

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

W-1291

RECORD OF WELL

Location:

Town: La Motte ( NE )  
( SW ): County Jackson



6WSE sec. 33 T 17 N., R. 3 W. Twp.

Well name and number La Motte City Well

Owner City of La Motte Address \_\_\_\_\_

Tenant \_\_\_\_\_ Address \_\_\_\_\_

Contractor C.W. Verner Address Dubuque

Drillers \_\_\_\_\_

Drilling dates 9/25/10 to 10/5/40

Well data:

Elevations: Drilling curb \_\_\_\_\_ feet; Land surface 961 feet

Determined by \_\_\_\_\_

Topographic position \_\_\_\_\_

Total depth: Reported 170 feet, Measured \_\_\_\_\_ feet

Drilling method cable

Hole and casing data 12" hole to 45', 8" hole to bottom. 46'8" of 8" pipe = 0-96'8"

Cement grouted

Original depth to water \_\_\_\_\_ above  
ft. below \_\_\_\_\_ Date \_\_\_\_\_

Original elevation of water level \_\_\_\_\_ ft.; Source of data \_\_\_\_\_

Sources of water: Principal \_\_\_\_\_; Others \_\_\_\_\_

Production data: \_\_\_\_\_ Date \_\_\_\_\_

Static depth to water 50 Measuring point \_\_\_\_\_  
Pumping level 125 at 21.5 g.p.m.  
128 24  
150 30

Specific capacity \_\_\_\_\_ g.p.m. per ft. drawdown; Temperature 51 1/2 °F.

Pump data: Type pump \_\_\_\_\_ Column Dia. \_\_\_\_\_ Length 136  
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	<u>Oct. 3, 1940</u>	_____	_____
Sampled by	<u>Paul Bolton</u>	_____	_____
Total solids	<u>433</u>	_____	_____
Insoluble matter	<u>10.5</u>	_____	_____
Alkalinity (Meo)	<u>280.0</u>	_____	_____
Alkalinity (Phn)	<u>0.0</u>	_____	_____
pH	<u>7.4</u>	_____	_____
Fe <sub>2</sub> O <sub>3</sub> + Mn <sub>2</sub> O <sub>3</sub> + Al <sub>2</sub> O <sub>3</sub>	<u>2.5</u>	_____	_____
Alkali as sodium	<u>9.9</u>	_____	_____
Calcium	<u>77.9</u>	_____	_____
Magnesium	<u>33.9</u>	_____	_____
Iron (unfiltered)	<u>0.5</u>	_____	_____
Manganese	<u>0.00</u>	_____	_____
Nitrate	<u>35.0</u>	_____	_____
Fluoride	<u>Trace</u>	_____	_____
Chloride	<u>12.0</u>	_____	_____
Sulfate	<u>35.0</u>	_____	_____
Bicarbonate	<u>341.6</u>	_____	_____
Hardness (ppm)	<u>335</u>	_____	_____
Hardness (gpg)	<u>19.6</u>	_____	_____

Remarks \_\_\_\_\_

Laboratory data: \_\_\_\_\_ Sample storage location \_\_\_\_\_

Sample range 10-170 No. spls. 31 No. dupls. & cond. 3/ Good

Spls. prepared by Sumner Washed range \_\_\_\_\_ by \_\_\_\_\_

Driller's log and cond. \_\_\_\_\_

Insoluble residues: Prepared by \_\_\_\_\_ Studied by \_\_\_\_\_ Strip log \_\_\_\_\_

Microscopic study 10-170 strip log 3-3-50

Gen. log \_\_\_\_\_ Correl. by R. Screven

LA MOTTE, IOWA  
CITY WELL

Date Started - 9-25-40

Date Completed - 10-5-40

Depth - 170'

Diameters - 12" to 45' - 8" to the bottom

Casing - 46' 8" of 8" pipe; Cement grouted

Strata Record

Depth

<u>From</u>	<u>To</u>	<u>Thickness</u>	<u>Description of beds</u>
Top	20	20	Clay
20	25	5	Limestone
25	60	35	Limestone brown
60	90	30	Limestone brown mixed with white rock
90	100	10	Limestone gray " " " "
100	125	25	Limestone, white
125	140	15	Limestone brown
140	145	5	Limestone yellow
145	166	21	Limestone gray
166	170	4	Shale blue

Static Water Levels:

<u>From</u>	<u>To</u>	<u>Level</u>
Top	60'	Dry
60	140	52'
140	170	48'

Drilled by:

C. W. Varner,  
905 Dubuque Bldg.,  
Dubuque, Iowa.

Note: All measurements taken from top of casing.

RECORD - WELL CAPACITY TEST

JOB Form Well No. 2 LOCATION LaMotte, Iowa. DATE Oct. 3, 1940.

PUMP SETTING 136' FT. AIRLINE 136' FT. STATIC HEAD 50'

Time	Inches Tube	G.P.M.	Airline	Drawdown	Pumping Level	Temper- ature	Remarks
11:50			85'				Started pump
12:20	20	22.2	16'	69'	119'		
1:15	21	21.5	10'	75'	125'		
1:17			10'	75'	125'		Stopped pump
1:20			40'				
1:21			50'				
1:22			60'			51 <sup>10</sup>	
1:23			67'				
1:24			73'				
1:25			77'				
1:28			82'				
1:33			86'				
1:38							Started pump
1:38 <sup>1/2</sup>			80'	5'	85'		
1:37	24		66'	12'	67'		
1:40			53'	32'	82'		
1:42			45'	40'	90'		
1:46	24		25'	60'	110'		
1:55	24	24	7	78'	128'		Pumping air
2:25	22	22.2	6	79'	129'		
3:45	20	21.7	7	78'	128'		Pumping air
4:00							Stopped pump to add lgth. of 4 <sup>1/2</sup> " pipe and airline.

