W-3994

IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey

See W-2071
W-3971

RECORD OF WELL

Location:

Town: Postville (N E / S W): County Allamakee

sec. ___ T ___ N., R. ___ E. W. ___ Twp.

Well name and number Postville Town Well No. 1

Owner Do Address

Tenant Address

Contractor Layne-Western Co Address Ames

Drillers

Drilling dates Aug. 11 to Oct. 9, 1949 Deepened 770-990'

Well data:

Elevations: Drilling curb ____ feet; Land surface ____ feet

Determined by

Topographic position

Total depth: Reported 993 feet, Measured ____ feet

Drilling method

Hole and casing date 615' of 8" pipe from 0' to 615'

Original depth to water 350 ft. ~~above~~ below ____ Date

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

Sources of water: Principal 765; Others

Production data: Date _____

Static depth to water 350 Measuring point _____
Pumping level 440 at 185 g.p.m.

_____ _____
_____ _____
_____ _____

Specific capacity _____ g.p.m. per ft. drawdown; Temperature _____ °F.

Pump data; Type pump Layne Turbine Column Dia. 6" Length _____
Cylinder or bowls: Dia. _____ Length 517' Suction pipe _____
Power Electric Airline _____

Estimated rate of production: _____ g.p.m. for _____ hrs. a day

Use of water _____

WATER ALALYSES (in parts per million)

Date samples				
Sampled by				
Total solids				
Insoluble matter				
Alkalinity (Meo)				
Alkalinity (Phn)				
pH				
Fe_2O_3- Mn_2O_3-Al_2O_3				
Alkali as sodium				
Calcium				
Magnesium				
Iron (unfiltered)				
Manganese				
Nitrate				
Fluoride				
Chloride				
Sulfate				
Bicarbonate				
Hardness (ppm)				
Hardness (gpg)				

Remarks _____

Laboratory data: Sample storage location CG3-9

Sample range 770-990 No. spls. 44 No. dupls. & cond. 44 Four
Spls. prepared by RPC Washed range 770-790 by RPC
Driller's log and cond. _____

Insoluble residues: Prepared by _____ Studied by _____ Strip log _____
Microscopic study [illegible] strip log 2-24-50
Gen. log _____ Correl. by [illegible]

WH 03994

STATE HYGIENIC LABORATORY, DES MOINES BRANCH
WATER LABORATORY DIVISION
MINERAL ANALYSIS

LAB. NO. 1675
MINERAL NO. 3458
10 April 1962

TOWN Postville COUNTY Allamakee
OWNER OF SUPPLY Town of Postville
COLLECTOR'S NAME Robert L Martindale
DATE COLLECTED Mar 8, 1962 DATE RECEIVED Mar 12, 1962
REPORT TO: NAME Division of Public Health Engineering
ADDRESS State Department of Health

FIELD DATA

SOURCE: WELL NAME, NUMBER, POINT OF COLLECTION, DEPTH, CONSTRUCTION DATE, ETC., South Well #1 Water Plant, 993 ft cement platform New Turbine Installed Sept 5, 1940

WELL PUMPED 1 HRS. AT 260 GPM. DATE OF PREVIOUS SAMPLE
WAS SAMPLE FREE OF TURBIDITY WHEN COLLECTED Yes
TEMPERATURE °C 11 ALKALINITY (ppm $CaCO_3$) P T pH
IS A POLYPHOSPHATE BEING USED? No

LABORATORY ANALYSIS
(PARTS PER MILLION)

SPECIFIC CONDUCTANCE K AT 25°C 100 x 10^{-5}. TURBIDITY
DISSOLVED SOLIDS 631 SOLUBLE IRON (Fe) 3.7
TOTAL SOLIDS 631 SILICA (SiO_2) 16.8 TOTAL IRON (Fe) 3.7
ALKALINITY (ppm $CaCO_3$) P None T 501 pH 7.25 DATE Mar 12, 1962

POSITIVE IONS		NEGATIVE IONS	
K+	2.8	NO_3 — asN	< 0.1
Na+	11.4	F−	0.2
Ca++	156	Cl−	22
Mg++	44.0	SO_4−−	68.3
Mn++	0.15	HCO_3−	611
Al+++		CO_3−−	None

HARDNESS AS $CaCO_3$ 570 ppm 33.3 gpg
Turbid, yellow on receipt in lab.

ANALYST Ryan, Ebert

R. L. MORRIS
PRINCIPAL CHEMIST

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