field located 1978

W-2379

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

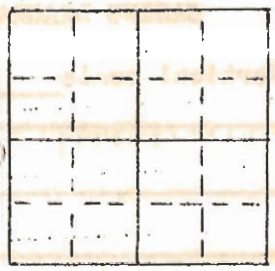
RECORD OF WELL

Location:

Town: DOW CITY (N E / S W): County CRAWFORD

SW NE NW SW NW NE SW sec. 10, T. 82N., R. 40W. 5th

sec. 10 T 82 N., R. 40 W. Twp.



Well name and number DOW CITY (1946)

Owner Town of Dow City Address

Tenant Address

Contractor A. O. Rasmussen Address

Drillers

Drilling dates

Topo. elev. 1141' C.I. = 20'

Well data:

Elevations: Drilling curb feet; Land surface 1142 feet

Determined by Alt - D. Ross-49

Topographic position

Total depth: Reported feet, Measured feet

Drilling method

Hole and casing data

Original depth to water ft. above / below Date

Original elevation of water level ft.; Source of data

Sources of water: Principal Bluestone ; Others

Production data: Date _____

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

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

Sample range 64-81 No. spls. 11 No. dupls. & cond. 0 Very Poor

Spls. prepared by S.P.&D.G. Washed range _____ by _____

Driller's log and cond. _____

Insoluble residues: Prepared by _____ Studied by _____ Strip log _____

Microscopic study 64-81 strip log Jan 20 1947

Gen. log _____ Correl. by M. Parker

MAY 07 1980 WH 2379

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

LAB. NO. 2129
8242
MINERAL NO.
21 Oct 19 70 bj

TOWN Dow City COUNTY Crawford
OWNER OF SUPPLY Municipal
COLLECTOR'S NAME Ronald Blume
DATE COLLECTED 6 Oct 70 DATE RECEIVED 7 Oct 70
REPORT TO: NAME EES
ADDRESS SDH

FIELD DATA

SOURCE: WELL NAME, NUMBER, POINT OF COLLECTION, DEPTH, CONSTRUCTION DATE, ETC., Well #2 School 85' 30-40-50 years ago

WELL PUMPED 1/2 HRS. AT 150 GPM. DATE OF PREVIOUS SAMPLE
WAS SAMPLE FREE OF TURBIDITY WHEN COLLECTED Yes
TEMPERATURE °C 15 ALKALINITY (ppm $CaCO_3$) P T pH
IS A POLYPHOSPHATE BEING USED? No

LABORATORY ANALYSIS
(PARTS PER MILLION)

SPECIFIC CONDUCTANCE K AT 25°C 76 x 10^{-5}. TURBIDITY
DISSOLVED SOLIDS 487 SOLUBLE IRON (Fe) 0.08
TOTAL SOLIDS 487 SILICA (SiO_2) 23 TOTAL IRON (Fe) 0.08
ALKALINITY (ppm $CaCO_3$) P None T 318 pH 7.1 DATE 7 Oct 70

POSITIVE IONS		NEGATIVE IONS	
K^+	2.7	NO_3^-	5.8
Na^+	8.0	F^-	0.3
Ca^{++}	108	Cl^-	13
Mg^{++}	34.0	SO_4^{--}	100
Mn^{++}	0.22	HCO_3^-	388
Al^{+++}		CO_3^{--}	None
Arsenic	< 0.01		

HARDNESS AS $CaCO_3$ 410 ppm 23.9 gpg

NO METALS

ANALYST Ryan, Calkins

R. L. MORRIS
JHG PRINCIPAL CHEMIST

IOWA PRESS
CLIPPING BUREAU
Des Moines, Iowa

Bulletin
Denison, Iowa

To be Done

MAY 9 1946

Increased need for water at Dow City since the establishment of the Daniels Hatchery about five years ago has now called for a new town well.

Digging of the 81 foot well began Tuesday morning just north of the town hall on Main street, near the killing plant of the hatchery. The new well will pump water from the same vein supplying the present source and is located about 50 feet north of the old one.

The Rasmussen well digging firm of Ida Grove is doing the work and Morris Griffin, street commissioner, expects completion in several weeks. It will cost approximately $2,800, including the digging and the new electric turbine pump, to be installed when the well is completed.

Breakdown Feared

The demand for more water came when the hatchery was established there shortly before the war. Griffin said from 32,000 to 48,000 gallons of water are pumped out of the old well each day and the council feared that the old pump would break down leaving Dow City without any water supply.

Both of the pumps, old and new, are Pomona electric unit drive turbines. Water is pumped into two large cylinder tanks housed in the town hall.

A pressure system supplies the homes with modern water facilities. About 130 homes and business places use water from the town's supply.

The old well, also 81 feet deep, will not be abandoned, Mr. Griffin said. The new well was needed to supplement the present supply.

#2

#

IOWA PRESS
CLIPPING BUREAU
Des Moines, Iowa

WEA

Review
Denison, Iowa

MAY 30 1946

New Well Being Dug At Dow City

To insure an adequate supply of water, Dow City is digging a new well, 85 feet deep, on the lot behind the public library.