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

RECORD OF WELL

Location:

Town: Jamaica (N E) (S W); County Guthrie

sec. T. N., R. E. W. Twp.

Well name and number

Owner Address

Tenant Address

Contractor [illegible] Address

Drillers Homer Rhodes

Drilling dates completed March 5, 1940

Well data:

Elevations: Drilling curb feet; Land surface feet

Estimated

Determined by

Topographic position

Total depth: Reported [illegible] feet, Measured feet

Drilling method

Hole and casing data 247'6" of 8" steel casing 0-247'6"; 172'5" of 6¼" steel casing 246'-418'5"; 418'5" to 524' - rock wall
(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 78 ft. above/below ground Date

Original elevation of water level ft.; Source of data

Sources of water: Principal ; Others 440'; 470'; 520'

CASING DIAGRAM

Vertical scale _____

LOG

0-1	Black soil
1-15	Sand & gravel
15-80	blue clay
80-81	coal
81-200	black shale & mud
200-247	shale, thin limestones & sandstones
247-265	limestones & shale
265-400	mud, shale, ls. & sands
400-521	solid rock
521	shale

Production data: Date _____

Static depth to water 28 Measuring point _____

Pumping level _____ at _____ g.p.m. see remarks

_____ _____

_____ _____

_____ _____

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 town supply

WATER ANALYSES (in parts per million)

Date sampled	March 5, 1940			
Sampled by	R.W. GEARHART			
Total solids	850.			
Insoluble matter	8.0			
Alkalinity (Meo)	214.6			
Alkalinity (Phn)	0.0			
pH	7.5			
Fe_2O_3+ Mn_2O_3+Al_2O_3	1.5			
Alkali as sodium	66.9			
Calcium	132.2			
Magnesium	42.8			
Iron (unfiltered)	0.2			
Manganese	0.00			
Nitrate	2.2			
Fluoride	3.2			
Chloride	90.0			
Sulfate	319.7			
Bicarbonate	297.1			
Hardness (ppm)	519			
Hardness (gpg)	30.3			

Remarks _____

Laboratory data: Sample storage location _____

Sample range _____ No. spls. _____ No. dupls. & cond. _____

Spls. prepared by Summerfield Washed range _____ by _____

Driller's log and cond. _____

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

Microscopic study 0-525 Gulf strip log copied by S.E. Hanna

Gen. log _____ Correl. by Calmody

WATER LEVEL DATA

Measuring point _____

Date	Depth to water	Altitude	Remarks

REMARKS

Pumping Test No1. pump set at 255
d.d. 142' 10gpm.
No 2 pump at 350'
d.d. 22' 15gpm

Town purchased single stroke double acting, 12 inch stroke, Fairbanks Morse Pump.

COPY

REPORT

LOG, CONSTRUCTION RECORD, AND PUMPING TEST

TOWN WELL, JAMAICA, IOWA. Hoeg andAmes, Drillers
R. W. Gearhart, Engineer.

completed March 5th 1940.

Log of Well

0 to 1 --------- black soil
1 to 15 -------- sand and gravel
15 to 80-------- blue clay
80 to 81-------- coal
81 to 200------- black shale and mud
200 to 247------ shale, thin limestones, and sandstones.
247 to 265------limestones and shale,
at 265, a little water seep.
265 to 400, mud, shale, limestone bands, and sandstone bands.
at 400 feet solid limestone.
at 440 a little water
at 470 a little water.
at 520 a little water.
400 to 524 solid rock
at 524 shale, and bottom of well.

Construction of well

0. to 247 feet 6 inches, 8 inch steel casing
246 to 418 feet 5 inches, 6-1/4 inch steel casing.
418' 5" to 524 ---------rock well.

Pumping test.

Static head of water 78 feet below the ground.

First test, pump set at 255 feet in the well
Draw down 142 feet at 10 gallons per minute.

Second test, pump set at 350 feet in the well.
Draw down 222 feet at 15 gallons per minute.

The Town purchased a single stroke, double acting, 12 inch stroke.
Fairbanks Morse Pump.

Respectfully submitted,

(Signed) Ralph W. Gearhart,
Engineer for Jamaica, Iowa.

IOWA GEOLOGICAL SURVEY
Iowa City, Iowa

DRILLING RECORD

Contractor: Hoeg and Ames, Lincoln
Driller: Homer Rhodes

Jamaica Town well

247' 8" Std. pipe
172' 6¼ S. and S.
350' Pump pipe
526' deep

IOWA GEOLOGICAL SURVEY
Water Well Data Sheet

Survey Number W-1161

Town Lamar County [illegible] T. [illegible] N., R. 30 E. W.

Name Town of Lamar Location [illegible] ¼ [illegible] ¼, Sec. [illegible]

Contractor [illegible] Driller [illegible] Use Town supply

Construction [illegible] Drilling Dates [illegible] Drilling Depth [illegible]

Topog. [illegible] Curb Elev. [illegible] Ref. [illegible] Total Depth 52

Final Static Level [illegible] above / below curb Pumping Level [illegible] Draw down [illegible] gpm [illegible] Time pumped [illegible] Date [illegible]

Depth to bot. pump [illegible] ft. with [illegible] ft. suction pipe. Calc. g/ft. drawdown [illegible] Prin. Prod. [illegible]

Producing Horizons [illegible]

Water levels and pumping tests on various horizons during drilling:

Depth Range	Stat. Level	Pump Level	Draw down	gpm.	Temp.	Producing horizons	Producing formations	Formations cased out
	75	360	285	[illegible]				

Additional information 247 of 8" pipe [illegible] 172' of 6¼ S.S. well [illegible]

Laboratory Data

Sample range 525 Number samples 100 Number Duplicates 100 Cond. Good

Log Yes / No, Cond. [illegible] Boxed [illegible] Range 0 - [illegible] Date April 30, 1940

Remarks Cut made for Gulf (103) (45 - 525) (87 sbls) April 30, 1940

Microscopic Study Range		Strip Log	Gen. Log	Blue Print	Samples Washed
Insol. Res. Study Range		Strip Log	Gen. Log	Insol. Res. Prepared	Well Corel.

March 17, 1972

Mr. Robert R. Miller
Gas Supply Division
Northern Natural Gas Company
2223 Dodge Street
Omahan Nebraska 68102

Dear Bob,

We have completed the re-study of the Jamaica City well (W-1181). The correct tops are as follows:

Cherokee	85'
Warsaw	198'
Keokuk	205'
Burlington	275'
Gilmore City	375'
Hampton (undiff.)	395'
Maynes Creek	460'
Chapin	510'
Prospect Hill	522'

These corrections should help all of our maps.

Very truly yours,

Mary C. Parker
Chief of Geologic Research

MCP:gh