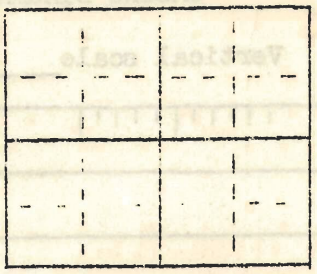
W-4013

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

RECORD OF WELL



Location:

Town: Earlham (N E) (S W): County Madison

SW NE NW sec. 6 T 75 N., R. 28 E. W. Twp.

Well name and number Earlham City Well

Owner Do Address

Tenant Address

Contractor Layne-Western Address

Drillers Nels Holmer

Drilling dates

Well data:

Elevations: Drilling curb feet; Land surface feet

Determined by

Topographic position

Total depth: Reported feet, Measured feet

Drilling method

Hole and casing date

Original depth to water ft. above below Date

Original elevation of water level ft.; Source of data

Sources of water: Principal ; 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 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				
Chloraie				
Sulfate				
Bicarbonate				
Hardness (ppm)				
Hardness (gpg)				

Remarks _____

Laboratory data: Sample storage location C67-67

Sample range 0-635 No. spls. 121 No. dupls. & cond. 120-G
Spls. prepared by RPC/VLM Washed range 150-635 by VLM 4/10/50
Driller's log and cond. _____

Insoluble residues: Prepared by _____ Studied by _____ Strip log _____
Microscopic study Huntington strip log 750
Gen. log _____ Correl. by _____

March 15, 1950

Madison

Mr. H. Claude Peer
Town Clerk
Earlham, Iowa

Dear Mr. Peer:

Your letter of inquiry dated the 10th of March, 1950, has been received at this office.

The samples from the new Earlham town well drilled by the Layne-Western Company to a depth of 555 feet have been examined and logged at this office.

Examination of the well cuttings indicate the presence of limestone at depths of from 175 to 185 feet, 197 to 200 feet, and from 213 to 220 feet. Dolomite is indicated at a depth of from 245 to 250 feet.

Between 250 and 325 feet the material drilled consisted of thin beds of limestone interbedded with thicker beds of shale. The combined limestone thickness in this 75 foot interval would probably be between 6 and 10 feet.

Enclosed is a copy of the log of the well for your information.

We hope this information answers your questions satisfactorily. If we can be of further assistance, do not hesitate to call on us.

Very truly yours,

HGH:GAN:AM

H. G. Hershey

Encl.

MAR 11 1950

TOWN OF EARLHAM

H. CLAUDE PEER, TOWN CLERK

EARLHAM, IOWA

March 10, 1950

Iowa Geological Survey.
Iowa City, Iowa.

Gentlemen:

Could you tell us how much lime stone the Layne-Western Well Drilling Company has gone through on the new well at Earlham, Iowa.

Very truly yours,

H. Claude Peer.

H. Claude Peer.

hcp/ljh

W-4013 New Town well (1950)
W-1407 Old Town well No. 1 (1940)
W-1525 " " " " 2 "

WELL RECORD

Well is located ..... N/S ..... miles S and ..... E/W ..... miles S from N/E W

..... (Nearest Town) in ..... (County),

in the ..... ¼ ..... ¼ Sec. ..... T. ..... R. .....

Owner Town of Garfield Well No. 3

Postoffice address .....

Contractor Layne Western Co

Address .....

Driller .....

Well begun 11-26, 19 47;

completed 3-31, 19 50

Rig used—Cable, Rotary, Jet, or .....

Depth of well 635 (Feet)

Size of hole (note total amount of each size) .....

.....

Main water supply at ..... (Feet below surface)

Final water head 325 (Feet above or below surface)

Is well pumped? Yes

Yield 25 GPM. (Gallons per minute)

Water level when pumping .....

Position of well ..... (Upland, valley, side hill, etc.)

RECORD OF PERMANENT CASING

Size Pipe	Amount of Pipe	Depth to Bottom of Pipe	Depth to Top of Pipe	Type* and Weight of Pipe	DIAGRAM OF WELL
12 in	200	200			Well cased to 535 ft
10 in	440	440			
8	108	535			

*As cast, wrought iron, steel, concrete, etc.

Is screen used? ..... Diameter ..... (Inches)

Length ..... (Feet) Depth to bottom .....

Depth to top ..... Slot size .....

Are packers or seals used? .....

Kind .....

Where used .....

Kind of pump ..... Dia. ..... (Inches)

Capacity of pump ..... (g.p.m.)

Power used ..... (Kind and amount)

Depth to bottom of pump line ..... feet,

including ..... feet tailpiece.

Remarks on construction of well .....

.....

Sample No.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	30	65		Clay Blue
	65	70		Broken Lime & Sand
	70	140		Clay & Hardpan
	140	150		Bedrock
	150	180		Shale
	180	205		Shale & Limerock
	205	220		Shale & a little coal
	220	225		Shale & Lime
	225	300		Shale and Some Lime
	300	315		Hard Shale & Lime
	315	340		Sticky Shale & Lime
	340	370		Shale
	370	405		Shale Red
	405	495		Shale Blue
	495	505		Lime Sandy Lime Grain
	505	520		Lime
	520	605		Shale

Struck water at 324 feet

Sample No.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	605	610		Rock
	610	615		Black Shale
	615	625		Rock
	625	635		Black Shale