FILE FOLDER

DESCRIPTION ON TAB:

BA-190

☑ **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

DATE 13 APR 2000

PWSID D467048

WELL # 190

WELL NAME Onslow Beach 190

BLDG. BA190

CODE Ground

AVAILABILITY Permanent

LOCATION Mock-up Road (near WTP)

LATITUDE 34° 34 min 31.304 N

LONGITUDE 077° 16 49.970 W

WELL DIAMETER 8"

WELL DEPTH 105'

SCREEN INTERVAL f/55' to 70' & 80' to 100' (2 screens)

YIELD 263 gpm

STATIC LEVEL 8'

PUMPING LEVEL 24'

PUMP TYPE

MOTOR HP 15'

INTAKE DEPTH 80'

DESIGN CAPACITY 250 gpm

ACTUAL GPM 265

SIZE OF CONCRETE SLAB

HEIGHT OF CASING 50'

WELL NUMBER BA 190 | BY SMILES / THOMAS | DATE 4-24-02

AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
80	10	15	05	75	100	38
	SET AT ⇒	18	08	68	170	48
		20	10	65	219	58
		25	15	60	248	08
					248	

REMARKS D/H - 85

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER BA-190 | BY Stevenson & Peterson | DATE 1-5-98

AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
80	8	13	5	72	100	10
		18	10	65	164	20
		20	12	60	207	30
		22	14	58	236	40
		24	16	50	265	

REMARKS D/H - 80

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER BA 190 | BY Stevenson & Peterson | DATE 2-16-95

AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
80	8	15	7	72	100	25
		20	12	60	212	35
		25	17	50	275	45
		28	20	40	313	55
		32	24	30	349	00

REMARKS PD 48-3 Left set at 50 PSI

P/H 80 PSI

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER BA 190 THOMAS / COX DATE 8-28-90

AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
80	13	18	5	74	111	15
		20	7	70	159	25
		23	10	65	205	35
		25	12	60	226	45
		26	13	55	263	55
		28	15	50	287	5
left set at →		30	17	45	303	10
		31	18	40	325	20

REMARKS

dead head 83

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

BA 190
10-22-85

AL	SL	PL	DD	PSI	GPM	Time
80	10	12	2	72	100	15
		18	8	68	125	15
		20	10	64	150	15
		22	12	60	180	15
		24	14	55	210	15

Set @ 55 psi with 210 gpm

WELL NUMBER BA 190		BY Thomas & BROWN - WARD			DATE 11-15-84	
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME 1420
80	9	14	5	75	100	1430
		16	7	70	128	1440
		19	10	65	178	1450
		22	13	60	219	1500
		24	15	55	254	1515

REMARKS left end @ S/L 9 P/L 24 D/D 15 PSI 55 GPM 254

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER BA190		BY THOMAS / RAYNOR			DATE 12-1-83	
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME 1400
80	7	11	4	73	104	1414
		15	8	69	130	1424
		17	10	66	164	1433
		19	12	63	187	1444
		21	14	60	221	1453
		27	20	55	250	1505

REMARKS used altitude gage
installed 2 load DS

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

BA 190

DATE	LENGTH OF AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAW DOWN	DISCHARGE PRESSURE	CAP. PER POINT OF DISCHARGE	TOTAL GPM
8-9-82					start	Time	1015
	80	22'	26	4'	71	100	1030
			30	8'	65	150	1045
			34	12'	57	200	1100
			38	16'	43	250	1115

REMARKS: used water meter - mud threaded Blow-off line

North Carolina Department of Environment, Health, and Natural Resources
Division of Environmental Health, Public Water Supply Section

SOURCE INFORMATION
GROUND WATER

Date Form Completed: M M D D Y Y: 01 25 95

PWSID: 0 6 7 0 8

Owner Assigned Source Code: 190

Well Name (If purchase, name of system): ONSLOW BEACH 190

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): MOCK-UP RD NEAR WTP

Latitude (N) Deg. Min. Sec.: 34 34 32.

Longitude (W) Deg. Min. Sec.: 077 16 51.

How Determined: O (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: 800

Entry Point Name: MCB ONSLOW BEACH WTP

Location:

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

Sources of pollution/distance: Road @ 75'

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: OK

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

Condition of house: OK Type of freeze protection: None

Well: Diameter: 8" Type: GRAVEL PACKED Yield (gpm): 263 Properly sealed? Y (Y,N)

Properly vented? ___ (Y,N) Casing depth: 50 ft. (If unknown, put 'UNK') Well depth: 105 Meter available? Y (Y,N)

Concrete slab adequate? ___ (Y,N) If no, explain: Size:

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

Pumps: Capacity: GPM: 250 HP: 15 Pump intake depth: 80 Auxiliary Power? N (Y,N)

Type pump: 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? ONSLOW BEACH

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

① Move sample tap - before valve PLANT
② Pkg leaking
③ No vent ④ Exhaust fan louvre out of service

"Hello Analysis, Goodbye Worry"

WATER ANALYSIS LABORATORY
802 HAMLET HIGHWAY
BENNETTSVILLE, SOUTH CAROLINA
29512

(803) 479-4639

CONSULTANTS FOR:
INDUSTRY
MUNICIPALITIES
HOME OWNERS
DEVELOPERS
IRRIGATION
OTHERS

DATE: 11/9/77

EAST COAST CONSTRUCTION CO., INC.
CONTRACT N62470-76-C-6799
REPLACE FOUR WATER WELLS
MARINE CORPS BASE
CAMP LEJUENE NC

Report To: Carolina Well & Pump Co.
Sanford, N. C.

Date Analyzed: 11/9/77

Sample Number: .62'-67'
Onslow Beach
WELL BA-169

Analysis Results--Parts Per Million

Determination		Determination	
pH	7.1	Carbon Dioxide (CO_2)	4
Iron (Fe)	0.2	Total Acidity ($CaCO_3$)	9
Nitrate (NO_3)	0.1	Calcium Hardness ($CaCO_3$)	136
Fluoride (F)	0.4	Magnesium Hardness ($CaCO_3$))	39
Manganese (Mn)	Trace	Carbonate Hardness ($CaCO_3$)	120
Total Hardness ($CaCO_3$)	175	Noncarbonate Hardness ($CaCO_3$)	55
Chlorides (Cl)	16	Alkalinity (Phenolphthalein) ($CaCO_3$)	0
Sulfate (SO_4)	2.2	Carbonate Alkalinity ($CaCO_3$)	0
Phosphate (PO_4)	0.1	Bicarbonate Alkalinity ($CaCO_3$)	120
Magnesium (Mg)	9	Total Alkalinity ($CaCO_3$)	120
Calcium (Ca)	54	Total Dissolved Solids	186
Carbonate (CO_3)	0	Specific Conductance (micromhos at 25°c)	310
Bicarbonate (HCO_3)	146	Appearance When Analyzed	Clear
Hydroxide (OH)	0	Odor When Analyzed	Not Objectionable

Water Analysis Laboratory
802 Hamlet Highway
Bennettsville, South Carolina 29512

SIGNED: _____
LABORATORY DIRECTOR

ANALYTICAL METHODS REFERENCES: 'STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTE-WATER,' APHA, AWWA AND WPCF AND 'METHODS FOR COLLECTION AND ANALYSIS OF WATER SAMPLES,' WATER SUPPLY PAPER 1454 (1960), U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C.

"Hello Analysis, Goodbye Worry"

WATER ANALYSIS LABORATORY
802 HAMLET HIGHWAY
BENNETTSVILLE, SOUTH CAROLINA
29512

(803) 479-4639

CONSULTANTS FOR:
INDUSTRY
MUNICIPALITIES
HOME OWNERS
DEVELOPERS
IRRIGATION
OTHERS

EAST COAST CONSTRUCTION CO., INC.
CONTRACT N62470-76-C-6799
REPLACE FOUR WATER WELLS
MARINE CORPS BASE
CAMP LEJEUNE, NC

DATE: 11/9/77

Report To: Carolina Pump Co.
Sanford, N. C.

Date Analyzed: 11/9/77

Sample Number: 85'-90'
Onslow Beach
HEZ-OBA-109

Analysis Results--Parts Per Million

Determination		Determination	
pH	7.1	Carbon Dioxide (CO_2)	6
Iron (Fe)	0.35	Total Acidity ($CaCO_3$)	13
Nitrate (NO_3)	Trace	Calcium Hardness ($CaCO_3$)	128
Fluoride (F)	0.4	Magnesium Hardness ($CaCO_3$))	24
Manganese (Mn)	Trace	Carbonate Hardness ($CaCO_3$)	152
Total Hardness ($CaCO_3$)	152	Noncarbonate Hardness ($CaCO_3$)	0
Chlorides (Cl)	16	Alkalinity (Phenolphthalein) ($CaCO_3$)	0
Sulfate (SO_4)	1.3	Carbonate Alkalinity ($CaCO_3$)	0
Phosphate (PO_4)	0.1	Bicarbonate Alkalinity ($CaCO_3$)	208
Magnesium (Mg)	5.8	Total Alkalinity ($CaCO_3$)	208
Calcium (Ca)	51	Total Dissolved Solids	192
Carbonate (CO_3)	0	Specific Conductance (micromhos at 25°c)	320
Bicarbonate (HCO_3)	254	Appearance When Analyzed	Clear
Hydroxide (OH)	0	Odor When Analyzed	Not Objectionable

Water Analysis Laboratory
802 Hamlet Highway
Bennettsville, South Carolina 29512

SIGNED: _____
LABORATORY DIRECTOR

ANALYTICAL METHODS REFERENCES: 'STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTE-WATER,' APHA, AWWA AND WPCF AND 'METHODS FOR COLLECTION AND ANALYSIS OF WATER SAMPLES,' WATER SUPPLY PAPER 1454 (1960), U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C.

EAST COAST CONSTRUCTION COMPANY, INC.
GENERAL CONTRACTORS
P. O. BOX 5004 — JACKSONVILLE, NORTH CAROLINA 28540
353-4479 or 353-6044

November 29, 1977

EAST COAST CONSTRUCTION CO., INC.
CONTRACT N62470-76-C-6799
REPLACE FOUR WATER WELLS
MARINE CORPS BASE
CAMP LEJUENE, NC

Driller's Log
Well No. BA-109
(Onslow Beach)

0 - 1	Topsoil
1 - 12	Sand and Clay
12 - 25	Sand
25 - 31	Soft Rock
31 - 37	Sand
37 - 55	Soft Limestone
55 - 57	Hard Limestone
57 - 78	Soft Limestone
78 - 115	Hard Limestone

Field - C-Booth

CONTRACTOR'S SUBMITTAL TRANSMITTAL

5ND LANTDIV 4-4355/3 (Rev. 6/76)

CONTRACT NO.	TRANSMITTAL NO.	DATE
N62470-76-C-6799	14	6/12/78

FROM CONTRACTOR

East Coast Construction Company, Inc.

TO

Commander NAVFAC

PROJECT TITLE AND LOCATION

EAST COAST CONSTRUCTION CO., INC.
CONTRACT N62470-76-C-6799
REPLACE FOUR WATER WELLS
MARINE CORPS BASE
CAMP LEJUENE, NC

CONTRACTOR USE ONLY

*List only one specification division per form.

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

☐ Contractor Approved ☒ OICC Approval ☒ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

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

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	15221	Pump data for well No. BA 109	7	A	ccs 405 6/19/78

CONTRACTOR'S COMMENTS

Note that the discharge pressure is 55 psi @ ground level in order to force the water through the existing softness and filters. Plans call for 40 psi @ discharge point

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

One (1)

CONTRACTOR REPRESENTATIVE (Signature)

Chas Myers

DATE RECEIVED BY REVIEWER	FROM (Reviewer)	TO
		East Const

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

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

REVIEWER'S COMMENTS

COPIES TO: ROICC (2) LANTDIV (1) A-E (1)	DATE	SIGNATURE
	6/19	

WATER AND WASTE WATER EQUIPMENT, SALES AND SERVICE

ENVIRONMENTAL PRODUCTS, INC

P. O. BOX 2385 • HICKORY, N. C. 28601 • 704/322-7003

SUBMITTAL DATA

PROJECT: N62470-76-B-6799, Replace Water Wells
LOCATION: Marine Corp Base, Camp Lejeune, North Carolina
ENGINEER: Naval Facilities Engineering Command, Norfolk, Virginia
CONTRACTOR: East Coast Construction, Jacksonville, North Carolina
SUBJECT: Well BA-109
CONDITIONS: 250 GPM @ 157.5 TDH, 1800 RPM
DESCRIPTION:

One (1) Crane Deming 7-stage, size M-8, Fig. 4700, vertical turbine bowl assembly, for water lubrication, with bronze impellers designed for the above conditions, fitted for 5" column and 1" shafting, with 5" threaded suction, and including the following:

A. One (1) H16DL 16½" x 6" type "C" surface discharge head, fitted for 5" column and 1" water lubricated shafting, for a 6" above ground discharge.
B. One (1) foundation plate (baseplate) for the above discharge head.
C. Two (2) 5' sections of 5" AWWA standard .258 wall, schedule 40, water well column pipe, threaded and coupled with couplings, zinc coated. One to be installed at the top of the bowl assembly, one to connect to bottom of discharge head.
D. Five (5) 10' sections, same as above, for use as "intermediate column".
E. One (1) 5' section of 1" diameter, C-1045, water lubricated shafting (bottom drive), with coupling, stainless steel shaft sleeve, bronze retainer and rubber bearing (for 5" column).
F. Five (5) 10' sections of 1" diameter, C-1045, water lubricated shaft assemblies, with couplings, stainless steel shaft sleeves, bronze retainers and rubber bearings (intermediate shaft).
G. One (1) 1" diameter, C-1045 topshaft, with sleeve, suitable for 5' top column, head, gear and motor used.
H. One (1) 10' section of 5" zinc coated pipe (suction pipe).
I. One (1) 5" galvanized cornucopia type strainer.
J. One (1) General Electric type K, 15 HP, 1800 RPM, 3 phase, 60 cycle, 200 Volt, vertical hollow shaft motor, NEMA design "B", rated for high thrust, with 1.15 service factor, class "B" insulated, 40° C. ambient, in a L254TP10 frame in a NEMA weather protected type one enclosure.

Note 1. TDH is based on 28'2" pumping level, 55 PSI @ ground level, and column and shaft friction loss of 2.30'. (28.16 + 127.05 + 2.30= 157.5')

Note 2. Please confirm overall setting.

JUNE 8, 1978

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

APPROVED ✓
APPROVED AS NOTED
DISAPPROVED
SUBJECT TO THE REQUIREMENTS OF
CONTRACT NO. 05-76-6799
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION --- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & [illegible], COORDINATION OF TRADES, ETC., AS REQUIRED.

REVIEWER CCS DATE 19 JUN 1978

FOR OFFICER IN CHARGE OF CONSTRUCTION

CS

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

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

CURVE PAGE 81
SIZE M8 P.C.3189
SUPERSEDES P.C.2577

SIZE **M-8** — SINGLE STAGE PERFORMANCE — **1770** R.P.M.

EFFICIENCY CHANGE:

7	STAGE DEDUCT	0	POINTS
~~5-6~~	~~STAGE DEDUCT~~	~~2~~	~~POINTS~~
3-4	STAGE DEDUCT	3	POINTS
1-2	STAGE DEDUCT	7	POINTS

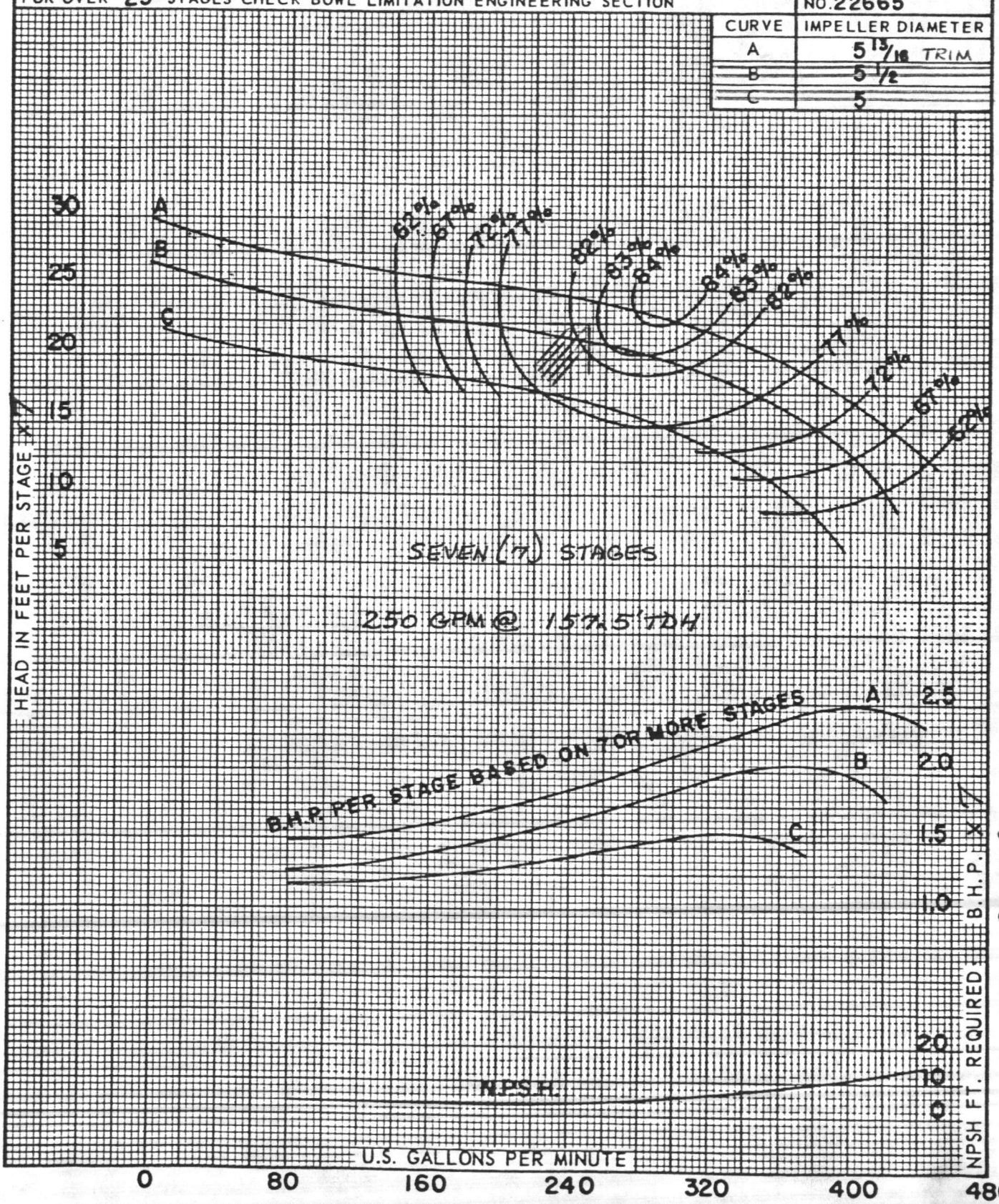
ENAMELED BOWLS

DIMENSIONS	FIG. 4700	FIG. 4750
BOWL DIAMETER	7 1/2	~~7 1/2~~
IMPELLER SHAFT DIA.	1	~~1~~
LENGTH FIRST STAGE	18 3/4	~~22 3/4~~
ADDITIONAL STAGE	7 1/2	~~7 1/2~~
THRUST FACTOR -	5.7	~~5.7~~

SUCTION - I.D. PIPE SIZE 5 " SIZE COLUMN ADAPTER 5 " ~~6~~ SEMI-ENC. IMPELLER

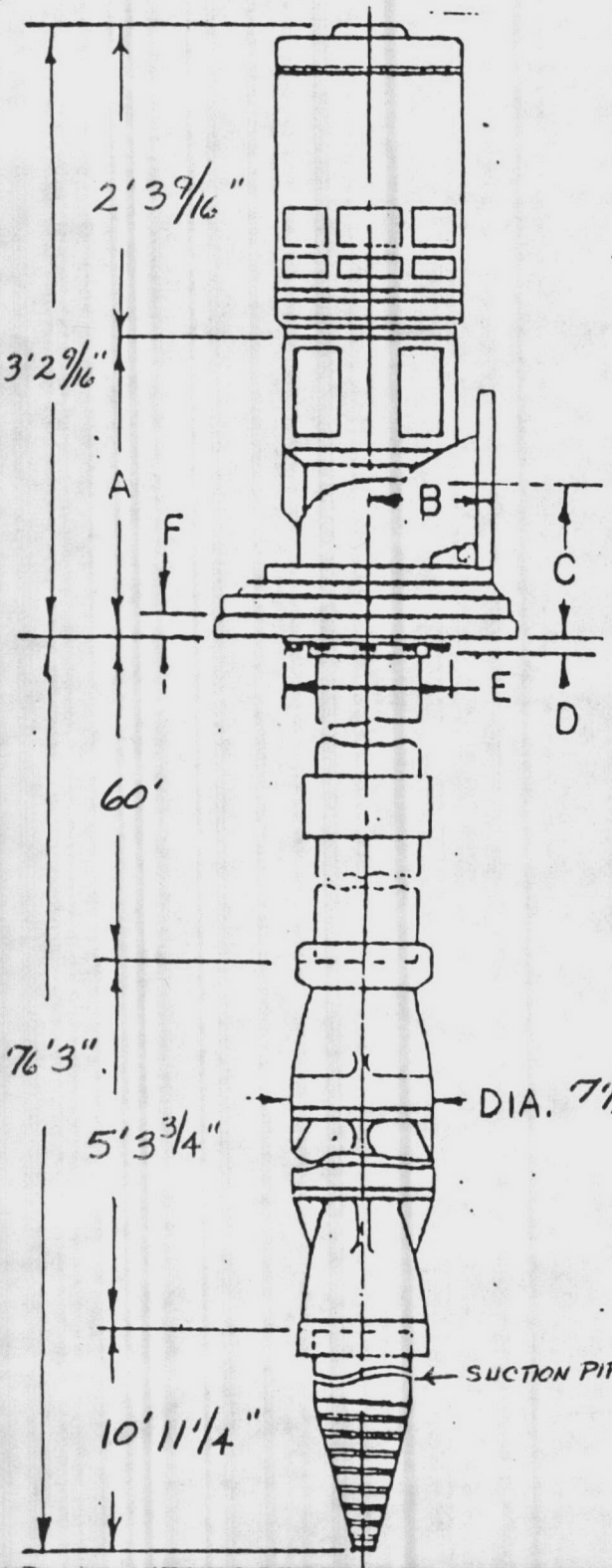
FOR OVER 25 STAGES CHECK BOWL LIMITATION ENGINEERING SECTION — NO. 22665

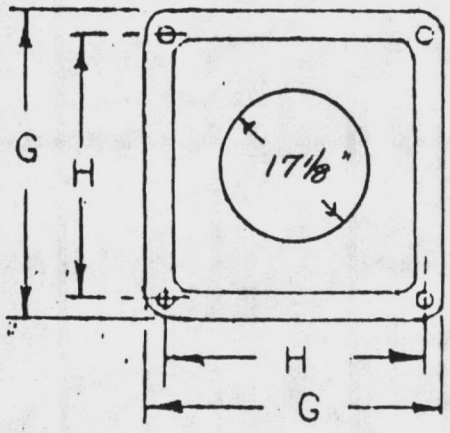
CURVE	IMPELLER DIAMETER
A	5 13/16 TRIM
~~B~~	5 1/2
C	5



$$\frac{250\ GPM\ @\ 157.5'TDH}{3960 \times .80\ (eff)} = 12.43\ BHP$$

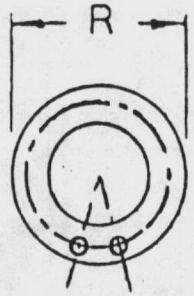
WELL BA-109 - CAMP LEJEUNE, N.C.
N624 70--76-B-6799





4-K DIA. HOLES

BASEPLATE TOP VIEW



L-125 LB ANSI FLG
M-N-HOLES ON
P BOLT CIRCLE
HOLES STRADDLE
VERTICAL ℄

HEAD	A	B	C	D	E	F	G	H	K	L	M	N	P	R
H16DL	23	11 3/8	10	1/4	14 3/4	1 7/16	24	19 3/4	7/8	6	8	7/8	9 1/2	11
~~H20~~	~~23~~	~~8 3/4~~	~~10~~	~~1/4~~	~~14 3/4~~	~~1 7/16~~	~~24~~	~~19 3/4~~	~~7/8~~	~~6~~	~~8~~	~~7/8~~	~~9 1/2~~	~~11~~
~~H16DL~~	~~23~~	~~11 3/8~~	~~10~~	~~1/4~~	~~14 3/4~~	~~1 7/16~~	~~24~~	~~19 3/4~~	~~7/8~~	~~6~~	~~8~~	~~7/8~~	~~9 1/2~~	~~11~~
~~H16F~~	~~23~~	~~11 3/8~~	~~10~~	~~1/4~~	~~14 3/4~~	~~1 7/16~~	~~24~~	~~19 3/4~~	~~7/8~~	~~6~~	~~8~~	~~7/8~~	~~11 3/4~~	~~13 1/2~~
~~H16FL~~	~~23~~	~~11 3/8~~	~~10~~	~~1/4~~	~~14 3/4~~	~~1 7/16~~	~~24~~	~~19 3/4~~	~~7/8~~	~~8~~	~~8~~	~~7/8~~	~~11 3/4~~	~~13 1/2~~
~~H20K~~	~~23~~	~~13 7/8~~	~~10 1/2~~	~~1/4~~	~~14 3/4~~	~~1 7/16~~	~~24~~	~~19 3/4~~	~~7/8~~	~~16~~	~~12~~	~~1~~	~~14 1/4~~	~~16~~

N62478-76-B-6799

CERTIFICATION FOR				
CUSTOMER EAST COAST CONSTRUCTION			PO# 440	
JOB & LOCATION WELL "BA-109", MCAS CAMP LEJEUNE, N. C.				
CONSULTING ENGINEERS NAVAL FACILITIES, NAVAL STATION, NORFOLK, VA.				
CONDITIONS	250 GPM	157.5' TDH	1800 RPM	76'3" SETTING
PUMP Crane Deming 7 stage, M-8, Figure 4700, Vert. Turbine				
MOTOR GE type K, 15HP, 1800 RPM, JHS, 3φ, 60hz, 200 volt, WP-1				
COLUMN & SHAFT 5" ZINC COATED (GALVANIZED), 1" φ C-1045				
SUCTION PIPE 5" ZINC COATED – 10' LONG			STRAINER 5" GALVANIZED	
SCALE - NONE	CERTIFIED BY PAJ		DATE: 6-7-78	

ENVIRONMENTAL PRODUCTS, INC. - HICKORY, N. C.

13

CS

MEMO OF
DATA TRANSMITTAL

GENERAL ELECTRIC

General Electric Company

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

OCTOBER 28, 1977 (DATE) | SAN JOSE, CALIFORNIA (LOCATION) | FIRST CLASS (PRINTS FORWARDED VIA)

CUSTOMER

DRILLERS SERVICE INC.
P.O. BOX 1407
HICKORY, N.C. 28601

MARKS: 440

STATION OR PROJECT NO.

CUSTOMER ORDER	CUSTOMER REQN.	G.E. CONTRACT	G.E. REQUISITION
4602-EPI			340-23284

PRINTS ARE:

[XXX] 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.

ITEM NO:	2	RPM:	1750	SHAFT TYPE:	HOLLOW
MOTOR MODEL:		PHASE:	3	COUPLING:	NON REVERSE
OUTLINE NO:	GEM 2562D	CYCLES:	60	BORE:	1"
TYPE:	K	VOLTS:	200	AMBIENT:	
FRAME:	D254TP10	THRUST:	HIGH	INSULATION:	CLASS B
HORSEPOWER:	15	ENCLOSURE:	WP1	SERVICE FACTOR:	1.15

ADDITIONAL MOTOR DATA: (ACCESSORIES & COMMENTS)
SPARE PARTS LIST: UPPER BEARING: 5903493P011 LOWER BEARING: 629A310AEP001
VERTICAL INDUCTION MOTOR

ADDITIONAL DATA: GEH 4212B - INSTRUCTION BOOK

PRINT DISTRIBUTION: 10 PRINTS & 5 INST. BOOKS TO:
ENVIRONMENTAL PRODUCTS, INC. / P.O. BOX 2385 / HICKORY, N.C. 28601
ATTN: MR. BOB DARNELL

1 PRINT TO: LAURA PENNINGER / ISD / CHARLOTTE, N.C.

SPECIAL NOTES, REVISIONS:
ORDER SERVICE / SAN JOSE, CA.

C. DERBEDROSSIAN
COPY OF M/S TO

AF-556-CM (4-71)

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.

By TRUDY PIERCE
8*425-2829

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

VERTICAL • SQUIRREL-CAGE

TRI/CLAD • **Hollow-shaft** • **Weather Protected** (NEMA Type I)

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

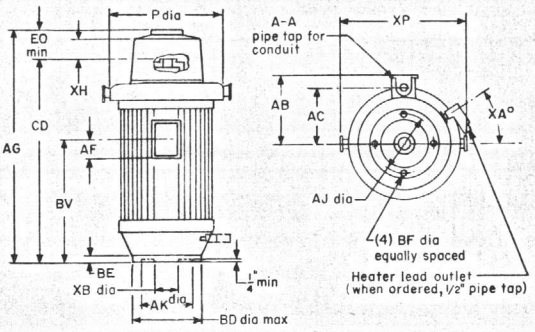
Type K
Frames L213TP to C404TP, 3600 Rpm and Below

Self-release, Bolted or Nonreverse Coupling

GEM-2562D

Feb. 28, 1977

DIMENSIONS—For ESTIMATING ONLY unless endorsed for construction.



For 3000- and 3600-RPM MOTORS ONLY

For a given pump shaft diameter the following table gives the maximum distance between the motors top coupling and the pump's first line shaft bearing. This table is based on keeping the headshaft critical at least 25 percent above operating speed. The selection of a smaller 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 Tap Coupling and Lower Support in Inches
0.750	33
1.000	38
1.187	42
1.437	45
1.500	47
1.688	50

Frame No.	Approx Net Wt in Lb	Dimensions in Inches																
		CD	P	AA	AB	AC	AF	AG	AJ	AK	BD	BE	BF	BV	EO	XA°	XB	XH *	XP
L213TP10	110	18 7/8	13 1/4	1	9 7/8	7 3/4	4	22 7/16	9 1/8	8 1/4	10	3/4	7/16	8 3/8	2 3/4	55	3 1/2	2	14 3/4
L215TP10	120	18 7/8	13 1/4	1	9 7/8	7 3/4	4	22 7/16	9 1/8	8 1/4	10	3/4	7/16	8 3/8	2 3/4	55	3 1/2	2	14 3/4
C254TP10	235	22	16	1 1/2	11	8 13/16	4	26 9/16	9 1/8	8 1/4	10	3/4	7/16	11 5/16	4	33	3 1/2	3 1/4	18
K256TP10	235	22	16	1 1/2	11	8 13/16	4	26 9/16	9 1/8	8 1/4	10	3/4	7/16	11 5/16	4	33	3 1/2	3 1/4	18
C254TP12	240	22	16	1 1/2	11	8 13/16	4	26 9/16	9 1/8	8 1/4	12	3/4	7/16	11 5/16	4	33	3 1/2	3 1/4	18
K256TP12	240	22	16	1 1/2	11	8 13/16	4	26 9/16	9 1/8	8 1/4	12	3/4	7/16	11 5/16	4	33	3 1/2	3 1/4	18
C254TP16	260	22	16	1 1/2	11	8 13/16	4	26 9/16	14 3/4	13 1/2	16 1/2	3/4	11/16	11 5/16	4	33	3 1/2	3 1/4	18
~~K256TP16~~	~~260~~	~~22~~	~~16~~	~~1 1/2~~	~~11~~	~~8 13/16~~	~~4~~	~~26 9/16~~	~~14 3/4~~	~~13 1/2~~	~~16 1/2~~	~~3/4~~	~~11/16~~	~~11 5/16~~	~~4~~	~~33~~	~~3 1/2~~	~~3 1/4~~	~~18~~
D254TP10	260	23	16	1 1/2	11	8 13/16	4	27 9/16	9 1/8	8 1/4	10	3/4	7/16	12 5/16	4	33	3 1/2	3 1/4	18
~~C256TP10~~	~~260~~	~~23~~	~~16~~	~~1 1/2~~	~~11~~	~~8 13/16~~	~~4~~	~~27 9/16~~	~~9 1/8~~	~~8 1/4~~	~~10~~	~~3/4~~	~~7/16~~	~~12 5/16~~	~~4~~	~~33~~	~~3 1/2~~	~~3 1/4~~	~~18~~
D284TP10	260	23	16	1 1/2	11	8 13/16	4	27 9/16	9 1/8	8 1/4	10	3/4	7/16	12 5/16	4	33	3 1/2	3 1/4	18
C256TP12	265	23	16	1 1/2	11	8 13/16	4	27 9/16	9 1/8	8 1/4	12	3/4	7/16	12 5/16	4	33	3 1/2	3 1/4	18
D284TP12	265	23	16	1 1/2	11	8 13/16	4	27 9/16	9 1/8	8 1/4	12	3/4	7/16	12 5/16	4	33	3 1/2	3 1/4	18
C256TP16	275	23	16	1 1/2	11	8 13/16	4	27 9/16	14 3/4	13 1/2	16 1/2	3/4	11/16	12 5/16	4	33	3 1/2	3 1/4	18
D284TPH16	275	23	16	1 1/2	11	8 13/16	4	27 9/16	14 3/4	13 1/2	16 1/2	3/4	11/16	12 5/16	4	33	3 1/2	3 1/4	18
D256TP10	280	23 3/4	16	1 1/2	11	8 13/16	4	28 5/16	9 1/8	8 1/4	10	3/4	7/16	13 1/16	4	33	3 1/2	3 1/4	18
C284TP10	280	23 3/4	16	1 1/2	11	8 13/16	4	28 5/16	9 1/8	8 1/4	10	3/4	7/16	13 1/16	4	33	3 1/2	3 1/4	18
K286TP10	280	23 3/4	16	1 1/2	11	8 13/16	4	28 5/16	9 1/8	8 1/4	10	3/4	7/16	13 1/16	4	33	3 1/2	3 1/4	18
D256TP12	285	23 3/4	16	1 1/2	11	8 13/16	4	28 5/16	9 1/8	8 1/4	12	3/4	7/16	13 1/16	4	33	3 1/2	3 1/4	18
C284TP12	285	23 3/4	16	1 1/2	11	8 13/16	4	28 5/16	9 1/8	8 1/4	12	3/4	7/16	13 1/16	4	33	3 1/2	3 1/4	18
K286TP12	285	23 3/4	16	1 1/2	11	8 13/16	4	28 5/16	9 1/8	8 1/4	12	3/4	7/16	13 1/16	4	33	3 1/2	3 1/4	18
D256TP16	295	23 3/4	16	1 1/2	11	8 13/16	4	28 5/16	14 3/4	13 1/2	16 1/2	3/4	11/16	13 1/16	4	33	3 1/2	3 1/4	18
C284TPH16	295	23 3/4	16	1 1/2	11	8 13/16	4	28 5/16	14 3/4	13 1/2	16 1/2	3/4	11/16	13 1/16	4	33	3 1/2	3 1/4	18
K286TPH16	295	23 3/4	16	1 1/2	11	8 13/16	4	28 5/16	14 3/4	13 1/2	16 1/2	3/4	11/16	13 1/16	4	33	3 1/2	3 1/4	18
K284TP10	305	24 3/4	16	1 1/2	11	8 13/16	4	29 5/16	9 1/8	8 1/4	10	3/4	7/16	14 1/16	4	33	3 1/2	3 1/4	18
C286TP10	305	24 3/4	16	1 1/2	11	8 13/16	4	29 5/16	9 1/8	8 1/4	10	3/4	7/16	14 1/16	4	33	3 1/2	3 1/4	18
K284TP12	310	24 3/4	16	1 1/2	11	8 13/16	4	29 5/16	9 1/8	8 1/4	12	3/4	7/16	14 1/16	4	33	3 1/2	3 1/4	18
C286TP12	310	24 3/4	16	1 1/2	11	8 13/16	4	29 5/16	9 1/8	8 1/4	12	3/4	7/16	14 1/16	4	33	3 1/2	3 1/4	18
K284TPH16	320	24 3/4	16	1 1/2	11	8 13/16	4	29 5/16	14 3/4	13 1/2	16 1/2	3/4	11/16	14 1/16	4	33	3 1/2	3 1/4	18
C286TPH16	320	24 3/4	16	1 1/2	11	8 13/16	4	29 5/16	14 3/4	13 1/2	16 1/2	3/4	11/16	14 1/16	4	33	3 1/2	3 1/4	18
D286TP10	330	25 3/4	16	1 1/2	11	8 13/16	4	30 5/16	9 1/8	8 1/4	10	3/4	7/16	15 1/16	4	33	3 1/2	3 1/4	18
D286TP12	335	25 3/4	16	1 1/2	11	8 13/16	4	30 5/16	9 1/8	8 1/4	12	3/4	7/16	15 1/16	4	33	3 1/2	3 1/4	18
D286TPH16	345	25 3/4	16	1 1/2	11	8 13/16	4	30 5/16	14 3/4	13 1/2	16 1/2	3/4	11/16	15 1/16	4	33	3 1/2	3 1/4	18
C324TP16	390	30 5/16	16	2	12 1/8	9 5/16	4 3/8	35 1/16	14 3/4	13 1/2	16 1/2	3/4	11/16	17 7/8	4 1/2	33	3 1/2	3 1/2	18
C324TPH12	380	30 5/16	16	2	12 1/8	9 5/16	4 3/8	35 1/16	9 1/8	8 1/4	12	3/4	7/16	17 7/8	4 1/2	33	3 1/2	3 1/2	18
C326TP16	445	32 5/16	16	2	12 1/8	9 5/16	4 3/8	37 5/16	14 3/4	13 1/2	16 1/2	3/4	11/16	20 1/8	4 1/2	33	3 1/2	3 1/2	18
C326TPH12	435	32 5/16	16	2	12 1/8	9 5/16	4 3/8	37 5/16	9 1/8	8 1/4	12	3/4	7/16	20 1/8	4 1/2	33	3 1/2	3 1/2	18
D324TP16	500	32 13/16	20	2	13 1/2	10 11/16	4 3/8	38	14 3/4	13 1/2	16 1/2	7/8	11/16	17 1/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
K326TP16	500	32 13/16	20	2	13 1/2	10 11/16	4 3/8	38	14 3/4	13 1/2	16 1/2	7/8	11/16	17 1/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
D324TPH12	475	32 13/16	20	2	13 1/2	10 11/16	4 3/8	38	9 1/8	8 1/4	12	7/8	7/16	17 1/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
K326TPH12	475	32 13/16	20	2	13 1/2	10 11/16	4 3/8	38	9 1/8	8 1/4	12	7/8	7/16	17 1/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
K324TP16	540	33 13/16	20	2	13 1/2	10 11/16	4 3/8	39	14 3/4	13 1/2	16 1/2	7/8	11/16	18 1/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
D326TP16	540	33 13/16	20	2	13 1/2	10 11/16	4 3/8	39	14 3/4	13 1/2	16 1/2	7/8	11/16	18 1/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
D364TP16	540	33 13/16	20	3	14 11/16	11 5/16	6 3/16	39	14 3/4	13 1/2	16 1/2	7/8	11/16	18 1/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/4
K324TPH12	515	33 13/16	20	2	13 1/2	10 11/16	4 3/8	39	9 1/8	8 1/4	12	7/8	7/16	18 1/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
D326TPH12	515	33 13/16	20	2	13 1/2	10 11/16	4 3/8	39	9 1/8	8 1/4	12	7/8	7/16	18 1/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
D364TP12	515	33 13/16	20	3	14 11/16	11 5/16	6 3/16	39	9 1/8	8 1/4	12	7/8	7/16	18 1/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
C364TP16	590	35 1/16	20	3	14 11/16	11 5/16	6 3/16	40 1/4	14 3/4	13 1/2	16 1/2	7/8	11/16	19 5/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
C364TP12	565	35 1/16	20	3	14 11/16	11 5/16	6 3/16	40 1/4	9 1/8	8 1/4	12	7/8	7/16	19 5/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
K364TP16	650	36 5/16	20	3	14 11/16	11 5/16	6 3/16	41 1/2	14 3/4	13 1/2	16 1/2	7/8	11/16	20 9/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/4
C365TP16	650	36 5/16	20	3	14 11/16	11 5/16	6 3/16	41 1/2	14 3/4	13 1/2	16 1/2	7/8	11/16	20 9/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/4
K364TP12	625	36 5/16	20	3	14 11/16	11 5/16	6 3/16	41 1/2	9 1/8	8 1/4	12	7/8	7/16	20 9/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
C365TP12	625	36 5/16	20	3	14 11/16	11 5/16	6 3/16	41 1/2	9 1/8	8 1/4	12	7/8	7/16	20 9/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
D365TP16	730	38 5/16	20	3	14 11/16	11 5/16	6 3/16	43 1/2	14 3/4	13 1/2	16 1/2	7/8	11/16	22 9/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8
C404TP16	730	38 5/16	20	3	14 11/16	11 5/16	6 3/16	43 1/2	14 3/4	13 1/2	16 1/2	7/8	11/16	22 9/16	4 1/2	22 1/2	4 1/2	3 1/2	22 3/8

THE FRAME NUMBERS SHOWN IN BOLD FACE TYPE INDICATE STANDARD NEMA BASE SIZES

COUPLING DIMENSIONS ON REVERSE SIDE

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

NOTES:

Provided mounting conditions permit, diagonally split conduit box may be turned so that entrance can be made from the bottom, or either side.

Frames L213 through D286 have grease-lubricated upper guide and lower thrust bearings. Frames C324 through C404 have oil-lubricated upper thrust and grease-lubricated lower guide bearings. Oil sight gage, filler plug and drain plug are located on opposite side of motor from conduit box.

Tolerances: Face runout and permissible eccentricity of mounting rabbet—
For "AK" dimension 8 1/4 inches, 0.004 TIR.
For "AK" dimension 13 1/2 inches, 0.007 TIR.

For shipping weight add 5 per cent to net weights.

CONTRACTOR'S SUBMITTAL TRANSMITTAL

Field - C-Booth

5ND LANTDIV 4-4355/3 (Rev. 6-76)

CONTRACT NO.	TRANSMITTAL NO.	DATE
N62470-76-C-6799	13	6/12/78

FROM CONTRACTOR
East Coast Construction Company, Inc.

TO
Commander NAVFAC

PROJECT TITLE AND LOCATION
EAST COAST CONSTRUCTION CO., INC.
CONTRACT N62470-76-C-6799
REPLACE FOUR WATER WELLS
MARINE CORPS BASE
CAMP LEJUENE, NC

CONTRACTOR USE ONLY

*List only one specification division per form.

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

☐ Contractor Approved ☒ OICC Approval ☐ Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

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

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
1	15201	Draw Down Data Well BA 109	7	A	CCS 405 6/19/78
2	15201	Chemical Analysis Well BA 109	7		

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC
One (1)

CONTRACTOR REPRESENTATIVE (Signature)

DATE RECEIVED BY REVIEWER | FROM (Reviewer) | TO EAST COAST

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

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

REVIEWER'S COMMENTS

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

DATE 6/19

SIGNATURE

EAST COAST CONSTRUCTION CO., INC.
CONTRACT N62470-76-C-6799
REPLACE FOUR WATER WELLS
MARINE CORPS BASE
CAMP LEJUENE, NC

(803) 479-1639

WATER ANALYSIS LABORATORY
802 HAMLET HIGHWAY
BENNETTSVILLE SOUTH CAROLINA
29512

CONSULTANTS FOR
INDUSTRY
MUNICIPALITIES
HOME OWNERS
DEVELOPERS
IRRIGATION
OTHERS

DATE May 29, 1978

Report To: Carolina Well & Pump Co.
Sanford, N. C.

Date Analyzed: 5/29/78

Sample Number: Onslow Beach
WELL #BA 109
Developed

Analysis Results--Parts Per Million

Determination		Determination	
pH	6.9	Carbon Dioxide (CO_2)	2
Iron (Fe)	0.1	Total Acidity ($CaCO_3$)	3
Nitrate (NO_3)	Trace	Calcium Hardness ($CaCO_3$)	152
Fluoride (F)	0.35	Magnesium Hardness ($CaCO_3$))	10
Manganese (Mn)	0	Carbonate Hardness ($CaCO_3$)	162
Total Hardness ($CaCO_3$)	162	Noncarbonate Hardness ($CaCO_3$)	0
Chlorides (Cl)	10	Alkalinity (Phenolphthalein) ($CaCO_3$)	0
Sulfate (SO_4)	7.4	Carbonate Alkalinity ($CaCO_3$)	0
Phosphate (PO_4)	Trace	Bicarbonate Alkalinity ($CaCO_3$)	200
Magnesium (Mg)	2.4	Total Alkalinity ($CaCO_3$)	200
Calcium (Ca)	60.2	Total Dissolved Solids	196
Carbonate (CO_3)	0	Specific Conductance (micromhos at 25°)	280
Bicarbonate (HCO_3)	222	Appearance When Analyzed	Clear
Hydroxide (OH)	0	Odor When Analyzed	Not Objectionable

Water Analysis Laboratory
802 Hamlet Highway
Bennettsville, South Carolina 29512

LABORATORY DIRECTOR

ANALYTICAL METHODS REFERENCES: STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTE-WATER, APHA AWWA AND WPCF AND METHODS FOR COLLECTION AND ANALYSIS OF WATER SAMPLES, WATER SUPPLY PAPER 1354 (1956), U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C.

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

APPROVED ✓
APPROVED AS NOTED
DISAPPROVED
SUBJECT TO THE REQUIREMENTS OF
CONTRACT NO. 05-76-6799
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO EACH DEVIATION AND APPROVES THE DEVIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DIMENSIONS & COORDINATION OF TRADES, ETC., AS
SIGNED
REVIEWER CCS DATE 19 JUN 1978
FOR OFFICER IN CHARGE OF CONSTRUCTION

Sheet 1 of 2 CS

PUMPING TEST DATA

Test conducted by: Carolina Well & Pump Co. For: EAST COAST CONST G
Well Owner: U.S. NAVY Address: CAMP LEJEUNE NC
Pumped Well No.: BA 109 Location: Onslow Beach County: ONSLOW
Observation Well Locations:
Airline Lengths: Pumped Well Observation Wells
Remarks: H62420-76-C-6799 - REPLACE FOUR WATER WELLS

Pumping rate measured with: 6" X 5" Orifice 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
April 12 1978							
12:00 PM	START		100			4 Ft.	STATIC LEVEL
12:15 "	15 MIN		100			11' 2"	
12:30 "	15 "		"			11' 4"	
1:00 "	30 "		"			12' 5"	
1:30 "	30 "		"			12' 6"	
2:00 "	30 "		"			12' 6"	
2:30 "	30 "		"			12' 5"	
2:45 "	15 "		150			16' 11"	
3:00 "	15 "		150			17' 0"	
3:30 "	30 "		"			17' 8"	
4:00 "	30 "		"			17' 10"	
4:30 "	30 "		"			17' 9"	
5:00 "	30 "		"			17' 10"	
5:15 "	15 "		200			22' 5"	
5:30 "	15 "		200			22' 6"	
6:00 "	30 "		"			22' 9"	
6:30 "	30 "		"			22' 11"	
7:00 "	30 "		"			23' 0"	
7:30 "	30 "		"			23' 0"	
7:45 "	15 "		250			28' 1"	
8:00 "	15 "		250			28' 2"	
8:30 "	30 "		"			28' 1"	
9:00 "	30 "		"			28' 2"	
9:30 "	30 "		"			28' 1"	
10:00 "	30 "		"			28' 2"	
10:15 "	15 "		300			31' 10"	
10:30 "	15 "		300			31' 11"	
11:00 "	30 "		"			32' 4"	
11:30 "	30 "		"			32' 8"	
12:00 AM	30 "		"			33' 0"	
12:30 AM	30 "		"			33' 2"	
12:45 "	15 "		350			39' 2"	
1:00 "	15 "		350			39' 3"	
1:30 "	30 "		"			39' 5"	
2:00 "	30 "		"			39' 5"	
2:30 "	30 "		"			39' 6"	
3:00 "	30 "		"			39' 6"	
3:15 "	15 "		400			45' 3"	
3:30 "	15 "		400			45' 3"	
4:00 "	30 "		"			45' 0"	
4:30 "	30 "		"			44' 10"	
5:00 "	30 "		"			44' 10"	
5:30 "	30 "		"			45' 0"	

PUMPING TEST DATA

Sheet 2 of 2 CS

Test conducted by: Carolina Well & Pump Co. FOR GAST GAST CONST CO
Well Owner: US MARINE Address: CAMP LEJEUNE, NC
Pumped Well No.: BA 109 Location: Onslow Beach County:
Observation Well Locations:
Airline Lengths: Pumped Well Observation Wells
Remarks:

Pumping rate measured with: 6" X 5" Orifice 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
6:30 AM	60 MIN		400			44' 10"	
7:30 "	"		"			44' 11"	
8:30 "	"		"			44' 11"	
9:30 "	"		"			44' 10"	
10:30 "	"		"			44' 11"	
11:30 "	"		"			45' 2"	
12:30 PM	"		"			46' 1"	
1:30 "	"		"			44' 11"	
2:30 "	"		"			45' 0"	
3:30 "	"		"			44' 11"	
4:30 "	"		"			44' 11"	
5:30 "	"		"			45' 0"	
6:30 "	"		"			45' 2"	
7:30 "	"		"			45' 0	
8:30 "	"		"			44' 10"	
9:30 "	"		"			45' 0"	
10:30 "	"		"			46' 0	
11:30 "	"		"			45' 1"	
12:30 AM	"		"			45' 3"	
1:30 "	"		"			45' 1"	
2:30 "	"		"			45' 0"	
3:30 "	"		"			45' 0"	
		RECOVERY DATA					
3:30						45' 0"	
3:35						12' 4	
3:40						10' 5	
3:45						9' 8"	
3:50						9' 2"	
3:55						8' 11"	
4:00						8' 5"	
4:05						7' 11"	
4:10						7' 10"	
4:15						7' 6"	
4:20						7' 2"	
4:25						7' 1"	
4:30						7' 0"	

EAST COAST CONSTRUCTION CO., INC.
CONTRACT N62470-76-C-6799
REPLACE FOUR WATER WELLS
MARINE CORPS BASE
CAMP LEJUENE, NC

ELECTRIC LOG BY

JOHNSON·KECK™ DR·61 ELECTRICAL LOGGING SYSTEM

Well Onslow Beach Owner U.S.M.C.

Location On Right of Road about 200' from W.plant Date Nov 2 1977

Borehole depth 115 ft. dia. 8 in. Casing depth 20 ft. dia. 0 in.

Mud resistivity _____ temperature _____ F

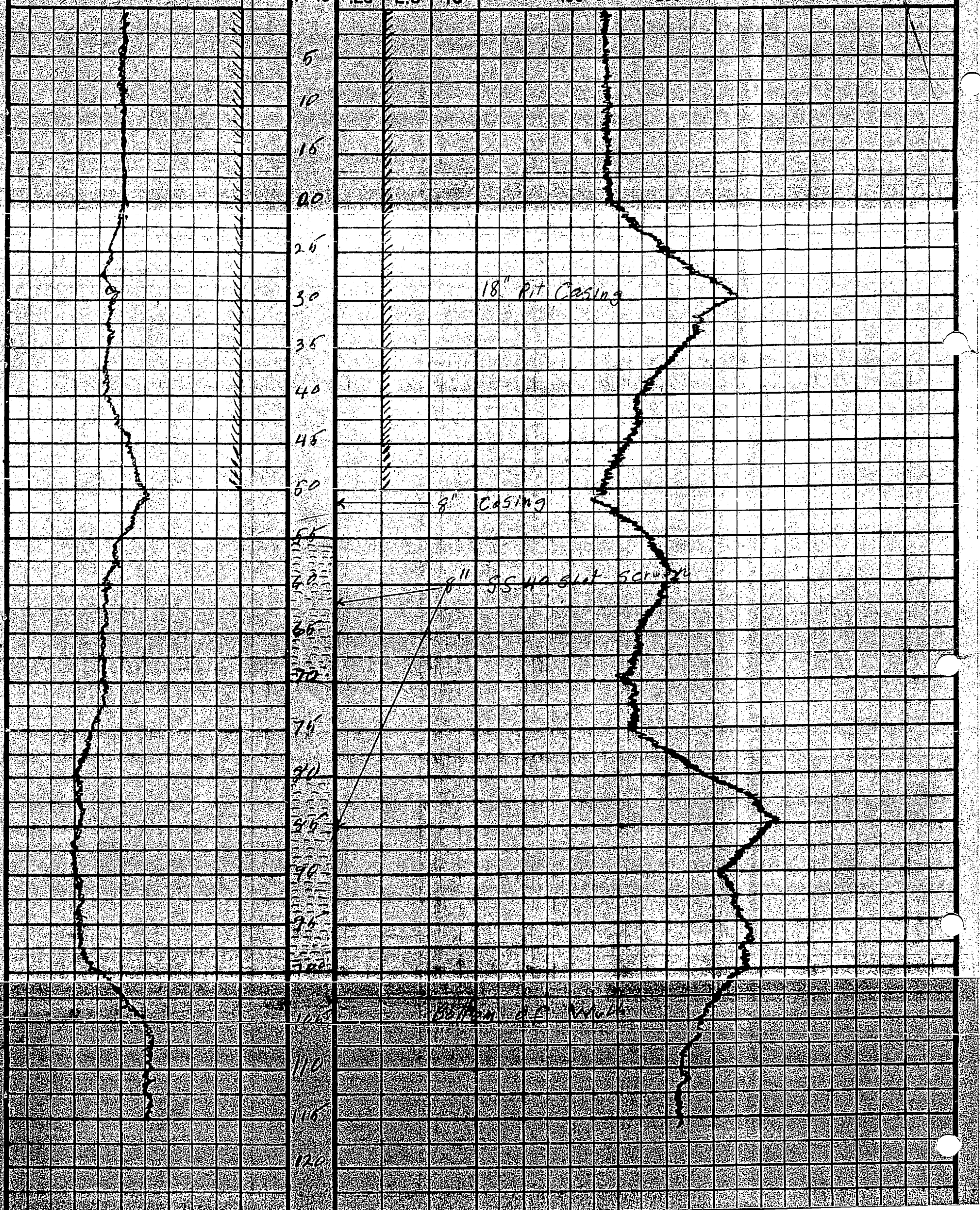
viscosity _____ sec weight _____ lb/gal type _____

Measuring point Ground ft. above/below ground level

Fluid level in hole 14 ft. Other logs _____

Driller C.W. Brinkley E·log operator C.W. Brinkley

Spontaneous Potential (millivolts)						Depth (ft)	Resistivity (ohm-ft)			
-400	-200		200	400	SP	1"=10'	(Circle one)	8000	16000	24000	32000
-100	-50	0	50	100		1"=20'	Normal – Lateral 0	2000	4000	6000	8000
						1"=40'		200	400	600	800
							.25 | 2.5 | 10	100	200	300	400



Screens
62'-67'
85'-90'

RECEIVED
18 JAN 1978
MARINE CORPS BASE
CAMP LEJEUNE,
N. C.