Other

Source of Water:
[✓] 1-Ground
[ ] 2-Surface
[ ] 3-Both
[ ] 4-Purchased

Source of Sample:
[✓] 1-Well tap
[ ] 2-House Tap
[ ] 3-Distribution Tap

Type of Sample:
[✓] 1-Raw
[ ] 2-Treated

Type of Treatment:
[✓] 0-None
[ ] 1-Chlorinated
[ ] 2-Fluoridated
[ ] 3-Filtered
[ ] 4-Alum
[ ] 5-Lime
[ ] 6-Soda Ash
[ ] 7-Polyphosphate
[ ] 8-Water Softener
[ ] 9-Other

Analysis Desired:
[✓] 1-Complete analysis (18 tests)
[ ] 2-Partial analysis (9 tests)

ANALYSIS

Color (000)	15 units	Ph (00.0)	8.4

Results in Parts per Million

Alkalinity $CaCO_3$ (000)	318	Fluoride (0.00)	1.74
Total Hardness (000)	20	Arsenic (*0.00)	<0.01
Iron (*00.00)	<0.05	Cadmium (*0.00)	<0.01
Manganese (*00.00)	<0.03	Chromium^{+6} (*0.00)	<0.05
Turbidity SiO_2 (000)	3	Copper (*00.00)	<0.05
Acidity, $CaCO_3$ (000)	0	Lead (*0.00)	<0.05
Chloride (000)	31	Zinc (*00.00)	0.05
Sodium (000)	145		5.2
Potassium (00.0)	4.2		1.9

ELECTRIC LOG BY

JOHNSON·KECK™ DR-61 ELECTRICAL LOGGING SYSTEM

Well R   Owner [illegible]

Location   Date 5/[illegible]/75

Borehole depth 20? ft. dia. 6 in.   Casing depth 28 ft. dia. 8" in.

Mud resistivity   temperature ___ F

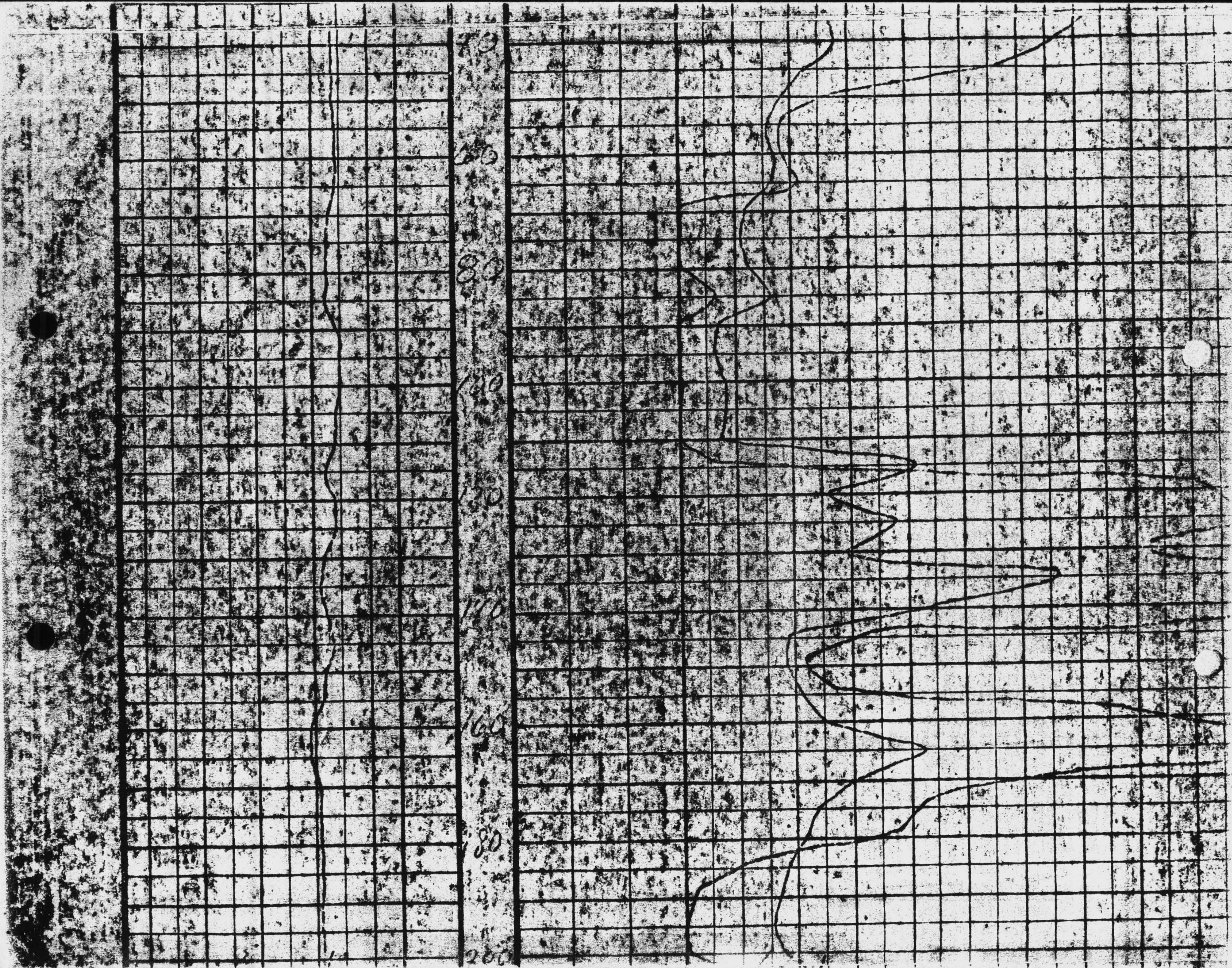
viscosity ___ sec   weight ___ lb/gal   type ___

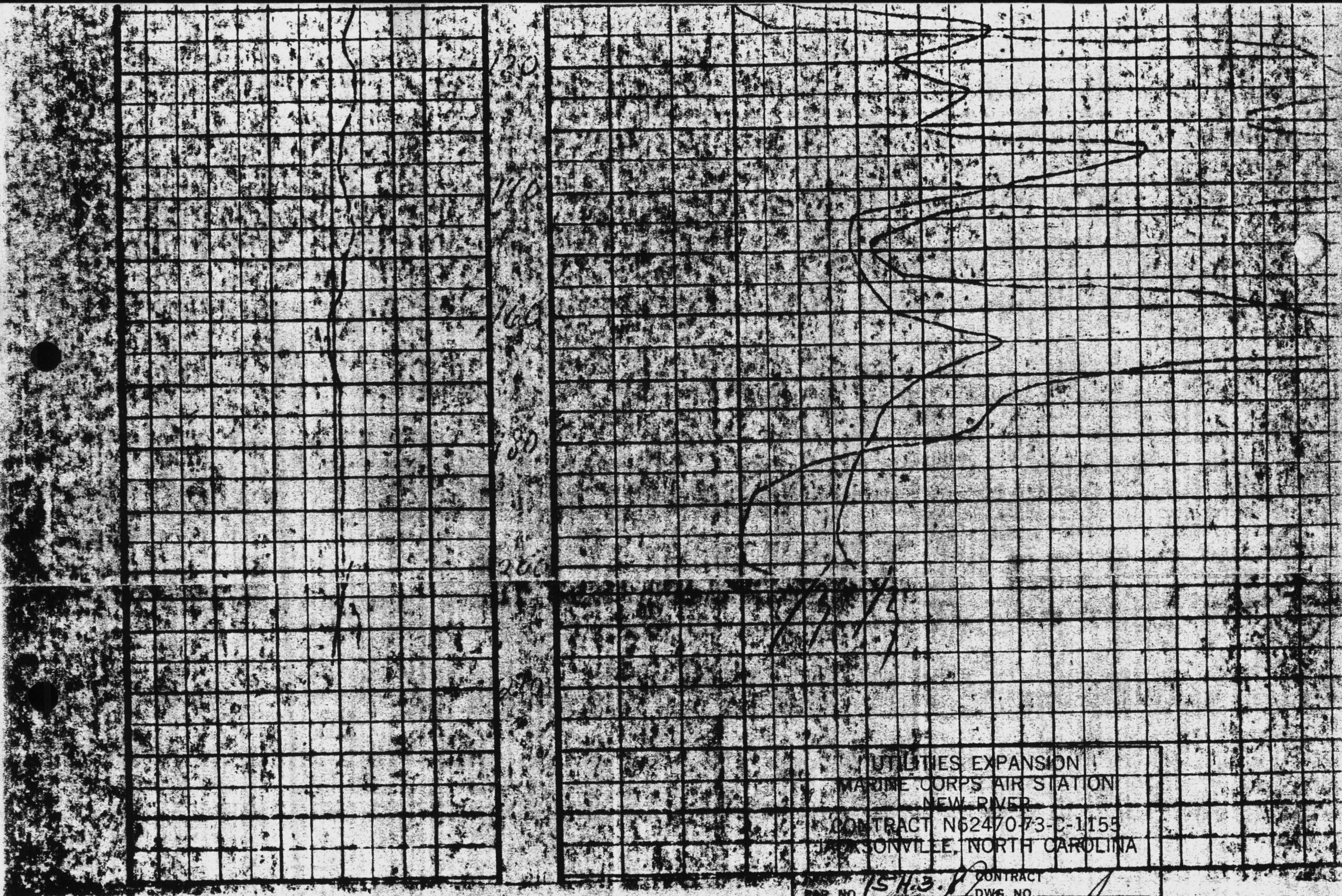
Measuring point 0 ft. above/below ground level

Fluid level in hole 8 ft.   Other logs

Driller Ralph Harrison   E-log operator [illegible]

Spontaneous Potential (millivolts)						Depth (ft)	Resistivity (ohm – ft)							
400	200	0	200	400	SP	1"=10	(Circle one) Normal	Lateral		0	8000	16000	24000	32000
200	100		100	200		1"=20					2000	4000	6000	8000
75	25		25	75		1"=40					200	400	600	800
						0	.25	2.5	10		100	200	300	400
						20								


80
120
160
180



UTILITIES EXPANSION
MARINE CORPS AIR STATION
NEW RIVER
CONTRACT N62470-73-C-1155
JACKSONVILLE, NORTH CAROLINA

REF. NO. 15H3.8 CONTRACT DWG. NO.

CK. & APP. BY [signature] DATE 17 June, 197[illegible]

PEABODY-PETERSEN CO.
Job No. 7409