

field located
1978

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

W 5901

RECORD OF WELL

Location: Back of fire Station

Town: CHARTER OAK (NE) (SW): County CRAWFORD

NW NW NE SW sec. 23 T. 84 N., R. 41 W. E.
SW sec. 23 T. 84 N., R. 41 W. Twp.

Well name and number Town of Charter Oak

Owner → Address _____

Tenant _____ Address _____

Contractor C. C. & A. O. Rasmussen Address 109 Grove

Drillers → _____

Drilling dates Completed April 1953

Well data: topo. elev. 1225' C.F. = 20'
Altitudes: Drilling curb _____ feet; Land surface _____ feet

Determined by _____

Topographic position _____

Total depth: Reported 210 feet, Measured _____ feet

Drilling method Cable Tool

Hole and casing data Gravel Pack around Screen
12" casing with 10' screen on bottom

Original depth to water _____ above
ft. below _____ Date _____

Source of data _____

Sources of water: Principal _____

Others _____

Production Data

Date _____
 Static water level _____
 Measuring point _____
 Pumping water level _____
 Yield (g. p. m.) _____
 Duration of pumping _____
 Specific capacity _____

Pump Data

Type pump _____ Column diameter and length _____
 Cylinder or bowls diameter and length _____
 Suction pipe _____ Airline _____
 Power _____ Production _____ g. p. m. for _____ hours per day
 Use of water _____

Dissolved constituents and properties (in parts per million except as indicated)

Date sampled _____
 Sampled by _____
 Silica (SiO₂) _____
 Iron (Fe) _____
 Manganese (Mn) _____
 Calcium (Ca) _____
 Magnesium (Mg) _____
 Potassium (K) _____
 Sodium (Na) _____
 Carbonate (CO₃) _____
 Bicarbonate (HCO₃) _____
 Sulfate (SO₄) _____
 Chloride (Cl) _____
 Fluoride (F) _____
 Nitrate (NO₃) _____
 Dissolved solids _____
 Hardness (as CaCO₃) _____
 Total _____
 Grains per gallon _____
 Noncarbonate _____
 Alkalinity (as CaCO₃) _____
 pH _____
 Specific conductance _____
 (micromhos at 25°C) _____
 Temperature (°F) _____
 Analysis No. _____

Laboratory Data

LOCATION - EA9-8

Well No. **W 5901** Sample range **200-298** No. of samples **24**
 No. of dupls. and cond. **20 Good** Washed range **213-298**
 Samples prepared by **DeRoma** Date **4/13/53**
 Logged by **NORTHUP** Date **4/27/53**
 Correlations by _____ Date **4/27/53**

10:40 am APR 25 1980

W# 5901 C

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

LAB. NO. 1583
MINERAL NO. 769
19

TOWN: Charter Oak COUNTY: Crawford
OWNER OF SUPPLY: Town of Charter Oak
COLLECTOR'S NAME: W. Butler
DATE COLLECTED: 6-10-58 DATE RECEIVED: 6-11-58
REPORT TO: NAME: Engineering Division
ADDRESS: State Department of Health

FIELD DATA

SOURCE: WELL NAME, NUMBER, POINT OF COLLECTION, DEPTH, CONSTRUCTION DATE, ETC.,
No. 4 - Collected at tap on main at well - Drilled in 1953. 210 ft deep.

WELL PUMPED _____ H.F.S. AT _____ GPM. DATE OF PREVIOUS SAMPLE _____
WAS SAMPLE FREE OF TURBIDITY WHEN COLLECTED: Not Stated
TEMPERATURE °C _____ ALKALINITY (ppm CaCO₃) P _____ T _____ pH _____
IS A POLYPHOSPHATE BEING USED? _____

LABORATORY ANALYSIS
(PARTS PER MILLION)

SPECIFIC CONDUCTANCE K AT 25°C: 259 x 10⁻⁵ TURBIDITY _____
DISSOLVED SOLIDS _____ SOLUBLE IRON (Fe) _____
TOTAL SOLIDS: 2334 SILICA (SiO₂): 25.2 TOTAL IRON (Fe): 16.8
ALKALINITY (ppm CaCO₃) P: None T: 114 pH: 7.4 DATE: 6-11-58

POSITIVE IONS		NEGATIVE IONS	
K ⁺	8.8	NO ₃ ⁻ as N	0.2
Na ⁺	232	F ⁻	0.15
Ca ⁺⁺	258	Cl ⁻	15
Mg ⁺⁺	96.0	SO ₄ ⁻⁻	1310
Mn ⁺⁺	0.76	HCO ₃ ⁻	139
Al ⁺⁺⁺		CO ₃ ⁻⁻	None

HARDNESS AS CaCO₃: 1040 ppm 60.7 gpg
Sample orange colored and very turbid with dark colored particles, probably iron, upon receipt. Not filtered for mineral analysis. 6-11-58 dew

ANALYST: Wright, Ryan
8-14-58 rjg

R. L. MORRIS
PRINCIPAL CHEMIST