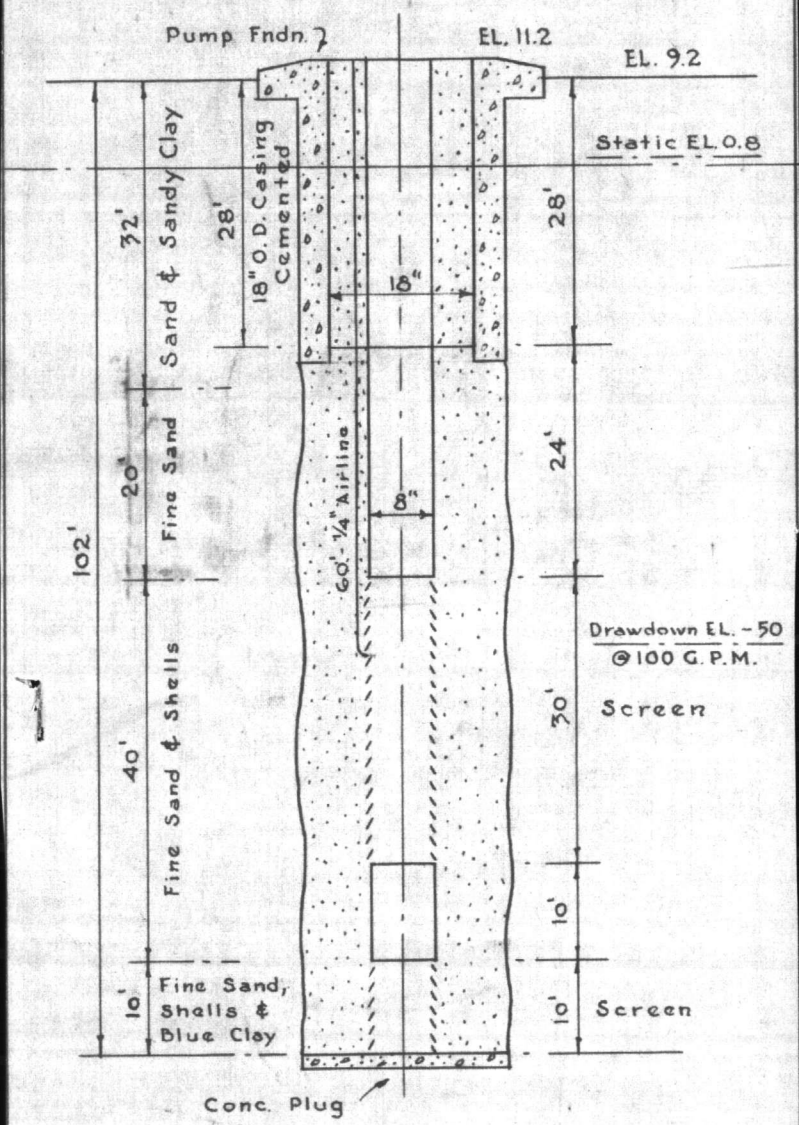
100 G.P.M. — DUAL DRIVE — 7½ H.P.



Armco Iron Screen Used In This Well

HOSPITAL WELL "E-1"

MR PRICE

CHEMICAL ANALYSIS - WATER
MCBCL 11330/3 (REV 8-74)

USNH
WELL H-37

Date 31 JAN 78

Parameter	HADNOT POINT	~~MONTFORD POINT~~	CAMP GEIGER	TARAWA TERRACE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH		6.9							
PHENOLTHALEIN ALKALINITY		0							
METHYL ORANGE ALKALINITY		80							
CARBONATES AS $CaCO_3$		0							
BICARBONATES AS $CaCO_3$		80							
CHLORIDES AS Cl		8							
HARDNESS AS $CaCO_3$		90							
IRON AS Fe		0.75							
TOTAL PHOSPHATE									
ORTHO PHOSPHATE									
META PHOSPHATE									
FLUORIDE		0.07							
CHLORINE RESIDUAL		—							

REMARKS:
TURBIDITY 38 COLI-FORM — NEGATIVE

NOTE: All results reported in parts per million unless otherwise noted except for pH, temperature, and specific conductance. One liter of potable water is assumed to weigh one kilogram.

LABORATORY ANALYSIS BY: EPICS + BIOS

DATE OF ANALYSIS: ~~1~~ FEB 78

2 August 1942

Wells: Permanent Water Supply, Hospital Area

By Layne Atlantic Company

Report on Well E-1, this area

Location: Seventy feet North of N.E. corner of Medical Warehouse in line with East side.

Drilling Equipment: Rotary Rig and Rotary Bits

Status: 23" diameter hole reamed and cased with 18" I. D. casing to a depth of 24 ft. Anular space around this was filled with cement grout. A 17" hole was then drilled to a depth of 110 ft.

Log of Formation:

0	to	10'	Tight sand with little clay
10'	to	32'	Sandy clay
32'	to	52'	Very fine sand
52'	to	92'	Fine sand and shells
92'	to	94'	Fine sand, shells and blue clay
94'	to	110'	Fine sand and shells
110'	to		Very hard rock

Remarks: Drilled one well about 2000' from this, near laundry and could not get any water from it. Due to the very fine sand, it was necessary to construct a gravel wall well.

Gravel Wall Construction: An 8" steel pipe with sections of 8" armco iron iron screen was placed in the well to a depth of 102'. The anular space around this was filled with a special 1/4" washed gravel.

Wells: Permanent Water Supply, Hospital Area

Report on Well-1, this area - Continued

Log of Screen Setting:	0	to 52'	8" pipe
	52'	to 82'	8" iron screen
	82'	to 92'	8" pipe
	92'	to 102'	8" screen

A total of 40' of screen was used.

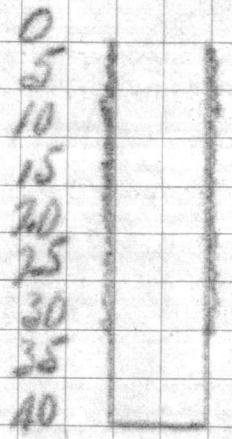
Air Line: 60' of 1/4" pipe was placed in the well for air line.

Static level: 8'4" below surface

Pumping: Well was pumped for several hours to clear off sand and clay.
Well pumps 100 G.P.M. with a 51' drawdown from static level. This is approximately 1.96 gallons per foot of drawdown.

N. H. Kellam
Asst. Chem. Engineer

Well at Mock UP.
El 25.0°



Well Completed at 40'-0"
No screen or Gravel used
Well pumps 100 G.P.M. W. Pr 30-0"
Standing behind surface
30'-0" 18" Casing set and Cemented
1'-0" to 2'-0" rock Static 8'-10"
below surface

Log of formation

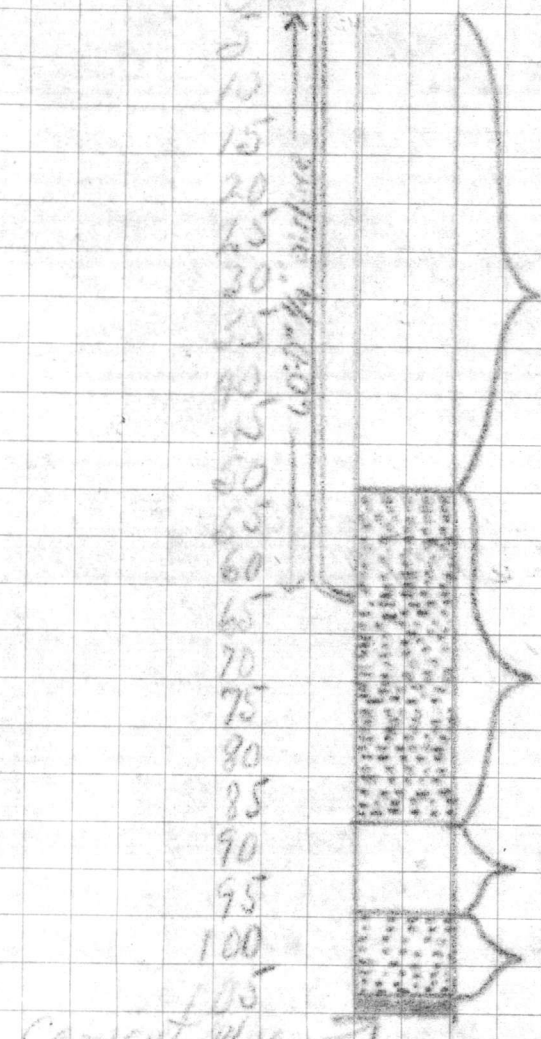
0 to 18'-0" hard brown sand
18' to 28' fine white sand
28' to 40' hard shell rock with sand pockets
40' sand stone

C.C. John Monroe
Wm Kellam

Mock up

Kellan

Well E-1 at Hospital
Finished at 102'-0" deep



Drive Shoe Screen
In this well

No Log of Formation

0' To 10' light Sand with little clay
10' To 32' Sandy Clay
32' To 34' fine Sand (almost muck)
34' To 52' fine Sand and Shells
52' To 74 fine Sand Shells and blue Clay
74' To 110 fine Sand and Shell
hard Rock like Cement Impervious To Water

Mr Monroe
Put Screen

Well E.I Hospital

Mo Kellam

WATER ANALYSIS

By N. H. Kellam

Date 7/14/42

Sample from Well E-1- Hospital

Total Solids	190 PPM	Dissolved Solids	160 PPM
Suspended Solids	30 PPM	Volatile Solids	PPM

Phenol. Alk. as $CaCo_3$	0 PPM	Silica as Sio_2	30 PPM
Total Alk. " "	110 "	Ferrous Iron as Fe	0 "
Carbonates " "	0 "	Total Iron as Fe	0.4 "
Bicarbonates " "	110 "	Aluminum as Al.	1.7 "
Chlorides as Cl.	10 "	Calcium as Ca.	46.0 "
Sulphates as SO_4	18 "	Magnesium as Mg.	4.3 "
Nitrites as No_2	trace "	Sodium as Na.	4.6 "
Carbon Dioxide as CO_2	6 "		

pH 7.4 Soap Hardness as $CaCO_3$ 140 PPM

Odor Slight Turbidity 5

REMARKS

WATER ANALYSIS

By N. W. Kellam

Date 7/10/42

Sample from test Well No. 2 at Hospital
64' Deep

Total Solids	PPM	Dissolved Solids	PPM
Suspended Solids	PPM	Volatile Solids	PPM

Phenol. Alk. as $CaCo_3$	0 PPM	Silica as Sio_2	PPM
Total Alk. " "	100 "	Ferrous Iron as Fe	"
Carbonates " "	0. "	Total Iron as Fe	"
Bicarbonates " "	100 "	Aluminum as Al.	"
Chlorides as Cl.	11 "	Calcium as Ca.	"
Sulphates as SO_4	"	Magnesium as Mg.	"
Nitrites as No_2	"	Sodium as Na.	"
Carbon Dioxide as CO_2	"		

pH 7.4 Soap Hardness as $CaCO_3$ 140 PPM

Odor Very slight Turbidity 5

REMARKS

Permanent Well at this site

WATER ANALYSIS

By N. H. Kellam

Date 7/9/42

Sample from Test Well at Hospital

95' Deep

Total Solids	PPM	Dissolved Solids	PPM
Suspended Solids	PPM	Volatile Solids	PPM

Phenol. Alk. as $CaCo_3$	0 PPM	Silica as Sio_2	PPM
Total Alk. " "	140 "	Ferrous Iron as Fe	"
Carbonates " "	0 "	Total Iron as Fe	"
Bicarbonates " "	140 "	Aluminum as Al.	"
Chlorides as Cl.	17 "	Calcium as Ca.	"
Sulphates as SO_4	"	Magnesium as Mg.	"
Nitrites as No_2	trace "	Sodium as Na.	"
Carbon Dioxide as CO_2	"		

pH 7.6 Soap Hardness as $CaCO_3$ PPM

Odor slight Turbidity very high

REMARKS

This site discontinued

WATER ANALYSIS

By _____

Date _____

Sample from _____

_____

_____

Total Solids _____ PPM Dissolved Solids _____ PPM

Suspended Solids _____ PPM Volatile Solids _____ PPM

Bicarb. Alk. as CaCO3 _____ PPM Silica as SiO2 _____ PPM

Total Alk. " " _____ " Ferrous Iron as Fe _____ "

Carbonates " " _____ " Total Iron as Fe _____ "

Bicarbonates " " _____ " Aluminum as Al. _____ "

Chlorides as Cl. _____ " Calcium as Ca. _____ "

Sulphates as SO4 _____ " Magnesium as Mg. _____ "

Nitrates as NO3 _____ " Sodium as Na. _____ "

_____ "

pH _____ Soap Hardness as CaCO3 _____ ppm

Odor _____ Turbidity _____

REMARKS

_____

_____

_____

_____

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_____