

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

W-1856

RECORD OF WELL

	3	4	
			109

Location:

(N E)
Town: Independence (S W); County Buchanan
SW SE SE sec. 34 T. 89 N., R. 9 W. Washington Twp.

Well name and number Independence City Well #3

Owner _____ Address _____

Tenant _____ Address _____

Contractor Thorp Well Co. Address _____

Drillers V. N. Ogden

Drilling dates 10-23-43 to 12-30-43

Well data:

Elevations: Drilling curb 934.5 feet; Land surface _____ feet

Determined by W. E. Hale

Topographic position _____

Total depth: Reported 307' feet; Measured _____ feet

Drilling method Drilled

Hole and casing data 38' of 16-inch casing from +1 foot to 37 ft
(Give amount, size, kind, and depth of all casing; type and

position of seals and packers; cementing; how finished--perforated pipe, screen, gravel pack, open hole, etc.)

Original depth to water 36 ft. ^{above} _____ ft. below _____ Date _____

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

Sources of water: Principal Silurian; Others _____

Production data:

Date _____

Static depth to water 36; Measuring point _____

Pumping level 107 at 643 g.p.m.

Specific capacity 9 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 City supply

WATER ANALYSES (in parts per million)

Date sampled	_____	_____	_____	_____
Sampled by	_____	_____	_____	_____
Total solids	_____	_____	_____	_____
Insoluble matter	_____	_____	_____	_____
Alkalinity (Meo)	_____	_____	_____	_____
Alkalinity (Phn)	_____	_____	_____	_____
pH	_____	_____	_____	_____
Fe ₂ O ₃ +Mn ₂ O ₃ +Al ₂ O ₃	_____	_____	_____	_____
Alkali as sodium	_____	_____	_____	_____
Calcium	_____	_____	_____	_____
Magnesium	_____	_____	_____	_____
Iron (unfiltered)	_____	_____	_____	_____
Manganese	_____	_____	_____	_____
Nitrate	_____	_____	_____	_____
Fluoride	_____	_____	_____	_____
Chloride	_____	_____	_____	_____
Sulphate	_____	_____	_____	_____
Bicarbonate	_____	_____	_____	_____
Hardness (ppm)	_____	_____	_____	_____
Hardness (gpg)	_____	_____	_____	_____
Remarks	_____			

Laboratory data:

Sample storage location _____

Sample range 0-305 No. spls. 60 No. dupls & cond. 60 Good

Spls. prepared by Fan Washed range _____ by _____

Driller's log and cond. Yes

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

Microscopic study 0-305 strip log ✓

Gen. log _____ Correl. by E. Schütz

WATER LEVEL DATA

Measuring point _____

Date	Depth to water	Altitude	Remarks

REMARKS

8" Pilot hole drilled to depth of 325 feet. Samples saved on this pilot hole. The final well was drilled in the pilot hole.

S.W.L. dropped 12' between 95 & 100 ft.

Independence (Buchanan County)
 Independence City well No. 3
 (located 3 blocks E. and 1 block N. of city square)

Thorpe Well Co., Des Moines
 10/23/43 to 12/30/43
 V. N. Ogden, driller

T.D. 307 ft.
 S.W.L. 36 ft.
 Production: 650 g.p.m. with 71 ft. drawdown

Casing: 38' of 16" casing set at 37'

Remarks: Cuttings lost and S.W.L. dropped 12 ft. between 95 and 100 ft.

Dark sandy soil	0 to	2
Brown sandy clay	2 to	12
Gray clay	12 to	26
Sand, gravel and limestone	26 to	30
Solid gray limestone	30 to	32
Limestone, loose	32 to	36
Limestone, solid gray	36 to	66 65
Limestone	65 to	95
Limestone, brown	95 to	100
Limestone, gray	100 to	106
Limestone, white	106 to	171
Limestone, gray	171 to	177
Limestone, white	177 to	187
Limestone, white	187 to	212
Limestone, gray	212 to	215
Limestone, white	215 to	222
Limestone, gray	222 to	225
Limestone, white	225 to	272
Limestone, gray	272 to	280
Limestone, white	280 to	302
Shale, light green	302 to	307

MAY 19 1944
 K. E. ANDERSON