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

W-1598

RECORD OF WELL

Location:

Town: Altoona (N E) (S W); County Polk

NE/c-NW sec. 16 T. 79 N., R. 22 E. W. Beaver Twp.

Well name and number Vane Overturff

Owner _____ Address _____

Tenant C.W. Carr Address _____

Contractor Thorpe Well Co. Address Des Moines

Drillers Fred Souder

Drilling dates June 16, 1942 to July 7, 1942

Well data:

Elevations: Drilling curb 968' feet; Land surface _____ feet

Determined by K.E.R.

Topographic position _____

Total depth: Reported 229' feet, Measured _____ feet

Drilling method cable

Hole and casing data 164'4" of 6" casing set at 162'
(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 42'½ ft. ~~above~~ below curb Date _____

Original elevation of water level 925.5 ft.; Source of data _____

Sources of water: Principal Pennsylvanian; Others _____

CASING DIAGRAM

Vertical scale 1-space =

LOG

2 Topsoil
Yel clay
10
Bl. clay
50
Yel clay
75
Sd yel clay
85
90 Clay rocks & dry hd gravel
95 Hd dry sh
96 Sd bits of sh
100 Sh dark
Sh gr
139
141 Very hd rock
Sh
158 Hd lime rocks 2'
162 SS muddy 2'
SS
T.D. 229'

164'4" of 6" set at 162'

100

200

Production data: Date _____

Static depth to water 42½' Measuring point _____

Pumping level 97½' at 10 g.p.m.

_____ _____

_____ _____

_____ _____

Specific capacity 5½ g.p.m. per ft. drawdown; Temperature 54 °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 sampled				
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 EC8

Sample range 0-229 No. spls. 51 No. dupls. & cond. 4 Poor

Spls. prepared by Travis Washed range _____ by _____

Driller's log and cond. no

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

Microscopic study 0-229 strip log Jan 17 1947

Gen. log _____ Correl. by M. Peyton

Altoona (1N, 2½E) Polk Co. 10-7-42
Overturf farm KEA
Located: 2E, 1N, ½E

C.W. Carr, tenant

Thorpe Well Co., contractors

1:58	Bondurant sta CGW	976	-8	968
2:12	Farm	981	-13	968
2:19	Mitchellville sta. CRIP	980	-15	965

Loc: NE¼-NW-16-79-22-Beaver Twp.
Elev: 968 ft.

[redacted] Samples

Altoona (Polk County)
Vane Overturf farm well

Thorpe Well Co., Des Moines
6/16/42 to 7/7/42
Fred Souder, driller

T.D. 229 ft.
S.W.L. 42½ ft.
Production: 10 g.p.m. with 55 ft. of drawdown

Casing: 164'4" of 6" set at 162 ft.
Temperature: 54° F.

Topsoil	0	to	2
Yellow clay	2	to	10
Blue clay	10	to	50
Yellow clay	50	to	75
Sandy yellow clay	75	to	85
Clay, rocks and dry, hard gravel	85	to	90
Hard dry shale	90	to	95
Sand, bits of shale	95	to	96
Shale, dark	96	to	100
Shale, gray	100	to	139
Very hard rock	139	to	141
Shale	141	to	158
Hard lime rock	158	to	160
Sandstone, muddy	160	to	162
Sandstone	162	to	229

R

IOWA GEOLOGICAL SURVEY
Water Well Data Sheet

Survey Number W-1588

Town Altoona County Polk T. ~~78~~ 79 N., R. 22 ~~E.~~ W.

Name Overturf Farm Location NE/c ¼NW¼, Sec. 16
C.W. Carr Tenant

Contractor Thorpe Driller _____ Use _____

Construction _____ Drilling Dates _____ Drilling Depth _____

Topog. _____ Curb Elev. 968 Ref. _____ Total Depth 229'

Final Static Level 42½' ~~above~~ below curb Pumping Level 284 Draw down 55 gpm 10 Time pumped _____ Date _____

Depth to bot. pump _____ ft. with _____ ft. suction pipe. Calc. g/ft. drawdown _____ Prin. Prod. _____

Producing Horizons _____

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

Additional information _____

Laboratory Data

Sample range 0-229 Number samples 51 Number Duplicates 44 Cond. Very poor to fair

Log Yes (No), Cond. _____ Boxed Travis Range 0-229 Date 8/25/42

Remarks _____

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