

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

File No. { Washington
District

Steamboat Rock

Aug. 16, 1951

[Drillers Record]

Time	W/L	GPM	Remarks
10:55	55		
10:58	65		
11:05	64	98	Pumping SS. c. & Rock
11:10	64		" " "
11:15	63		" " "
11:20	64		" " "
11:25	64	100	" " "
11:30	64		" " "
11:35	64		Clearing slightly
11:40	64		dirty
11:45	64		Clearing some
11:50	64		Clearing
11:55	64		"
12:00	64		"
12:30	64		"
12:45	64		dirty
12:50	85	240	"
2:00	85 1/2	240	"
2:00		84	"
3:15		84	Clearing
4:50		84	Sample taken
95' of Pump small Turbine			
6" hole cased to 60'			
for pumping tests of Aug. 16-17-1951			
This hole later reamed 12" to 71' & 2" 71' to 115'			

UNITED STATES
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File No. { Washington
District
GPO 6-2333

Steamboat Rock

Aug. 17, 1951

[Drillers Record]

Time	W/L	Gpm	Remarks
8:50	56		
8:55	61		Brown Hazy
9:00	61.5		"
9:05	61.5	125	"
9:10	61.5		"
9:15	61.5		"
9:20	61'-10"		"
9:25	61'-10"		Clearing slightly
9:35	62		"
9:45	62'-2"		Clearing slowly
9:55 → 10:05	62'-4" → 62'-5"	125 → 125	Clearing
10:15	62'-8"		"
10:25	62'-10"		Almost clear - cloudy
10:35	62'-10"		Very hazy yellow
10:45	62'-10"		Water clearing yellow
10:55	63'-2"		Clearing
11:15	63'-4"		Clear as of 10:25
11:30	63'-4"		Water clear
11:55	63'-6"		"
11:55 -			Stopped pump for noon
12:50	57'-6"		Started pump - clear
1:00	59'-10"	85	yellow
1:50	60'-4"	85	clear
2:00		252	hazy
2:45		285	"
3:15		285	clearing some
3:30		295	" "
95' of pump Turbine - Tractor Power			

CWL-IBC

[illegible]

#1 — Finished as final well

EROW FUNK, Wheeler

Sandy Blue Clay	0-43	
Yellow Clay	43-48	
Limestone	48-52	
Yellow Shale	52-56	
Shale & Lime	56-70	
Sandstone	70-95	water
Cherty lims. soft	95-115	

71' & 8" from L.S. to 71'
Anchored in 12" hole

95' & 3 1/2" Calum from
+1.5 6" bowls.

6' & 3" discharge pipe

#2

Black dirt & mgyer heads	0-8
Yellow Clay	8-32
Broken L.S.	32-35

12" hole to 71'
8" " to bottom.

#3

Black dirt & mgyer heads	0-10
Yellow Clay	10-20
Yellow Broken L.S.	20-30

No. 1 was drilled to 50' & up moved to another location & finally moved back & drilled to 115'.

Stumpboat Rock
Hardin County

INVENTORY OF VISITORS Phone call

Name Brainard

Date 12/11/63

Affiliation Layne-Western

Address Ames-

Information Requested Layne-Western is drilling a well for Stumpboat Rock (Hardin Co.). They last circulation at 75 feet and are going to move in another rig. The well is located about 300 feet from the well drilled in 1951 (T.D. 115). In this well a sand-filled crevice

Information Obtained at Survey Office was encountered from 65-95 feet (the main source of water for the well). Apparently this crevice is a similar one has been encountered in the present drilling. Reviewed the section to the top of the Lime Creek for time.

M. Parker

Survey Contact

Town: Steamboat Rock { N E }
S W : County Hardin

SW SE SE sec. 21 T 88 N., R. 19 E. W. Twp.

Well name and number Steamboat Rock Town Well (1951)

Owner *Town of Steamboat Rock* Address

[illegible]

Contractor Hoeg & Ames Address Lincoln, Iowa

Drillers Ervol Fink

Drilling dates August - Sept. 28, 1951

Elevations: Drilling curb feet; Land surface feet

Determined by

Topographic position

Total depth: Reported 115 feet, Measured _____ feet

Drilling method *Cable tool*

Hole and casing data 71' of 8" casing 0 to 71' cemented in 12"
hole. 12" hole to 71'; 8" to bottom

Original depth to water 56 1/2 ft. below ~~above~~ Date 9/26/51

Original elevation of water level _____ ft.; Source of data _____

Sources of water: Principal Sandstone 70-95'; Others

LOG

Vertical Scale

(Driller's log)

0-43'	Sandy Blue Clay
43-48	Yellow clay
48-52	Limestone
52-56	Yellow shale
56-70	Yellow shale & lime
70-95	Sandstone (water)
95-115	Cherty lime, soft

Production data:

Date _____

Static depth to water

56 1/2

Measuring point _____

Pumping level

84

at

250

g.p.m.

Specific capacity

g.p.m. per ft. drawdown; Temperature

50

°F.

Pump data: Type pump

Column Dia.

Length

Cylinder or bowls: Dia.

Length

Suction pipe

Power

Airline

Estimated rate of production:

g.p.m. for

hrs. a day

Use of water

WATER ANALYSES (in parts per million)

Date samples

Sampled by

Total solids

Insoluble matter

Alkalinity (Meo)

Alkalinity (Phn)

pH

 $\text{Fe}_2\text{O}_3 + \text{Mn}_2\text{O}_3 + \text{Al}_2\text{O}_3$

Alkali as sodium

Calcium

Magnesium

Iron (unfiltered)

Manganese

Nitrate

Fluoride

Chloride

Sulfate

Bicarbonate

Hardness (ppm)

Hardness (gpg)

Remarks

Laboratory data:

Sample storage location CK1-6

Sample range

0-115

No. spls.

18

No. dupls. & Cond.

18-6

Spls. prepared by

Kallson

Washed range

50-115

by

MORTEN 1/27/51

Driller's log and cond.

Insoluble residues: Prepared by

Studied by

Strip log

Microscopic study

strip log

Gen. log

Correl. by

1/23/52

WATER LEVEL DATA

Measuring point _____

Date	Depth to water	Altitude	Remarks

REMARKS

Test hole No. 1 of 3 tests was later reamed
and deepened from 60 to 115' and developed
as the final well

5188

Name: Steamboat Rock town well (1951)

Loc: SW SE SE 21-88N-19W, Hardin Co.

T.D. 115'

pop 426 (1960)

Drilled: Hoeg & Ames Aug-Sept. 1951

Log: W-5188 Jeffords

Casing: 71' of 8" csg. from 0-71' cemented in 12" hole; 8" open hole to bottom

Prod. data:

SWL 56.5'

PWL 84'

Yield 250 gpm

Main water 70-95'

$$\begin{array}{r} 84.0 \\ 56.5 \\ \hline 27.5 \end{array} \frac{9.1}{2500.} \\ 2475$$

$$\frac{9.1}{44} = 20.7 \times 10^{-2}$$

$$\begin{array}{r} 1031 \\ 57 \\ \hline 974 \end{array}$$

$$\begin{array}{r} .2068 \\ 44 \overline{) 9.10} \\ \underline{88} \\ 300 \\ \underline{264} \\ 360 \\ \underline{352} \end{array}$$

Analyses: No. 3933(3441) 8/17/51; No. 1570(1830) 1/14/60

Twenter & Coble report average 40-45000 gpd
all but 10-12 houses use

Industry - Cheese factory 204000 ± gpd 3 months or about 2275 gpd

Elevation	1031'		
Formations	Depth	Top	Base
Hampton	50	981	

$$\begin{array}{r} 88.5 \\ 60\% \\ \hline 531.00 \end{array}$$

Cheese Factory

J }
F } 204700g
H }

$$\begin{array}{r} 2274 \text{ gpd} \\ 90 \overline{) 204700} \\ \underline{180} \\ 247 \\ \underline{180} \\ 670 \\ \underline{630} \\ 400 \\ \underline{360} \end{array}$$

$$\begin{array}{r} 40000 \\ - 2300 \\ \hline 37700 \text{ gpd} \\ 94.25 \text{ gpd/acre} \\ 400 \overline{) 37700} \\ \underline{3600} \\ 1700 \\ \underline{1600} \\ 1000 \\ \underline{800} \\ 200 \end{array}$$

$$\begin{array}{r} 107 \text{ gpd} \\ 426 \overline{) 45000} \\ \underline{426} \\ 2400 \\ \underline{2282} \end{array}$$

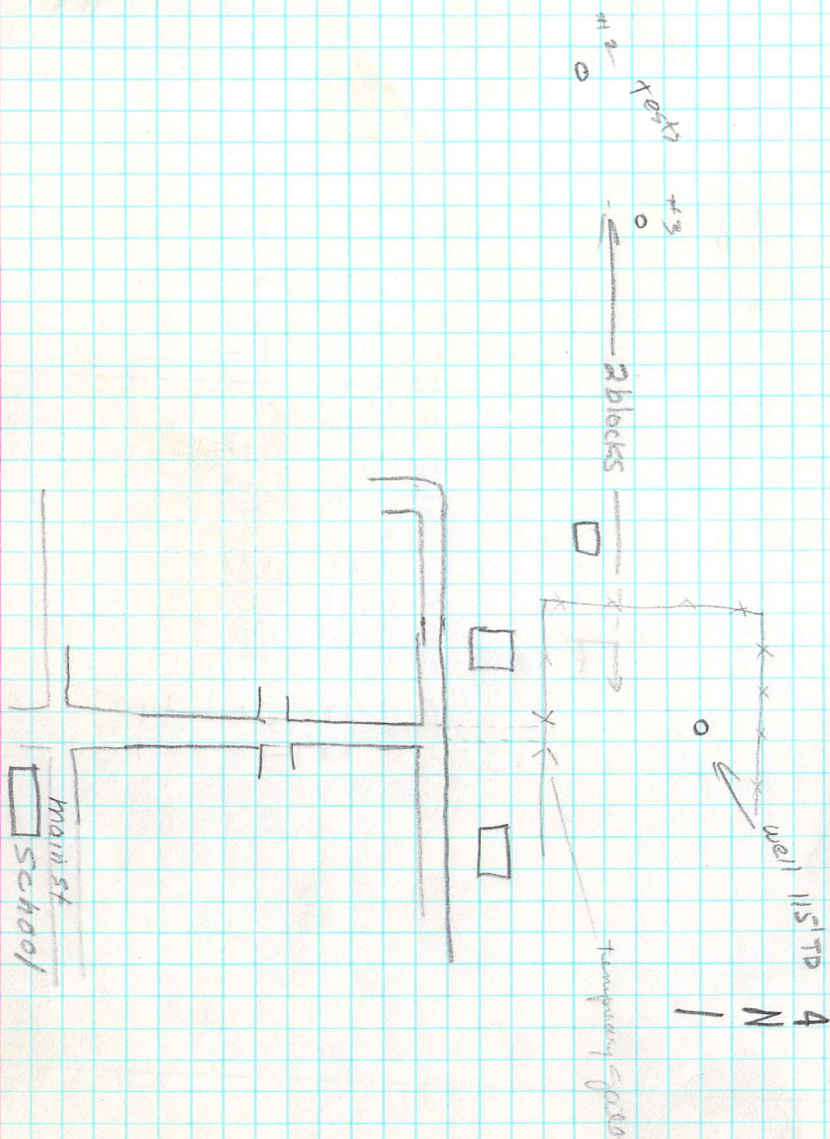
$$\begin{array}{r} 93.9 = 94 \\ 426 \overline{) 40000} \\ \underline{3834} \\ 1660 \\ \underline{1278} \\ 3820 \end{array}$$

Use 37700 gpd
94 gpd/acre
Possible leakage from mains



5188

Steamboat Rock Town Well (1951)





Stampt R_x Town Tests (1951)

4
N
1

