

## FILE FOLDER

### DESCRIPTION ON TAB:

TC 202 Well I

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- 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**

USC & GS ELEV.  
 AIR TAP = 24.4  
 FIN. FLOOR = 22.0  
 ORIGINAL GROUND = 20.9

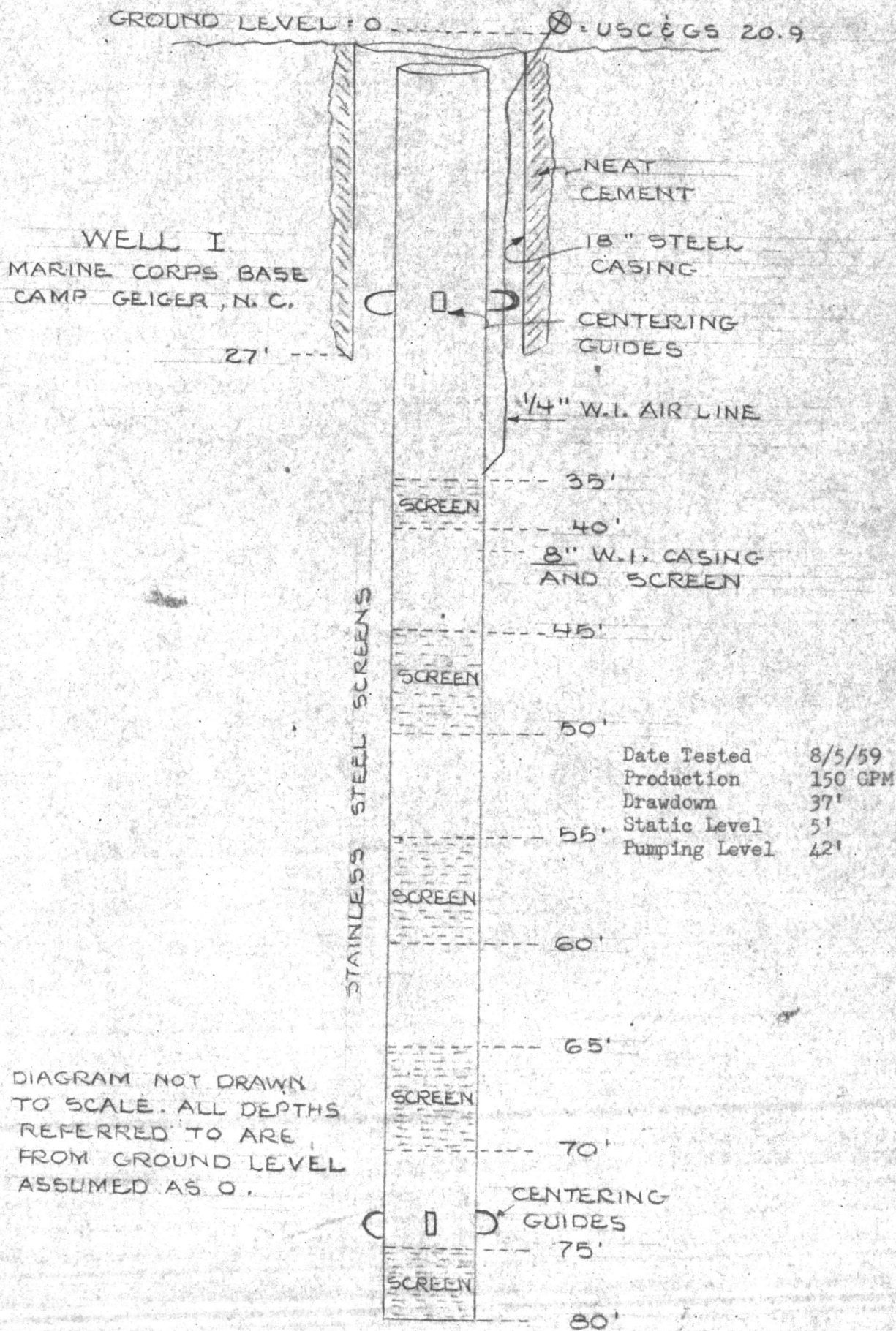
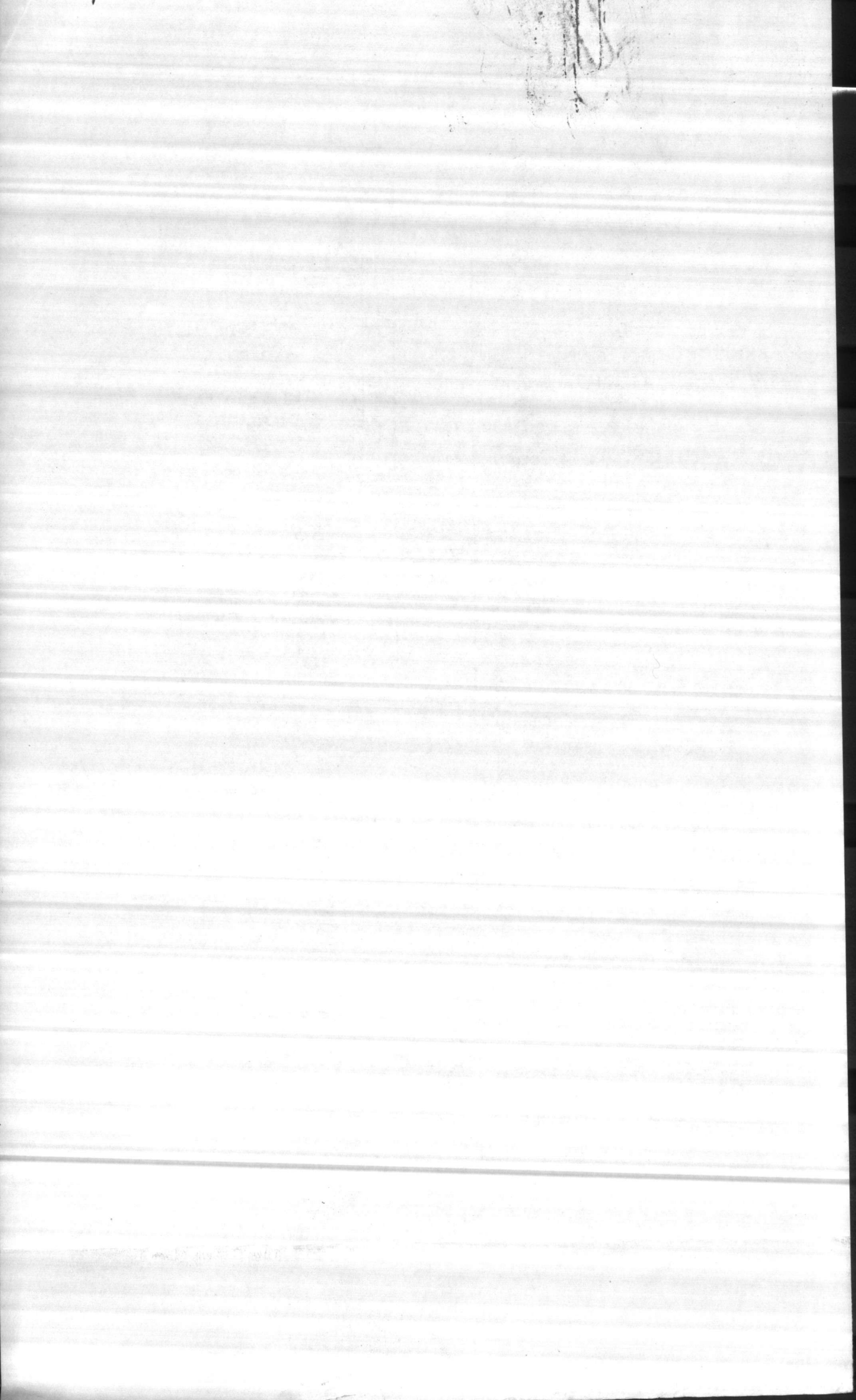


DIAGRAM NOT DRAWN TO SCALE. ALL DEPTHS REFERRED TO ARE FROM GROUND LEVEL ASSUMED AS 0.





USC & GS ELEV.  
 AIR TAP = 24.4  
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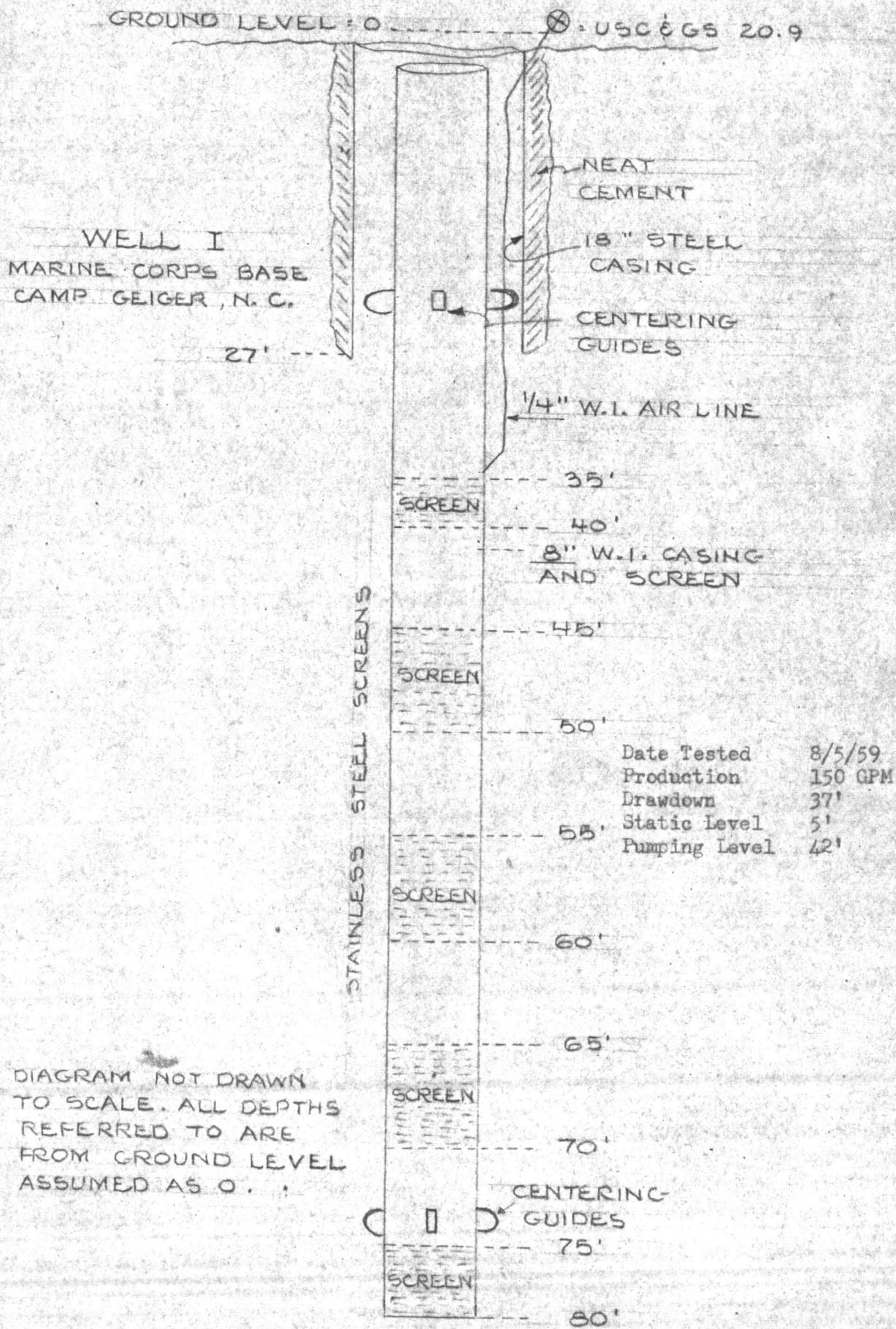


DIAGRAM NOT DRAWN TO SCALE. ALL DEPTHS REFERRED TO ARE FROM GROUND LEVEL ASSUMED AS 0.





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 MC	2. TYPE Q	3. LATITUDE ° 34 ' 44 " 16 N	4. LONGITUDE ° 77 ' 27 " 52 W	5.
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6. AGENCY STATION NO. TC202	7. STATION NAME TC508-I
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8. DRAINAGE BASIN CODE No. 6 Letter W	9. STATE CODE 32	10. COUNTY CODE 133	11. COUNTY NAME ONslow
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12. PERIOD OF RECORD Began 1941 Discontinued	Y <input type="checkbox"/> Continuous Interruption Exceeds 1 Year	13.	14.
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15. SITE	<input type="checkbox"/> 101 Stream	<input type="checkbox"/> 102 Canal	<input type="checkbox"/> 103 Lake	<input type="checkbox"/> 104 Reservoir	<input type="checkbox"/> 105 Estuary	<input type="checkbox"/> 106 Spring	<input checked="" type="checkbox"/> 107 Well	<input type="checkbox"/> 110 Other
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16. FREQUENCY OF MEASUREMENT	<input type="checkbox"/> 201 Continuous Recorder	<input type="checkbox"/> 202 Telemetered	<input type="checkbox"/> 203 Daily	<input type="checkbox"/> 204 Weekly	<input type="checkbox"/> 205 Monthly	<input type="checkbox"/> 206 Quarterly	<input type="checkbox"/> 207 Seasonal	<input type="checkbox"/> 208 Annual	<input type="checkbox"/> 209 Other Periodic	<input checked="" type="checkbox"/> 210 Occasional
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17. TYPES OF DATA AVAILABLE	<i>Physical</i>	<i>Chemical</i>	<i>Organic</i>
<input type="checkbox"/> 311 Temperature	<input type="checkbox"/> 312 Specific Conductance	<input type="checkbox"/> 313 Turbidity	<input type="checkbox"/> 314 Color
<input type="checkbox"/> 315 Odor	<input type="checkbox"/> 316 Radioactivity	<input checked="" type="checkbox"/> 317 pH (field)	<input checked="" type="checkbox"/> 318 pH (lab)
<input type="checkbox"/> 319 Eh	<input type="checkbox"/> 320 Other	<input type="checkbox"/> 331 Dissolved solids	<input checked="" type="checkbox"/> 332 Chlorides Only
		<input type="checkbox"/> 333 Nutrients (Nitrogen and phosphorus compounds)	<input type="checkbox"/> 334 Common ions
		<input checked="" type="checkbox"/> 335 Hardness	<input type="checkbox"/> 336 Radiochemical
		<input type="checkbox"/> 337 Dissolved oxygen	<input type="checkbox"/> 338 Other Gases
		<input type="checkbox"/> 339 Other	<input type="checkbox"/> 351 Pesticides (insecticides, herbicides, etc.)
			<input type="checkbox"/> 352 Synthetic detergents
			<input type="checkbox"/> 353 Other
			<i>Biologic</i>
			<input type="checkbox"/> 361 Coliforms
			<input type="checkbox"/> 362 Other Micro-organisms
			<input type="checkbox"/> 363 BOD
			<input type="checkbox"/> 364 Other
			<i>Sediment</i>
			<input type="checkbox"/> 371 Concentration
			<input type="checkbox"/> 372 Particle size
			<input type="checkbox"/> 373 Other

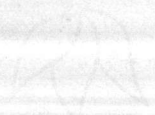
18. SUPPLEMENTARY DATA FOR SITE	<input type="checkbox"/> 421 Surface Water Station	<input type="checkbox"/> 422 Ground Water Station	<input type="checkbox"/> 423 Water Stage or Level	<input checked="" type="checkbox"/> 424 Water discharge	<input type="checkbox"/> 425 Time of Travel	<input type="checkbox"/> 426 Drainage Area
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19. STORAGE OF DATA	<input type="checkbox"/> 501 Periodic Report	<input type="checkbox"/> 502 Areal Report	<input checked="" type="checkbox"/> 503 Not Published	<input type="checkbox"/> 504 Data on Punchcard	<input type="checkbox"/> 505 Data on Magnetic Tape	<input type="checkbox"/> 506 Other
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20. OFFICE AT WHICH DATA AVAILABLE	Office <u>BASE MAINTENANCE DEPARTMENT</u>
Street No. <u>MARINE CORPS BASE</u>	City Code
City, State, Zip <u>CAMP LEJEUNE, N. C. 28542</u>	<u>0735</u>

21. OFFICE COMPLETING FORM	<u>BASE MAINTENANCE DEPARTMENT</u>
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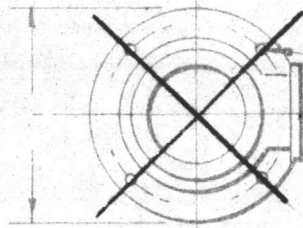
22. COMPILER'S NAME	<u>F. E. TEW, JR.</u>	23. DATE	Month	Year
				19





# JOHNSTON VERTICAL TURBINE PUMP

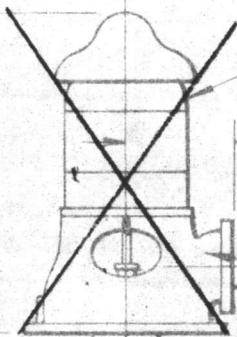
647058-3



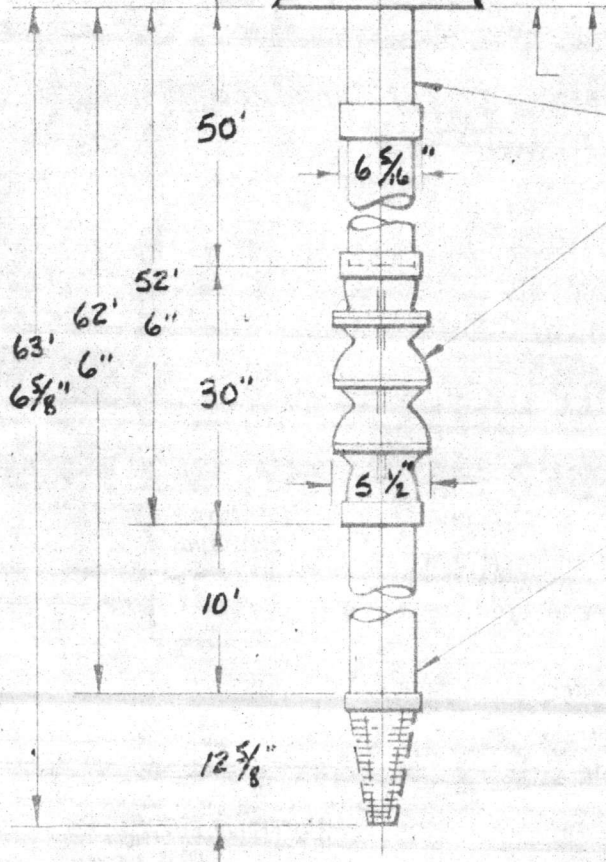
4- DIA. HOLES

Furnished By Others  
 VERTICAL HOLLOW SHAFT MOTOR

HP	PHASE	CYCLE
	VOLT	RPM
ENCLOSURE		



Furnished By Others  
 TYPE "A" DISCHARGE HEAD  
 " X 125# FLANGE



5" x 2" x 1 3/16" GWI COLUMN ASSEMBLY

5 STAGE 6 EC BOWL ASSEMBLY

CONDITIONS:  
 135 USGPM  
 57 FT. TOTAL HEAD  
 LIQUID WATER  
 SPEC. GRAV 1.0 @ F PUMPING TEMP.

5" SUCTION PIPE 5" CONE STRAINER

CUSTOMER \_\_\_\_\_  
 PC# \_\_\_\_\_  
 DEALER Heater Well Co.  
 PO# \_\_\_\_\_  
 JOHNSTON SERIAL # \_\_\_\_\_  
 JOHNSTON QUOTATION # \_\_\_\_\_

NOTE: DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED

Pump # I

2-20112

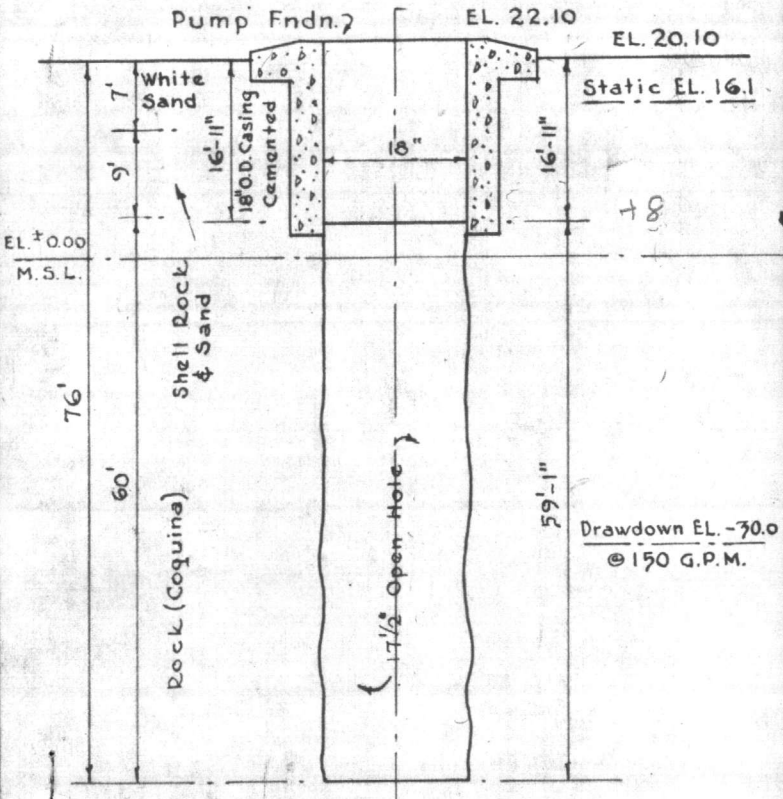
PUBLIC WORKS DEPARTMENT  
CAMP LEIGUNE, NORTH CAROLINA

**APPROVED**

SUBJECT TO CONTRACT REQUIREMENTS

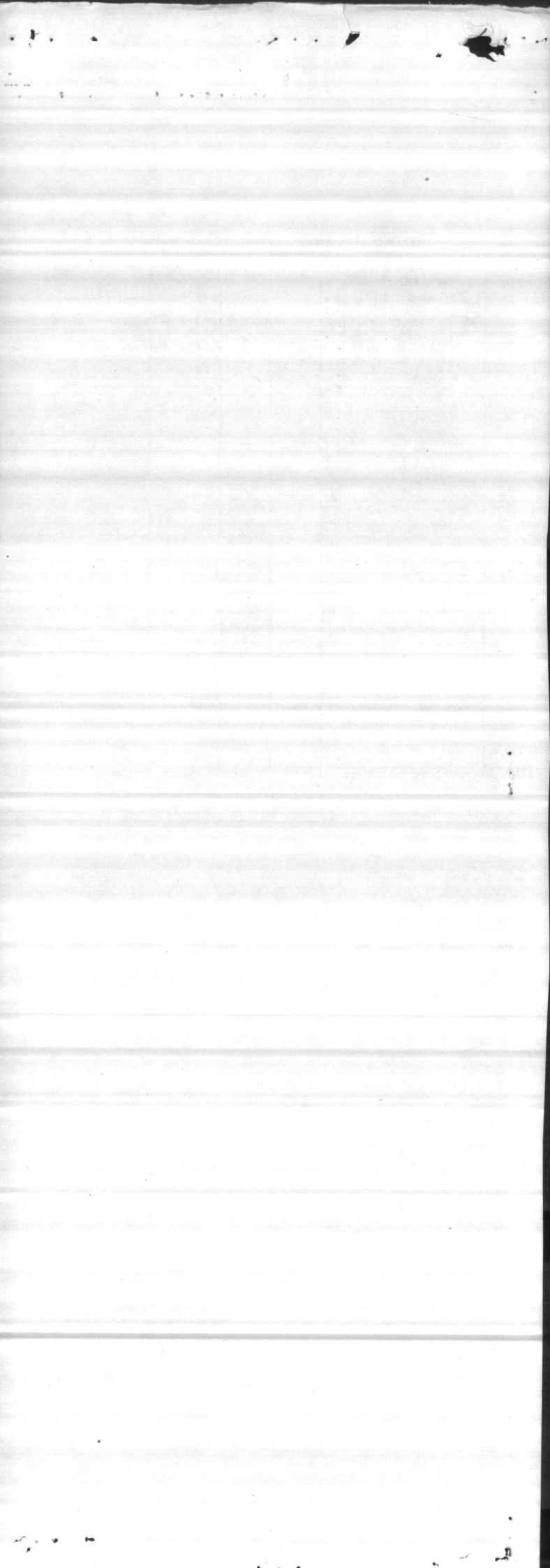
CONTRACT NO. 3886 SPEC. NO. 3886/56  
TITLE Repairs to Well Pump, Camp Leigun  
DATE: 8 May 1957 W. J. Evans, Jr.  
BY DIRECTION OF OFFICER  
IN CHARGE OF CONSTRUCTION JB

150 G.P.M. - SINGLE DRIVE - 5 H.P.



T.C.A. WELL "I"





HYDRAULIC PERFORMANCE IS CONTINGENT ON WELL FURNISHING PUMP WITH CLEAR, FRESH NON-AERATED OR NON-GASEOUS WATER FREE FROM DETRITUS WITH NO SUCTION LIFT AND TEMPERATURE NOT TO EXCEED 85 DEGREES FAHRENHEIT

NOTE: ALL COLUMN LOSSES ARE INCLUDED

CUSTOMER: \_\_\_\_\_

P.O.# \_\_\_\_\_

DEALER: HEATER WELL CO.

P.O.# \_\_\_\_\_

JOHNSTON SERIAL: \_\_\_\_\_

Pump # I

TOTAL HEAD IN FEET

60  
55  
50  
45  
40

Head/Capacity

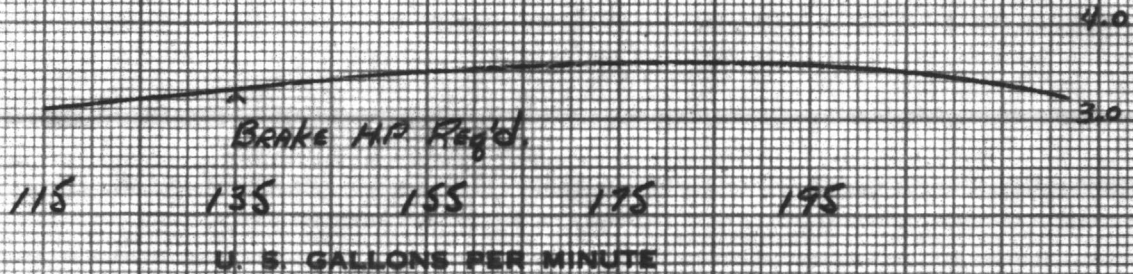
CHANGE EFFICIENCY AS FOLLOWS	NUMBER OF POINTS	FOR NUMBER OF STAGES

NOTE: ANY CHANGE IN EFFICIENCY CHANGES EITHER THE HEAD OR HORSEPOWER IN PROPORTION

% EFFICIENCY  
70  
65  
60

Boat Efficiency

HORSE POWER



IMPELLER Bez.  
4 1/2" DIA.

JOHNSTON PUMP CO.

PERFORMANCE 5 STAGE



**VERTICAL PUMPS**

6 EC

DEEP WELL TURBINE PUMP

1800

R. P. M.

DATE: 4-11-57 BY: JDM

PASADENA • CALIFORNIA • USA

CURVE SHEET NO. \_\_\_\_\_

PUBLIC WORKS DEPARTMENT  
CAMP LEJEUNE, NORTH CAROLINA

**APPROVED**

SUBJECT TO CONTRACT REQUIREMENTS

CONTRACT NOY 3886

SPEC. NO 3886/56

TITLE Repairs to Well Pump, Camp Singer

DATE: 8 May 1957 W. F. Evans, Jr.

BY DIRECTION OF OFFICER  
IN CHARGE OF CONSTRUCTION



WELL # 1

PLACE - Geiger

DATE - 16 Jan 1957

ORIGINAL WELL CAPACITY G.P.M. 150

ORIGINAL WELL		TESTING	
Depth of Well	76	Depth after Cleaning	76' 7"
Pump Size		Test Pump Setting	60'
Pump Setting	55	Measured Static Water Level	16'
Static Water Level	16.1 ele.	Depth of Air Line	60'

Static on gauge 18'

CONDITION OF WELL - Two feet of sludge on bottom same in oil on top of water. Pumped this well to 300 G.P.M. without breaking suction.

STATIC LEVEL ON GAUGE

Inches of water in dizometer tube	G.P.M.	30 Min.	45 Min.	60 Min.	1 Hour
	75	PL	PL	PL	PL 24
	90	PL	PL	PL	PL 25
	105	PL	PL	PL	PL 26
	120	PL	PL	PL	PL 27
	135	PL	PL	PL	PL 28
	150	PL	PL	PL	PL 35
		PL	PL	PL	PL
		PL	PL	PL	PL
		PL	PL	PL	PL
		PL	PL	PL	PL
		PL	PL	PL	PL

RECOVERY	
10 Sec.	33
20	PL 31
30	PL 30
40	PL 29
50	PL 28
60	PL 28
2 Min.	PL 26
4	PL 22
8	PL 19
16	PL 18
32	PL 18
60	17.5

TESTING

ORIGINAL FILE

Left Hand Station	Right Hand Station
Left Hand Station	Right Hand Station
Forward Station (Star Level)	Right Hand Station
Left Hand Station	Right Hand Station

The following table shows the results of the tests conducted on the various stations mentioned above. The data is presented in a tabular format for clarity.

Station	Test 1	Test 2	Test 3	Test 4	Test 5
Left Hand Station	1.2	1.5	1.8	2.1	2.4
Right Hand Station	1.3	1.6	1.9	2.2	2.5
Forward Station (Star Level)	1.4	1.7	2.0	2.3	2.6
Left Hand Station	1.5	1.8	2.1	2.4	2.7
Right Hand Station	1.6	1.9	2.2	2.5	2.8
Forward Station (Star Level)	1.7	2.0	2.3	2.6	2.9
Left Hand Station	1.8	2.1	2.4	2.7	3.0
Right Hand Station	1.9	2.2	2.5	2.8	3.1
Forward Station (Star Level)	2.0	2.3	2.6	2.9	3.2

The data indicates a consistent increase in values across all stations and tests, suggesting a positive correlation between the variables being measured.

Well # I-TC

Date	Line Ft.	D.D. El.	G.P.M.	Static El.	Shut of Head	D.D. Ft.
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10-25-54 - - -

*Stage - FT*  
*DIRECT READING GAUGE*

14 FT

2-7-55 -

*9ft from P. Base.*



100-100000-100000

1000

1000

1000

1000

1000-100000-100000

1000

Marine Barracks  
New River, N.C.

WELLS-PERMANENT WATER SUPPLY-TENT CAMP AREA  
By Layne Atlantic Company

Project P-250-1-4

WELL NO. "I"  
As on MB Drawing T.C. 223

**Location:** 60' S.E. of State Highway #17, approximately 2000' west of intersection of "A" and Fourth Streets in Tent Camp 1.

**Date Drilled:** December 1941 - January 1942

**Drilling Equipment:** Rotary Rig and Rotary Bit.

**Status of Well:** A 23" hole was drilled to a depth of 16' 11", penetrating coquina rock a foot, and an 18" diameter pit casing set and fixed by filling the annular space between the casing and the drilled hole with Portland Cement.

A 17 $\frac{1}{2}$ " hole was drilled below the casing to a depth of 81' below ground surface.

In that the coquina strata was porous and had very few sand pockets, it was deemed necessary to case or screen the lower portion of the well. A five foot plug filled the boring in the blue clay below the coquina.

**Static Water Level:** The static water level is 4' below ground surface.

**Tests:** The well was pumped for 36 hours and showed a steady 150 g.p.m. with a constant drawdown of 45'.

Water analysis dated January 2, 1941 was made.

<b>Log of Formations:</b>	0' - 1'	Black top soil
	1' - 7'	White sand
	7' - 16'	Shell rock and sand
	16' - 76'	Porous Rock (coquina)
	76' - 81'	Blue clay



WATER RESOURCES  
DIVISION

WELL-LOGS  
FOR WATER RESOURCES DIVISION

Project 1-23-1-4

WELL NO. 17  
AS ON 12/23/53

CO. of Great Lakes Water Resources  
of International and Technical Services in Port Canal

Location

WELL NO. 17

Date drilled

WELL NO. 17

A 200' well was drilled on a fault of 10' N. 70° W. strike-slip  
direction and a fault, and an 18" diameter casing was  
installed by driving the standard casing down the hole  
to the depth of 170' below ground level.

Section of well

A 200' well was drilled on a fault of 10' N. 70° W. strike-slip  
direction and a fault, and an 18" diameter casing was  
installed by driving the standard casing down the hole  
to the depth of 170' below ground level.

In this well casing string was perforated at 170' for water  
production. It was found necessary to seal the lower  
portion of the well. A 2" pipe was fitted and sealed  
in the pipe above the casing.

Static Water Level: The static water level is 14' below ground level.

The well was tested for 30 hours and showed a capacity of  
4.7 m<sup>3</sup> with a constant drawdown of 4.5'.

Notes

Water analysis: 1-14-53, 1-17-53, 1-20-53.

Depth (ft)	Description
0 - 10	Surface soil
10 - 20	Clay
20 - 30	Clay
30 - 40	Clay
40 - 50	Clay
50 - 60	Clay
60 - 70	Clay
70 - 80	Clay
80 - 90	Clay
90 - 100	Clay
100 - 110	Clay
110 - 120	Clay
120 - 130	Clay
130 - 140	Clay
140 - 150	Clay
150 - 160	Clay
160 - 170	Clay
170 - 180	Clay
180 - 190	Clay
190 - 200	Clay



Page #2 - Well "I"

Log of Casing: Only 16' 11" of pit casing used.

J. E. Womaldurf

1954

1954

1954

1954

*Amesoba*

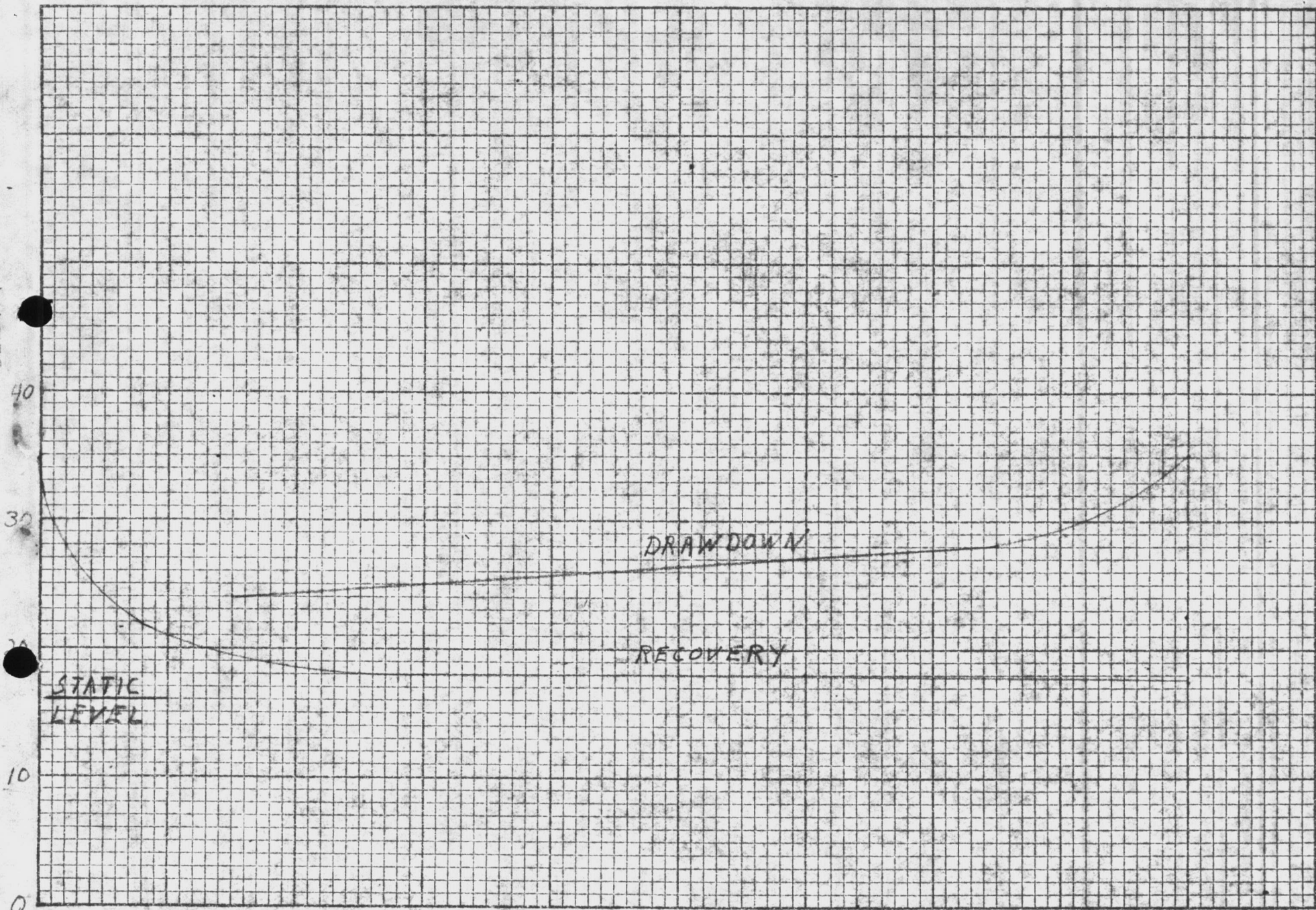
1954

1954

1954



WATER LEVEL



GPM	50	80	90	100	110	120	130	140	150
0 MINUTES	5	10	15	20	25	30	35	40	45

STATIC  
LEVEL

DRAWDOWN

RECOVERY

DATA SHEETS

CAMP LEJEUNE  
SPEC # 3886

NO. 700-10

CHARLES BRUNING COMPANY, INC.  
10 x 10 to the Inch  
PRINTED IN U. S. A.

WELL "I"  
CAMP GEIGER





WATER ANALYSIS

By \_\_\_\_\_

Date 8-19-43

Sample from Well I Tent Camp

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

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

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

Total Alk. " " 173 "      Ferrous Iron as Fe \_\_\_\_\_ "

Carbonates " " \_\_\_\_\_ "      Total Iron as Fe 1.2 "

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

Chlorides as Cl. 8 "      Calcium as Ca. \_\_\_\_\_ "

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

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

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

pH 7.1      Soap Hardness as CaCO<sub>3</sub> 176 PPM

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

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

WATER ANALYSIS

By \_\_\_\_\_

Date \_\_\_\_\_

Sample from \_\_\_\_\_

_____	_____	_____	Total Solids
_____	_____	_____	Suspended Solids

_____	_____	_____	Total Alk.
_____	_____	_____	Carbonates
_____	_____	_____	Bicarbonates
_____	_____	_____	Chlorides as Cl.
_____	_____	_____	Sulfates as SO <sub>4</sub>
_____	_____	_____	Nitrates as NO <sub>3</sub>

\_\_\_\_\_ Scale hardness as CaCO<sub>3</sub>

\_\_\_\_\_ Turbidity

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_