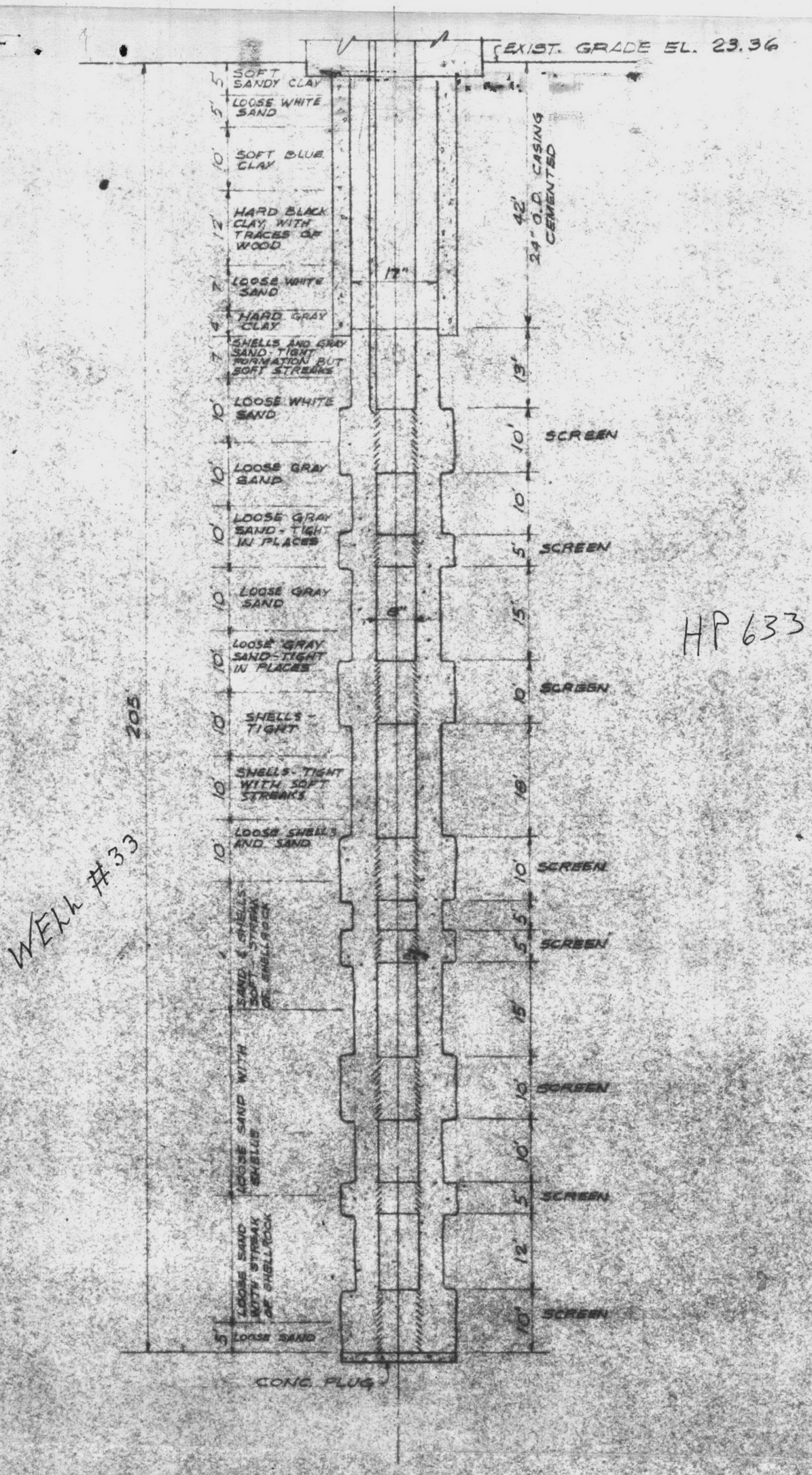
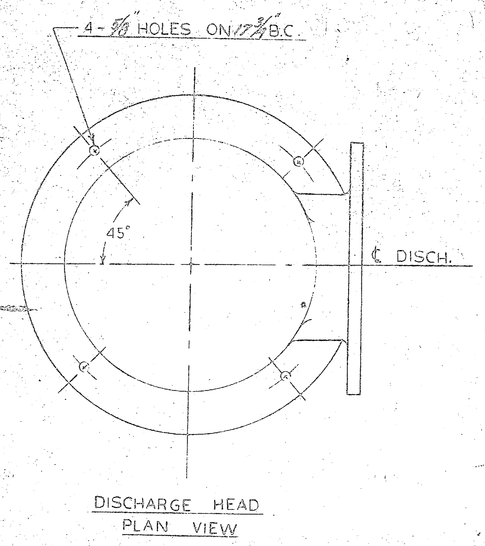

EXIST. GRADE EL. 23.36
SOFT SANDY CLAY
LOOSE WHITE SAND
SOFT BLUE CLAY
HARD BLACK CLAY WITH TRACES OF WOOD
LOOSE WHITE SAND
HARD GRAY CLAY
SHELLS AND GRAY SAND - TIGHT FORMATION BUT SOFT STREAKS
LOOSE WHITE SAND
LOOSE GRAY SAND
LOOSE GRAY SAND - TIGHT IN PLACES
LOOSE GRAY SAND
LOOSE GRAY SAND - TIGHT IN PLACES
SHELLS - TIGHT
SHELLS - TIGHT WITH SOFT STREAKS
LOOSE SHELLS AND SAND
SAND & SHELLS - SOFT STREAK OF SHELLROCK
LOOSE SAND WITH SHELLS
LOOSE SAND WITH STREAK OF SHELLROCK
LOOSE SAND
42' 24" O.D. CASING CEMENTED
17"
13'
SCREEN
10'
10'
SCREEN
5'
SCREEN
15'
8"
10'
SCREEN
18'
10'
SCREEN
5'
5'
SCREEN
15'
SCREEN
10'
10'
SCREEN
5'
SCREEN
12'
10'
SCREEN
CONC. PLUG
205
WELL #33
HP 633

33



DISCHARGE HEAD
PLAN VIEW

WESTINGHOUSE VERTICAL HOLLOW SHAFT MOTOR
TYPE CSP FRAME 254-UP H.P. 7½" PHASE 3
CYCLE 60 VOLTS 220 R.P.M. 1745 ®
WITH NON-REVERSE RATCHET

ADJUSTING NUT

220 VOLT - 60 CYCLE AC AUTOMATIC SOLENOID OPERATED OILER - 1 GALLON CAPACITY

37 15/16"

10"

10" x 6" DISCHARGE HEAD TYPE A - CAST IRON

TUBE TENSION NUT - CAST IRON
TUBE TENSION NUT BRG. - HIGH LEAD BRZ.

PACKING
TUBE TENSION PLATE - CAST IRON

HEADSHAFT - 416 S.STL.

1"

TUBE TENSION NIPPLE - STEEL

LINESHAFT COUPLING - STEEL
LINESHAFT - 416 S.STL.

STD. TUBE STABLIZER - RUBBER

© 69'-8 3/16"

LINESHAFT TUBING - STEEL
LINESHAFT BEARING - HIGH LEAD BRG.

COLUMN PIPE - WROUGHT IRON
COLUMN PIPE COUPLING STEEL

PUMPSHAFT COUPLING - STEEL
PUMPSHAFT - ™ 416 STAIN. STEEL

TUBING ADAPTER SCREW BEARING - BRZ.
TUBING ADAPTER - DUCTILE IRON

DISCHARGE CASE - CAST IRON
DISCHARGE CASE SCREW BRG. BRZ.
"O" RING DEFLECTOR
DISCHARGE CASE COMBINATION BRG. HIGH LEAD BRZ.

93'-1 7/16"

© 2'-6 3/8"

INTERMEDIATE BOWL
INTERMEDIATE BOWL BEARING - HIGH LEAD BRZ.
INTERMEDIATE BOWL BEARING - RUBBER

IMPELLER - CAST IRON VIT
IMPELLER LOCK COLLET - STEEL
IMPELLER SEAL RING - ALUM. BRZ.

SUCTION CASE - CAST IRON

SUCTION CASE BEARING - HIGH LEAD BRZ.

10'-10 7/8"

SUCTION PIPE - STEEL

STRAINER - GALV. STEEL

11'-5 7/8"

DEALER - T.H. LAWRIE & COMPANY
P.O. # 8754
JOHNSTON SC & SHIN NO JP 3889

PUMP PERFORMANCE
800 U.S. G.P.M.
98 FT. TOTAL HEAD
LIQUID - WATER
1.0 SPECIFIC GRAVITY

THIS PRINT CERTIFIED CORRECT BY JOHNSTON PUMP COMPANY
A DIVISION OF THE BUCKEYE CORPORATION
By

SECTIONAL ILLUSTRATION - VERTICAL TURBINE PUMP - 3 STAGE 8 BOWL

3	REVISED TO DATE	JDS	2-24-64
2	REVISED TO DATE	JDS	1-22-64
1	REVISED TO DATE	JDS	12-13-63

JOHNSTON VERTICAL TURBINE PUMPS
PASADENA 8, CALIF. U.S.A.

DRAWN JDS 12-13-63
CHECKED
APPROVED

SCALE 1/4" = 1'-0"

PRINTS REQUIRED

PRINTS APPROVED

DRAWING NO. 3889-1

POLAROID/KODAK PRINTMASTER S-104 Ultralith Film

DATE 7-25-00

PWSID 04-67-041

WELL # HP 633

WELL NAME HADNOT POINT HP-20

BLDG. HP 633

CODE G.

AVAILABILITY P.

LOCATION HOLCOMB BLVD.

LATITUDE 34.69932

LONGITUDE 77.33425

WELL DIAMETER 8"

WELL DEPTH 205'

SCREEN INTERVAL ---

YIELD 183

STATIC LEVEL 47'

PUMPING LEVEL 62'

PUMP TYPE VERTICAL TURBINE

MOTOR HP 7.5

INTAKE DEPTH 93

DESIGN CAPACITY 200

ACTUAL GPM 250

SIZE OF CONCRETE SLAB 10X12

HEIGHT OF CASING 18.5

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 24 95

PWSID: 1100490

Owner Assigned Source Code: 633

Well Name (If purchase, name of system): HADNOT POINT 633

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): HOLCOMB BLVD.

Latitude (N) Deg. Min. Sec.: 34 41 58.

Longitude (W) Deg. Min. Sec.: 077 20 06.

How Determined: 5 (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: 100

Entry Point Name: ~~HP633~~ MCB HADNOT PT WTP

Location:

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

Sources of pollution/distance: Hwy @ 75'

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

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

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): 250 Properly sealed? Y (Y,N

Properly vented? Y (Y,N) Casing depth 55 ft. (If unknown, put 'UNK') Well depth: 205' Meter available? N (Y,N

Concrete slab adequate? ___ (Y,N) If no, explain: Size: 10X12

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

Pumps: Capacity: GPM: 200 HP: 7.5 Pump intake depth: 93 Auxiliary Power? N (Y,N

Type pump: VERTICAL TURBINE Height above floor (pump/casing): 18.5" /

Storage at well site: Elev: Hydro: Ground:

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

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

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

If other wells are treated here, which ones? If treated elsewhere, where? HP-20 PLANT

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

① Vent needs screen
② No Meter

WELL NUMBER 633 BY Stevenson & Peterson DATE 2-26-97

AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
72'	47	55	8	25	100	10
		58	11	20	128	20
	Lefl set #	60	13	15	154	30
		62	15	10	183	40

REMARKS Q/H-34PSI

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER 633		BY Thomas - Stevenson B.			DATE 10-12-93	
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME 1030
72'	42	52	10	26	108	
		57	15	20	167	
		60	13	15	205	
		62	15	10	230	← Pressure Lit

REMARKS

DD - 34 PSI

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER 633 BY TWOMEY / BROWN DATE 3-28-90

AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
72	40	52	12	32	111	5'
		54	14	18	149	15'
		56	16	12	178	25'
	—	58	18	8	205	35'

REMARKS

Deadhead '32

set @ 8

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER	633	BY	Sardinas Harris		DATE	9-16-88
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
72	40	46'	6'	28	104	13:30
		48	8'	23	133	13:45
		52	12	18	164	14:00
		54	14	13	201	14:15
kept	set →	57	17	8	222	14:30

REMARKS

DH 38
AMP 19 16 17

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

#P 633

9-9-85

A/L	SL	PL	DD	Psi	G.P.M	Time
72	35	46	11	28	104	15
		49	14	24	128	15
		52	17	20	151	15
		53	18	16	172	15
		56	20	10	210	15

1030 - 1200

WELL NUMBER 633 | BY THOMAS/BROWN | DATE 10-22-84

AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME
72'	37	42	5	28	104	1045
		45	8	25	119	1055
		49	10	22	133	1105
		48	11	19	149	1115
		50	13	16	167	1126
		52	15	13	185	1136
		54	17	10	197	1146

REMARKS GPM set at 10 PSI 197 GPM

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER 633		BY THOMAS / RAYNOR			DATE 9-30-83	
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME 1022
72	38	45	7	26	104	1032
		47	9	23	129	1042
		49	10	20	137	1055
		51	12	17	157	1111
		52	13	14	175	1122

REMARKS

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

633

DATE	LENGTH OF AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAW DOWN	DISCHARGE PRESSURE	CAP. PER FOOT OF DRAW DOWN	TOTAL CAP.
	~~42~~				Steel Time	1/2 M	1310
9-24-82	22'	35	43	8	27	104	1320
			46	11	24	~~120~~	1330
			47	12	21	137	1340
			48	13	18	151	1355
			50	15	15	170	1410
			52	17	12	183	1425
			55	17	0	244	1434

REMARKS:

244

WELL # 633

DATE	LENGTH OF AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAW DOWN	DISCHARGE PRESSURE	CAP. PER FOOT OF DRAW DOWN	TOTAL CAP.
4/1/77					30		
					28		
					26		108
					24		115
					22		130
					20		146
					18		159

REMARKS:

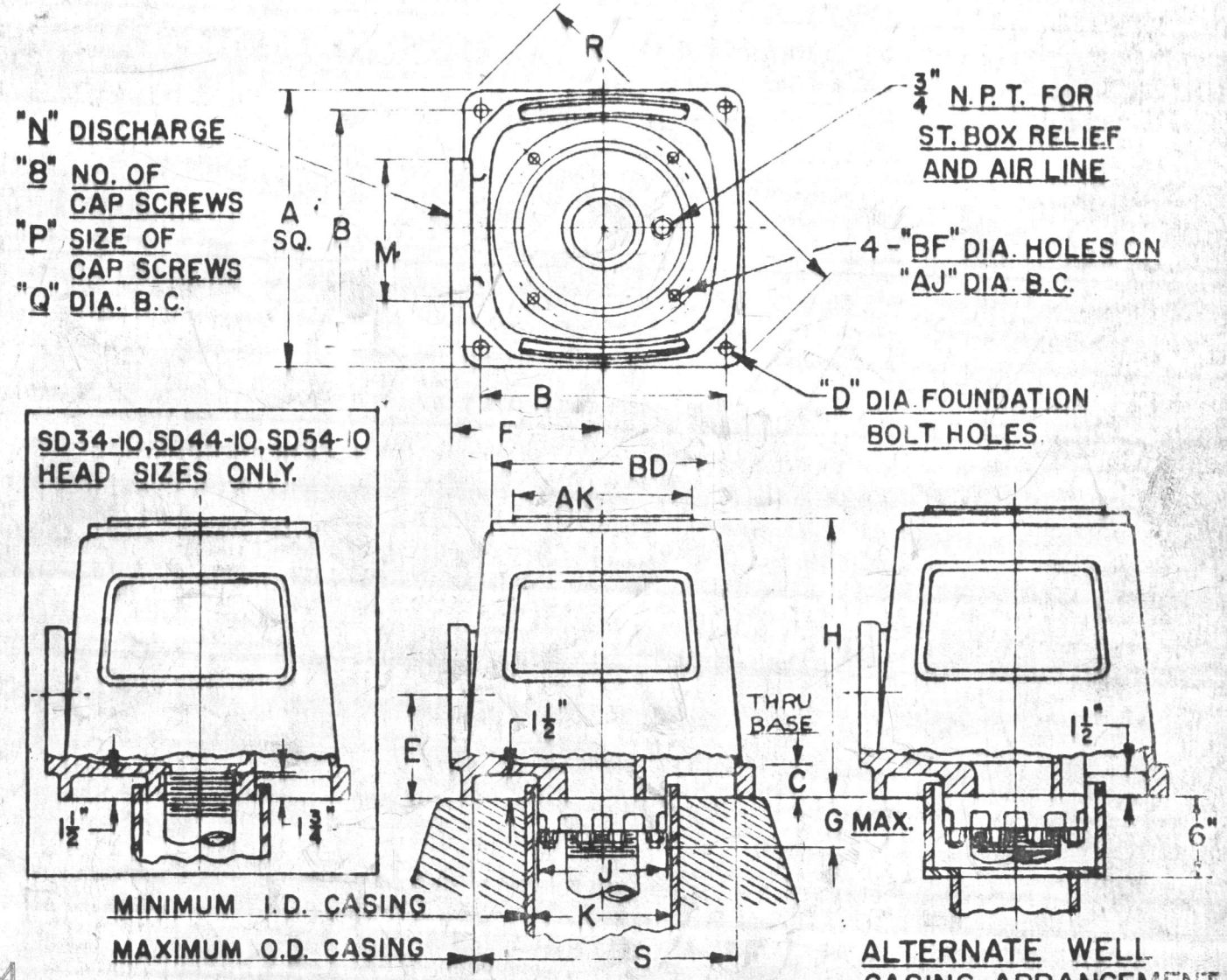
EPTH OF
ELL:

IRLINE
LEVATION: + -

ATE
NSTALLED:

as of March/1/67 Well 33
has Johnston pump

DIMENSIONS OF TYPE SD DISCHARGE HEADS



Bolt Holes 8 Disc-

HEAD SIZE	SYMBOL	A	B	C	D	E	F	G	H	J	K	M	N	P	Q	R	S	BF	AJ	AK	BD
SD34-10	33712																				
SD44-10	33713	14	12⅜	2	⅝	6	7½	0	15½	7	8	9	4	⅝	7½	19⅛	12¾	7/16	9⅛	8¼	10
SD54-10	33714				✓	7	10					11	6								
SD66-12	33715	17	14½	2	⅞	6½	9	3½	15½	9⅞	10	11	6	¾	9½	23	15	7/16	9⅛	8¼	12
SD88-12	33716	17	14½	2⅛	⅞	7¾	9	4¼	16½	12¾	13¼	13½	8	¾	11¾	23	15	7/16	9⅛	8¼	12
SD88-16½	33717	20	17 11/16	2⅛	⅞	7¾	10½	4¼	16½	12¾	13¼	13½	8	¾	11¾	27⅜	18	11/16	14¾	13½	16½

WELL # 63

1959 Well drilled

DATE	G.P.M	STATIC	AIRLINE
10/25/66	119	34	57.6
8/11/69	221	36	57.6
4/5/68	222	36	57.6

		STATIC	PUMP LVL.	DD. FT
9-4-69	221	+6.4'	-14.6'	21.0'

This well was probably pulled and cleaned. (we have no record) of it

FORM A-4
JUNE '66)

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OF WATER DATA COORDINATION
INVENTORY OF HYDROLOGIC DATA STATIONS
QUALITY OF WATER

APPROVED
Budget Bureau No. 42-R1485
Approval Expires June 30, 1968

1. AGENCY CODE	2. TYPE	3. LATITUDE	4. LONGITUDE	5.
MC	Q	° ' " N 34 41 59	° ' " W 77 20 7	

6. AGENCY STATION NO.	7. STATION NAME
633	HP20-633

8. DRAINAGE BASIN CODE No.	Letter	9. STATE CODE	10. COUNTY CODE	11. COUNTY NAME
00	N	32	133	ONSLOW

12. PERIOD OF RECORD Began	Discontinued	Continuous	13.	14.
1959		Y Interruption Exceeds 1 Year		

15. SITE

- ☐ 101 Stream
- ☐ 102 Canal
- ☐ 103 Lake
- ☐ 104 Reservoir
- ☐ 105 Estuary
- ☐ 106 Spring
- ☑ 107 Well
- ☐ 110 Other

16. FREQUENCY OF MEASUREMENT

- ☐ 201 Continuous Recorder
- ☐ 202 Telemetered
- ☐ 203 Daily
- ☐ 204 Weekly
- ☐ 205 Monthly
- ☐ 206 Quarterly
- ☐ 207 Seasonal
- ☐ 208 Annual
- ☐ 209 Other Periodic
- ☑ 210 Occasional

17. TYPES OF DATA AVAILABLE

Physical

- ☐ 311 Temperature
- ☐ 312 Specific Conductance
- ☐ 313 Turbidity
- ☐ 314 Color
- ☐ 315 Odor
- ☐ 316 Radioactivity
- ☐ 317 pH (field)
- ☑ 318 pH (lab)
- ☐ 319 Eh
- ☐ 320 Other

Chemical

- ☐ 331 Dissolved solids
- ☑ 332 Chlorides Only
- ☐ 333 Nutrients (Nitrogen and phosphorus compounds)
- ☐ 334 Common ions
- ☑ 335 Hardness
- ☐ 336 Radiochemical
- ☐ 337 Dissolved oxygen
- ☐ 338 Other Gases
- ☐ 339 Other

Organic

- ☐ 351 Pesticides (insecticides, herbicides, etc.)
- ☐ 352 Synthetic detergents
- ☐ 353 Other

Biologic

- ☐ 361 Coliforms
- ☐ 362 Other Micro-organisms
- ☐ 363 BOD
- ☐ 364 Other

Sediment

- ☐ 371 Concentration
- ☐ 372 Particle size
- ☐ 373 Other

18. SUPPLEMENTARY DATA FOR SITE

- ☐ 421 Surface Water Station
- ☐ 422 Ground Water Station
- ☐ 423 Water Stage or Level
- ☑ 424 Water discharge
- ☐ 425 Time of Travel
- ☐ 426 Drainage Area

19. STORAGE OF DATA

- ☐ 501 Periodic Report
- ☐ 502 Areal Report
- ☑ 503 Not Published
- ☐ 504 Data on Punchcard
- ☐ 505 Data on Magnetic Tape
- ☐ 506 Other

20. OFFICE AT WHICH DATA AVAILABLE

Office: BASE MAINTENANCE DEPARTMENT, UTILITIES DIVISION

Street No.: MARINE CORPS BASE

City Code: 0735

City, State, Zip: CAMP LEJEUNE, N. C. 28542

21. OFFICE COMPLETING FORM

BASE MAINTENANCE DEPARTMENT

22. COMPILER'S NAME

P. E. TEW, JR.

23. DATE Month: SEPT. Year 19: 66

34024

TRAVELER

Order No. 0997000

Ser. No. 74887 Prod. Code 4700-6800-0999

Fig. No. 4700 Size 8" Unit

Class Type Quantity 1

Motor 1150 Pack

Customer Fenwal

DO NOT DESTROY THIS TICKET

From Dept. 11 To Dept. 16

Date 6-28-75 Signature

FORM-8-DM-1-75 H

NEW WELL HOUSES

PUMP	CAPACITY	TOTAL HEAD	COLUMN LOSSES	TOTAL DYNAMIC HEAD	SHAFT LOSSES
#33	200 GPM	93 Ft.	5 Ft.	98 Ft.	.2 HP
#34 & 36	200 GPM	79 Ft.	5 Ft.	84 Ft.	.2 HP
#35	200 GPM	79 Ft.	4.5 Ft.	83.5 Ft.	.2 HP

NEW PUMP ROOM

#1	2800 GPM	60 Ft.	*	60 Ft.	*
#2	3500 GPM	60 Ft.	*	60 Ft.	*
#3	4200 GPM	60 Ft.	*	60 Ft.	*

* No appreciable losses incurred on short coupled pumps.

WELL #33

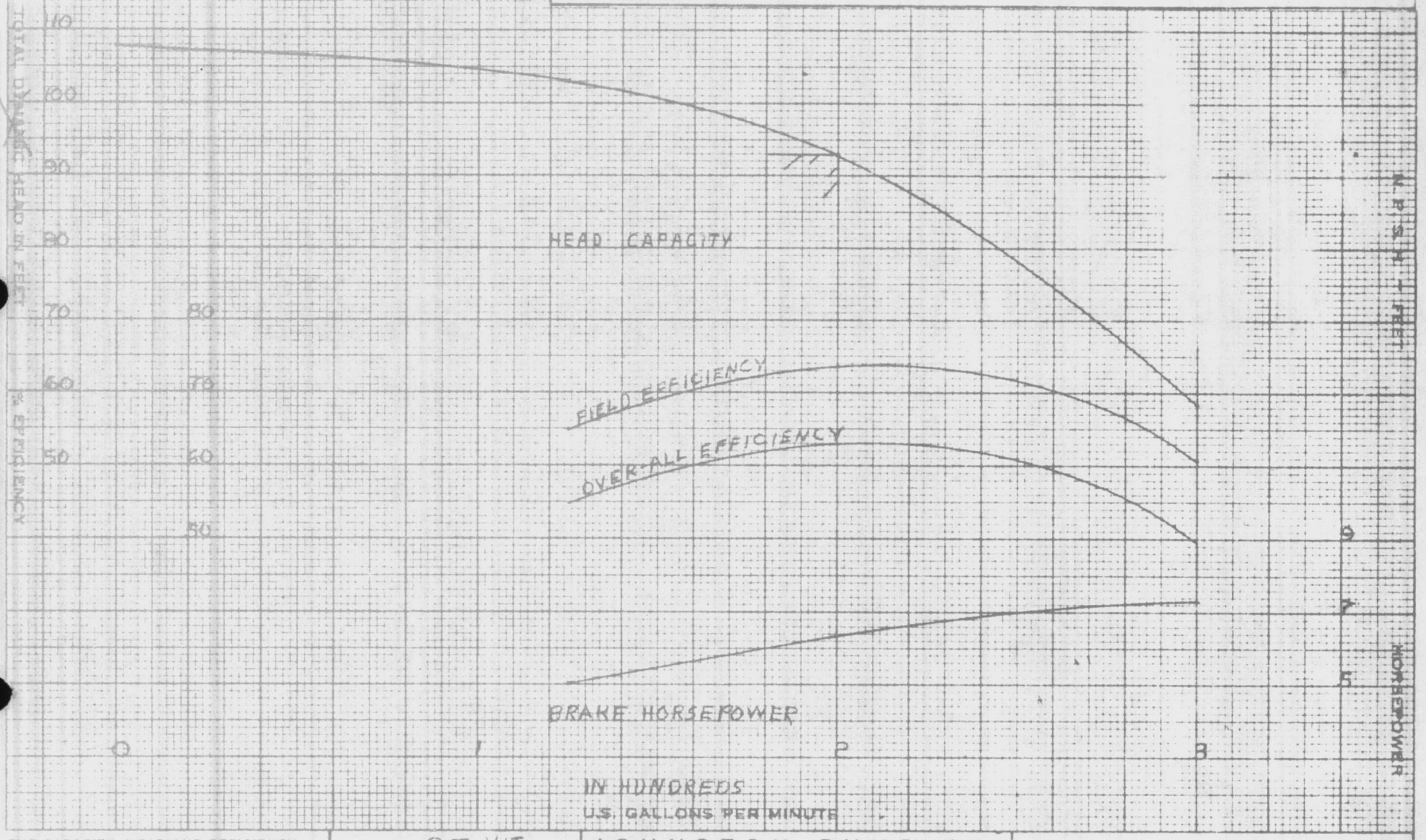
GUARANTEED PERFORMANCE

NOTE: ALL COLUMN LOSSES ARE INCLUDED

JOHNSTON: REF. NO. JQ 3889

DEALER: REF. NO.

CUSTOMER: T. A. LOVING CO. REF. NO.



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

IMPELLER C.I. V/T DIA.

BOWLS C I V/T

LIQUID WATER

SP. GR. 1.0 @ 70°F

DATE: 14JUL59 BY CHET

JOHNSTON PUMP CO.
DIVISION OF YOUNGSTOWN SHEET & TUBE

VERTICAL PUMPS

50TH YEAR 1909-1959

PASADENA • CALIFORNIA • U.S.A.

PERFORMANCE 3 STAGE

8AC TURBINE PUMP

1760 R.P.M.

RECORD OF PUMPING TEST OF WELL [illegible] Contract NBY 24218

TIME	GPM	DRAWDOWN	PUMPING LEVEL	REMARKS
10:45 am.	--started			
1:30 pm	75	3 feet	21 feet	All depths r
3:30 pm	115	4	22	-ate to grou
6:00 pm	154	7	25	elevation
9:00 pm	195	12	30	
12:00 pm	235	16	34	
5-59 1:00 am	235	16	34	Static water
2:00	235	16	34	level was 18
2:30	[illegible]	16	34	below ground
3:00	235	16	34	elevation at
3:30	235	16	34	beginningof
4:00	235	16	34	test.
4:30	235	16	34	
5:00	235	16	34	
5:30	235	16	34	
6:00	235	16	34	
6:30	235	16	34	
7:00	235	16	34	
7:30	235	16	34	
8:00	235	16	34	
8:30	250	18	36	
9:00	250	18	36	
9:30	250	18	36	
10:00	250	18	36	
10:30	250	18	36	
11:00	250	18	36	
11:30	225	16	34	
12:00 noon	225	16	34	
1:00 pm	225	16	34	
2:00	225	16	34	
2:45	200	14	32	
3:00	200	14	32	
4:00	200	14	32	
5:00	200	14	32	
6:00	200	14	32	
7:00	200	14	32	
8:00	200	14	32	
9:00	200	14	32	
10:00	200	14	32	
11:00	200	14	32	
12:00	200	14	32	
1:00 am	200	14	32	
2:00	200	14	32	
3:00	200	14	32	
4:00	200	14	32	
5:00	200	14	32	
6:00	200	14	32	
7:00	200	14	32	
8:00	200	14	32	

842849 69

RESIDENT OFFICER IN CHARGE OF CONSTRUCTION
CAMP LEJEUNE, NORTH CAROLINA

APPROVED

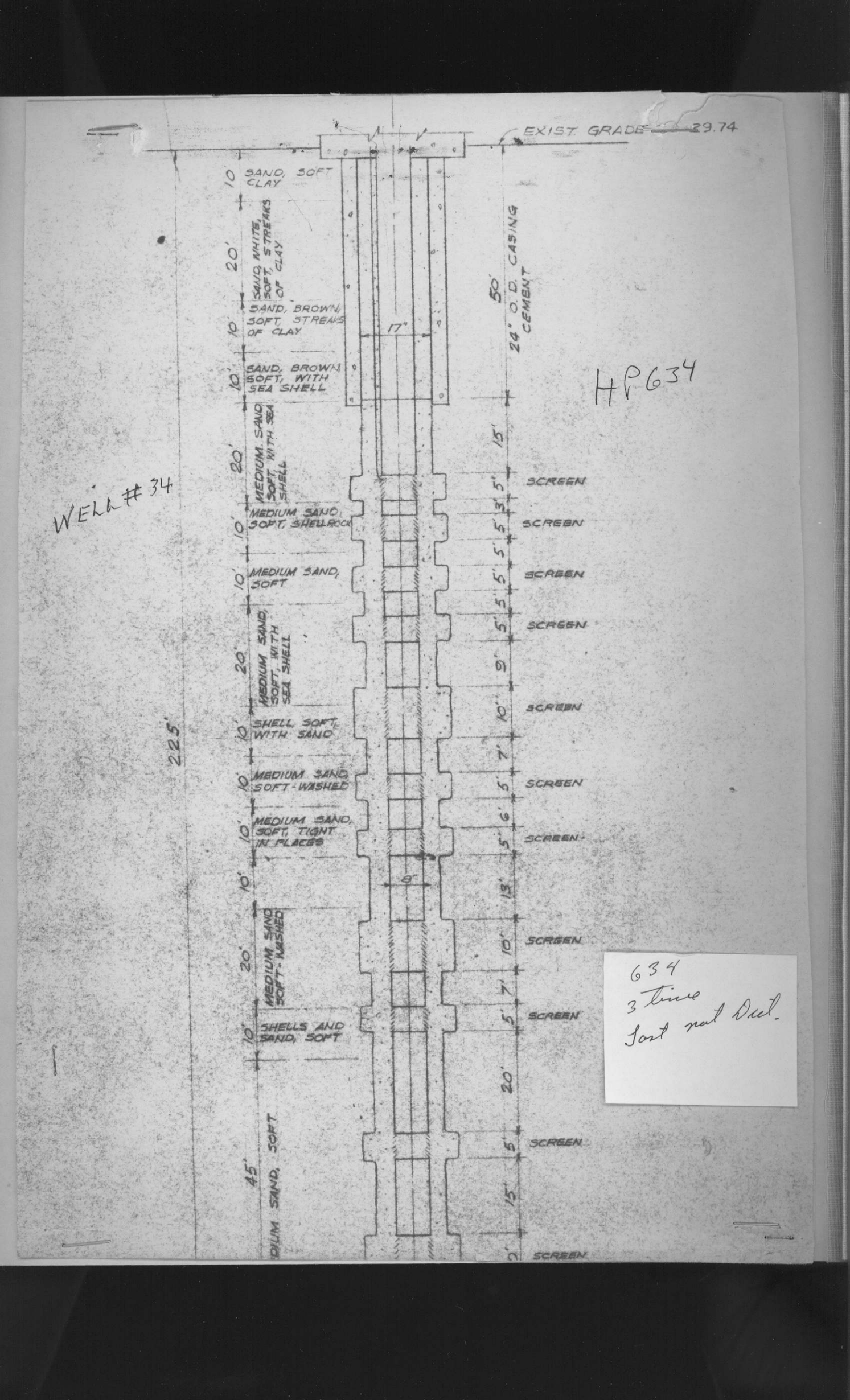
SUBJECT TO CONTRACT REQUIREMENTS

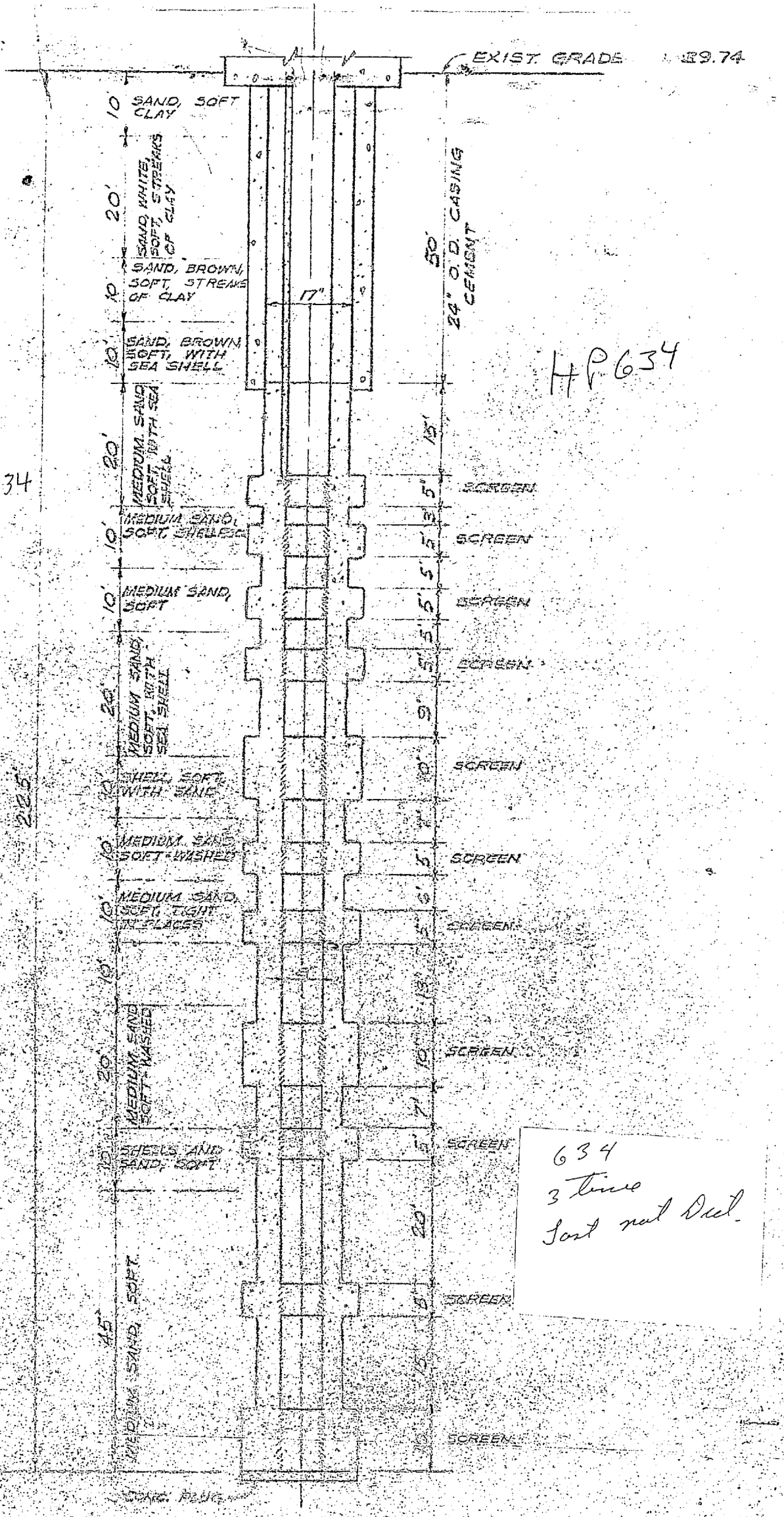
CONTRACT NBy [illegible] SEC. NO. [illegible]

DATE: [illegible]

N. C. HARVEY
CDR, CEC, USN
Resident Officer in
Charge of Construction

H.P. Well 633


EXIST. GRADE 29.74
10' SAND, SOFT CLAY
20' SAND, WHITE, SOFT, STREAKS OF CLAY
10' SAND, BROWN, SOFT, STREAKS OF CLAY
10' SAND, BROWN, SOFT, WITH SEA SHELL
20' MEDIUM SAND, SOFT, WITH SEA SHELL
10' MEDIUM SAND, SOFT, SHELLROCK
10' MEDIUM SAND, SOFT
20' MEDIUM SAND, SOFT, WITH SEA SHELL
10' SHELL SOFT, WITH SAND
10' MEDIUM SAND, SOFT-WASHED
10' MEDIUM SAND, SOFT, TIGHT IN PLACES
10'
20' MEDIUM SAND, SOFT-WASHED
10' SHELLS AND SAND, SOFT
45' MEDIUM SAND, SOFT
225'
17"
9"
50' 24" O.D. CASING CEMENT
15' SCREEN
5' 3' SCREEN
5' 5' 5' SCREEN
5' 5' 5' SCREEN
9' SCREEN
10' SCREEN
7' 5' SCREEN
6' 5' SCREEN
13' SCREEN
10' 7' SCREEN
5' 20' SCREEN
15' SCREEN
WELL #34
HP634
634
3 times
Sort not Dict.

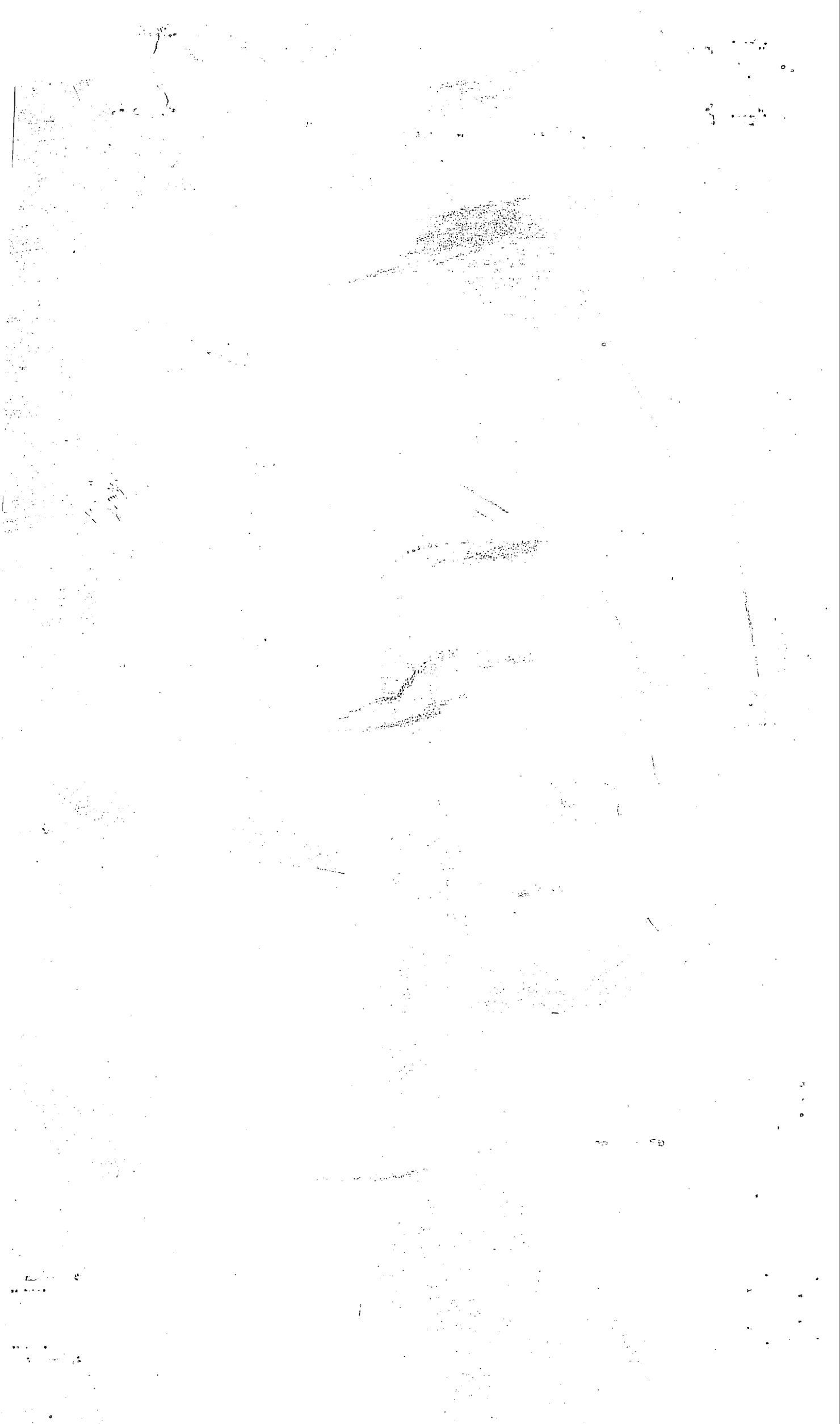


WELL #34

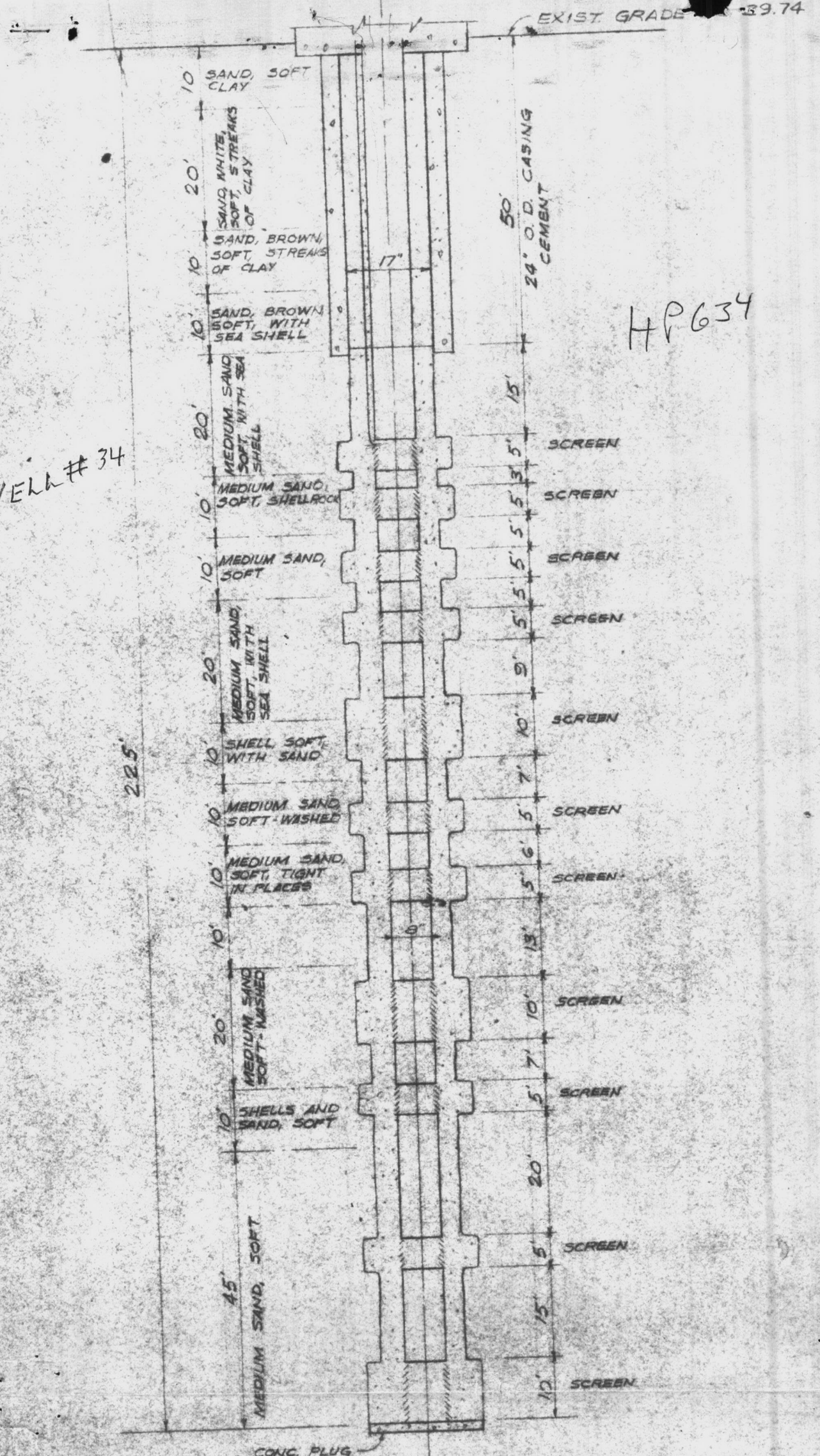
HP 634

634
3 times
Sand not Dual

34



634
3 times
Sort not Dict.



WELL #34

HP634

0. 34

TOLERANCE
FRACTIONAL ± 1/64 UNLESS NOTED

WESTINGHOUSE VERTICAL HOLLOW SHAFT MOTOR
TYPE C.S.P. FRAME 324 HP. 125 PHASE 3
CYCLE 60 VOLTS 440 R.P.M. 1745 ③
WITH NON-REVERSE RATCHET

ADJUSTING NUT

220 VOLT - 60 CYCLE AC AUTOMATIC SOLENOID
OPERATED OILER - 1 GALLON CAPACITY

10"

6" DISCHARGE HEAD TYPE 'A' CAST IRON

TUBE TENSION NUT - CAST IRON
TUBE TENSION NUT BRG. - HIGH LEAD BRZ.

PACKING
TUBE TENSION PLATE - CAST IRON

HEADSHAFT - 416 S.STL.

TUBE TENSION NIPPLE - STEEL

LINESHAFT COUPLING - STEEL
LINESHAFT - 416 S.STL.

STD. TUBE STABLIZER - RUBBER

LINESHAFT TUBING - STEEL
LINESHAFT BEARING - HIGH LEAD BRG.

COLUMN PIPE - MEDIUM IRON
COLUMN PIPE COUPLING STEEL

PUMPSHAFT COUPLING - STEEL
PUMPSHAFT - ⅝" 416 STAIN. STEEL

TUBING ADAPTER SCREW BEARING - BRZ.
TUBING ADAPTER - DUCTILE IRON

DISCHARGE CASE - CAST IRON
DISCHARGE CASE SCREW BRG. BRZ.
"O" RING DEFLECTOR
DISCHARGE CASE COMBINATION BRG. HIGH LEAD BRZ.

INTERMEDIATE BOWL
INTERMEDIATE BOWL BEARING - HIGH LEAD BRZ.
INTERMEDIATE BOWL BEARING - RUBBER

IMPELLER - CAST IRON 417
IMPELLER LOCK COLLET - STEEL
IMPELLER SEAL RING - ALUM. BRZ.

SUCTION CASE - CAST IRON

SUCTION CASE BEARING - HIGH LEAD BRZ.

SUCTION PIPE - STEEL

STRAINER - GALV. STEEL

97" 15/16"
1"
② 7'-1 3/16"
96"-1 3/16"
② 2'-6 3/8"
-18'-10 7/8"
11 5/8"

4 - 5/8" HOLES ON 17 3/8" B.C.
℄ DISCH.
45°
DISCHARGE HEAD
PLAN VIEW

PUMP PERFORMANCE
800 U.S. G.P.M.
84 FT. TOTAL HEAD
LIQUID - WATER
1.0 SPECIFIC GRAVITY

DEALER - T. A. LOVING COMPANY
PO# 874
JOHNSTON SO & SERIAL NO JP-3892-93

THIS PRINT CERTIFIED
CORRECT BY
JOHNSTON PUMP COMPANY
A DIVISION OF THE YOUNGSTOWN
SHEET AND TUBE COMPANY
Per

WGL 634

NO.	REVISIONS	APP.	DATE
3	REVISED TO DATE	JDE	2-8-60
2	REVISED TO DATE	JDE	1-15-60
1	REVISED TO DATE	JDE	9-10-59

SECTIONAL ILLUSTRATION - VERTICAL TURBINE PUMP - 3 STAGE BAC

JOHNSTON TURBINE PUMPS
PASADENA 8, CALIF., U. S. A.

SCALE	NONE	
DRAWN	JDE	8-25-59
CHECKED	ST	8-14-59
APPROVED		

PART NUMBER
MATERIAL
PATTERN NUMBER
DRAWING NUMBER H-1197

RESIDENT OFFICER IN CHARGE OF CONSTRUCTION
Camp Lejeune North Carolina

APPROVED

SUBJECT TO CONTRACT REQUIREMENTS

CONTRACT No. 24-45-57 SPEC. No.

U.S. NAVY
CIVIL ENGINEER CORPS
Resident Officer in
Charge of Construction

ISSUED
FEB 5 1960
ENG. DEPT.

North [redacted]lina Department of Environment, [redacted]
[redacted]ion of Environmental Health, Public Water Supply Se[redacted]

SOURCE INFORMATION
GROUND WATER

Date Form Completed: M M D D Y Y = 01 25 94

PWSID: 0460701

Owner Assigned Source Code: 634

Well Name (If purchase, name of system): HADNOT POINT 634

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=Permanent, E=Emergency, S=Seasonal, I=Interim, O=Other)

T/B ABANDONED

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

Latitude (N) Deg. Min. Sec.: 34 40 30.

Longitude (W) Deg. Min. Sec: 077 19 35.

How Determined: (G=GPS, M=Map, S=Surveyed)

GPS Data: Q# or DOP #

No. of Sats. Locked on:

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

Vulnerable (VOCs)? Y N

Assessment Date (M M D D Y Y):

ENTRY POINT INFORMATION

Use Code: C (C=Ground/Permanent, D=Ground/non-permanent)

Availability: P (P=Year-round, S=Seasonal, E=Emergency, I=Interim, O=Other)

Owner Assigned Entry Point Code: 100

Entry Point Name: HP 634

Location: _____

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

Sources of pollution/distance: _____

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

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

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

Condition of house: _____ Type of freeze protection: _____

Well: Diameter: 8" Type: GRAVEL PACK Yield (gpm): 219 Properly sealed? ____ (Y,N

Properly vented? ____ (Y,N) Casing depth 65 ft. (If unknown, put 'UNK') Well depth: 225' Meter available? N (Y,N

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

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

Pumps: Capacity: GPM: 200 HP: 7.5 Pump intake depth: 80 Auxiliary Power? N (Y,N

Type pump: VERTICAL TURBINE Height above floor (pump/casing): 18" / _____

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? HP-20 PLANT

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

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

- CONTAMINATED -

WELL NUMBER 634		BY THOMAS / BROWN			DATE 10-29-84	
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME 1400
65	14	26	12	35	119	1410
		32	18	33	125	1420
		35	21	30	130	1430
		39	25	27	151	1440
		43	29	24	170	1450
		44	30	21	183	1500
		45	31	18	197	1510
		49	35	15	207	1520
		50	36	12	219	1530

REMARKS left set at 12 psi P/L 50 S/L 14 U/D 36 & 219 gpm

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE

WELL NUMBER 634		BY THOMAS/MILLER/BROWN				DATE 2-3-84
AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAIN DOWN	DISCHARGE PRESSURE	GPM	START TIME 1305
66	16	30	14	37	100	1317
		34	18	32	128	1323
		39	23	28	149	1337
		43	27	24	162	1345
		45	29	21	172	1355
		48	32	18	195	1406
		50	34	15	199	1410
		53	37	12	212	1425

REMARKS used direct reading gage
left set at 12 PSI 212 GPM

installed Coren Pump

MANUFACTURER	STAGE	S.N.	TOTAL HEAD	SIZE
VALLEY Pumps	4	684-5017 - RPM 1800 Code X83 model - 8MM0-45	85	200 GPM

634

DATE	LENGTH OF AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAW DOWN	DISCHARGE PRESSURE	CAP. PER FOOT OF DRAW DOWN	TOTAL GPM
					Start	Time	1050
10-1-82	65'	17	35	18	19	104	1105
			36	19	16	108	1115
			38	21	13	111	1130
			40	23	10	115	1140
			40	23	8	119	1150

REMARKS: Set at 119 GPM at 8 PSI

PUMP TO BE REPLACE 11-9-83

WELL # 634

DATE	LENGTH OF AIR LINE	STATIC LEVEL	PUMPING LEVEL	DRAW DOWN	DISCHARGE PRESSURE	CAP. PER FOOT OF DRAW DOWN	TOTAL CAP.
3/29/77	65		38		10		
			35		(8)		
			34		6		
			32		4		
7-13-79	Installed New Pump.				(Direct Reading gauge		
	Air line - 66 ft						
	Static - 20 ft						
	P/L - 41 ft						
REMARKS:	D.D = 21 ft						
	8 LBS Pressure - Produces 178 g.p.m.						
	MAX output 192 g.p.m at 5 lbs.						

DEPTH OF WELL: 225

AIRLINE ELEVATION: + 65 -

DATE INSTALLED: 1959

= LINE / COLUMN DWG. ~~Case 2761~~ B/M NO. 1962

2160

DATE ISSUED 5/14/71	REVISION
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL
8JO BOLTED BOWL ASSEMBLY
AGR. - W/L

DATE 7 MAY 1975
BY J. ROSE

NO. OF UNITS 1 (B) (1)
CUSTOMER UNITED STATES MARINE CORP
CUSTOMER P.O. M67001-75-5383 ITEM WELL NO 634 S.O. 302669

ln #	qty pump	qty or.		PART NAME & TYPE		MAT'L	PRO-CESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL
1	1	1		SUCTION BOWL 5" NPT	688	1003			L-143	B-2772		
2												
3												
4	1	1		SUCTION BUSHING	690	1104				IE-279		
5	1	1		SAND COLLAR	692	1102			IE-281	IE-281		
6	1.	1		TOP INT. BOWL	669	1003	IC		U-124	B-2777		
7	3	3		INT. BOWL	670	1003	IC		U-125	B-2780		
8	4	4		FLEETWOOD F8511 INT. BOWL BUSHING	672					A7391	6	
9	4	4		IMPELLER (L) $4\frac{7}{8}$" D.X NO U.F.	673	1102	4H		S-183	A-8154		
10												
11	4	4		TAPER LOCK	677	2242				IE-331		
12												
13												
14												

ENGINEERED PRODUCTS AND MACHINE TOOL DIVISION
TIDEWATER SUPPLY COMPANY
WILMINGTON, N. C.

= LINE AT COLUMN DWG.

SHEET 2 of 42
B/M NO. 2150

DATE ISSUED	REVISION
5/2/72	1
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL

8JO BOLTED BOWL ASSEMBLY
AGR. - W/L

NO. OF UNITS 1
CUSTOMER —
CUSTOMER P.O. ITEM

DATE 1 MAY 75
BY J. ROSE

S.O. 302669

Line #	qty pump	qty or.		PART NAME & TYPE	MAT'L	PROCESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL.
1											
2	1	1		DISCH. BOWL 5" W/L 661	1003			A-4883	A-5587		
3											
4	1	1		DISCH. BOWL BUSHING 662	1104				IE-280		
5	1	1		PUMPSHAFT W/L 8" S/U 1-3/16" DIA. 660	2227				B-2060	2	4
6	1	1	A	PUMPSHAFT COUPLING (CH. A-1011-1) 649	2218				IE 112		
7	40	40		CAPSCREWS (8 PER STG. + 8) 760E	2210			3/8"-16	NC X 1"		
8	1	1		PIPE PLUG 1/2 NPT 747E	1000						
9	1	1		STRAINER (CONE) 698					A8922	2	
10											
11											
12											
13											
14											

= LINE AND COLUMN DWG. 5 x 9'-11½" COLUMN - 10'-0" SHAFT w/1 CHROME SPOT

SHEET 3

B/M NO. 4006

DATE ISSUED	REVISION
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL

THREADED COLUMN - PRODUCT LUBE
5" COLUMN 1" LINE SHAFT

NO. OF UNITS 1

CUSTOMER

CUSTOMER P.O. ITEM 1

DATE 5/7/75

BY J. Ross

S.O. 302669

ne	qty 10'	qty or.	PART NAME & TYPE	MAT'L	PROCESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL
	7	7	COLUMN 5 WATER LUBE (.258 WALL 646	6521				B4842	4	X
	8	8.	COL. CPLG 645	6521				B4844	4	
	8	8.	SPIDER BSHG. ASSY FLEETWOOD FSB-8C 652 653					C-1087	8	1
	1	1	COLUMN 5" WATER LUBE (.258 WALL 646	6521				B4842	4	Y
	7	7	LINESHAFT 646	2205	6C			A-5788	2	E
	9	9	LINESHAFT CPLG. 649	2242				IE-112		
	1	1	HEADSHAFT 1.0"DIA X 38"LG 646	2227				A6572	2	
	2	2	PIPE 5"NPT X 10' SCH 40	6546		THD BOTH ENDS				
0	1	1	COUPLING, 5"NPT SCH 40	6546						
1	1	1	LINESHAFT 646	2205	6C			A5788	2	F
2	1	1	NUT, ADJ 604	2242				IE459		
3	1	1	LOCK SCREW 757J	2242	10-32	NF X		1 ¼ LG		
4										

* = LINE AND COLUMN DWG.

SHEET ____ B/M NO. 4

DATE ISSUED	REVISION
11/13/70	2-4-74
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL

AGRICULTURAL DISCHARGE HEAD (Heavy Duty)
6" DIS.FLANGE (125# STD.) 6" THR.COLUMN

NO. OF UNITS 1

CUSTOMER

CUSTOMER P.O. ITEM 1

DATE 7MAY'75 1014

BY J. Rose

S.O. 302669

Line #	qty pump	qty or.		PART NAME & TYPE	MAT'L	PRO-CESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL				
1	1	1		6" HEAD 12" BD (600)	1003			0-106	C-984						
2															
3															
4															
5															
6															
7															
8															
9	1	1		SLINGER (622)	~~65~~				A-5775	2					
10	1	1		PIPE PLUG 1½ (747N)	1000										
11	1	1		PIPE PLUG 3/4 (747B)	1000										
12	4	4		H.H. CAPSCREWS & NUTS (757B)	2210	3/8-16NC X			1 3/4 LG						
13															
14															
15	1	1		6M X 5F REDUCER (799)	1003				B-3026	E					

SHEET 2 of 2 (5)

* = LINE AND COLUMN DWG.

B/M NO. _____

DATE ISSUED	REVISION
11/13/70	2-4-74
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL

AGRICULTURAL DISCHARGE HEAD (Heavy Duty)
6" DIS.FLANGE (125# STD.) 6" THR.COLUMN

NO. OF UNITS 1

CUSTOMER _____

CUSTOMER P.O. _____ ITEM 1

DATE 7MAY'75 1014

BY J. Rose

S.O. 302669

Line #	qty pump	qty or.	PART NAME & TYPE	MAT'L	PRO-CESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL
1	1	1	LOCK RING 5" (639)	1003			A-963	A-964-8		
2	1	1	COLUMN NIPPLES 5" X 12" LG.(631)	6521				A-5776	4	
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

BILL OF MATERIAL - INDEX NO.: 10GA-103A

GOULDS PUMP INC. – V.P.D., INDUSTRY, CALIF.

B/M FOR: STUFFING BOX
1" SHAFT NO SLEEVE

ORDER NO: SO 302669
DATE 5/7/75 BY: D. Rose QUANTITY: (

R.S.P.	LINE NO.	LEVEL	ITEM NO.	PART NAME	DRAWING OR CODE NO.	LINE	COL.	MAT'L CLASS	ITEM OR PATTERN	PROCESS NO.	PCS PER UNIT	QTY. TO ORDER	ALLOCATE	REMARKS
	1		758A	HEX CAP SCREW	49511	203		2210			6	6		
	2		789B	LOCK WASHER	49522	7		6953			6	6		
	3		739A	STUD	91786	84		2130			2	2		
	4		735	HEX NUT	49507	7		2130			2	2		
	5		759G	HEX CAP SCREW	49511	5		2210			2	2		
	6		735	HEX NUT	49507	2		2210			2	2		
	7		789B	LOCK WASHER	49522	3		6953			2	2		
	8													
	9													
*	10		779A	GASKET (MAX. 400#)	B 2749	4		5130			1	1		
*	11													
	12													
	13		747C	PIPE PLUG (MAXSO)	511668	4		1000			1	1		
	14													
	15													
	16													
	17													
	18													
	19		616	STUFFING BOX	C 1923			1003	D 1212		1	1		
*	20		617	BEARING S.B.	IE 310			1104			1	1		
	21		618	GLAND-SPLIT	B 3464			1102	X 175		1	1		
*	22		620A	PACKING RING	90855	10					6	6		
	23		789C	WASHER	B 4643	2		3217			1	1		
	24													
	25													
	26													
	27													
	28													
	29													
	30													
	31													
	32			ASSEMBLY	C 1944	3								
	33													
	34													
	35													
	36			LINE NO. 10&11 - DELETE	ONE NOT USED									
	37													
	38			LINE NO. 13&14 - DELETE	ONE NOT USED									

PAGE NO. 6

*RECOMMENDED SPARE PARTS

FORM GP-A

= LINE COLUMN DWG.

SHEET 1

B/M NO.

DATE ISSUED	REVISION
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL

PRELUBE TANK & FITTINGS

NO. OF UNITS 1

CUSTOMER

CUSTOMER P.O. ITEM 1

DATE 7 MAY 1975

BY J. ROSE

S.O. 302669

Line #	qty pump	qty or.	PART NAME & TYPE	MAT'L	PROCESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL
1	1	1	WATER TANK - 42 GAL.	3201	5C		GOULDS WATER SYSTEMS	AC2V		
2	1	1	REDUCER BUSHING - 1¼NPT x ½NPT 150#	1000						
3	1	1	AIR RELEASE VALVE - ½ NPT	1107			LUKENHEIMER	# 740		
4	1	1	CLOSE NIPPLE - ½ NPT SCH 40	6546						
5	1	1	1¼ PIPE - SCH. 40 x 18.00 LG	6546			CUT & THREAD IN FIELD			
6	1	1	GATE VALVE - 1¼ NPT	1107			LUKENHEIMER	#2127		
7	1	1	UNION - 1¼ NPT 150#	1000						
8	1	1	REDUCER BUSHING - 1½NPT x 1¼NPT 150#	1000						
9										
10										
11										
12										
13										
14										

= LINE / COLUMN DWG. Use 2701 B/M NO. 1961

2160

DATE ISSUED	REVISION
5/14/71	
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL
8JO BOLTED BOWL ASSEMBLY
AGR. - W/L

DATE 7 MAY 1975
BY J. ROSE

NO. OF UNITS 1
CUSTOMER UNITED STATES MARINE CORP (B) (1)
CUSTOMER P.O. M67001-75-5383 ITEM WELL NO 634 S.O. 302669

ln #	qty pump	qty or.	PART NAME & TYPE		MAT'L	PRO-CESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL
1	1	1	SUCTION BOWL 5" NPT	688	1003			L-143	B-2772		
2											
3											
4	1	1	SUCTION BUSHING	690	1104				IE-279		
5	1	1	SAND COLLAR	692	1102			IE-281	IE-281		
6	1	1	TOP INT. BOWL	669	1003	IC		U-124	B-2777		
7	3	3	INT. BOWL	670	1003	IC		U-125	B-2780		
8	4	4	FLEETWOOD F8J11 INT. BOWL BUSHING	672					A7391	6	
9	4	4	IMPELLER (L) $4\frac{7}{8}$" D.X NO	673 U.F.	1102	4H		S-183	A-8154		
10											
11	4	4	TAPER LOCK	677	2242				IE-331		
12											
13											
14											

ENGINEERED PRODUCTS AND MACHINE TOOL DIVISION
TIDEWATER SUPPLY COMPANY
WILMINGTON, N. C.

* = LINE AI COLUMN DWG.

SHEET 2 of 2
B/M NO. 2150

DATE ISSUED	REVISION
5/2/72	1
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL
8JO BOLTED BOWL ASSEMBLY
AGR. - W/L

NO. OF UNITS 1
CUSTOMER —
CUSTOMER P.O. ITEM 1

DATE 7 MAY '75
BY J. Rose

S.O. 302669

line #	qty pump	qty or.		PART NAME & TYPE	MAT'L	PROCESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL
1											
2	1	1		DISCH. BOWL 5" W/L 661	1003			A-4883	A-5587		
3											
4	1	1		DISCH. BOWL BUSHING 662	1104				IE-280		
5	1	1		PUMPSHAFT W/L 8" S/U 1-3/16" DIA. 660	2227				B-2060	2	4
6	1	1	A	PUMPSHAFT COUPLING (CH. A-1011-1) 649	2218				IE 112		
7	40	40		CAPSCREWS (8 PER STG.+ 8) 760E	2210			3/8"-16	NC X 1"		
8	1	1		PIPE PLUG 1/2 NPT 747E	1000						
9	1	1		STRAINER (CONE) 698					A8922	2	
10											
11											
12											
13											
14											

= LINE AND COLUMN DWG. 5 x 9'-11½" COLUMN - 10'-0" SHAFT w/1 CHROME SPOT

SHEET B/M NO. 4006 3

DATE ISSUED	REVISION
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL

THREADED COLUMN - PRODUCT LUBE
5" COLUMN 1" LINE SHAFT

NO. OF UNITS 1

CUSTOMER

CUSTOMER P.O. ITEM 1

DATE 5/7/75

BY J. Ross

S.O. 302669

qty 10'	qty or.	PART NAME & TYPE	MAT'L	PROCESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL
7	7	COLUMN 5 WATER LUBE (.258 WALL 640	6521				B4842	4	X
8	8	COL. CPLG 645	6521				B4844	4	
8	8	SPIDER BSHG. ASSY FLEETWOOD FSB-8C 652 653					C-1087	8	1
1	1	COLUMN 5" (.258 WALL 642 WATER LUBE	6521				B4842	4	Y
7	7	LINESHAFT 646	2205	6C			A-5788	2	E
9	9	LINESHAFT CPLG. 649	2242				IE-112		
1	1	HEADSHAFT 1.0"DIA X 38"LG 646	2227				A6572	2	
2	2	PIPE 5"NPT X 10' SCH 40	6546		THD BOTH ENDS				
1	1	COUPLING, 5"NPT SCH 40	6546						
1	1	LINESHAFT 646	2205	6C			A5788	2	F
1	1	NUT, ADJ 604	2242				IE459		
1	1	LOCK SCREW 757J	2242	10-32	NF X		1 1/4 LG		

* = LINE AND COLUMN DWG.

B/M NO. 4

DATE ISSUED	REVISION
11/13/70	2-4-74
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL

AGRICULTURAL DISCHARGE HEAD (Heavy Duty)
6" DIS.FLANGE (125# STD.) 6" THR.COLUMN

NO. OF UNITS 1

CUSTOMER

CUSTOMER P.O. ITEM 1

DATE 7MAY'75 1014

BY J. Rose

S.O. 302669

line #	qty pump	qty or.	PART NAME & TYPE	MAT'L	PROCESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL
1	1	1	6" HEAD 12" BD (600)	1003			0-106	C-984		
2										
3										
4										
5										
6										
7										
8										
9	1	1	SLINGER (622)	~~65~~				A-5775	2	
10	1	1	PIPE PLUG 1½ (747N)	1000						
11	1	1	PIPE PLUG 3/4 (747B)	1000						
12	4	4	H.H. CAPSCREWS & NUTS (757B)	2210	3/8-16NC X			1 3/4 LG		
13										
14										
15	1	1	6M X 5F REDUCER (799)	1003				B-3026	E	

* = LINE AND COLUMN DWG.

DATE ISSUED	REVISION
11/13/70	2-4-74
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL
AGRICULTURAL DISCHARGE HEAD (Heavy Duty)
6" DIS.FLANGE (125# STD.) 6" THR.COLUMN

NO. OF UNITS 1
CUSTOMER
CUSTOMER P.O. ITEM 1

DATE 7MAY'75 1014
BY J. ROSS

S.O. 302669

Line #	qty pump	qty or.		PART NAME & TYPE	MAT'L	PRO-CESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL					
1	1	1		LOCK RING 5" (639)	1003			A-963	A-964-8							
2	1	1		COLUMN NIPPLES 5" X 12" LG.(631)	6521				A-5776	4						
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																

BILL OF MATERIAL - INDEX NO.: 10GA-103A

GOULDS PUMP INC. – V.P.D., INDUSTRY, CALIF.

B/M FOR: STUFFING BOX
1" SHAFT NO SLEEVE

ORDER NO: SO 302669
DATE 5 7 75 BY: D. Rose QUANTITY: (

R.S.P.	LINE NO.	LEVEL	ITEM NO.	PART NAME	DRAWING OR CODE NO.	LINE	COL.	MAT'L CLASS	ITEM OR PATTERN	PRO-CESS NO.	PCS PER UNIT	QTY. TO ORDER	ALLO-CATE	REMARKS
	1		758A	HEX CAP SCREW	49511	203		2210			6	6		
	2		789B	LOCK WASHER	49522	7		6953			6	6		
	3		739A	STUD	91786	84		2130			2	2		
	4		735	HEX NUT	49507	7		2130			2	2		
	5		759G	HEX CAP SCREW	49511	5		2210			2	2		
	6		735	HEX NUT	49507	2		2210			2	2		
	7		789B	LOCK WASHER	49522	3		6953			2	2		
	8													
	9													
*	10		779A	GASKET (MAX. 400#)	B 2749	4		5130			1	1		
*	11													
	12													
	13		747C	PIPE PLUG (MAXSO)	511668	4		1000			1	1		
	14													
	15													
	16													
	17													
	18													
	19		616	STUFFING BOX	C 1923			1003	D 1212		1	1		
*	20		617	BEARING S.B.	IE 310			1104			1	1		
	21		618	GLAND-SPLIT	B 3464			1102	X 175		1	1		
*	22		620A	PACKING RING	90855	10					6	6		
	23		789C	WASHER	B 4643	2		3217			1	1		
	24													
	25													
	26													
	27													
	28													
	29													
	30													
	31													
	32			ASSEMBLY	C 1944	3								
	33													
	34													
	35													
	36			LINE NO. 10&11 - DELETE	ONE NOT USED									
	37													
	38			LINE NO. 13&14 - DELETE	ONE NOT USED									

PAGE NO. 6

*RECOMMENDED SPARE PARTS

FORM GP-A

= LINE COLUMN DWG.

SHEET

B/M NO.

DATE ISSUED	REVISION
DISTRIBUTION	
PROD.	ORDER
ACCT.	

BILL OF MATERIAL

PRELUBE TANK & FITTINGS

NO. OF UNITS 1

CUSTOMER

CUSTOMER P.O. ITEM 1

DATE 7 MAY 1975

BY J. ROSE

S.O. 302669

Line #	qty pump	qty or.	PART NAME & TYPE	MAT'L	PROCESS	HEAT TREAT	PATTERN #	MACHINE DRAWING	LIN	COL
1	1	1	WATER TANK - 42 GAL.	3201	5C		GOULDS WATER SYSTEMS	AC2V		
2	1	1	REDUCER BUSHING - 1¼NPT x ½NPT 150#	1000						
3	1	1	AIR RELEASE VALVE - ½ NPT	1107			LUKENHEIMER	# 740		
4	1	1	CLOSE NIPPLE - ½ NPT SCH 40	6546						
5	1	1	1¼ PIPE - SCH. 40 x 18.00 LG	6546			CUT & THREAD IN FIELD			
6	1	1	GATE VALVE - 1¼ NPT	1107			LUKENHEIMER	#2127		
7	1	1	UNION - 1¼ NPT 150#	1000						
8	1	1	REDUCER BUSHING - 1½NPT x 1¼NPT 150#	1000						
9										
10										
11										
12										
13										
14										

FORM A-4
(JUNE '66)

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF WATER DATA COORDINATION
INVENTORY OF HYDROLOGIC DATA STATIONS
QUALITY OF WATER

APPROVED.
Budget Bureau No. 42-R1485
Approval Expires June 30, 1968

1. AGENCY CODE	2. TYPE	3. LATITUDE	4. LONGITUDE	5.
15	Q	° ' " N	° ' " W	
		34 40 30	77 19 35	

6. AGENCY STATION NO.	7. STATION NAME
634	MP20-634

8. DRAINAGE BASIN CODE No.	Letter	9. STATE CODE	10. COUNTY CODE	11. COUNTY NAME
03	N	32	133	ONSLOW

12. PERIOD OF RECORD
Began 1959 Discontinued
Y ☐ Continuous Interruption Exceeds 1 Year

13.

14.

15. SITE

☐ 101 Stream
☐ 102 Canal
☐ 103 Lake
☐ 104 Reservoir
☐ 105 Estuary
☐ 106 Spring
☑ 107 Well
☐ 108 Other

16. FREQUENCY OF MEASUREMENT

☐ 201 Continuous Recorder
☐ 202 Telemetered
☐ 203 Daily
☐ 204 Weekly
☐ 205 Monthly
☐ 206 Quarterly
☐ 207 Seasonal
☐ 208 Annual
☐ 209 Other Periodic
☑ 210 Occasional

17. TYPES OF DATA AVAILABLE

Physical
☐ 311 Temperature
☐ 312 Specific Conductance
☐ 313 Turbidity
☐ 314 Color
☐ 315 Odor
☐ 316 Radioactivity
☐ 317 pH (field)
☑ 318 pH (lab)
☐ 319 Eh
☐ 320 Other

Chemical
☐ 331 Dissolved solids
☑ 332 Chlorides Only
☐ 333 Nutrients (Nitrogen and phosphorus compounds)
☐ 334 Common ions
☑ 335 Hardness
☐ 336 Radiochemical
☐ 337 Dissolved oxygen
☐ 338 Other Gases
☐ 339 Other

Organic
☐ 351 Pesticides (insecticides, herbicides, etc.)
☐ 352 Synthetic detergents
☐ 353 Other

Biologic
☐ 361 Coliforms
☐ 362 Other Micro-organisms
☐ 363 BOD
☐ 364 Other

Sediment
☐ 371 Concentration
☐ 372 Particle size
☐ 373 Other

18. SUPPLEMENTARY DATA FOR SITE

☐ 421 Surface Water Station
☐ 422 Ground Water Station
☐ 423 Water Stage or Level
☑ 424 Water discharge
☐ 425 Time of Travel
☐ 426 Drainage Area

19. STORAGE OF DATA

☐ 501 Periodic Report
☐ 502 Areal Report
☑ 503 Not Published
☐ 504 Data on Punchcard
☐ 505 Data on Magnetic Tape
☐ 506 Other

20. OFFICE AT WHICH DATA AVAILABLE

Office: BASE MAINTENANCE DEPARTMENT, UTILITIES DIVISION
Street No.: MARINE CORPS BASE
City, State, Zip: CAMP LEJEUNE, N. C. 28542
City Code: 0735

21. OFFICE COMPLETING FORM

BASE MAINTENANCE DEPARTMENT

22. COMPILER'S NAME

F. E. TEW, JR.

23. DATE
Month 09 Year 66

SEPT. 09

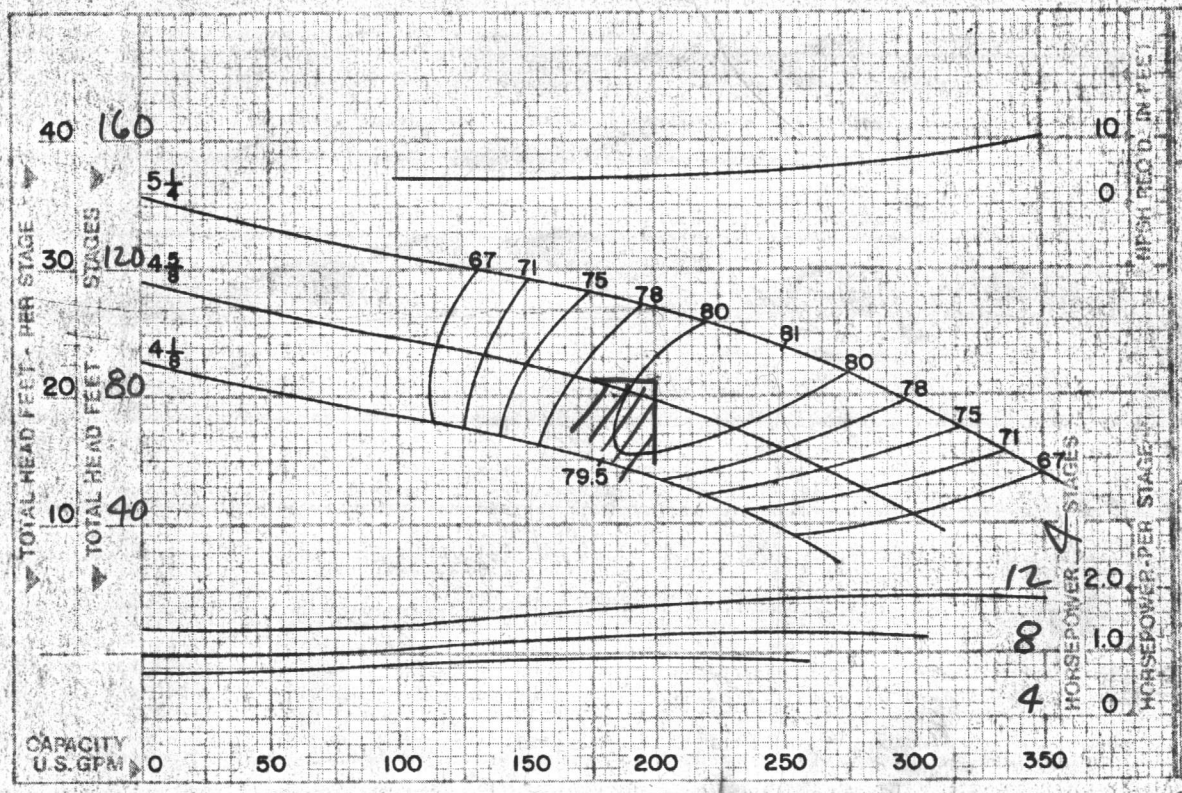
GOULDS PROPOSAL NO.	GOULDS SO.	CUST. INQUIRY NO.	CUSTOMER PO. NO.	PO. DATE	ITEM NO.	PATTERN
	302669	M67001-75-M-5383	2/6/75	WELL 634		5C17

CUSTOMER: U.S.M.C. CAMP LEJEUNE

PROJECT:

DATE: 10/1/70

SERVICE:	G.P.M. CAPACITY:	FT. TDH:	% EFFICIENCY:	R.P.M.	SUPERSEDES DATE
WATER	200	84	79%	1760	(2/1/70)



Curve NO. 1039

SIZE: 4x5LO
8JLO

RPM: 1760

CHANGE EFFICIENCY AS FOLLOWS:

NO. STAGES	LOWER EFFICIENCY
1	4
2	2
4	1

Impeller: SEMI-OPEN

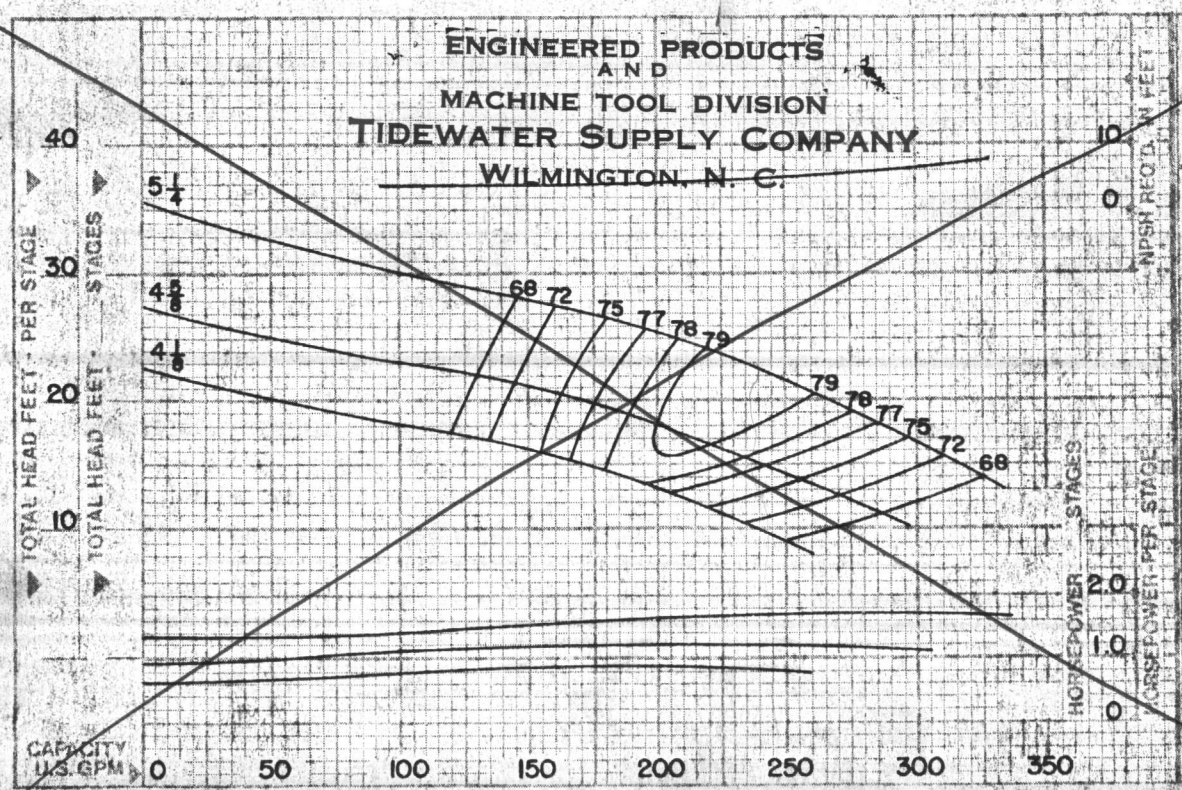
K: 5.3

GOULDS PUMPS
VERTICAL PUMP DIVISION

Characteristic based upon pumping clear, non-aerated water.

Rating point only is guaranteed. Column losses not included.

ENGINEERED PRODUCTS
AND
MACHINE TOOL DIVISION
TIDEWATER SUPPLY COMPANY
WILMINGTON, N. C.



Curve NO. 1040

SIZE: 4x5LC
8JLC

RPM: 1760

CHANGE EFFICIENCY AS FOLLOWS

NO. STAGES	LOWER EFFICIENCY
1	4
2	2
4	1

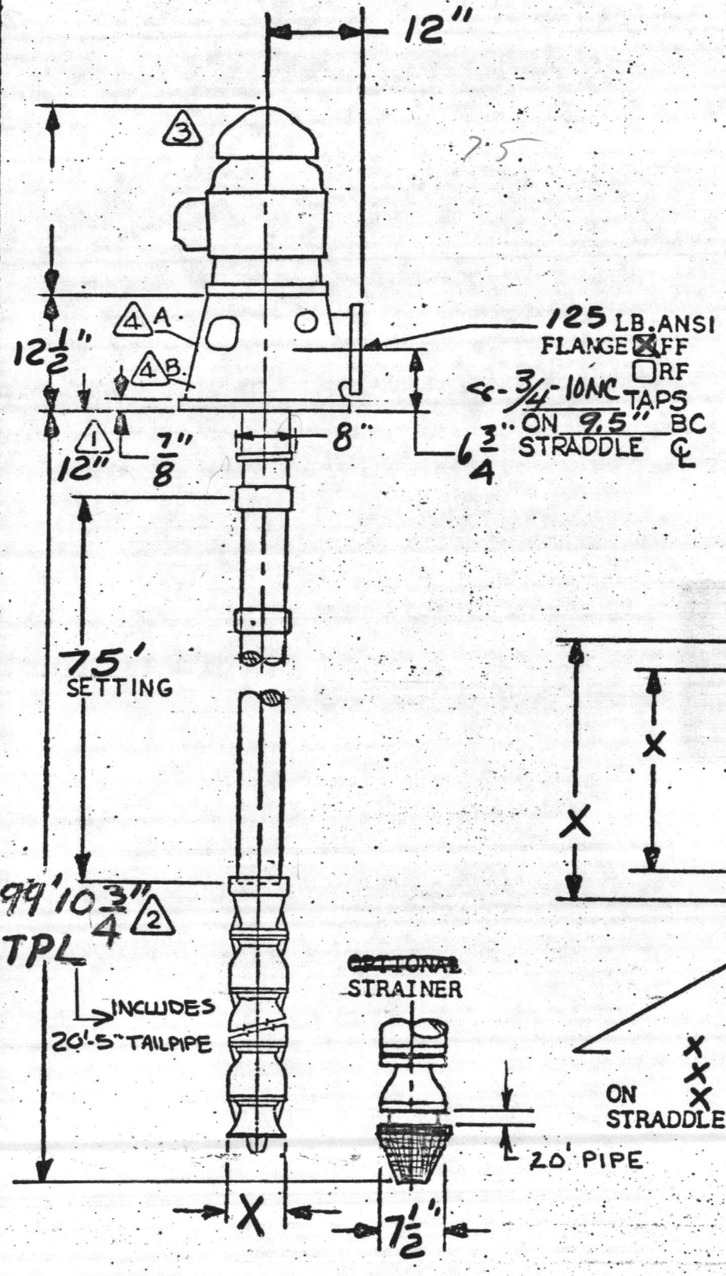
Impeller: CLOSED

K: 4.0

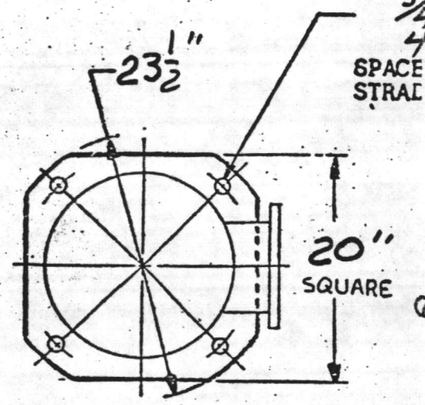
GOULDS PUMPS
VERTICAL PUMP DIVISION

Characteristic based upon pumping clear, non-aerated water.

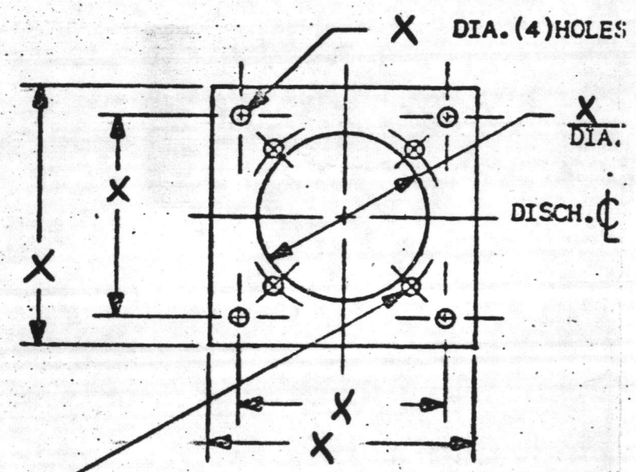
Rating point only is guaranteed. Column losses not included.



MINIMUM DIAMETER RECOMMEND TO CLEAR PUMP AND COLUMN ASS'Y IS 8" ②²



BASEPLATE PLAN



SUB-BASE OPTIONAL

CUSTOMER UNITED STATES MARINE CORP ④'

P.O. M67001-75-M-5383 ③

ITEM WELL Nº 634

NO. OF UNITS 1

PUMP SIZE 8 J LO NO. STAGES 4

GPM 200 T.D.H. 84 FT.

LIQUID WATER

SP. GR. 1.0 TEMP. 70°F VISC. ~

COLUMN 5"

TUBE ~

SHAFT 1.0"

MAX. BRG. CENTERS 10'

SEAL PACKING BOX

COUPLING NONE SPACER LTH. ~

DRIVER MFG. WEST. (BY CUST)

H.P. 7.5 RPM 1745 VSS☐ VHS☒

PH. 3 CY 60 VOLTS 230

THRUST

ENCLOSURE

FRAME 254UP

WEIGHT: PUMP 2050 LBS

DRIVER LBS

IMPELLER DIA. 4 7/8" D NO. U.F.

NO.	NOTES
①	ADJUSTABLE NIPPLE
②	T.P.L.- TOTAL PUMP LENGTH-IS THE DISTANCE TO LOWEST PROJECTION ON PUMP AND INCLUDES OPTIONAL STRAINER WHEN SPECIFIED.
③	DRIVER MAY BE ROTATED AT 90 INTERVALS ABOUT VERTICAL CENTERLINE. FOR DETAILS REFER TO DRIVER DIMENSION DRAWINGS.
④	A. 1½ NPT PRELUDE TAP (PRODUCT LUBE ONLY.) B. SOUND TAP & SEALING ELEMENT DRAIN

ENGINEERED PRODUCTS AND MACHINE TOOL DIVISION
TIDEWATER SUPPLY COMPANY
WILMINGTON, N. C.

LET	REVISION	BY	DATE
A³	P.O. + ITEM CHANGE		
A² A¹	PER CUST "9" REQ'D-REVISED WAS WAS TIDEWATER SUPPLY	T.S	10/1/75

DRAWN BY	DATE	CHECKED	DATE
J. ROSE	8 MAY 75	BTG	5-8-75

DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED

CERTIFIED BY J. Rose DATE 8 May 19-75

GOULDS PUMPS
VERTICAL PUMP DIVISION
INDUSTRY, CALIFORNIA

TITLE
OUTLINE-MODEL - DWT.
6 x 8 J LO / 4 STG

FORM NO. DM-3137

DRAWING NUMBER 302669

VERSATEC BLUEPRINT MADE: JAD

L. E. WOOTEN AND COMPANY
CONSULTING ENGINEERS
RALEIGH, N. C.

March 11, 1960

Resident Officer in Charge of Construction
Bureau of Yards and Docks Contracts
Marine Corps Base
Camp Lejeune, North Carolina

RE: 4E-50:WFU:ejs, NBy-24218
Rehabiliation of Raw Water Supply
Camp Lejeune, North Carolina

Dear Sir:

We are enclosing herewith the below listed shop drawings and recommend approval of same, without comment.

H-1828-C	Johnston Pump Co. dwg of vertical turbine pump details, Serial No. JQ-3865
H-1829-C	Johnston Pump Co. dwg of vertical turbine pump details, Serial No. JQ-3864
H-1830-C	Johnston Pump Co. dwg of vertical turbine pump details, Serial No. JQ-3863
H-1826-D	Johnston Pump Co. dwg of vertical turbine pump-3 stage 8AC details, Serial No. JQ-3888
H-1825-D	Johnston Pump Co. dwg of vertical turbine pump-3 stage 8AC details, Serial No. JQ-3889
H-1827-D	Johnston Pump Co. dwg of vertical turbine pump-3 stage 8AC details, Serial Nos. JQ-3892 & JQ-3893.

Very truly yours,

L. E. WOOTEN AND COMPANY

By L. E. Wooten
L. E. Wooten

RFR/js
Enclosures


RECEIVED
MAR 14 1960
Officer In Charge Const
Public Works Dept.
Camp Lejeune.

DEPARTMENT OF THE NAVY
Resident Officer in Charge
Bureau of Yards and Docks Contracts
Marine Corps Base, Camp Lejeune, North Carolina

In reply refer to:
4E-50:WFW:ojo
NBy-24216
26 March 1960

T. A. Loving and Company
P. O. Box 738
Goldsboro, North Carolina

Re: Contract NBy-24216, Rehabilitation of Raw Water Supply, Marine Corps Base, Camp Lejeune, North Carolina

Gentlemen:

We are returning X herewith, _____ under separate cover, the following shop drawings or data sheets with action indicated:

No. of Dwgs	Dwg No.	Description	Action
1	H-1826-D	Johnston Pump Co. dwg of vertical turbine pump details, Serial No. JC-3063	Approved, subject to contract requirements
1	H-1829-D	Johnston Pump Co. dwg of vertical turbine pump details, Serial No. JC-3064	Approved, subject to contract requirements
1	H-1830-D	Johnston Pump Co. dwg of vertical turbine pump details, Serial No. JC-3063	Approved, subject to contract requirements
1	H-1826-D	Johnston Pump Co. dwg of vertical turbine pump - 3 stage BAC details, Serial No. JC-3068	Approved, subject to contract requirements
1	H-1825-D	Johnston Pump Co. dwg of vertical turbine pump - 3 stage BAC details, Serial No. JC-3069	Approved, subject to contract requirements
1	H-1827-D	Johnston Pump Co. dwg of vertical turbine pump - 3 stage BAC details, Serial Nos. JC-3092 & JC-3093	Approved, subject to contract requirements

Very truly yours,

W. F. USRR, Jr.
USN CEC USR
Assistant Resident Officer
in Charge of Construction

Copy to:
DPWO FIVE (C-320)

L. E. Wooten & Co. (w/copy encl)
306 So. Dawson St., Raleigh, N. C.
4E-520 (w/copy encl)
4E-50 (w/copy encl)
Records (w/copy H-1827-D only - 2)
Board

Follow up for 4 additional sets of contractor's copy of ltr

OICC-ROICC
MARINE CORPS BASE, CAMP LEJEUNE, N. C.

No. 352
Date 14 Mar 60

From L. E. Wooten & Co.

Subject NBy-24218 - shop drawings and recommended approval
Johnston Pump Co.
-Code-

1. Action
2. Information
3. Prepare reply for OICC/ROICC
4. Prepare reply for MCB
5. Prepare estimate
6. Investigate
7. Retain copy
8. File
9. Denote action and return Buck Tag to Admin. Div.
10. _____

ROUTING	CODE	SEQUENCE	INITIAL	DATE
CODE 4E-10				
CODE 4E-11				
CODE 4E-20				
CODE 4E-20A				
CODE 4E-25				
CODE 4E-30				
CODE 4E-50	/	/		
CODE 4E-100				
CODE 4E-200				
CODE 4E-300				
CODE 4E-500				
CODE 4E-510				
CODE 4E-520				
ADMIN.FILE				

REMARKS:

O.K. approved

(Routing slip will be returned to Central Office with correspondence attached unless otherwise indicated)

OICC-ROICC
MARINE CORPS BASE, CAMP LEJEUNE, N. C.

No. 349
Date 4 Mar 60

From T. A. Loving and Company

Subject NBy-24218 - Dwgs. on Johnston Pump Co.

-Code-

1. Action
2. Information
3. Prepare reply for OICC/ROICC
4. Prepare reply for MCB
5. Prepare estimate
6. Investigate
7. Retain copy
8. File
9. Denote action and return Buck Tag to Admin. Div.
10. _____

ROUTING	CODE	SEQUENCE	INITIAL	DATE
CODE 4E-10				
CODE 4E-11				
CODE 4E-20				
CODE 4E-20A				
CODE 4E-25				
CODE 4E-30				
CODE 4E-50	1	1	WHH	3/4
CODE 4E-100				
CODE 4E-200	1	2	[illegible]	3/7/60
CODE 4E-300				
CODE 4E-500				
CODE 4E-510				
CODE 4E-520				

Send to A&E

ADMIN. FILE

REMARKS: This is A&E's responsibility.

WHH.

(Routing slip will be returned to Central Office with correspondence attached unless otherwise indicated)

L. E. WOOTEN AND COMPANY
CONSULTING ENGINEERS
RALEIGH, N. C.

March 11, 1960

Resident Officer in Charge of Construction
Bureau of Yards and Docks Contracts
Marine Corps Base
Camp Lejeune, North Carolina

RE: 4E-50:WFU:ejs, NBy-24218
Rehabiliation of Raw Water Supply
Camp Lejeune, North Carolina

COPY

Dear Sir:

We are enclosing herewith the below listed shop drawings and recommend approval of same, without comment.

H-1828-C	Johnston Pump Co. dwg of vertical turbine pump details, Serial No. JQ-3865
H-1829-C	Johnston Pump Co. dwg of vertical turbine pump details, Serial No. JQ-3864
H-1830-C	Johnston Pump Co. dwg of vertical turbine pump details, Serial No. JQ-3863
H-1826-D	Johnston Pump Co. dwg of vertical turbine pump-3 stage 8AC details, Serial No. JQ-3888
H-1825-D	Johnston Pump Co. dwg of vertical turbine pump-3 stage 8AC details, Serial No. JQ-3889
H-1827-D	Johnston Pump Co. dwg of vertical turbine pump-3 stage 8AC details, Serial Nos. JQ-3892 & JQ-3893.

Very truly yours,

L. E. WOOTEN AND COMPANY

By_____
L. E. Wooten

RFR/js
Enclosures

T. A. LOVING AND COMPANY

GENERAL CONTRACTORS

GOLDSBORO, N. C.

March 1, 1960

Resident Officer in Charge of Construction
Building 1005
U. S. Marine Corps Base
Camp Lejeune, North Carolina

Re: Contract NBy-24218
Rehabilitation Raw Water Supply
Camp Lejeune, N. C.

Dear Sir:

We are enclosing four (4) copies each of the following detail drawings for your consideration.

Plant Pumps:

Drawing H-1828-C	Johnston Pump Company	Serial No.	J Q 3865
Drawing H-1829-C	Johnston Pump Company	Serial No.	J Q 3864
Drawing H-1829-C	Johnston Pump Company	Serial No.	J Q 3863

1830-C

Well Pumps:

Drawing H-1826-D	Johnston Pump Company	Serial No.	J Q 3888
Drawing H-1825-D	Johnston Pump Company	Serial No.	J Q 3889
Drawing H-1827-D	Johnston Pump Company	Serial No.	J Q 3892 and J Q 3893

Very truly yours,

T. A. LOVING AND COMPANY

Robert S. Hults

By: Robert S. Hults
Office Manager-Utility Dept.

RSH/lm
Enclosures

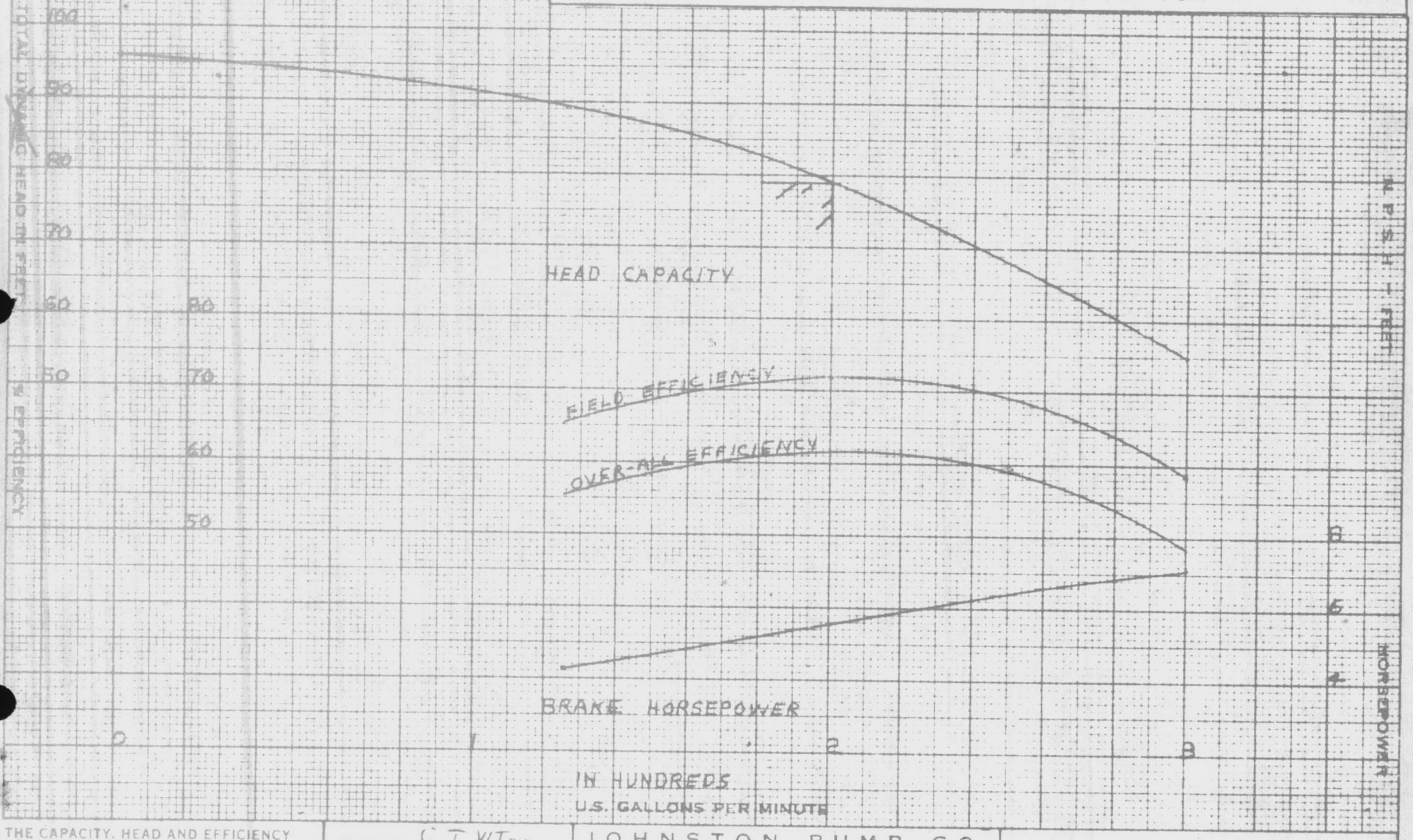
WELL # 34+36 GUARANTEED PERFORMANCE CURVE

NOTE: ALL COLUMN LOSSES ARE INCLUDED

JOHNSTON REF. NO. JQ 3892-93

DEALER: REF. NO.

CUSTOMER: T.A. LOVING CO. REF. NO.



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

IMPELLER CI VIT DIA

BOWLS CI VII

LIQUID WATER

SP. GR. 1.0 @ 70°F

DATE: 14JUL59 BY: CHET

JOHNSTON PUMP CO.
DIVISION OF YOUNGSTOWN SHEET & TUBE

VERTICAL PUMPS

50TH YEAR 1909-1959

PASADENA • CALIFORNIA • U.S.A.

PERFORMANCE 3 STAGE

8AC TURBINE PUMP

1760 R.P.M.

25 Nov. 59
Contract NBY-24218

Recovery data for wells 34, 36 & 35

Stopped pumping well 34 at 5:00 PM on 14 Oct. 59.
Water level recovered to an Elev. of +9.75 by 5:35 PM on 14 Oct. & to a +12.75 by 8:15 AM on 15 Oct. 59.

Stopped pumping well 36 at 11:03 PM on 23 Oct. 59
Water level recovered to an Elev. of +11.20 by 11:28 PM on 23 Oct. & to a +19.80 by 9:30 AM on 24 Oct. 59.

Stopped pumping well 35 at 11:00 PM on 30 Oct. 59.
Water level recovered to an Elev. of +5.50 by 11:22 PM on 30 Oct. & to a +12.5 by 9:00 AM on 31 Oct. 59.

Glenn Simmonds
Inspector for
Public Works Dept.
Camp Lejeune N.C.

RECORD OF WELL TEST ? WELL #34 CONTRACT NO. 218

DATE	TIME	GPM.	DRAWDOWN	PUMPING LEVEL	REMARKS
10-13-59	9:30	75	11 feet	25 feet	All depths relate to ground elevation
	9:45	75	11	25	
	10:15	75	11	25	
	10:45	75	12	26	Began testing at rate of 75 gpm. at 9:15
	11:15	75	13	27	
	11:45	75	13	27	
	12:00	115	18	32	
	12:15	115	18	32	Static level was 14 feet below ground elevation before start of test.
	12:45	115	18	32	
	1:15	115	19	33	
	1:45	115	19	33	
	2:00	154	28	42	
	2:15	154	28	42	
	2:30	154	28	42	
	3:00	154	29	43	
	3:30	154	29	43	
	4:00	154	30	44	
	4:30	154	30	44	
	4:45	190	36	50	
	5:00	185	36	50	
	6:00	185	36	50	
	7:00	175	36	50	
	8:00	175	36	50	
	9:00	175	36	50	
	10:00	175	36	50	
	11:00	175	36	50	
	12:00	175	36	50	
	1:00	175	36	50	
	2:00	175	36	50	
	3:00	175	36	50	
	4:00	175	36	50	
	5:00	175	36	50	
	6:00	175	36	50	
	7:00	175	36	50	
	8:00	175	36	50	
	9:00	175	36	50	
	10:00	175	36	50	150 gpm
	11:00	175	36	50	
	12:00	175	36	50	
	1:00	175	36	50	
	2:00	175	36	50	
	3:00	175	36	50	
	4:00	175	36	50	
	5:00	175	36	50	

Set pump at
Pump at 175 gpm
Adjust back pressure valve for this rate.

RECORD OF WELL TEST P WELL #34 CONTRACT NO. 216

DATE	TIME	GPM.	DRAWDOWN	PUMPING LEVEL	REMARKS
10-13-59	9:30	75	11 feet	25 feet	All depths relate to ground elevation
	9:45	75	11	25	
	10:15	75	11	25	
	10:45	75	12	26	Began testing at rate of 75 gpm. at 9:15
	11:15	75	13	27	
	11:45	75	13	27	
	12:00	115	18	32	
	12:15	115	18	32	Static level was 14 feet below ground elevation before start of test.
	12:45	115	18	32	
	1:15	115	19	33	
	1:45	115	19	33	
	2:00	154	28	42	
	2:15	154	28	42	
	2:30	154	28	42	
	3:00	154	29	43	
	3:30	154	29	43	
	4:00	154	30	44	
	4:30	154	30	44	
	4:45	190	36	50	
5:00	XXX	185	36	50	
	6:00	185	36	50	
	7:00	175	36	50	
	8:00	175	36	50	
	9:00	175	36	50	
	10:00	175	36	50	
	11:00	175	36	50	
	12:00	175	36	50	
	1:00	175	36	50	
	2:00	175	36	50	
	3:00	175	36	50	
	4:00	175	36	50	
	5:00	175	36	50	
	6:00	175	36	50	
	7:00	175	36	50	
	8:00	175	36	50	
	9:00	175	36	50	
	10:00	175	36	50	
	11:00	175	36	50	
	12:00	175	36	50	
	1:00	175	36	50	
	2:00	175	36	50	
	3:00	175	36	50	
	4:00	175	36	50	
	5:00	175	36	50	

150 gpm

Accepted
Pump @ 175 gpm
Report back pumping rates for this
Well.

DATE	WELL #	GAGE STATIC	PUMPING LEVEL	DD FT.	GPM.	DISCHARGE HEAD LBS
4-26-63	34	17 FT.	19		185'	9
			21		167	12
			23		154	15'
	well		26		133	18
5-11-65	34	54 GAGE	26'	28	164	10 LB.
"	34	"	25'	29	150	12 LB.
"	34	"	22	32	167	8½"
"	34	"	22	32	162	9 LB.
5-11-67 PUMP	REMOVED + CLEANED By HENDERSON.					COMPLETELY STOPPED UP.
10-20-66	NOT ENOUGH WATER TO CHECK					
P.	WELL CLEANED.				151	
1/29/68		48'			151	
8/11/69		48'			30	WELL NEEDS
~~11-5-69~~						CLEANING
11-5-69		+12.7'	-22.3'	35.0'	130	7#
10-10-69	Pump Pulled & CLEANED					
8-27-71	Pump cleaned					

March 1/67 Johnston Pump

H.P. Well 634